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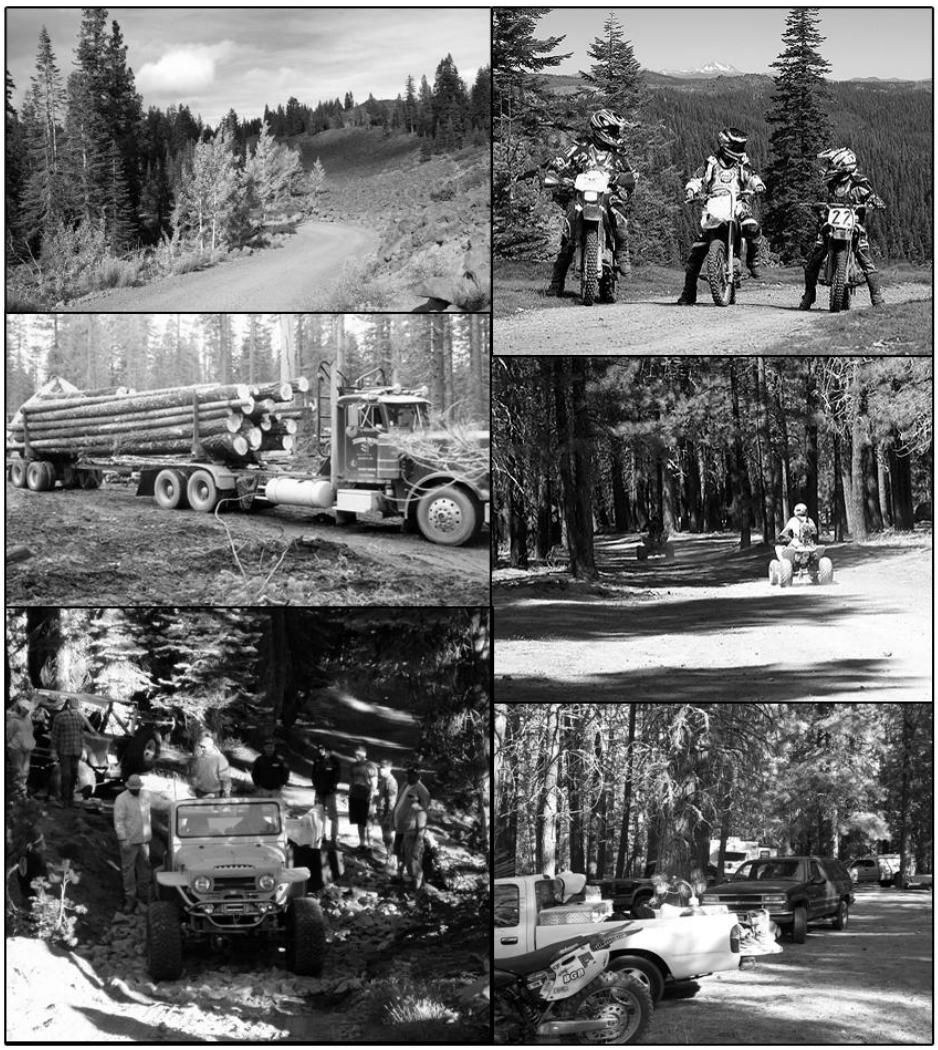
Record of Decision

Motorized Travel Management

Lassen National Forest

Butte, Lassen, Modoc, Plumas, Shasta, Tehama and Siskiyou Counties, California



Lassen National Forest
Motorized Travel Management

Record of Decision

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Introduction

This Record of Decision (ROD) documents my decision for the Motorized Travel Management Project on the Lassen National Forest (LNF). The purpose of the Travel Management Project is to implement provisions of the 2005 Travel Management Rule (36 CFR Part 212, Subpart B) designed to enhance management of National Forest System lands; sustain natural resource values through more effective management of motor vehicle use; and provide opportunities for motorized recreation experiences on National Forest System lands. The Final Environmental Impact Statement (FEIS) discloses the environmental impacts associated with the agency's modified Proposed Action, a No Action alternative, and five additional action alternatives developed to meet the purpose and need and respond to issues raised by the public.

This document also contains Errata (Appendix B) to the FEIS. The Errata are also posted on the Lassen web site and will be updated periodically as need be.

Background

On November 9, 2005, the Forest Service published the Final Travel Management Rule in the Federal Register (70 Federal Register 216, Nov. 9, 2005 p. 68264-68291). Subpart B of the Final Travel Management Rule requires designation of those roads, trails, and areas that are open to motor vehicle use on National Forests (codified in the Code of Federal Regulations (CFR), 36 CFR 212.50). Only roads and trails that are part of a NFTS may be designated for motorized use. Designations are made by class of vehicle and, if appropriate, by time of year. Part 261 – Prohibitions, 36 CFR 261.13 Subpart A of the final rule, prohibits the use of motor vehicles off designated roads, trails and areas, as well as, use of motor vehicles on roads and trails that are not consistent with the designations.

The Lassen NF currently manages and maintains approximately 3,278 miles of NFTS roads and 57 miles of NFS motorized trails. The NFTS was developed over many decades to meet a variety of needs including vegetation management, fuel treatment, access to private in-holdings, fire control, public utilities, special uses management and public recreation access. Harvesting of special forest products such as ornamental greenery, firewood, mushrooms and plants are among the many opportunities afforded by the NFTS. The NFTS is managed and maintained to various road standards, ranging from paved highways to roughly graded high-clearance roads, depending on the type of access needed. The NFTS is displayed on the Forest Transportation Atlas. Details concerning the management of individual roads and trails are maintained in the Forest Service Infrastructure database (INFRA).

In accordance with the Travel Management Rule and following a decision on this environmental analysis, the Lassen NF will publish a Motor Vehicle Use Map (MVUM) identifying all NFTS roads and trails that are designated for motor vehicle use. The MVUM shall specify the classes of vehicles and the times of year for which use is designated. Unauthorized routes and areas not included in this FEIS are not precluded from future consideration for addition to the NFTS and inclusion in a later version of the MVUM.

The unauthorized routes not included in this decision also are not precluded from future consideration for either removal from the landscape and restoration to the natural condition or addition to the NFTS and designation on the MVUM. Future decisions associated with changes to the NFTS and MVUM are dependent on available staff and resources and may trigger the need for additional environmental analysis, public involvement and documentation.

Project Location

As shown on the Vicinity Map 0 (Map Package), Lassen NF is located in northeastern California and totals approximately 1.2 million acres in size. The Forest is located within seven counties: Butte, Lassen, Modoc, Siskiyou, Shasta, and Tehama. Administratively, Lassen NF is divided into three ranger districts: Almanor, Eagle Lake and Hat Creek. It is bordered by the Plumas NF to the southeast, Modoc NF to the north, and the Shasta-Trinity NF to the northwest. The project area includes all NFS lands, existing NFS motor vehicle routes and inventoried unauthorized routes within the identified project area except for designated wilderness areas. The project area does not include any other federal, state, private or tribal lands.

The Lassen NF includes approximately 78,240 acres of wilderness within the Forest administrative boundary; Caribou Wilderness (20,546 ac), Ishi Wilderness (41,399 ac) and Thousand Lakes Wilderness (16,355 ac). The Lassen NF administrative boundary, minus these three wilderness areas and forenamed other land ownerships, is considered the project area for this analysis.

High Lakes and Front Country

For the purpose of this decision, I have decided to postpone adding any unauthorized routes in High Lakes and Front Country project areas due to on-going planning efforts for these two areas. Planning in these two areas was initiated in 2008. Any unauthorized routes will be designated during the planning process for these two decisions. However, I will not delay the decision to prohibit motorized cross-country travel in these two areas.

Purpose and Need

The following needs have been identified for this proposal:

Purpose #1: Cross-country Travel

There is a need for regulation of unmanaged cross-country motor vehicle travel by the public. The proliferation of unplanned, unauthorized, non-sustainable roads, trails, and areas created by cross-country travel adversely impacts the environment. The travel management regulations, 36 CFR Section 212. Subpart B, provide for a system of NFS roads, NFS trails, and areas on National Forest System lands that are designated for motor vehicle use. After roads, trails, and areas are designated, motor vehicle use off designated roads and trails and outside designated areas is prohibited by 36 CFR 261.13. Subpart B is intended to prevent resource damage caused by unmanaged motor vehicle use by the public. In accordance with this national direction, implementation of Subpart B of the travel management rule for the Lassen NF is scheduled for completion in 2010.

Purpose #2: Dispersed Recreation, Diversity of Recreational Opportunities

There is a need for changes to the Lassen's NFTS to:

Purpose #2a. Provide motor vehicle access to dispersed recreation opportunities (camping, hunting, fishing, hiking, horseback riding, etc.). A substantial portion of known dispersed recreation activities are not typically located directly adjacent to NFTS roads or NFTS motorized trails. Some dispersed recreation activities depend on foot or horseback access, and some depend on motor vehicle access. Those activities accessed by motor vehicles are typically accessed by short spurs that have been created primarily by the passage of motor vehicles. Many such unauthorized 'user-created' routes are not currently part of the NFTS. Without adding them to the NFTS and designating them on a MVUM, the regulatory changes noted above would make continued use of such routes illegal and would preclude access by the public to many dispersed recreation activities.

Purpose #2b. Provide a diversity of motorized recreation opportunities (4X4 vehicles, motorcycles, ATVs, SUVs, passenger vehicles, etc.). It is Forest Service policy 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 (FSM 2353.03 (2)) (FSM 2006a). Implementation of Subpart B of the Travel Management Rule will dramatically reduce acres and miles of motorized recreation opportunities relative to current levels. As a result, there is a need to consider limited changes to the NFTS such as additional routes, changes in vehicle class and season of use.

Travel Management Regulations

The criteria for designation of National Forest System roads, trails and areas from Subpart B of the travel management regulations (36 CFR 212.55) are outlined in two sections and the general criteria (212.55(a)) require that the Responsible Official consider:

- Effects on natural and cultural resources
- Public safety
- Provision of recreational opportunities
- Access to public and private lands
- Conflicts among uses of National Forest
- Need for maintenance and administration of roads, trails and areas that would arise if the uses under consideration are designated

Specific criteria for designation of trails and areas (212.55(b)), in addition to the criteria listed above also include minimizing:

- Damage to soil, watershed, vegetation, and other forest resources.
- Harassment of wildlife and significant disruption of wildlife habitat.
- Conflicts between motor vehicles and existing or proposed recreational uses of NFS lands or neighboring Federal lands.
- Conflicts among different classes of motor vehicle uses on NFS lands or neighboring Federal lands.
- Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.

Specific criteria for designation of NFTS roads (212.55(c)), in addition to the criteria listed above also include consideration of:

- Speed, volume, composition and distribution of traffic on roads.
- Compatibility of vehicle class with road geometry and road surfacing.
- Maintaining valid existing rights of use and access (rights-of-way).

Decision

Based on the analysis in the Lassen National Forest Motorized Travel Management Project FEIS and the associated project record, I have decided to implement Modified Alternative 5 (Selected Alternative). My decision includes the modifications made to Alternative 5 in response to comments I received from the public as well as analysis and judgment with regards to public safety, as described below and analyzed in the FEIS. I believe the selection of this alternative best meets the purpose and need and responds to the issues of access, motorized recreation opportunity, and natural resource protection.

Modifications to Alternative 5 in Response to Comments and Public Safety Concerns

After a careful review of the public comments I received in response to the Draft Environmental Impact Statement (DEIS), I concluded that Alternative 5 was still a solid approach to managing motorized travel. However, a few changes could be made to improve the recreation value of the alternative and minimize the safety concerns associated with it. By incorporating elements analyzed in other alternatives considered in the DEIS, I was able to maintain the original theme and intent of Alternative 5 while addressing issues that arose during public comment and from engineering analysis regarding the public safety aspects of my decision. The resulting alternative, Modified Alternative 5, is included in the FEIS to disclose the effect of the following modifications:

I added four unauthorized routes totaling 2.7 miles.

I am designating seven mixed use routes totaling 9.3 miles (contingent on the concurrence of the California Highway Patrol).

These two changes are described in more detail in Chapter 2 of the FEIS and analyzed for each affected resource in Chapter 3 of the FEIS. I have selected Modified Alternative 5 because I believe it will enhance recreation opportunities while ensuring that safety and natural resource values remain intact. I delayed signing the ROD for a month to allow the public to review these changes. Comments received during this period and responses are summarized in Appendix C: Response to Comments.

Modified Alternative 5 (Selected Alternative)

How the Alternative was Developed

Modified Alternative 5 was designed to enhance and improve motorized recreation across the Lassen NF, while addressing economics. In analyzing Alternative 5 (the Preferred Alternative for the DEIS), it was recognized that the Forest has an extensive road system, 78 percent of which is already available to non-highway legal vehicles as

well as passenger cars, trucks, and jeeps. However, what is missing is an explicit design for loop systems and linkages of short segments of routes to provide the type of off-road driving experience visitors are looking for and enjoy. This alternative responds to the need for providing diverse riding opportunities without compromising safety. The mixed use safety analysis conducted by the Forest Engineers as part of the planning process demonstrated that most of the NFTS road segments proposed for mixed use exhibit either moderate or high probability of a severe crash. Table G-3 in the FEIS Appendix lists the results of the Safety Analysis for all the routes proposed for mixed use under all the Action Alternatives (2, 4, 5, and Modified 5). These ratings were used to make my decision about which routes should be designated for mixed use in Modified Alternative 5.

During the scoping period for this project, the Lassen NF received suggestions on a number of additional unauthorized routes to be added to the NFTS. These routes were reviewed to determine the degree to which they added recreational value–either by providing access to dispersed recreation or by linking segments of the existing road system–and the environmental sensitivity associated with proposing the route addition for motorized use. In addition to the unauthorized routes being added in Alternative 5, an additional 2.7 miles of unauthorized routes (4 routes) were found to have important recreational value and minimal resource concerns or impacts that could be mitigated. These were considered for addition to the NFTS in this alternative. As we looked for ways to create the riding loops people told us they wanted; we identified 9.3 miles of lesser-used ML 3 road segments where mixed use could be designated and 79.6 miles where ML 3 objective maintenance levels could be reduced to ML 2. This is an increase of 0.6 miles over the 79 miles identified in Alternative 5, because it was discovered in the process of conducting the mixed use safety analysis on routes in Alternative 5 that one of the segments, 0.6 miles of 28N70, proposed in that alternative had already operationally changed from a ML 3 to a ML 2. Over time, all 79.6 miles of these roads will be made available for non-highway-legal vehicles and help link currently disconnected ML 2 road segments to form more continuous OHV circuits.

Seasonal closures were included in Modified Alternative 5 to address the need for providing diverse recreation opportunities and to minimize user conflicts. Winter closures protect Over-snow Vehicle (OSV) trails. Other seasonal closures are designed to provide hunting access during limited times of the year. Wet weather closures prevent resource damage in erosion-prone areas and also meet the need to reduce road maintenance costs by limiting damage to the roadbed. One stretch of road (29N21Y) would have seasonal restrictions to protect Spotted Owl nesting (see Appendix B: FEIS Errata and Map 31).

Description of Modified Alternative 5

Cross-Country Travel: Public motor vehicle travel off designated NFTS roads and trails on approximately 1,072,364 acres would be prohibited, except as allowed by permit or other authorization.

Additions to the NFTS: A total of 56 miles of unauthorized routes, comprised of 207 route segments would be added to the NFTS as ML 2 roads (10.3 miles) or as motorized NFTS trails (45.7 miles). Winter Recreation season of use would be applied to 6.6 miles of proposed additions. Wet weather season of use would be applied to 8.2 miles of proposed additions. Proposed route additions are summarized below in Table 1 and specific routes are listed in Appendix A. To see an illustration of these proposed additions to the NFTS, refer to Maps 32 & 35.

Changes to the NFTS – Vehicle Class: Objective Maintenance Levels would be lowered to ML 2 on 79.6 miles of roads currently managed as ML 3. This action would serve to increase the amount of NFTS miles available for use by non-highway legal motor vehicles and provide additional connectivity between riding loops for longer riding opportunities. In addition, 9.3 miles of ML 3 roads are proposed (contingent on the concurrence of the California Highway Patrol) for motorized mixed use by both highway and non-highway legal vehicles for the same purpose. Additionally, six miles of roads that are currently closed to public motor vehicle use through Maintenance Level 1 designation will be converted to Maintenance Level 2 roads and managed as trails allowing all vehicle use. Changes to the NFTS are summarized below in Table 1 and listed in Appendix A of this ROD. These proposed changes to the existing NFTS are illustrated on Map 33 (Vehicle Class Changes) and Map 34 (Circuits and Loop Opportunities).

Changes to the NFTS – season of use: In addition to the 271 miles of seasonal restrictions as specified in the existing Forest Orders, an additional 375 miles would be seasonally restricted, totaling 646 miles. There are three categories of restrictions that would apply under this alternative. Map 31 identifies all seasonal restrictions proposed under Modified Alternative 5:

a. **Winter Recreation**: Use of motor vehicles would remain seasonally restricted on NFTS roads groomed for snowmobile and cross-country ski use during winter months. These 271 miles of NFTS roads would remain open to motor vehicle use from April 1 through December 25. In addition to groomed trails, 275 miles of other routes identified on the Lassen NF Winter Recreation Guide would become seasonally restricted during winter months (Table A-1 of FEIS Appendix A and Table G-1 of FEIS Appendix G). These include routes identified as un-groomed snowmobile trails; dedicated cross-country ski trails, and recommended cross-country ski trails during winter months. These combined 546 miles of roads would become open to motor vehicle use from

April 1 through December 25. The additional miles of routes proposed for winter motor vehicle use restrictions are listed below in Table 1.

b. **Wet Weather**: Use of motor vehicles would become seasonally restricted on 88 miles of NFTS roads, to limit damage to roads from severe rutting due to motor vehicle operation during periods when road beds are water-saturated and easily impacted. These 88 miles would be open to motor vehicle use from May 1 to November 30. Roads with seasonal motor vehicle use restrictions during wet weather are listed in Table 1 below, Table A-1 of FEIS Appendix A and Table G-1 of FEIS Appendix G.
c. **Hunting Access**: Use of motor vehicles would be seasonally restricted on 12 miles of NFTS roads to provide non-motorized hiking opportunities near Susanville, except to allow access during the fall hunting season. These 12 miles of road would become open to motor vehicle use from August 1 through October 31. Routes designated for motor vehicle use only during the fall hunting season are summarized below in Table 1 and listed in Appendix A of this ROD.
d. **Spotted Owl Nesting:** As noted in Appendix B under Seasonal Restrictions Errata, one 2.1 mile long route (29N21Y) will have a seasonal restriction to protect Spotted Owl nesting. The route will be open from August 15 to March 1 each year.

Parking, Big Game Retrieval, and Firewood: Parking will be allowed 1 vehicle length off roads. The routes that were added to access dispersed camping areas were extended close to the campsites. Cross-country travel will not be allowed for big game retrieval, but with a firewood permit, cross-country travel will be allowed to retrieve cut firewood.

Amendments to the Forest Plan: One Non-significant Plan Amendment to the Lassen LRMP (1992) would be necessary under this alternative, to address the 0.10 miles of route 270326UC14 being added to the Deer Creek, Eligible Wild and Scenic River. Along with other wildlife that typically use Northern Sierra streams, Deer Creek has resident rainbow, as well as steelhead and spring-run Chinook salmon that migrate to and from the Pacific Ocean. The character of the area remains primitive and the lower section near Deer Creek Flats contains the historic Yahi-Yana Indian site known as Ishi Caves.

The Amendment will shift the eastern boundary of the “Wild” portion of Deer Creek Eligible Wild and Scenic River so that the 0.10 miles will now be in the “Scenic” portion rather than in the “Wild” portion of the Eligible Wild and Scenic River. The current boundary appears to be a mapping error. The intent when the original boundaries were drawn was to go around the end of the road and the associated dispersed campground. This Non-significant Forest Plan Amendment will allow continued use of this route and

the associated dispersed recreation. Appendix E, Wild and Scenic Rivers Evaluation, Table E-2 of the LRMP displays Segment Number 4, a Scenic segment as being 2.5 miles in length; this adjustment would make the river segment 2.8 miles in length. Correspondingly, Segment Number 5, a Wild segment would be displayed as 9.5 miles in length instead of 10.0 miles (the LRMP rounded to the nearest 0.5 miles, so the actual value to begin with was 9.8 miles without rounding).

Table 1 displays a summary of the actions proposed in this alternative. A complete list of roads and trails to be added into the NFTS, including the vehicle class, if applicable, and seasonal use restrictions, can be found in Appendix A of this ROD.

Table 1 Modified Alternative 5 - Summary of Actions

Action Type		Action Proposed
1. Cross-country Travel		
Status of cross-country travel		Prohibited on 1,072,364 acres
2. Additions to the NFTS (Routes)[a]		**Miles**
Trails added		45.7
Roads added		10.3
3. Changes to the Existing NFTS		
Vehicle Class Changes [a]		**Miles**
Allowing highway and non-highway vehicles (Mixed Use) to use the same roads through vehicle class changes. 1	System roads currently closed to motorized use by the public - to be designated as motorized trails (< 50" motorized trail)	6
	Roads managed for highway legal vehicles will be allowed to weather to lower maintenance levels. These roads will then be managed for both high clearance highway and non-highway vehicles. (Objective Maintenance Level change to eventually allow Mixed Use, Maintenance Level 3/4 to Maintenance Level 2.)	79.6
	Roads managed for highway legal vehicles will not be altered, but safety concerns addressed (Allowing Mixed Use to occur through a change in allowed vehicle classes).	9.3
New Seasonal Restrictions		
Reason for restriction	**Open period**	**Miles**
Winter recreation	Apri 1 to December 25	275
Wet weather	May 1 to November 30	88
Hunting	August 1 to October 31	12
Spotted Owl Nesting	August 15 to March 1	2

[a]All routes added or changed to allow mixed use will be open to all forms of motorized wheeled vehicles; Source: GIS query March 22, 2009

Best Available Science My decision is based on the best available science. All practicable means to avoid or minimize environmental harm have been adopted in the design of the Selected Alternative. I have included all of the mitigation measures and monitoring that I believe are necessary to avoid, minimize, or rectify impacts on resources affected by implementation of the Selected Alternative. My conclusion is based on a review of the record that shows a thorough review using the best available science. The resource analyses disclosed in Chapter 3 of the EIS identify the effects analysis methodologies, references and scientific sources which informed the analysis, and disclose limitations of the analysis.

Mitigations and Monitoring Mitigations minimize, reduce or eliminate impacts on sensitive resources. Specific mitigations listed in Appendix A of this ROD must be completed prior to designation of the route for public motorized use on the MVUM. The Forest will put together the MVUM in a two tier process. Those routes listed in Appendix A that do not require mitigation will be shown on the MVUM immediately in the Tier I MVUM. Routes with route specific mitigations will be placed on the Tier II MVUM as the mitigations are completed. Route specific monitoring listed in Appendix A of the ROD must be conducted as described in Chapter 2 and Appendix A of the FEIS.

Reasons for My Decision

The Lassen National Forest is comprised of outstanding landscapes, with a diversity of resource values, and a rich history of human use and visitation. Motorized recreation plays an important and pivotal role in how people visit and use the Lassen National Forest. Many of the backcountry settings on the Lassen are accessed by a network of motorized routes that provide opportunities to get away from urbanized settings and explore a large expanse of undeveloped landscapes.

The Forest provides a spectrum of recreation experiences that include opportunities to experience the unique challenges of exploration and discovery, as well as opportunities for quiet reflection and solitude where one can just get away from it all. These landscapes represent some of the largest expanses of undeveloped public lands that remain in the nation, and are home to many rare plants, animals and fish, and a vast array of valuable cultural sites.

With these factors in mind, I did not take this decision lightly. In reaching my decision, I have considered the purpose and need for action, the issues, the Forest Plan and associated amendments, current policies and regulations, effects on natural and cultural resources, public comments received, and the full range of alternatives. I considered the broad range of concerns expressed throughout this process relating to both motorized and non-motorized recreation opportunities.

Although my decision will reduce the number of miles of motorized routes available as compared to the existing condition, there is a compelling need for change. This decision implements a permanent prohibition on cross-country travel and potential future route proliferation which will reduce detrimental effects on natural resource conditions. Importantly, it implements this prohibition while ensuring continued public motorized access to recreation opportunities throughout the Lassen National Forest.

Compelling Need for Change

My decision consists of three different components. The first component of the decision prohibits cross-country travel off the designated route system. The second component of the decision selects carefully considered routes to add to the existing NFTS. Finally, the third component of the decision provides a strategic framework for working within the augmented NFTS to better address the desire for more loop opportunities on the Forest as expressed by motorized recreationists.

Prohibiting cross-country travel is a preventative action that will ensure motorized recreation is planned and managed in concert with the resource stewardship responsibilities of the Forest Service.

Adding routes to the NFTS will complement the existing system in terms of providing access to long-standing recreational uses or links to existing travel segments to enhance the value of the NFTS to motorized recreation. In developing this aspect of the decision, I drew upon local knowledge of both employees and the public to determine where specific unauthorized routes would respond to recreation requests for loop opportunities and provide access to dispersed recreation areas with minimal disturbance to natural and cultural resources.

Developing loop opportunities cannot be done simply by adding more unauthorized routes to the system because the vast majority of the remaining routes are disjointed spurs and dead-end segments. Adding these segments would increase road maintenance costs and provide little value in terms of access or quality recreation experience. However, the existing network provides an opportunity for meaningful increases in the loops available to non-street legal vehicle use simply by changing the road maintenance level objectives for a select number of road segments. While this administrative action is only the first step in increasing the loop riding opportunities on the Forest, it sets forth both the intent and the strategy for enhancing the motorized recreation opportunities on the Forest in a fiscally responsible manner.

It is important to recognize that before these road segments are available for non-highway legal use, the road must physically reflect conditions that slow travel speeds and make concurrent use by highway and nonhighway legal vehicles safer. In time, some roads are expected to naturally degrade to rougher driving conditions under a less frequent maintenance schedule. For others, it may be necessary to accelerate this

natural process by undertaking additional work to physically alter the operational condition of the road. Such work will depend on the current road condition, the potential for resource damage, and public safety. Additional environmental analysis may be required before any given segment can be physically altered to meet a maintenance level more suited to high clearance vehicles. As work is completed and the road is deemed safe for all vehicles (including OHVs), the change in vehicle class will be reflected in the associated MVUM.

Balanced Approach

The Selected Alternative provides a balanced approach, weighing resource and economic concerns against the need for recreation opportunities. The Selected Alternative provides interconnected loops and linkages into backcountry landscapes and maintains access to popular dispersed recreation opportunities. While some of the public wanted all unauthorized routes to be added and cross-county travel to continue, this decision is the result of responsible stewardship that limits the additions of unauthorized routes to those that would create the best recreation opportunity while considering the magnitude of the existing Lassen National Forest Transportation System and the costs associated with maintaining it. This alternative provides ample access through a manageable system of roads and trails for local residents and Forest visitors to use. As previously mentioned, the Forest has an extensive road system, covering over 3,278 miles. Additional routes were added with the intent of addressing recreation needs where resource concerns did not exist. Careful consideration was given to creating loop opportunities in locations that were popular with OHV users and insuring that the routes that were added provided adequate access to identified dispersed recreation areas.

I believe that the Selected Alternative strikes the best balance in providing motorized recreation access, while also protecting cultural and natural resources. By banning cross-country travel, the Forest enhances protection of more than three cultural resource sites per 100 acres. Also considered and addressed in the Selected Alternative were habitat protection for endangered species, such as the Federally-listed Threatened fish species, Chinook salmon and Steelhead (*Oncorhynchus tshawytscha*, *O. mykiss*), the Federally listed Threatened owl, Northern spotted owl (*Strix occidentalis caurina*), the Federally listed Threatened plant species, Slender Orcutt Grass (*Orcuttia tenuis)* and the Federally Endangered plant species, Greene's tuctoria (*Tuctoria greenei*). The Forest carefully limited the addition of unauthorized routes that could affect these species and identified mitigations that must be completed prior to designating each route on the MVUM. The Selected alternative protects these species and will follow through on essential monitoring to minimize impacts to these species. For example, the Selected Alternative balances the need to provide access to the Forest, while substantially reducing impacts from vehicle traffic to aquatic resources. It does this by implementing

mitigation measures specifically aimed at reducing sedimentation into water bodies. For further explanation see the Legal and Regulatory Compliance Section of the Record of Decision, outlining in more detail the various natural resources and the Forest's efforts to protect them.

Addressing the Purpose and Need and the Travel Management Regulations

My decision has been carefully designed to respond to all of the needs identified in the Travel Management EIS and to implement the provisions of Subpart B of the Travel Management regulations (36 CFR 212).

The first need, to regulate public motor vehicle travel, is accomplished through a permanent prohibition on cross-country travel that prevents future route proliferation. As previously mentioned, implementation of this permanent prohibition will have countless benefits to large numbers of natural and cultural resources across the Forest.

Some measureable achievements through implementing the Selected Alternative are: the elimination of motor vehicle impacts to approximately 60 miles of routes in meadows; reduction of the amount and quantity of sediment entering stream channels at 32 stream crossings; diminishment of the amount of sediment contributed to perennial streams, springs and lakes by 124 miles of unauthorized routes. In addition, 88 miles of seasonal restrictions during wet weather would effectively limit the amount of erosion caused by users on these routes. Six threatened, endangered and sensitive aquatic species will benefit from the Selected Alternative. For example, prohibition of motor vehicle travel on 91% of the unauthorized routes in proximity to historic, known, or potentially suitable Cascade frog habitat will enhance protection for this sensitive species.

The two components of the second need, to provide motor vehicle access to dispersed recreation opportunities and to provide a diversity of motorized recreation opportunities, are accomplished through carefully selected additions to the NFTS.

One might think that the existing NFTS, currently comprised of 3,598 miles of roads and motorized trails, should meet the Purpose and Need for providing a diversity of motorized recreation opportunities and for providing access to dispersed recreation opportunities that historically have been accessed by motor vehicles (Purpose and Need 2a and 2b). However, the existing NFTS generally provided access to major recreation areas and for Forest management activities. The majority of existing high clearance 4x4 roads were unauthorized low standard, primitive routes that did not receive active maintenance. For many years, most roads on the LNF were added to the transportation system based on management needs for vegetation management, fuel treatment, access to private in-holdings, fire control, public utilities, special uses management, in addition to public recreation access. As a result, many important dispersed recreation opportunities are not accessible via the present NFTS. The Selected Alternative

addresses this need by adding 53 miles of road and trail to the NFTS to maintain access to long-standing recreational use areas on the Forest. Among these 53 miles there are at least 58 individual routes that access dispersed camping opportunities and lead to a variety of dispersed recreation areas such as, Turner Mountain, Hogflat Reservoir, Wiley Ranch, Potato Buttes, Pine Creek, Four Corners and the Cone Lake Trailhead for the Caribou Wilderness (Table 36 of the FEIS). The transportation system will provide access to sites and routes that are important to Forest users for camping, backpacking, hiking, sightseeing, exploring, rock hounding, fishing, and hunting, among other activities.

The Selected Alternative provides diverse recreation opportunities (Purpose and Need 2b) by providing access to a variety of riding experiences through loop opportunities created through a combination of additions to the NFTS and changes to the NFTS (mixed use and objective maintenance level changes). The Selected Alternative provides a total of over 405 miles of loops—each greater than 20 miles in length—as described in Table 33 of the Recreation Section of the FEIS. These loop opportunities occur in the north, east and west portions of the Hat Creek Ranger District, the north, east, west and central portion of the Eagle Lake Ranger District and the Lassen Trail/Pegleg/Swain Mountain. and Turner Mountain areas on the Almanor Ranger Districts (Map 34). This alternative adds the most mileage of unauthorized routes to the NFTS. These unauthorized routes are open to “all” vehicle types. This alternative also reduces objective maintenance levels from ML 3 to ML 2 over 79.6 miles. I am aware that it will take some time for the conditions on ML 3 roads to change enough for them to be considered operationally an ML 2 road and therefore suitable for a vehicle class change and addition to the Motor Vehicle Use Map(MVUM). This decision, however, signals my intent to make these roads available for OHV use, to work closely with the off-highway vehicle community to prioritize roads to bring onto the MVUM, and to find funding sources to accomplish this (Tier III, see Implementation Strategy below).

After closely reviewing the Engineering Reports for all passenger car road segments (ML 3+) proposed for motorized mixed use in the action alternatives, I can only support changing the designation to allow motorized mixed use on seven segments totaling 9.3 miles. My primary concern is with public safety. Many of the routes that were initially analyzed in the preferred alternative (Alternative 5) proved to have a high probability or severity of crash risks involving highway-legal and non-highway-legal vehicles sharing the roadways. Only those segments where risks could be mitigated to a reasonable level were included in Modified Alternative 5. These seven segments will provide enhanced off-highway vehicle opportunities on the Lassen NF. I realize this aspect of my decision will disappoint a large segment of the riding community, but I could not in good conscience make a decision that might put the riding public at risk.

It is important to recognize these seven segments may not be added to MVUM immediately. Implementation of mitigation measures for these designations will incur a cost and labor expense, as well as a long-term maintenance and monitoring responsibility for the Forest. Full implementation of the changes in route designation will mean waiting until all Tier II routes and road changes are added to the MVUM. This decision was primarily based on the enhancement of recreation opportunities where the Forest could reasonably mitigate the associated safety risks with proper signage.

Lastly, the Selected Alternative provides additional access while considering the cost of these additions to the NFTS. (The issue of the cost of maintaining the NFTS was identified as a significant issue by the public during scoping. See the Public Involvement section in this ROD and Significant Issue # 2 on page 13 of the FEIS.) Further, I have considered the need for and availability of resources for maintenance and administration of the roads and trails added to the NFTS in this decision as directed by the Travel Management Rule (36 CFR 212.55 (a) 6). The change in objective maintenance level combined with the additional unauthorized routes is a net savings over the existing NFTS as described in the Transportation Section, Appendix B: FEIS Errata. Although the additions would result in an implementation cost of approximately $170,000, in the first year, the Forest saves close to $700,000 on annual maintenance costs and close to $5.3 million over 5 years on deferred maintenance costs with this decision due to the downgrading of ML 3 and ML 4 roads to ML 2. Maintenance level 3 and 4 roads are designed to be passable by passenger cars (Table 13 of the Transportation Section, Appendix B: FEIS Errata). Maintenance level 2 roads are designed to be passable by high clearance vehicles and are not maintained for passenger cars. The higher maintenance levels are associated with significantly higher maintenance costs. This decision is the second most economical decision of any of the alternatives (Table 19 of the Transportation Section, Appendix B: FEIS Errata). Currently, the Forest receives approximately $1 million annually for trail and road maintenance funding (Table 17 of the Transportation Section, Appendix B: FEIS Errata). Although both appropriated and grant funding levels can change from year to year, I believe we will be able to secure adequate funding to complete needed maintenance of the transportation system over the long-term. I expect that we may need to pursue grant funding more aggressively, further prioritize needed maintenance, as well as explore more creative solutions such as road maintenance agreements or volunteer trail adoption programs, but that roads and trails will be maintained to management objectives.

Subpart B of the Travel Management regulations implements the Executive Orders that direct Federal agencies to ensure the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands. The Travel Management regulations implement those orders by requiring

designation of roads, trails, and areas for motor vehicle use and prohibiting motor vehicle use off the designated system. The Selected Alternative, Modified Alternative 5, fully implements this direction. Publication of a Motor Vehicle Use Map (MVUM) by March, 2010 will complete the designation process by identifying the roads, trails, and areas designated for public motorized use. The Temporary Forest Order will be superceded and the prohibition of motor vehicle use off the designated system will take effect permanently once the MVUM is published. For more about the criteria used to make this decision compliant with the Travel Management regulations, see the Legal and Regulatory Compliance section, Travel Management Regulations below.

Listening to Public Input

My goal throughout this effort was to work with the full range of stakeholders and interests to find an alternative that would sustain resources while providing a diverse set of recreation opportunities that satisfies the needs of the public. Despite apparent differences in opinion, the public, through their comments, revealed a strong connection with public lands on the Lassen National Forest; connections based on generations of use and exploration as well as traditions still in the making. Comments that I received provided very helpful information on important areas and routes. Public input helped clarify the need for addition of some of these routes in order to provide access to important recreation opportunities and experiences. I also heard about valuable Forest resources in need of additional protection or mitigation.

Each community, whether it is Susanville, Chester or Chico, maintains a unique set of characteristics, values, and beliefs that shape its relationship with the forest and its resources. The ability of these distinct civic entities to continue to thrive economically, physically, and spiritually through their connection with the Lassen National Forest cannot be understated. The public has the right to use their Federal public lands, but in responsible and sustainable ways–ways that do not diminish the current or future uses of the National Forest for others. There were many who made suggestions for compromise and who brought much needed information and thoughtful insight into this process. Their comments were greatly appreciated and were helpful in working towards this decision.

I heard from many individuals and groups with particular goals for the types of recreation and uses they consider to be appropriate on National Forest System lands. Some feel all existing unauthorized routes are valuable and important and should remain available for motorized use. For them, the freedom to choose where to go and how to get there is important. Some expressed concern that motorized vehicles degrade the quality of their recreation experience. Others asserted protection of natural resource values such as roadless area character, water quality, or fish and wildlife habitat should

take precedence over other needs. They argued that more restrictions on motorized travel should be in place.

Lastly, some have questioned the long-term sustainability of local economies as a result of perceived effects of my decision. Some believe implementation of any of the action alternatives will harm small businesses, recreation users, the tourism industry, local governments, local economies, low-income residents, families with children, and people with disabilities, and reduce public access to federal lands. I disagree. I believe the Selected Alternative results in a well-planned system of roads, trails, and areas available for public motorized use. More importantly, I believe my decision offers better opportunities for quality, long-term recreational motor vehicle use and better economic opportunities for individuals and communities, than either the existing network of NFTS and unauthorized routes or the other action alternatives. Both the opportunity to access and enjoy the Lassen National Forest for motorized recreation and the natural and cultural resources that draw people to this special place are protected with this decision.

Fostering Citizen Stewardship in National Forest Management of Roads and Trails

The successful implementation of this decision will, in large part, be based on local community members, visitors, and land managers working together to sign, map, restore, implement mitigation measures, and encourage compliance with regulations. I am grateful that many individuals and groups from many viewpoints have already indicated their willingness to work together towards developing community-based solutions for future on-the-ground work.

It is important that people know that I listened intently to their input even if all of their wishes are not directly reflected in the Selected Alternative. We received many articulate and heartfelt requests for routes to be added or dropped based on a wealth of knowledge from local citizens and visitors. I personally read many of your letters and I was greatly impressed by the quality of the responses. As work progressed on the final EIS, I met several times with our resource specialists and engineers to look for solutions to some of the more puzzling dilemmas. In the end, I still struggled in making a decision that prohibited non-highway legal vehicles on some of the routes where people had explicitly requested this use. The Philbrook Road (25N05) was mentioned many times and with a great deal of passion from the OHV community. I am acutely aware of the desire to ride from private residences to the High Lakes area without the burden of loading a trailer and driving to legal riding opportunities. However, as I took a harder look at the issue, I found it to be quite complicated.

A substantial investment has been made by the Forest Service and our partners to upgrade road 25N05 and to keep it in very good condition to protect the watershed and anadromous fish resources in the vicinity. Downgrading the road to a lower maintenance

level for OHV use would require that more money be spent to reverse these improvements. This is not a prudent use of our limited funding, nor does it seem like a rational approach. The other immediate solution would be to keep the maintenance level at ML 3 and allow mixed use on all or part of the road. However, 25N05 has been evaluated by forest engineers and, in its current state, presents an unacceptable risk to public safety if designated for mixed use. Complicating the situation is the fact that another segment of the population has requested that the road be off-limits to OHVs due to concerns over noise and route proliferation in the High Lakes area. After looking at all of the issues surrounding this specific road, I have concluded that, although it is not a popular decision, the best option at this time is to take the appropriate amount of time to gather more information and examine a number of options for addressing this situation. Simply put, allowing mixed use on road 25N05 is not ripe for inclusion in this decision.

Another area where significant interest has been expressed is the Share the Dream Trail. The Recreation Outdoors Coalition has dedicated a substantial amount of personal time and energy in developing this proposal for an all-vehicles loop that would allow riders to circle Lassen Volcanic National Park. This proposal is still conceptual in nature and a number of route segments to be included pose logistical challenges and would require careful mitigation before they could be added to the NFTS. Nevertheless, it is clear there is sustained interest and willing volunteers to continue working to make this concept a reality. I know that some have the expectation of seeing this circuit (or parts of it) included in my decision. However, I find that there is substantial work to be done, including engineering designs, more extensive public involvement, and feasibility analyses of different approaches to more difficult sections, for example, before the circuit can come to fruition. As a result, it is not possible to fold a proposal of this magnitude into this decision. This in no way should be taken as an indication of our abandonment of the idea or a dismissal of the hard work that has been done to move the Trail to a more tangible state. It is my intent to continue to work with the OHV community to prioritize segments of the longer circuit for more focused effort after this decision is issued.

The Lassen NF has a number of collaborative planning efforts that began prior to the travel management project and will continue even as this project draws to a close. Ongoing work is directed toward developing special management plans for the High Lakes and Front Country OHV areas and a newly-awarded grant project to assess the Potato Buttes OHV trails and play areas for future additions to the MVUM. The importance of the continued planning for improved management of motor vehicle use on the Forest cannot be overstated. By selecting Modified Alternative 5, I have endorsed this community-based approach to solving difficult issues. Implementing this alternative can and will be successful with a commitment to use the demonstrated success of these collaborative efforts to guide decision-making processes well into the future.

Lassen National Forest Implementation Strategy

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

Tier System

A number of follow-up actions are needed to implement this decision, for the disposition of all routes to be completed and for the MVUM to fully reflect the travel management goals inherent in the decision. To better understand the timeframes associated with these follow-up activities, the Forest has grouped them into the following three tiers, or stages, of implementation.

Tier I Routes

Routes listed in Appendix A of the ROD that do not require mitigations will be designated as open to public motorized travel on the March 2010 Tier I MVUM.

Tier II Routes

Routes listed in Appendix A requiring mitigation, will be addressed as soon as possible and added as open to public motorized travel in a subsequent Tier II MVUM. Mixed Use segments of roads will be added to the MVUM as soon as safety signing and mitigations are accomplished. Roads changed from Objective ML 3 to ML 2 status will be added to the MVUM as conditions allow changes in allowed vehicle class to be made safely. In some cases, this might entail intentional modifications to the roadbed and subsequent analyses.

Tier III Routes

There were many routes that were requested by the public for OHV use that could not be added without conducting a more complex site-specific analysis that was not possible within the current timeframe. For example, they may require ground disturbing activities such as bridges or extensive road work in order to add the route to the MVUM. These types of activities require site-specific design features. These routes may be added to a Tier III list of routes requiring more NEPA analysis and a new decision. The Forest will work with motorized recreation users to prioritize routes that provide extensive recreation opportunities. It is anticipated that many of these routes could be added to the MVUM once these issues are resolved.

Maps/Brochures

Based on the selected alternative, the Lassen NF will 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. The MVUM will be used for law enforcement and education. This map will be made available to the public free of charge. Designations, use restrictions, and operating conditions will be revised in future decisions as needed to meet changing conditions or management strategies. A Forest brochure will be developed as a companion document to the MVUM with clear and simple explanations of the rules and restrictions, and examples of signs on the ground.

As a service to visitors, the Forest will also produce a 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 would help the public navigate the system.

Signing

The Forest will supplement the MVUM by signing NFTS roads and trails that are open to public use on the ground with a road or trail number and applicable regulatory information. Clear, consistent, and adequate signs will be installed to identify trails 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 motor vehicle damage.

Public Outreach

Successful implementation of this decision will require a program of public education and outreach. The following components have been identified as key elements of this program.

1) Development of a public education strategy to educate Forest visitors about the designated route system, to assist with reading and understanding the MVUM and local travel map, to educate Forest visitors about the potentially negative effects of motorized travel 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 visitors.
2) Continue collaborating with groups interested in the addition, modification, or management of NFTS roads, trails, and areas on the Lassen National Forest in order to build additional stewardship opportunities for the public and improve our transportation system. The activities of these groups could include, but are not limited to:
    a) Developing a public volunteer strategy to identify opportunities for the public to help implement, enforce, maintain, and fund the designated route system.

b) Expanding a core of dedicated volunteers capable of supporting ongoing resource protection efforts, expanding the dissemination of public information, ensuring the effectiveness of resource monitoring, and maintaining the NFTS infrastructure (including signs, kiosks, roads, trails, and restoration efforts).
c) Developing a public education strategy to educate forest visitors about the designated route system, to assist the public with reading the public MVUM, and to educate forest visitors about best practices for minimizing impacts resulting from motorized travel activities.
d) Assisting with the implementation of actions included in this decision such as mitigations, signage, and disguising unauthorized route entrances.

3) Continue the examination of the adequacy of the designated system of routes and recommend modifications or adjustments to the system to be addressed in subsequent NEPA analysis.
4) Continue collaborating with volunteer groups to plan and implement specific motorized vehicle recreation projects. Priorities through 2012 would be the following:
   a) Planning and development of the Share the Dream trail for all vehicle types. The principle partner will be the Recreation Outdoor Coalition and the strategy will be to concentrate on implementing segments of the trail as time and resources allow for the necessary planning efforts;
   b) Development and implementation of an OHV Management Plan for the High Lakes region; principle partner will be Friends of the High Lakes. Included in this project will be planning and implementation of OHV routes to the High Lakes from neighboring communities;
   c) Public review and publication of the Front Country OHV management plan;
   d) Planning and development of the Potato Buttes OHV riding area.

Public Involvement

The Off-Highway Vehicle Route Designation process has been posted on the Schedule of Proposed Actions for the Lassen National Forest since April 1st, 2005.

The Responsible Official and Interdisciplinary Team (IDT) relied on public involvement to ensure that a full range of alternatives, representing a broad array of perspectives, would be analyzed. Public involvement occurred during three key periods: first during the public collaboration process that began in 2004; second during the 36-day public scoping period for the NOI; and third during meetings with public groups to explore issues they raised during scoping.

The public involvement process began in 2004 and 2005 with public meetings in several key locations around the Forest. Initial meetings held at Susanville, Chico, Fall River Mills and Chester in 2004 were designed to provide the public with key information

on the travel management process. Discussion topics at these meetings included an overview of the Travel Management Rule, the proposed Roadless Rule, the route designation process and ways in which the public could be involved. Additional public meetings in Chico and Susanville were provided to update the public on the travel management process and to provide the public with information on the application process and timelines for OHV grants. During 2004 and the first half of 2005 presentations were also made twice to the Lassen County Board of Supervisors, and once to the Tehama, Plumas and Modoc County Boards of Supervisors to inform them of the travel management process. During this time Forest staff also consulted with area tribes, including the Susanville Indian Rancheria, Pit River Tribe and Greenville Rancheria on the travel management process. During this period, consultation with the tribes occurred on seven separate occasions.

In mid 2005, public meetings were held again at Chico, Chester, Susanville, Fall River Mills, Shingletown and Redding. The purpose of these meetings was to present route maps; provide instruction to the public on how to read route inventory maps and provide the public with an opportunity to comment on any routes that were missed. This on-the-ground training provided the public with the knowledge and tools necessary to locate and map their favorite riding areas and routes so that they could effectively provide that information to the Forest Service. As a result of this public involvement, an additional 320 miles of routes were added to the Forest inventory. During this period, similar consultations were made with the Pit River Tribe, Susanville and Greenville Rancherias on four separate occasions.

In April of 2006, the Forest once again held public meetings to continue updating the public on the travel management process and to provide training and instruction on developing input to the Forest. Meetings held in Chico, Fall River Mills, Redding, Susanville and Chester were designed to (1) present the Forest Service's new national rule requiring designation of roads, trails and open areas for all types of motorized vehicle travel; (2) discuss the specific criteria for road and trail designation in the rule; and (3) explain the Temporary Forest Order (effective July, 2006) that restricted motorized vehicle use to mapped roads and trails and (4) provide a 60-day public notification period. The Greenville Rancheria, Susanville Indian Rancheria and Pit River Tribe were also consulted on continued developments in the travel management process in mid-2005. In September 2006, public workshops were held to provide the public with an opportunity to help the Forest develop a transportation plan that accommodated OHV recreation while minimizing resource and social impacts. These were held at Fall River Mills, Susanville, Chico, Chester and Redding. The workshops offered individuals or groups a format to identify the opportunities and benefits of their favorite routes as well as provide a forum for discussion of potential risks and concerns. Maps and tools

needed to provide feedback were made available via the web or by CD for those individuals who could not make one of the workshops.

From October to November 2006, Lassen NF asked for the public's help, through release of a "route designation feedback form" made available via the Forest website, to identify which unauthorized routes should be added to the FTS for motor vehicle travel. The public was asked to provide the following specific information on the forms: which non-system routes should be added, what type of vehicles should be allowed to use that route and why that particular route should be added. Forms were originally due to the Forest by November 3, 2006, however, in late October, the Forest extended the feedback comment period another 35 days to better accommodate public involvement. Approximately 3,700 feedback forms were received, which provided comments on unauthorized routes and identified resource concerns. The Forest used this information to assist in development of the original Proposed Action for the NOI. During this time, tribal consultations with the Susanville Indian Rancheria and the Pit River Tribe on travel management also occurred.

Additional public open house meetings were held in Chester and Burney in July of 2007. The purpose of these meetings was to provide an opportunity for the public to comment on the "discussion draft" of the Forest's proposed transportation system. The discussion draft identified proposed routes, loop opportunities and access to recreation locations and also included route evaluation criteria.

Scoping for the Notice of Intent

In October 2007, the Forest Service completed the "Proposed Action and NOI to Prepare an Environmental Impact Statement" which was published in the Federal Register, October 25, 2007 (Volume 72, Number 206). Thus the scoping period began on October 25, 2007, and ended November 24, 2007. Presentations to a variety of groups, phone calls, news releases, website postings, and e-mails were used to alert the public of the initiation of scoping. Public meetings were held in Redding, Susanville, and Chico to explain the Proposed Action. The agency received 2,309 responses (including letters, e-mails, and faxes), of which 152 contained original language. The remaining 2,157 responses were organized response campaign (form) letters. All of this is summarized in the Scoping Report and the Content Analysis Report, Lassen National Forest, Travel Management Plan NOI, hereby incorporated by reference and found in the Project Record. Using the comments from the public, other agencies, and agency resource specialists, the IDT developed a list of issues to address.

County governments and planning departments were informed of the Lassen National Forest's plans and intent throughout this process. The Lassen National Forest shared the NOI with public works directors from all counties. In 2007 the forest engineering

department shared mixed-use guidelines with Butte County's planning department in an effort to potentially coordinate the designation of system roads.

Between January 2009 and May 2009 presentations were made to county governments and agencies to seek additional input on modification of the proposal and development of the Draft Environmental Impact Statement (DEIS). Presentations were made before the full Board of Supervisors for Lassen and Plumas Counties. Lassen National Forest staff made presentations to a smaller group of Supervisors for Tehama, Shasta, and Butte counties and county planning staff from Modoc County. Lassen National Forest staff also offered to meet with all county staffs for further discussion and comments on proposed travel management, including "study sessions" with both Lassen and Plumas counties, but no additional meetings were requested by county governments.

In early 2009, the Lassen National Forest invited representatives to a meeting to view maps and discuss the process of travel management with agencies and local governments. Staffs from Butte, Plumas and Lassen counties were present, as were representatives from county Sheriff's Departments, California Highway Patrol, California Fish and Game, Lassen Volcanic National Park and the Bureau of Land Management. Lassen National Forest staff participated in two Stakeholders Conference calls in 2009 to discuss the travel management process and field questions from organizations, county governments and others in attendance. Lassen National Forest staff held monthly conference calls with the Regional Office and other forests to discuss the progress of travel management and discuss any issues. Throughout the travel management process, the Lassen National Forest has offered organizations, governments and agencies and tribes numerous opportunities to provide substantive comment and discuss potential coordination and cooperation.

56-Day DEIS Comment Period and 30 FEIS Review Period.

Following four years of work and over 45 public meetings, tribal consultations and local government presentations, the Draft Environmental Impact Statement (DEIS) was released for public comment.

Interested parties, tribes and reviewing agencies were sent a letter (via email or by mail) on May 20, 2009. The DEIS and maps were posted on the web the same day at http://www.fs.fed.us/r5/lassen/projects/NEPA_projects/route/downloads.php. Hard copies and/or CDs of the DEIS were sent to tribes, reviewing agencies and any individuals or organizations that requested one. All agencies, tribes and individuals received a summary and website location for downloading documents and maps. The notice of availability was published by the Environmental Protection Agency in the Federal Register on June 5, 2009, which initiated the 45-day comment period. A legal notice was published in the Lassen County Times on June 2, 2009. Public open house

meetings were held in June in Susanville and Chico to provide the public with an opportunity to comment and to ask questions regarding the DEIS.

The Lassen NF received several comments requesting an extension to the comment period. The Forest Supervisor decided to extend the comment period an additional 11 days. On July 21, 2009, a legal notice explaining the extension was published in the Lassen County Times. A letter was also sent to interested parties, reviewing agencies and tribes on July 20, 2009. The Environmental Protection Agency published an amended notice in the Federal Register extending the comment period on July 24, 2009.

The Lassen NF received 268 total responses to the DEIS, including 252 original responses and 16 form letters. An executive summary of the comments appears in Appendix J of the FEIS.

While the EIS was being prepared, the Temporary Forest Order #06-09-01, banning cross-country travel and restricting motorized travel to the inventoried unauthorized routes was revised on May 27, 2009, lasting through July 12, 2010.

Lastly, the Lassen National Forest also offered a 30 day review period between release of the FEIS on December 18, 2009 and January 19, 2010. This review period was provided to the public because a new Alternative was developed (Modified Alternative 5) which differed substantially from the Alternative 5 that the public had an opportunity to comment upon during the DEIS comment period. This Modified Alternative 5 was developed because Mixed Use Safety Analyses were completed after the DEIS Comment Period. When the Forest Supervisor, Kathleen Morse (the Responsible Official), reviewed these safety analyses, she determined that only 9.3 miles of the 51 miles originally proposed for Mixed Use in Alternative 5 were actually safe enough for a vehicle class change allowing non-highway legal vehicles to share the roads with highway legal vehicles. In order to allow the public an opportunity to review these changes, signing of the Record of Decision was delayed for a month. Comments received during this review period did not convey appeal rights, but they were considered.

Identification of Issues

Comments from the public, other agencies, Pit River Tribe, Susanville Indian Rancheria and Greenville Rancheria were used to formulate issues concerning the Proposed Action. An issue is a matter of public concern regarding the Proposed Action and its environmental impacts. The Forest Service separated these issues into two groups: significant issues and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the Proposed Action. Non-significant issues were identified as those: 1) outside the scope of the Proposed Action; 2) already decided by law, regulation, Forest Plan, or other higher-level decision; 3) irrelevant to the decision to be made; or 4) conjectural without supporting scientific or factual evidence.

The Council on Environmental Quality (CEQ) NEPA regulations explain this delineation in Section 1501.7, "…identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)… " A summary of issues, comments, questions, and suggested alternatives is located in the Scoping Report, which is incorporated by reference in the Project Record.

The Forest Service identified the following significant issues during scoping:

Issue 1: The original Proposed Action (in the NOI) unreasonably restricts motorized recreation use by prohibiting cross-country travel. The proposed addition of only 30 miles of NFTS roads and 7 miles of NFTS trails to the NFTS provides insufficient public access to Lassen NF lands and unfairly limits motorized recreation.

Issue 2: The Lassen NF NFTS is already too large to provide adequate maintenance and administration. Current maintenance backlogs should be addressed before proposing the addition of new routes to an already overburdened system.

Issue 1 was addressed in Alternative 5 and Modified Alternative 5 by increasing the number of miles being added to the NFTS by 23 miles over the Proposed Action. Issue 2 was addressed in Alternative 3 by not adding any routes to the NFTS thus limiting the costs associated with new route additions. Alternative 4 addressed this issue as well, by adding 10 miles of roads to the NFTS, changing the objective maintenance level on 79 miles of ML 3 and ML 4 roads, and changing the season of use on 375 miles of roads. Alternative 5 and Modified Alternative 5 compromised by adding 53 miles and 56 miles respectively of routes while simultaneously lowering the objective maintenance level and placing season of use restrictions as discussed above in Alternative 4. These changes cut costs associated with maintaining those facilities.

Alternatives Considered in Detail but Not Selected

In addition to the Selected Alternative, I considered five other alternatives in detail, which are summarized below. A more detailed comparison of these alternatives can be found in Chapter 2 of the FEIS.

Alternative 1 (No-action)

This alternative serves as a baseline for comparison among the alternatives, and is required by the implementing regulations of the National Environmental Policy Act (NEPA). The No-action Alternative represents the continuation of cross-country travel. Under the No-action Alternative, no changes would be made to the NFTS and there would be no prohibition of cross-country travel. Current management plans would continue to guide project area management. The Travel Management Rule would not be implemented, and no Motor Vehicle Use Map (MVUM) would be published. Motor

vehicle travel by the public would not be limited to designated routes. Unauthorized routes would continue to have no status or authorization as NFTS facilities.

There are a number of reasons I did not select this alternative. It does not implement the Travel Management Rule and does not meet the need for regulation of unmanaged wheeled motor vehicle travel as required by the Rule because cross-country travel with continued route proliferation would cause continued adverse resource impacts. This alternative has the most resource impacts, conflicts with adjacent landowners and impacts on non-motorized or quiet recreation activities of any of the alternatives. It includes existing seasonal closures and restriction without the additional resource protection provided by the season of use restrictions in the other Alternatives 4, 5 and Modified Alternative 5. It does not allow mixed use to occur on any of the ML 3 or ML 4 roads, tying it with Alternative 3 for the alternative with the least number of miles available for loop riding opportunities. This alternative is the most expensive alternative to maintain because NFTS maintenance costs remain high and ongoing resource impacts from continued use of the 1,089 miles of unauthorized routes would require remediation.

Alternative 2 (Modified Proposed Action)

The Proposed Action, as described in the NOI published in the Federal Register on October 25, 2007 (USDA FS 2007b includes the following,): prohibition of cross-country motorized travel, proposed changes to the existing NFTS, and additions to the NFTS. This alternative was developed during the course of a year's worth of public meetings, including workshops where the public identified important routes for addition. The focus of this alternative was to meet OHV recreation needs by adding some unauthorized routes and providing for some mixed use opportunities. However, the alternative largely assumes existing OHV recreation opportunities are adequate for most user needs and also attempts to meet the need of limiting road maintenance costs. Subsequent to publishing the NOI, routes that did not have resource concerns were included in a "Modified Proposed Action (Alternative 2). Public input subsequent to NOI publication suggests that Alternative 2 in fact offers fewer OHV recreation opportunities than desired by OHV user groups and individuals.

Alternative 2 nevertheless represents a starting point for the development of Alternatives 4, 5, and Modified 5 . It was developed with public input and comment. It regulates unmanaged motor vehicle use; however, it does not provide the same degree of access to dispersed recreation opportunities (Purpose and Need 2a) as compared to the selected alternative. It provides 7 miles less dispersed recreation access as compared to the selected alternative. It also adds only 38 miles of additional loop opportunities compared to the current NFTS (Diversity of motorized recreation opportunities (Purpose and Need 2b)). By contrast, the selected alternative provides 178

miles of additional riding loop opportunities beyond the current NFTS, 140 miles more than Alternative 2. Because there are additions of unauthorized routes, but no lowering of maintenance levels on system roads, Alternative 2 also costs around $45,000 more per year than the current NFTS to maintain (Issue 2) (Appendix B: FEIS Errata, Transportation Facilities section, Table 19).

Alternative 3

Alternative 3 meets the objective of prohibiting cross-country, but proposes no additions or changes to the NFTS. This alternative provides a baseline for comparing the impacts of other alternatives that propose changes to the NFTS. None of the currently unauthorized routes would be added to the NFTS under this alternative and motorized access beyond existing NFTS routes would be prohibited except as allowed by permit or other authorization. No maintenance levels would be changed on system roads and mixed use would not be allowed on ML 3+ roads. Season of use restrictions already in place would remain as they are. This alternative responds to the issue of cost by not adding any new facilities to the NFTS, but does not realize savings from maintenance level changes such as realized in Alternatives 4, 5, and Modified 5 (Appendix B: FEIS Errata, Transportation Facilities section, Table 19).

There are a number of reasons that I did not select this alternative. Although this alternative meets the need to regulate unmanaged motor vehicle use, the diversity of motor vehicle recreation opportunities and access to dispersed recreation are all confined to the existing NFTS. This alternative does not incorporate routes suggested by the public that provide additional important dispersed recreation opportunities. The Selected Alternative, by contrast, adds 9.0 miles of additional routes that access dispersed recreation and 79 miles of ML 3 and ML 4 roads have their objective maintenance level changed in order to allow non-highway and highway vehicles to access the same routes. The Selected Alternative provides 178 miles more loop opportunities than this alternative. Similar to the No-action Alternative (Alternative 1), it does nothing to address the costs to maintain the existing NFTS; however it is environmentally better than the No-action Alternative, in that unauthorized routes are no longer available for travel and resource related damage caused by continued use of the unauthorized routes would not occur. The Selected Alternative provides greater recreation access and a greater diversity of riding opportunities without adversely affecting Forest resources; thus better meeting public needs.

Alternative 4

Alternative 4 addresses access, economics and natural resource protection. This alternative was developed to meet the need of providing diverse OHV riding

opportunities by attempting to improve existing riding opportunities rather than add additional routes. Under this alternative a combination of vehicle class changes and minimal addition of unauthorized routes to the NFTS are used to address concerns about both dispersed recreation access and OHV riding opportunities, while constraining the resource and economic impacts from addition of routes. It adds a few unauthorized routes and makes some changes to the maintenance level (ML) of some system roads. Improvements focused on providing unauthorized routes and vehicle class changes on existing roads to better link ML 2 roads. This would create riding opportunities of increased length, allowing a diversity of riding opportunities of varying length and riding duration. Improving linkages between roads already available for OHV use also allows for increased access to dispersed recreation opportunities via OHVs. Winter, wet weather and hunting closures were developed to meet the need of providing diverse recreation opportunities and reducing user conflicts by protecting winter OSV trails and providing hunting access during limited times of the year. Wet weather closures meet the need of reducing road maintenance costs by limiting damage from motorized use.

Although this alternative regulates unmanaged motor vehicle travel, provides a diversity of recreation opportunities and riding experiences in the context of the existing NFTS, and contains costs by adding just 10 miles to the NFTS; it was not chosen because it does not provide the quality of recreation diversity and access to dispersed recreation that are offered by the Selected Alternative. For many years, most roads on the LNF were added to the transportation system based on management needs for vegetation management, fuel treatment, access to private in-holdings, fire control, public utilities, special uses management, in addition to public recreation access. As a result, many important dispersed recreation opportunities are not accessible via the present NFTS, even with the addition of 10 miles of unauthorized routes to the NFTS. The Selected Alternative adds 8.2 miles of additional routes that access dispersed recreation than this alternative. Additionally, it does nothing to address the need for loop riding opportunities by changing vehicle class to allow for mixed use when compared to the 9.3 miles being changed to mixed use in the Selected Alternative.

Alternative 5

Alternative 5 addresses access, motorized recreation opportunity, economics, as well as resource concerns in its recognition that Lassen NF's ML 2 road system provided over 2,500 miles of OHV riding opportunity that could be improved upon by linking the system. In this way, the alternative meets the needs of access to dispersed recreation and diverse riding opportunities. During scoping, Lassen NF received suggestions for additional routes and alternative routes that would improve access to dispersed recreation and motorized recreation opportunities. These routes were reviewed for their access to dispersed recreation, ability to provide linkages between ML 2 roads and lack

of resource concerns. Unauthorized routes that met these criteria were considered for addition to the NFTS. In addition there were opportunities to provide further linkages by proposing Maintenance Level changes on some ML 3+ roads to accommodate OHVs and to propose some mixed-use that would provide further links. Maintenance Level changes also served to meet the need of reducing overall road maintenance costs. As with Alternative 4, winter, wet weather and hunting closures were developed to meet the need of providing diverse recreation opportunities and minimizing user conflicts by protecting winter Over-snow Vehicle (OSV) trails and providing hunting access during limited times of the year. Wet weather closures meet the need of reducing road maintenance costs by limiting damage from motorized use.

Although this was originally the Preferred Alternative in the Draft Environmental Impact Statement, I did not select this alternative. It meets the Purpose and Need as described; however, I was concerned about public safety and the change in designation of 43.7 miles of ML 3 roads to mixed use. I also felt that adding the 2.3 miles of unauthorized routes to the Selected Alternative created more loop opportunities that would help compensate for the fact that I chose to drop all but 9.3 miles of the 43.7 miles of mixed use proposed in this alternative.

Environmentally Preferable Alternative

The environmentally preferable alternative is often interpreted as the alternative that causes the least damage to the biological and physical environment, but other factors relevant to this determination are provided in Section 101 of NEPA. These include fulfilling the responsibilities of each generation as a trustee of the environment for succeeding generations; assuring safe, healthful, productive, and aesthetically and culturally pleasing surroundings for all Americans; and achieving a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities. Based on my consideration of these factors and the effects disclosed in the FEIS, I consider Alternative 4 to be the environmentally preferable alternative because it adds just 10 miles of roads while providing wet season protection on 80 miles of existing NFTS roads. My reasons for not selecting Alternative 4 are provided above.

Legal and Regulatory Compliance

My decision complies with the laws, policies, and executive orders listed below and described in Chapter 2 and 3 of the FEIS.

Forest Plan Consistency

My decision includes one amendment to the management direction contained in the Lassen National Forest Land and Resource Management Plan (Forest Plan) as amended.

Non-significant Forest Plan Amendment

This is a project specific plan amendment to move the eastern boundary of the Deer Creek Eligible Wild and Scenic River so that unauthorized route 270326UC14 will be designated in the “Scenic” portion (Segment 4) of the Eligible Wild and Scenic River, rather than the “Wild” portion (Segment 5). The current mapping of that boundary appears to be a Geographic Information System mapping error attributed to a time when the mapping accuracy was not as detailed as it is presently (Figure 1).

Evaluation of Significance

The National Forest Management Act (NFMA) requires evaluation of whether proposed forest plan amendments would constitute a significant change in the long-term goods, outputs and services projected for the National Forest. The following criteria are used to determine the significance of forest plan amendments (FSM 1926.51-52).

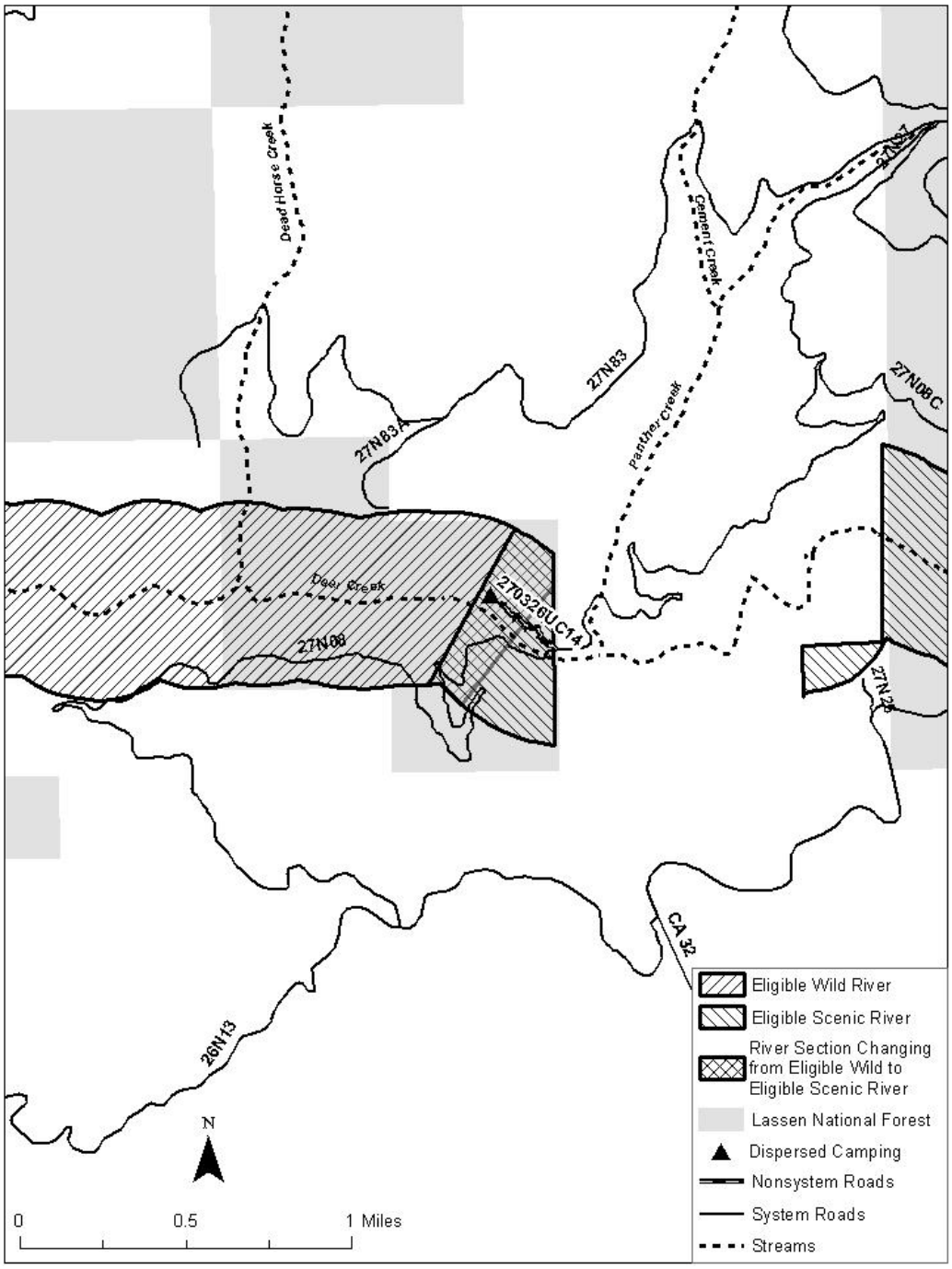

Figure 1 Deer Creek Eligible Wild and Scenic River boundary change.

FSM 1926.51 - Changes to the Forest Plan that are Not Significant.

Changes to the Forest Plan that are not significant and can result from:

1) **Actions that do not significantly alter the multiple-use goals and objectives for long-term land and resource management;**

   The Eligible Wild and Scenic River amendment is consistent with the Forest Plan goals to manage Wild and Scenic Rivers and their immediate environments to preserve their free flowing condition and to protect their outstandingly remarkable values.

2) **Adjustments of management area boundaries or management prescriptions resulting from further on-site analysis when adjustments do not cause significant changes in the multiple-use goals and objectives for long-term land and resource management**;

   The boundary adjustment does not change management area objectives for long-term land and resource management of the Eligible Wild and Scenic River. Although the LRMP states that a few inconspicuous roads leading to the boundary of the river area will not disqualify the "Wild" river classification, the Forest finds this to be a mapping error that is best addressed by an adjustment to the actual boundary. This non-significant Forest Plan Amendment will allow continued use of this route and the associated dispersed recreation without compromising the integrity of the "Wild" portion of the Eligible Wild and Scenic River.

3) **Minor changes in standards and guidelines; and**,

   This plan amendment would not change the standard and guides because it would adjust the boundary of the management area instead.

4) **Opportunities for additional management practices that will contribute to achievement of the management prescription**.

   The adjustment to the boundary will help to achieve the desired condition of the Wild and Scenic River should it become designated as such, by leaving the natural condition of the Deer Creek "Wild" portion intact. This change in the boundary will help to define the character of this segment by removing the influence of human improvements and habitation.

FSM 1926.52 - Changes to the Land Management Plan That are Significant.

The following examples indicate circumstances that may cause a significant change to a land management plan:

1) **Changes that would significantly alter the long-term relationship between levels of multiple-use goods and services originally projected (section 219.10(e) of the planning regulations in effect before November 9, 2000 (36 CFR parts 200 to 299, revised as of July 1, 2000)**.

The adjustment to the boundary only allows continued use of one existing unauthorized route to access a dispersed campsite. It does not alter the long-term relationships between the levels of goods and services projected in the Forest Plan.

2) Changes that may have an important effect on the entire land management plan or affect land and resources throughout a large portion of the planning area during the planning period.

The boundary adjustment is a project level site-specific Plan Amendment that does not have implications for the entire Forest Plan.

Conclusions

As discussed in the Evaluation of Significance above, the Forest Plan Amendment included in my decision:

a. Does not significantly alter the multiple-use goals and objectives for long-term land and resource management.
b. Does not cause significant changes in the multiple-use goals and objectives for long-term land and resource management.
c. Represent minor changes in Standards and Guidelines.
d. Provide opportunities for additional management practices that contribute to achievement of the management prescription.
e. Does not alter the long-term relationships between the levels of goods and services projected in the Forest Plan.
f. Does not change land allocations or management direction for other elements of the Forest Plan.
g. Based on consideration of the factors above and the analysis contained in the EIS, I determined that this Forest Plan Amendment is not significant in the context of NFMA. I hereby amend the Forest Plan with the non-significant amendments shown in Figure 1.

Travel Management Regulations

The Travel Management regulations require that certain criteria be considered when designating routes for motor vehicle use (36 CFR 212.55(a) through (e)). These criteria have been considered at all stages of this process beginning with the development of the underlying Purpose and Need (Section 1.3), development of the alternatives, analysis of effects (as documented in the ‘Compliance with the Forest Plan and Other Direction’ sections of each analysis in Chapter 3 of the EIS), and ultimately my selection of Modified Alternative 5. Throughout the ROD and the FEIS, there are many specific examples of how I considered the Travel Management Rule criteria in making this decision. The criteria for designation of National Forest System roads, trails and areas

from Subpart B of the travel management regulations (36 CFR 212.55) are outlined in three sections, 212.55 (*a*, *b, & c*). I considered these criteria in my decision:

Section 212.55 (a)

Impacts to natural and cultural resources.

My decision will not adversely affect cultural resources (FEIS Section 3.5). For sites where the FEIS discloses uncertainty regarding effects, this decision includes monitoring of these sites per the stipulations in the Motorized Recreation Programmatic Agreement. Further, this decision is in full compliance with Programmatic Agreements with the State of California.

For information on natural resources see Travel Rule 212.55 (b) 1 and 2 below.

Public safety.

The Selected Alternative authorizes the use of proposed Maintenance Level 2 roads or motorized trails that have been determined to be generally safe (Section 3.2). In addition, public safety has been my top priority when considering whether to allow mixed use on passenger car roads (Section 3.2, Appendix G and the Mixed Use Analysis Reports). Public safety was the major premise for the Modified Alternative 5 that has become the Selected Alternative.

Provide for recreational opportunities.

I carefully considered diversity of recreational opportunities and access to dispersed recreation in adding selected unauthorized routes in this decision. Although the existing NFTS generally provides access to major recreation areas and for Forest management activities; it does not contain some routes that were important for accessing long-used dispersed recreation opportunities. The Selected Alternative addresses this need by adding 53 miles of roads and trails to user-identified dispersed recreation areas or diverse riding opportunities. Among these 53 miles there are at least 58 individual routes with known dispersed campsites that in turn are starting points for exploring larger dispersed recreation areas such as, Turner Mountain., Hog Flat Reservoir, Wiley Ranch, Potato Buttes, Pine Creek, Four Corners and the Cone Lake Wilderness Trailhead (Table 35 of the FEIS). The enhanced transportation system in the Selected Alternative will provide access to sites and routes that are important to Forest users for camping, backpacking, hiking, sightseeing, exploring, rock hounding, fishing, and hunting, among other activities.

The Selected Alternative also provides diverse recreation opportunities by providing access to a variety of riding experiences; specifically through additional OHV loop riding opportunities created through a combination of additions to the NFTS and changes to the NFTS (mixed use and lowering of maintenance levels on some roads). The Selected Alternative provides 405 miles of loops greater than 20 miles (Table 33 of the FEIS).

These loop opportunities occur in the north, east and west portions of the Hat Creek Ranger District, the north, east, west and central portion of the Eagle Lake Ranger District and the Lassen Trail/Pegleg/Swain Mtn. and Turner Mountain areas on the Almanor Ranger Districts (Map 34). This alternative adds the most mileage of unauthorized routes to the NFTS. These unauthorized routes are open to "all" vehicle types. This alternative also downgrades objective maintenance levels from ML 3 to ML 2 on over 79.6 miles of NFTS roads. This change will eventually accommodate OHV use as operational maintenance levels change to allow safe use by both highway legal and non-highway legal vehicles.

Access to public and private lands.

When identifying trails to add to the NFTS, I focused on meeting the needs of the public by providing access to the most desired trails and roads on the Forest. In addition, my decision will not impact access to private lands, as this project does not designate roads or trails through private lands where the Forest Service does not have right-of-way, nor will it change existing rights-of-way for adjacent private landowners. Private landowners that need to use one of the unauthorized routes that were not added through this effort can work with the Forest on an individual basis to obtain special use permits that will grant them the needed access.

Conflicts among uses of National Forest System lands.

When developing the alternatives to the proposed action, the issue of use conflicts was addressed by placing winter recreation and hunting season of use restrictions on various routes in order to avoid user conflicts. The winter recreation season of use was employed in order to eliminate conflicts between over-snow recreation users and other potential uses of these routes.

Need for maintenance and administration of roads, trails and areas that would arise if the uses under consideration are designated.

The Forest currently has a maintenance backlog for trails and roads of $182 million. This alternative carefully considers the availability of resources for maintenance and administration of roads, trails and areas given a combination of additions and changes to the existing NFTS maintenance levels. As stated previously, the additions would result in an implementation cost of approximately $170,000 (Effects Analysis for Alternative Modified 5, Appendix B: FEIS Errata for the Transportation Facilities section), in addition to the approximately $1.1 million (Table 17 of Appendix B: FEIS Errata, Transportation Errata section) needed to maintain the existing NFTS. The selected alternative saves approximately $700,000 per year in annual maintenance costs compared to the current road and trail system because Objective Maintenance levels are lowered on 79.6 miles of ML 3 roads, reducing maintenance costs immediately. Wet seasonal closures also will

reduce damage and need for maintenance on 88 miles of roads. I have determined that the Forest would have sufficient resources to administer and maintain the additional NFTS within the Selected Alternative.

Section 212.55 (b)

I also considered the following specific criteria for designation of trails and areas, in addition to the criteria listed. They include minimizing:

Damage to soil, watershed, vegetation, and other forest resources.

Routes added to the NFTS as part of my decision are expected to maintain and improve water quality and satisfy all federal and state water quality requirements. No route additions to the NFTS cross perennial stream channels. My decision minimizes impacts to both soil and water resources, including riparian and aquatic habitats, by only adding routes where adverse impacts could be either avoided or mitigated to acceptable levels. This decision adds 4 routes totaling 1.3 miles to the NFTS that go through meadows. All of these routes have wet season restrictions to prevent erosion, rutting and gully formation. These routes were carefully considered and will not impact the meadow hydrology. One of these routes goes on the outside edge of a meadow and does not cross any drainage features. Two other routes go through a seasonal dry lake bed that hardens in the summer. The last route goes through a dry meadow with upland sedge and sage brush and the route does not cross any drainage features. The full analysis displaying these effects can be found in the Hydrology Section 3.9 of the FEIS and in the Riparian Conservation Objective Analysis in Appendix F of the FEIS.

Regarding Botanical Resources, the analysis contained within Section 3.11 of the FEIS determined that my decision is not likely to result in a trend toward federal listing or loss of viability for any sensitive or watch list plant species or fens. The project includes species-specific mitigation to reduce or avoid potential impacts to rare plants. Mitigations include signing to discourage off-road travel in high risk areas and monitoring of higher risk routes to ensure rare plants are protected (Appendix D). Lastly, my decision includes mitigation to control the eight high priority weed occurrences adjacent to designated routes and direction to clean road maintenance equipment to prevent further weed spread (Section 3.12).

Harassment of wildlife and significant disruption of wildlife habitat.

I considered whether there would harassment of wildlife or significant disruption to wildlife in this decision. There are no additions within threatened or endangered wildlife species Critical Habitat or high-value occupied habitats (Section 3.13). For example, the Federally-listed Threatened Northern spotted owl has no known observation points along any of the proposed additions (FEIS Table 140) and no miles of Critical Habitat are

affected by this decision (FEIS Table 141). None of the 5 miles of routes were found to affect the owl.

For all sensitive species, it was determined that the Selected Alternative would not result in a trend towards federal listing or a loss of population viability. The California spotted owl would have 2.4 miles of routes added that intersect PACs (FEIS pg. 483). The maintenance level change of route 29N21Y has the potential to disturb California spotted owl PACs, therefore a seasonal restriction would be placed in order to minimize effects during the breeding season with additional monitoring to assure the csoPACs remain productive breeding areas. In the case of the northern goshawk, 9 ngoPACs have routes within them for a total of 1.02 miles within ngoPACs (FEIS Table 150). In all of the instances where routes intersect ngoPACs there would be a low risk of noise disturbance, therefore no seasonal restrictions are required. The routes that intersect the ngoPAC are all greater than ¼ mile from any activity centers or there was no identified activity center within the ngoPAC. This decision affects 9 observation points totaling 1.0 miles within ¼ mile of the recorded observation (FEIS Table 151). No American marten den sites have been verified or recorded within the vicinity of any route additions. Given the short distances, most routes are less than 0.10 miles within the ¼ mile observation point, noise disturbance is anticipated to be absent or of short duration when natal or maternal dens would be occupied (Feb-July). In the case of the Pacific fisher, there are no verified observation points within ¼ mile of existing unauthorized routes, likewise no breeding den sites have been verified or recorded on the Lassen NF.

Regarding Aquatic resources, I also considered whether there would be direct effects to Federally-listed Chinook salmon and Steelhead or significant disruption to these fish habitat in this decision. This decision does not add any routes that would directly cross perennial creeks that provide habitat for federally listed aquatic species; therefore there would be no direct effects. Additionally, for all Federally-listed and Forest Service sensitive aquatic species, it was determined that the Selected Alternative would not result in an effect and/or result in a trend towards Federal listing or a loss of viability (FEIS Table 94).

Conflicts between motor vehicles and existing or proposed recreational uses of NFS lands or neighboring Federal lands.

This decision does not add any routes in Wilderness Areas, “Wild” portions of the Wild and Scenic River, Inventoried Roadless Areas, Semi-primitive Motorized and Non-motorized. It addresses route conflicts between recreationists, on the existing NFTS and new additions connected to the existing NFTS, by placing seasonal restrictions on winter recreation and hunting. Out of the 1,032 miles of Roaded Natural this decision adds just 6.2 miles (FEIS Table 23). The Roaded Natural is the area with the highest likelihood for

potential conflict (FEIS Recreation Section 3.3). This decision does not add any routes that dead-end at the National Park boundary.

Conflicts among different classes of motor vehicle uses on NFS lands or neighboring Federal lands.

My decision minimizes the potential for conflicts, in part by ensuring the compatibility of route additions with recreation direction contained in the Forest Plan. My decision does not include any Recreational Opportunity (ROS) class changes (FEIS Recreation Section 3.3).

Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.

Most of the routes added to the NFTS are located far from populated areas. The Selected Alternative adds no routes within 1/2 mile of communities, areas with higher densities of residences, commercial buildings, and/or administrative sites (FEIS Recreation Section 3.3, pgs. 135 & 136).

Section 212.55 (c)

Finally, regarding criteria for roads and trails, I considered:

Speed, volume, composition and distribution of traffic on roads.

Based on the analysis disclosed in the EIS, I have determined that the terrain, sight distance, and condition of the road surface of the 56 miles of unauthorized routes being added to the NFTS makes them suitable as low standard roads or motorized trails rather than higher standard roads. I believe 45.7 miles are appropriately classified as trails and 10.3 miles as roads. The number of roads and trails added in the Selected Alternative coupled with the existing road and trail system are expected to result in a low traffic density on most of the NFTS, although I expect some congestion near staging areas and on more popular routes. Signs to warn drivers of the class of vehicles authorized and expected on particular routes will be posted as part of the implementation of the route designation process. Authorized vehicles will be shown on or adjacent to all route markers. Maintenance Level 3 NFTS routes designated for mixed use will be signed appropriately to warn drivers of mixed use (Ch. 2 Mitigation Measures).

Compatibility of vehicle class with road geometry and road surfacing.

As described above, routes added to the NFTS will be entered into the system as either Maintenance Level 2 roads or motorized trails based on vehicle compatibility considerations and the need to provide a range of different recreational opportunities. The analysis of each Maintenance Level 3 road proposed for motorized mixed use considered the compatibility of each vehicle class with the road geometry and surfacing

based on an assessment of the type and size of vehicle in conjunction with the driver's level of skill.

Maintaining valid existing rights of use and access (rights-of-way).
When identifying trails to add to the NFTS, I focused on meeting the needs of the public by providing access to the most desired trails and roads on the Forest. In addition, my decision will not impact access to private lands, as this project does not designate roads or trails through private lands where the Forest Service does not have right-of-way, nor will it change existing rights-of-way for adjacent private landowners. Private landowners that need to use one of the unauthorized routes that were not added through this effort can work with the Forest on an individual basis to obtain special use permits that will grant them the needed access.

Findings Required by Other Laws and Regulations

The National Environmental Policy Act at 40 CFR 1502.25(a) directs "to the fullest extent possible, agencies shall prepare draft EIS concurrently with and integrated with …other environmental review laws and executive orders." Each resource section in the FEIS includes a list of applicable laws, regulations, policies and Executive Orders that are relevant to that resource. Surveys, analyses, and findings required by those laws are specifically addressed in Chapter 3 of the FEIS. These laws include:

National Forest Management Act. See the Forest Plan Consistency section above.

Clean Water Act. All Action Alternatives and the Selected Alternative were designed to comply with The Clean Water Act (CWA) and its implementing regulations and policies. The decision involves no dredging, filling, or ground disturbing activities. There are no crossings of perennial streams and no construction to cross any such streams. All mitigations regarding the addition of unauthorized routes to the NFTS include implementation of Best Management Practices (FEIS Chapter 3.9 and Appendix I).

Endangered Species Act. All Federally-listed Threatened and Endangered plant, wildlife and aquatic species considered in the FEIS that are under the jurisdiction of the US Fish and Wildlife Service (USFWS) were analyzed considering the existing regional programmatic consultation completed for route designation (USDA FS PSW Region 2006; USDI FWS 2006). No project specific consultation with USFWS was required as a "no effect" determination was made for the Federally-listed plant and wildlife species (refer to the Biological Assessment for *Orcuttia tenuis* and *Tuctoria tenuis*, and Biological Assessment and Evaluation for Wildlife Species) In addition, the potential effects of implementing the Selected Alternative were analyzed for two Federally-listed anadromous fish that occur on the LNF and are under the regulatory jurisdiction of the National Marine Fisheries Service (NMFS). No consultation with NMFS was required as

a “no effect” determination was made (refer to the Biological Assessment for Federally-listed Anadromous Salmonids).

Executive Order 13112 Invasive Species 64 FR 6183 (February 8, 1999). Consistent with this Order, this project has incorporated feasible and prudent mitigation measures in the Selected Alternative to minimize risk of harm caused by invasive plant species. All high risk routes that have known high priority weeds within 100 feet will be treated in the early stages of project implementation, as per the SNFPA requirement to mitigate high risk actions (FEIS Noxious Weed Section 3.12 (containing the Weed Risk Assessment). Required weed treatment mitigations are listed in Appendix A of this ROD.

National Historic Preservation Act. This project was designed to meet this act by following the Programmatic Agreement among the U.S.D.A. Forest Service, Pacific Southwest Region, California State Historic Preservation Officer and Advisory Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Designating Motor Vehicle Routes and Managing Motorized Recreation on the National Forests in California (2005).

Migratory Bird Treaty Act. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales and ensuring that bird conservation is addressed when planning for land management activities. As part of the Travel Management process, the Lassen National Forest has conducted an assessment of existing roads and trails within Forest boundaries. Any new construction, reconstruction and maintenance of system roads or trails will be conducted under a separate NEPA analysis and decision. Because current travel management efforts are directed at identifying which existing unauthorized routes will be formally added to the National Forest Transportation System while prohibiting cross-country travel, and because there is no expectation of new construction or development, no changes in the distribution or abundance of habitats available to migratory birds are anticipated. Changes in authorization are not anticipated to contribute to measurable increase in use levels, but the prohibition of cross-country travel is expected to result in less use across the landscape. Therefore, habitat functionality is expected to remain similar or improve, and levels of disturbance related to use are expected to remain similar to or decline, from pre-decision levels.

Northwest Forest Plan. A very small portion of the northwest corner of the Lassen National Forest falls within the boundaries of the Northwest Forest Plan. No routes were considered for addition to the National Forest Transportation System (NFTS) in this area under any alternative. No Survey and Manage species are affected by the project.

Special Area Designations

I have determined that the Selected Alternative complies with laws, regulations, and policies that pertain to the following special areas. In addition, I believe that this decision enhances the values that make these special areas unique.

Research Natural Areas. No routes are added to the NFTS for public use within any of the Research Natural Areas.

Special Interest Areas. The Murken Special Interest Area has two short segments being added to the northern portion of the SIA, route UNC016 (0.14 miles) and UNC105 (0.06). These two routes will not impair the beneficial and unique characteristics of this SIA. These short spurs will simply act as places to pull off and park off of the system road, 35N10; where people can access and enjoy the natural beauty of the SIA.

Inventoried Roadless Areas. IRAs comprise a significant portion of the LNF land base (14% of the total Forest). As documented in Section 3.14 of the FEIS, the Selected Alternative would result in beneficial effects to the overall character of IRAs on the Forest. I have carefully considered the issue of adding motorized routes to the NFTS within IRAs. None of our alternatives added any of the approximately 25 miles of unauthorized routes inventoried in our roadless areas to the NFTS. My decision to select Modified Alternative 5 will, therefore, likewise add no NFTS motorized trails within IRAs. Roadless characteristics will be maintained in all our IRAs by not adding routes and by banning cross country travel which contributed to previous route proliferation.

Wilderness Areas. No routes are added to the NFTS for public use within wilderness areas.

Wild and Scenic Rivers. There are no Designated Wild and Scenic Rivers on the Lassen National Forest. The Non-significant Plan Amendment mentioned in the Forest Consistency Review to adjust the boundary of the “Wild” portion of the Deer Creek Eligible Wild and Scenic River will mean that no routes are added to the “Wild” portion of the Eligible Wild and Scenic River in this decision. As previously mentioned this appears to be a mapping error and will enhance the “Wild” characteristics of the Wild and Scenic River if it should become designated in the future.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215. In accordance with the April 24, 2006 order issued by the U. S. District Court for the Missoula Division of the District of Montana in Case No. CV 03-119-M-DWM, only those individuals and organizations who provided comments during the DEIS comment period are eligible to appeal [36 CFR 215.11(a), 1993 version]. Appeals must be filed within 45 days from the publication date of the legal notice in the Lassen County Times. Notices of appeal must meet the specific content requirements of 36 CFR 215.14. An appeal, including attachments, must be filed (regular mail, fax, e-mail, hand-delivery, express delivery, or messenger service) with the appropriate Appeal Deciding Officer [36 CFR 215.8] within 45 days following the publication date of the legal notice. The publication date of the legal notice is the exclusive means for calculating the time period to file an appeal [36 CFR 215.15 (a)]. Those wishing to appeal should not rely upon dates or timeframe information provided by any other source.

Appeals must be submitted to Regional Forester, USDA Forest Service, 1323 Club Drive, Vallejo, CA 94592, (707) 562-8737. Appeals may be submitted by FAX [(707) 562-9091] or by hand-delivery to the Regional Office, at the address shown above, during normal business hours (Monday-Friday 8:00am to 4:00pm). Electronic appeals, in acceptable [plain text (.txt), rich text (.rtf) or Word (.doc)] formats, may be submitted to appeals-pacificsouthwest-regional-office@fs.fed.us with the Subject: Lassen Motorized Travel Management.

For electronically mailed appeals, the sender should normally receive an automated electronic acknowledgment from the agency as confirmation of receipt. If the sender does not receive an automated acknowledgment of the receipt of the appeal, it is the sender's responsibility to ensure timely receipt by other means [36 CFR 215.6(a)(4)(iii)].

Implementation Date

If no appeals are filed within the 45-day appeal period, implementation of the decision may occur on, but not before, five business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Contact Person

The FEIS and supporting documents are available for public review at the Lassen National Forest, Supervisor's Office, 2550 Riverside Dr., Susanville, CA 96130, (530) 257-2151. For further information on this decision, contact Chris O'Brien (cjobrien@fs.fed.us; (530) 252-6698) or David Pilz (dpilz@fs.fed.us; (530)-252-6659), Project Team Leaders.

Signature and Date

Kathleen S. Morse

KATHLEEN S. MORSE
Forest Supervisor, Lassen National Forest
Susanville, CA

January 28, 2010
Date

Appendix A: Route Monitoring and Mitigation Table

Introduction

Appendix A displays the road and trail information, monitoring plans, and mitigation measures for all unauthorized routes that will be added to the National Forest Transportation System (NFTS) with this decision, as well as any Maintenance Level 1 (ML 1) roads that will be opened to public motorized use.

About Table A-1

Table A-1 below displays the information for each new road or trail as follows:

- The unique **Route ID** number for each route which was used throughout the document and on maps.
- The **Prior Status** of each route. The prior status is one of the following: (1) an unauthorized route or (2) an ML 1 road not previously authorized for motorized use.
- The **Class of Vehicle and Season of Use** that will be designated for each new road or trail. Codes for the combinations of Class of Vehicle and Season of Use are:

Class of Vehicle

T – Trails open to all vehicles

R – Roads open to all vehicles

Season of Use

W – August 15 to March 1

X – May 1 to November 30

Y – April 1 to December 25

Z – Open All Year

Table A-1 Route Monitoring and Mitigation Table

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
250510UC01	Unauthorized Route	TZ	0.13	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Maintain only established access into site. Sign to keep vehicles on established route, and off of the PCT. Post leave no trace/light on the land use ethics message. Sign adjacent unauthorized routes for vehicle restrictions.
260225UC21	Unauthorized Route	RZ	0.25	**Aquatics –** Annually monitor use of designated route to evaluate if mitigation is effective in containing motorized use. If monitoring determines mitigation is ineffective, document any impacts. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor for closure of unauthorized accesses bi-annually, if ineffective re-establish closures within 30 days of assessment and documentation. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Maintain only established route into Gaither Camp. Define travel way by rocking access, or other means to delineate route. Post leave no trace message. Sign adjacent unauthorized routes for vehicle restrictions.
260608UC01	Unauthorized Route	TZ	0.15	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
260608UC04	Unauthorized Route	TZ	0.13	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
270326UC14	Unauthorized Route	RZ	0.25	**Aquatics –** Annually monitor use of designated route to evaluate if mitigation is effective in containing motorized use. If monitoring determines mitigation is ineffective, document any impacts. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Maintain only established route into Upper Deer Creek dispersed site. Sign adjacent unauthorized routes for vehicle restrictions. Post leave no trace/light on the land use ethics message. Sign area to keep vehicles on designated route.
27N11W	Maintenance Level 1 System Road	TZ	0.22	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Install proper drainage.
280310UC03	Unauthorized Route	TY	0.23	None.	Maintain existing waterbars.
280512UC01	Unauthorized Route	TZ	0.03	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Maintain only established access into site and sign area to keep vehicles on designated route. Post leave no trace/light on the land use ethics message. Sign adjacent unauthorized routes for vehicle restrictions.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
280512UC02	Unauthorized Route	TZ	0.06	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Maintain only established access into site, sign area to keep vehicles on designated route. Post leave no trace/light on the land use ethics message. Sign adjacent unauthorized routes for vehicle restrictions.
280608UC01	Unauthorized Route	TZ	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
280608UC02	Unauthorized Route	TZ	0.04	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
28N29H	Maintenance Level 1 System Road	TX	1.57	**Watershed –** Monitor for Best Management Practices. Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Improve drainage and institute a seasonal wet weather closure.
290522UC01	Unauthorized Route	TZ	0.04	None.	None.
290522UC02	Unauthorized Route	TZ	0.01	None.	Harden surface.
290522UC03	Unauthorized Route	TZ	0.05	None.	None.
290606UC01	Unauthorized Route	TZ	0.21	None.	Install proper drainage.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
290606UC04	Unauthorized Route	TZ	0.06	None.	Install proper drainage.
29N21Y	Maintenance Level 1 System Road	TW	2.10	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.
30N08A	Maintenance Level 1 System Road	TY	0.05	None.	None.
310716UC01	Unauthorized Route	TZ	0.01	None.	Sign unauthorized routes for vehicle restrictions. Sign area to keep vehicles on established route, post leave no trace and light on the land use ethics.
310716UC02	Unauthorized Route	TZ	0.05	None.	Sign unauthorized routes for vehicle restrictions. Sign area to keep vehicles on established route, post leave no trace and light on the land use ethics.
31N17H	Maintenance Level 1 System Road	TZ	0.32	None.	Install proper drainage. Open route.
320306UC01	Unauthorized Route	RY	0.37	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
320924UC01	Unauthorized Route	TZ	0.10	None.	None.
320924UC02	Unauthorized Route	TZ	0.08	None.	None.
320924UC03	Unauthorized Route	TZ	0.10	None.	None.
321009UC01	Unauthorized Route	TZ	1.14	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
32N08YA	Maintenance Level 1 System Road	TZ	0.39	None.	None.
32N09A1	Maintenance Level 1 System Road	TZ	0.09	None.	None.
330329UC02	Unauthorized Route	TZ	0.06	None.	None.
330812UC02	Unauthorized Route	RZ	0.30	None.	None.
340327UC01	Unauthorized Route	RZ	0.10	**Botany –** Monitor *Hypericum perforatum* (Klamathweed) annually to assess treatment efficacy. Monitoring will cease if no noxious weeds are observed for three consecutive years.	Treat Klamathweed if monitoring shows recurrence.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
340327UC02	Unauthorized Route	RZ	1.25	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
340327UC03	Unauthorized Route	RX	0.19	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices. Monitor for vegetative changes and accelerated erosion from 1 to 3 years after implementation. If site meets Best Management Practices then move to Phase 2.	Sign area to keep vehicles on established route, post leave no trace and light on the land use ethics. Institute a seasonal wet weather closure. Existing barriers need to be repaired and enhanced and/or install more barriers to keep vehicles out of meadow.
340328UC05	Unauthorized Route	RZ	0.26	None.	None.
38N03F	Maintenance Level 1 System Road	TZ	1.48	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UBB031	Unauthorized Route	TZ	0.16	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB076	Unauthorized Route	RZ	0.03	None.	None.
UBB081	Unauthorized Route	RZ	0.11	None.	None.
UBB412	Unauthorized Route	TZ	0.04	**Watershed –** Monitor for vegetative changes and accelerated erosion from 1 to 3 years after implementation. If site meets Best Management Practices then move to Phase 2.	Sign to keep vehicles on established route and block access to adjacent meadow. Post leave no trace and light on the land use ethics. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB414	Unauthorized Route	TY	0.45	**Watershed –** Monitor for vegetative changes and accelerated erosion from 1 to 3 years after implementation. If site meets Best Management Practices then move to Phase 2.	Sign to keep vehicles on established route and block access to adjacent meadow. Post leave no trace and light on the land use ethics.
UBB416	Unauthorized Route	TZ	0.12	**Watershed –** Monitor for vegetative changes and accelerated erosion from 1 to 3 years after implementation. If site meets Best Management Practices then move to Phase 2.	Sign to keep vehicles on established route and block access to adjacent meadow. Post leave no trace and light on the land use ethics.
UBB618	Unauthorized Route	RZ	0.10	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UBB689	Unauthorized Route	RZ	0.05	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB690	Unauthorized Route	RZ	0.08	None.	Confirm need for Right of Way, easement, or special use.
UBB727	Unauthorized Route	RZ	0.07	None.	None.
UBB744	Unauthorized Route	TZ	0.38	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB746	Unauthorized Route	TZ	0.15	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB746A	Unauthorized Route	TZ	0.04	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB746B	Unauthorized Route	TZ	0.03	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB794	Unauthorized Route	TZ	0.11	None.	None.
UBB796	Unauthorized Route	TZ	0.05	None.	None.
UBB797	Unauthorized Route	TX	0.03	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace/light on the land use ethics.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB798	Unauthorized Route	TX	0.11	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace/light on the land use ethics.
UBB799	Unauthorized Route	TX	0.02	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace/light on the land use ethics.
UBB800	Unauthorized Route	TX	0.21	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace message.
UBB806	Unauthorized Route	TZ	0.06	None.	None.
UBB809	Unauthorized Route	RZ	0.08	None.	None.
UBB858	Unauthorized Route	TZ	0.02	None.	None.
UBB860	Unauthorized Route	TZ	0.05	None.	None.
UBB865	Unauthorized Route	TX	0.03	**Watershed –** Monitor for Best Management Practices. Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace message.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB866	Unauthorized Route	TZ	0.05	None.	Install proper drainage.
UBB867	Unauthorized Route	TZ	0.08	**Watershed –** Monitor route for sedimentation of Little Tule Lake and for the effectiveness of barriers.	None.
UBB872A	Unauthorized Route	TZ	0.18	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UBB872B	Unauthorized Route	TZ	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UBB872C	Unauthorized Route	TZ	0.02	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UBB873A	Unauthorized Route	TZ	0.09	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB873B	Unauthorized Route	TZ	0.06	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
UBB874	Unauthorized Route	TZ	0.03	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
UBB876	Unauthorized Route	TZ	0.26	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	Sign to keep vehicles on established route. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UBB877	Unauthorized Route	TZ	0.17	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBB878	Unauthorized Route	TZ	0.05	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UBB886	Unauthorized Route	TZ	0.02	None.	None.
UBB887	Unauthorized Route	TZ	0.02	None.	None.
UBB888	Unauthorized Route	TZ	0.02	None.	None.
UBB889	Unauthorized Route	RZ	0.08	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UBB898	Unauthorized Route	TZ	0.04	None.	None.
UBB902	Unauthorized Route	TZ	0.09	None.	None.
UBC021	Unauthorized Route	TZ	0.10	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Sign and block to keep vehicles on established route and prevent access to seasonal lake. Post leave no trace message.
UBC025	Unauthorized Route	TZ	0.21	None.	Open route.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UBC115	Unauthorized Route	TZ	0.32	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.
UCC089	Unauthorized Route	TZ	0.08	None.	None.
UCC090	Unauthorized Route	RZ	0.17	None.	None.
UCC127	Unauthorized Route	RZ	0.08	None.	Close route at fence line to prevent direct access to shoreline of Swains Hole.
UCC317	Unauthorized Route	TZ	0.05	None.	None.
UCC331	Unauthorized Route	TZ	0.28	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
UCC368	Unauthorized Route	TZ	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UCC385	Unauthorized Route	TZ	0.03	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UCC387	Unauthorized Route	TZ	0.29	None.	None.
UCC560	Unauthorized Route	TZ	0.23	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UCC571	Unauthorized Route	RY	0.24	None.	Sign to keep vehicles off the PCT.
UCC572	Unauthorized Route	TY	0.07	None.	None.
UCC576	Unauthorized Route	TZ	0.73	None.	None.
UCC587	Unauthorized Route	TY	0.12	None.	None.
UCC600	Unauthorized Route	TZ	0.30	None.	None.
ULA059	Unauthorized Route	TX	0.07	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure. Sign to keep vehicles on established route, post leave no trace and light on the land use ethics.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA061	Unauthorized Route	TZ	0.11	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Sign to keep vehicles on established route; install barriers at end of route to prevent motorized use within RCA. Post leave no trace and light on the land use ethics.
ULA079	Unauthorized Route	RZ	0.04	None.	None.
ULA084	Unauthorized Route	TZ	0.45	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Install proper drainage.
ULA095	Unauthorized Route	TZ	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
ULA098	Unauthorized Route	TZ	0.10	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA136	Unauthorized Route	TZ	0.07	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA156	Unauthorized Route	TZ	0.12	None.	None.
ULA158	Unauthorized Route	TZ	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Sign and block to keep vehicles on established route and prevent access to seasonal lake. Post leave no trace/light on the land use ethics.
ULA163	Unauthorized Route	TZ	0.10	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA164	Unauthorized Route	TZ	0.07	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Install proper drainage.
ULA174	Unauthorized Route	TX	0.05	**Watershed –** Monitor for Best Management Practices. Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route. Post leave no trace/light on the land use ethics.
ULA187	Unauthorized Route	TZ	0.12	None.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA190	Unauthorized Route	TY	0.92	None.	Install proper drainage.
ULA219	Unauthorized Route	TZ	1.15	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Install proper drainage. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA230	Unauthorized Route	RZ	0.37	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA231	Unauthorized Route	TX	0.59	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure and sign to keep vehicles on established route, post leave no trace and light on the land use ethics.
ULA234	Unauthorized Route	RZ	0.54	None.	Repair gullies; install proper drainage.
ULA252	Unauthorized Route	TZ	0.08	None.	None.
ULA254	Unauthorized Route	TZ	0.09	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Sign to prevent encroachment into meadow; install proper drainage on route (waterbars).
ULA364	Unauthorized Route	TZ	0.07	None.	None.
ULA415	Unauthorized Route	TZ	1.44	None.	None.
ULA420	Unauthorized Route	RZ	0.07	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA426	Unauthorized Route	TX	0.51	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices. Monitor meadow impacts.	Add vehicle barrier at treeline ½ mile north of ULA104 to restrict vehicles from crossing Susan River. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements. Institute a seasonal wet weather closure. Confirm the need for Right of Way, easement, or special use.
ULA454	Unauthorized Route	TY	0.98	None.	None.
ULA455	Unauthorized Route	TY	0.26	None.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA461	Unauthorized Route	TX	3.49	**Watershed –** Monitor for Best Management Practices. Monitor route and seasonal lake for route proliferation off of route and into seasonal lake. Monitor meadow impacts.	Institute a seasonal wet weather closure; sign to keep vehicles on established route. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA461A	Unauthorized Route	TZ	1.48	None.	None.
ULA479	Unauthorized Route	RZ	0.16	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA485	Unauthorized Route	TX	0.13	**Watershed –** Monitor for Best Management Practices.	Repair fence and sign to keep vehicles on established route, post leave no trace and light on the land use ethics. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements. Institute seasonal wet weather closure.
ULA488	Unauthorized Route	RX	0.14	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure; sign to keep vehicles on established route. Post leave no trace and light on the land use ethics. Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
ULA488-1	Unauthorized Route	RX	0.14	**Botany –** Monitor *Lepidium latifolium* (perennial pepperweed) annually to assess treatment efficacy. Monitoring will cease if no noxious weeds are observed for three consecutive years. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure; sign to keep vehicles on established route. Treat perennial pepperweed if monitoring shows recurrence. Post leave no trace and light on the land use ethics.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA489A	Unauthorized Route	TX	0.10	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure; sign to keep vehicles on established route. Post leave no trace and light on the land use ethics.
ULA489B	Unauthorized Route	TX	0.08	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure, terminate route at campsite; sign to keep vehicles on established route. Post leave no trace and light on the land use ethics.
ULA496	Unauthorized Route	TZ	0.41	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
ULA505	Unauthorized Route	RX	0.26	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure.
ULA533	Unauthorized Route	TZ	0.14	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail. **Watershed –** Monitor for detrimental soil compaction, soil erosion, and drainage effectiveness.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
ULA536	Unauthorized Route	TZ	0.18	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
ULA546	Unauthorized Route	TZ	0.33	None.	None.
ULA557	Unauthorized Route	TX	0.39	**Watershed –** Monitor for Best Management Practices.	Institute a seasonal wet weather closure to mitigate rutting. Install proper drainage to correct rilling.
UMN003	Unauthorized Route	TZ	0.07	None.	None.
UMN004	Unauthorized Route	TZ	0.19	None.	None.
UMN005	Unauthorized Route	TZ	0.05	None.	None.
UMN008	Unauthorized Route	TZ	0.33	None.	None.
UMN009	Unauthorized Route	TZ	0.28	None.	None.
UMN010	Unauthorized Route	TZ	0.03	None.	None.
UMN012	Unauthorized Route	TZ	0.04	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UMN790	Unauthorized Route	RZ	0.23	None.	None.
UMN853	Unauthorized Route	RZ	0.28	None.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UNC050	Unauthorized Route	TZ	0.57	None.	None.
UNC105	Unauthorized Route	TZ	0.06	None.	None.
UNC106	Unauthorized Route	TZ	0.14	None.	None.
UNC181	Unauthorized Route	TZ	0.16	None.	None.
UNC395	Unauthorized Route	TZ	1.21	None.	None.
UNC410	Unauthorized Route	RZ	0.52	None.	None.
UNC412	Unauthorized Route	TZ	0.97	None.	None.
UNC513	Unauthorized Route	RZ	0.33	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.
UNE001A	Unauthorized Route	RZ	0.25	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNE001B	Unauthorized Route	RZ	0.02	None.	None.
UNE028	Unauthorized Route	RZ	0.09	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UNE047	Unauthorized Route	TZ	0.16	**Botany –** Monitor for impacts to rare plants and adjacent playa. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
UNE062	Unauthorized Route	TZ	0.35	**Recreation –** Monitor route into dispersed recreation site yearly for travel off of the designated trail.	None.
UNE080	Unauthorized Route	TZ	0.11	**Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	Define edge of site to keep vehicles out of riparian area and prevent creek crossing; sign and install barriers. Maintain only established route into site. Sign area to keep vehicles on designated route. Post leave no trace/light on the land use ethics. Sign unauthorized routes for vehicle restrictions.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNE360	Unauthorized Route	RZ	0.16	None.	None.
UNE384	Unauthorized Route	TZ	0.06	None.	Sign road to prevent meadow encroachment.
UNE392	Unauthorized Route	TZ	0.32	None.	Block route at meadow.
UNE394	Unauthorized Route	TZ	0.91	None.	None.
UNE404	Unauthorized Route	RZ	0.31	None.	None.
UNE405	Unauthorized Route	RZ	0.28	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence.	Sign to keep vehicles on established route.
UNE436	Unauthorized Route	TZ	0.47	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UNE476	Unauthorized Route	RZ	0.34	None.	None.
UNE492	Unauthorized Route	RZ	0.27	None.	None.
UNE493	Unauthorized Route	RZ	0.18	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNE499	Unauthorized Route	RZ	0.50	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements. Confirm need for Right of Way, easement, or special use.
UNE562	Unauthorized Route	TZ	0.08	None.	None.
UNE564	Unauthorized Route	RZ	0.36	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UNE590	Unauthorized Route	TZ	0.04	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UNE642	Unauthorized Route	TZ	0.07	**Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNE643	Unauthorized Route	TZ	0.33	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Sign to control access to Ashurst Lake. Maintain only established access into site. Sign area to keep vehicles on designated route. Post leave no trace/light on the land use ethics. Sign unauthorized routes for vehicle restrictions.
UNE708	Unauthorized Route	TZ	0.63	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UNE709	Unauthorized Route	TZ	0.35	None.	None.
UNE712	Unauthorized Route	TZ	0.28	None.	None.
UNE714	Unauthorized Route	TX	0.19	**Watershed –** Monitor dry meadow for impacts and for Best Management Practices.	Institute a seasonal wet weather closure.
UNE749	Unauthorized Route	TZ	0.11	None.	None.
UNE750	Unauthorized Route	TZ	0.38	None.	None.
UNE787	Unauthorized Route	TX	0.28	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Monitor for Best Management Practices. Monitor meadow and spring impacts.	Institute a seasonal wet weather closure.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNE814	Unauthorized Route	TZ	0.26	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Recreation –** Monitor route into dispersed campsite yearly for travel off of the designated trail.	None.
UNH001	Unauthorized Route	TZ	1.05	**Botany –** Monitor for impacts to rare plants. If increased impacts are found, consider signing, barriers, or closing route to protect occurrence. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UNH515	Unauthorized Route	TZ	0.54	None.	None.
UNH528	Unauthorized Route	TZ	0.10	None.	None.
UNH529	Unauthorized Route	TZ	0.22	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.
UNO170	Unauthorized Route	TZ	0.82	None.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNO171	Unauthorized Route	TZ	0.53	None.	None.
UNO180	Unauthorized Route	TZ	0.34	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.
UNO216	Unauthorized Route	TZ	0.36	**Botany –** Monitor *Centaurea solstitialis* (yellow starthistle) annually to assess treatment efficacy. Monitoring will cease if no noxious weeds are observed for three consecutive years. **Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements. Treat yellow starthistle occurrence along route.
UNO219	Unauthorized Route	TZ	0.11	None.	None.
UNO220	Unauthorized Route	TZ	0.85	None.	None.
UNO222	Unauthorized Route	TZ	1.16	None.	None.
UNO229	Unauthorized Route	TZ	1.18	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols.	None.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNO230	Unauthorized Route	TZ	0.11	None.	None.
UNW100	Unauthorized Route	TZ	0.40	**Heritage Resources –** Monitor for potential effects per Forest heritage monitoring protocols. **Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	Harden within RCA (0.09 miles).
UNW318	Unauthorized Route	TZ	0.15	None.	None.
UNW337	Unauthorized Route	TZ	0.10	None.	None.
UNW338	Unauthorized Route	TZ	0.77	None.	None.
UNW339	Unauthorized Route	TZ	0.30	None.	None.
UNW340	Unauthorized Route	TZ	0.33	None.	None.
UNW341	Unauthorized Route	TZ	0.12	None.	None.
UNW342	Unauthorized Route	RZ	0.16	None.	Coordinate with the agency of jurisdiction to obtain the appropriate encroachment and implement the associated requirements.

Route ID	Prior Status	Class of Vehicle and Season of Use	Length (miles)	Monitoring Plans	Mitigation Measure
UNW353	Unauthorized Route	TZ	0.23	None.	None.
UNW355	Unauthorized Route	TZ	0.56	None.	None.
UNW356	Unauthorized Route	TZ	0.44	None.	None.
UNW358	Unauthorized Route	TZ	0.27	None.	None.
UNW364	Unauthorized Route	TZ	0.28	None.	None.
UNW509	Unauthorized Route	RZ	0.09	None.	None.
UNW602	Unauthorized Route	RZ	0.08	None.	None.
UNW675	Unauthorized Route	TZ	0.12	None.	None.
UNW676	Unauthorized Route	TZ	0.13	None.	None.
UNW804	Unauthorized Route	TZ	0.28	None.	None.
UNW805	Unauthorized Route	TZ	0.35	None.	None.
UTD001	Unauthorized Route	TZ	0.76	**Watershed –** Conduct GYR monitoring for soils. If monitoring assessments result in a yellow or red condition, then remediation will be required according to Best Management Practices.	None.

Appendix B: FEIS Errata

Errata for the Lassen National Forest - Motorized Travel Management - Final Environmental Impact Statement include the following as of January 28, 2010:

In the Transportation Facilities Section, 3.2 of the FEIS

- The 2009 MOU between the FS and the FHWA mentioned on page 64 of the FEIS has not been finalized. Instead we refer to an October 14, 1975 MOU.
- Corrections to the Annual Maintenance Costs for Operational Maintenance Level 4 in Table 15
- Corrections to the mileages for Alternative 5 and Modified 5 on line 3 of Table 19
- Addition of a footnote that Annual Maintenance Needs for Roads values on line 4 of Table 19 were calculated with monetary values to two digits, so results vary slightly from values that might be calculated from Tables 13 & 15
- Addition of a footnote that 5 year Deferred Road Maintenance Costs listed on line 5 of Table 19 include a 7% annual inflation factor, but the Deferred Trail Maintenance values on line 8 of Table 19 does not. Also, corrected the Current Deferred Road Maintenance value listed in the text on page 78 of the FEIS from $111, 695, 499 to $111,695,400.
- Added Trail maintenance costs to Table 19
- Added total NFTS maintenance costs (roads and trails) and increases or decreases by Alternative to Table 19
- Changed values in the text under Effects Analysis for each alternative to reflect the total deferred maintenance costs for both roads and trails in the NFTS.
- Adjusted Table 21 to reflect new maintenance cost values from Table 19.

In the Recreation Section

- In Tables 37 and 38 (page 142 of the FEIS) we added Modified Alternative 5 to the Tables.
- In the same two Tables, we changed the numbers from a raking system (best to worst) to a relative rating system (how good they were for the resource or opportunity)
- We carried these ratings into Summary Table 2 on page xxv.

Seasonal Restrictions in the Modified Alternative 5

Spotted Owl Nesting: One 2.1 mile-long unauthorized route (29N21Y) will have a seasonal restriction to protect Spotted Owl nesting when it is added to the NFTS. The route will be open for motorized vehicle use from August 15 to March 1 each year.

Transportation Facilities Errata (All of FEIS Chapter 3.2)

Changes Between DEIS and FEIS

Safety analyses for proposed mixed use segments of ML 3 and ML 4 roads were completed and are incorporated into the FEIS. The section was restructured to better mirror the regional template for transportation and engineering. In addition, clarifying language was added throughout the section to better explain concepts and proposals. Finally, maintenance and other costs are restructured to better portray the effect on these for each of the alternatives.

Introduction

The National Forest Transportation System (NFTS) consists of roads, trails, and airfields. The NFTS provides for protection, development, management, and utilization of resources on the national forests. There are other roads and trails existing on the Forest that are not currently part of the NFTS Changes to NFTS must take into account the need to provide for both adequate public safety and adequate maintenance of any roads and trails that will be designated for wheeled motor vehicle use. The analysis in this section focuses primarily on these two features of the NFTS.

The goal of the NFTS is to provide public and administrative access to Lassen N. F. by providing a safe, economical, and efficient system of roads and trails, while minimizing effects to the local environment. Planning and providing for well-designed access enhances opportunities for public use and enjoyment of the forest.

The NFTS that currently serves motor vehicle users on Lassen NF consists of approximately 3,278 miles of NFS roads and approximately 57 miles of motorized NFS trails. An additional 1,060 miles of unauthorized routes exist upon the landscape. These routes are currently open and available for public use under a temporary forest order prohibiting cross-country travel and travel outside of existing, identified routes. This section primarily addresses the road network and access. See Chapter 3: Recreation Resources, for a detailed discussion of trails.

Analysis Framework: Statute, Regulation, Forest Plan and Other Direction

Travel Management Rule

On November 9, 2005, the Forest Service published a new regulation entitled, *Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule* (Travel Management Rule), which modified motor vehicle use direction for NFS lands under 36 CFR Sections 212, 251, 261, and eliminated 36 CFR Section 295. The rule provides guidance to the Forest Service on designation and management of motor vehicle use on NFS lands, and

requires formal designation of roads, trails, and areas open to motor vehicle use on each national forest and grassland (USDA FS 2005h).

Other Regulations

Other direction directly influencing road management includes Federal and State laws, the 1966 Memorandum of Understanding (MOU) between Federal Highways Administration (FHWA) and the Forest Service, Forest Service manuals and handbooks in the 7000 series, and Forest Plan direction.

Forest Service Manual Sections 2350 and 7700 contains agency policy for management of the National Forest Transportation System. Agency policy requires the development of trail management objectives (TMO's) and road management objectives (RMO's). The TMO's and RMO's document the purpose for each trail or road and follow the direction in Forest Service Handbook (FSH) 2309.18, Trails Management Handbook (FSH 1991b), when developing, reconstructing, or maintaining trails.

The purpose for the trail or road sets the parameters for maintenance standards needed to meet user needs, resource protection and public safety. Forest Service Handbook 7709.59 describe the maintenance management system the Forest Service uses and the maintenance standards needed to meet road management objectives (RMO's) for the road system, with emphasis on public safety (FSH 2009b, 2009a). The California Vehicle Code (CVC) regulates the use of motor vehicles in California, including motor vehicles used on the national forests. The CVC sets safety standards for motor vehicles and vehicle operators. It defines the safety equipment needed for highway-legal and non-highway-legal vehicles. It also defines the roads and trails where non-highway-legal motor vehicles may be operated.

Regional Forester's letters, file code 7700/2350, dated 08/26/06, 06/20/07, 1/13/09, and 2/13/09 contain procedures national forests in the Pacific Southwest Region will use to evaluate safety aspects of public travel on roads when proposed changes to the NFTS will allow both highway-legal and non-highway-legal traffic on a road (MMU - motorized mixed use).

In the October 14, 1975 Memorandum of Understanding (MOU) with the FHWA, the Forest Service agreed to manage a subset of NFTS roads defined as "public roads" (maintained for four wheel passenger car vehicles) as directed in FSM 7730.5 with a definition of "safety requirements" as directed in FSM 7733. These roads are maintained with a Forest Service schedule and frequency assigned as ML 3, 4, and 5. These roads are managed as highways in accordance with the CVC. The Forest Service and FHWA agree that while these NFTS roads are not "public roads" per se, as for example a deeded interstate highway is, most are "open to public travel." "Open to public travel" defines a NFTS road as available for use by the public, except during scheduled periods, extreme weather, or emergency conditions, and passable by four-wheeled standard passenger cars.

Within the context of annual funding (affordability), resource management activity, and priorities established by Congress and the Administration, the Forest Service endeavors to provide a safe experience for users traveling on NFS roads and trails. It is always the ultimate responsibility of users to drive safely and follow all applicable laws. The following publications specifically address the design of NFS roads and NFS trails:

AASHTO: Geometric Design of Very Low-Volume Local Roads (AASHTO 2001)

USDA Forest Service EM-7100-15: Sign and Poster Guidelines (USDA FS 2005d)

USDA Forest Service Forest Service Manual (FSM) 7700: Transportation System (FSM 2009b)

USDA Forest Service Forest Service Handbook (FSH) 7709.55: Transportation Planning Handbook (FSH 1992)

USDA Forest Service FSH 7709.56: Road Preconstruction Handbook (FSH 2003)

USDA Forest Service FSH 2309.18: Trails Management Handbook (FSH 1991b)

Effects Analysis Methodology

Transportation Specific Assumptions:

- Any motor vehicle use authorized by State law is occurring on the NFTS unless there are forest-specific prohibitions.
- Motor vehicle use by special use permit or other permitted activities are outside the scope of this proposal (fuel wood gathering, dispersed camping, motorized OHV events, recreation residences, mining activities, grazing, timber sales, etc.)
- High-clearance vehicles (4WD, etc.), ATV and motorcycles represent the vehicle classes most likely to use motorized trails. Low clearance, highway-legal vehicles are not prohibited on motorized trails but are not as likely to use them.
- Some maintenance costs will be incurred by the Forest Service for any route open to motor vehicle use by the public.
- State laws pertaining to motor vehicle operators set the safety standards for drivers and other users of the NFTS.

Public Safety - 36CFR212.55 requires public safety be considered when designating roads, trails and areas for motor vehicle use. The proposed additions and changes to the NFTS have been evaluated for the effects on public safety

Transportation System Affordability - 36CFR212.55 requires consideration of the need for maintenance and administration of the designated NFTS. Costs for the NFTS address needed maintenance work that has not been completed for various reasons (deferred maintenance) and maintenance that should be performed routinely to maintain the facility at

its current standard and serviceability (annual maintenance). In addition there may be additional costs associated with proposed changes to the NFTS (implementation costs). These may include costs for improvements to unauthorized routes added to the NFTS, costs associated with addressing public safety when altering the use pattern on existing roads, and costs for seasonally closing routes to restrict motor vehicle use.

Specific Methodology

Approximately 4,400 segments comprising 1,089 miles of unauthorized routes currently exist on Lassen NF. During public feedback on the NOI, the public commented specifically on segments totaling 768 miles of unauthorized routes. These routes were analyzed for possible addition to the FTS in a separate Travel Analysis Process (TAP). An interdisciplinary team examined these route segments for resource risks and recreation opportunities. Team members reviewed the condition of each route and assessed its conformance with the standard and guideline indicators associated with their area of expertise. Resource area specialists used field investigation, GIS data review, and resource area road-logs/field reports to determine their recommendation for each route. Ultimately the forest inventory of unauthorized routes will be reduced by designating some routes as NFTS roads or NFTS motorized trails and decommissioning/rehabilitating the routes that are not selected for designation. The Route Designation process is the first step in accomplishing this goal.

A main consideration when designing and maintaining road systems is safety. Considerations for road use and design are based on modes of travel, amount and variety of use, geography, topography, soils, and weather conditions. Signs, gates, turnouts, surfacing, road widening, road realignment, speed limits, clearing, parallel routes for different modes of travel, and allowing only certain modes of travel (e.g., highway-legal vehicles, OHVs, non-motorized travel) are all ways to mitigate for safety.

The following safety sideboards have been developed to aid in determining feasibility of changing use on specific NFS roads, NFS trails, and Unauthorized Routes on the Lassen NF:

Changing roads managed and maintained for passenger cars to roads managed and maintained for high-clearance vehicles (i.e. ML 3→ML 2): This change may reduce the likelihood of speed-caused accidents between vehicles; however, it may include hazards to drivers from roadway rocks, wind-thrown trees and danger trees, access and travel time to and from medical treatment facilities, etc.

Roads managed and maintained for high-clearance vehicles changed to managed and maintained for passenger cars (i.e. ML 2→ML 3): Changes might affect public safety such as increased speeds, ensuring compliant MUTCD road signing, and educating drivers.

Roads changed to Motorized Trails: The use of non-highway-legal vehicles must consistent with the current Forest Plan and the Recreational Opportunity Spectrum (ROS) classification for the area.

Adding unauthorized routes to the NFTS: The route or system of routes added should provide for a quality recreational riding experience, be compatible with Forest Plan direction, and either add to or enhance the opportunities for motorized recreation use on the forest.

Motorized Mixed Use: The California Vehicle Code (CVC) requires that motor vehicles operated on public highways be highway-legal and be operated by licensed drivers. The CVC allows the operation of non highway-legal vehicles operated by unlicensed drivers on roughly graded forest roads and logging roads. The Lassen NF considers roads maintained for high-clearance vehicles (Forest Service maintenance schedule/level of ML 2) to be roughly graded. Operation of OHV's on these roads is consistent with State law. Roads maintained for passenger cars are managed more aggressively to achieve a higher road standard. Forest Service maintenance schedules of ML 3, ML 4, and ML 5 apply to these roads and they are not considered to be "roughly graded" or logging roads. Thus, roads managed in this fashion are considered highways in accordance with the State definition. Motorized mixed use is allowed on short (<3 mile in length) segments on these types of roads provided an engineering safety analysis supports mixed use.

Motorized Mixed Use

In the Travel Management Rule supplementary information, the agency acknowledged the potential need to mix highway-legal and non-highway-legal traffic on some Forest Service ML 3 and ML 4 roads, and directed evaluation of safety and engineering considerations for motorized mixed use. Engineering analyses reports are used to display consequences of these potential designations. The publication, Guidelines for Engineering Analysis of Motorized Mixed Use on National Forest System Roads (USDA FS 2005a) and the Forest Service Handbook (FSH 1992: Chapter 30) outline safety risk analysis procedures when considering authorizing motorized mixed use.

The Lassen NF conducted engineering analyses for motorized mixed use on certain Forest Service ML 3 and 4 road segments. Table G-3 in Appendix G – "Proposed Passenger Car Roads Analyzed for Motorized Mixed Use" is a record of the roads currently managed to high standard that were analyzed in this project to assess the feasibility of allowing use by both highway-legal and non highway-legal vehicles.

Often, these segments are on arterial and collector roads, and thus the main public access routes to the forest. Engineering analyses evaluated the probability of a crash and the severity of a crash.

The crash potential ratings were based on roadway factors, (e.g., driving speeds, closing speeds, emergency situation vehicle maneuvering zones - road shoulders-adjacent areas to road shoulders), surface type and condition, sight distance and vegetation encroachment, road alignment (horizontal and vertical curves), traffic volume and type, and whether operators are required to be licensed or certified.

Crash severity ratings were based on items such as roadside conditions (e.g., natural ground slopes, slope and height of embankments, and large unyielding roadside features), speed, and traffic types (i.e., the larger the differences in vehicle sizes, the greater the crash severity).

Lassen NF conducted engineering field review for motorized mixed use on approximately 85 miles of Forest Service ML 3-4 roads currently open to highway-legal vehicles. These analyses are documented as engineering reports, and will be used to inform Forest Supervisor decisions involving motorized mixed use.

Affected Environment and Environmental Consequences

Affected Environment

Development History and Current Need

The grade of terrain and its influence on ease of travel has affected the choice of travel paths historically and continues to be a primary influence today. The gentlest grades occur along rivers and streams with an average gradient of approximately two percent. Grade is the historical reason that game trails followed rivers and streams, which became indigenous peoples' trade trails and routes, which then became immigrant trails and wagon roads, and later became modern transportation routes such as railroad grades and forest roads. In the latter half of the 20th century, heavy construction and snow removal equipment were designed and built. This enabled the construction and maintenance of cut-and-fill roads, away from the gentle river grades and up the sides and ridges of the Cascade and Sierra Nevada Mountains.

Historical road access needs, such as for gold mining, livestock grazing and production, farm products transport, and timber transport, from forest areas ultimately to metropolitan centers, were the impetus for construction of the present forest, county, and state transportation systems that exist today. Recent surveys (2000-2005) conducted by Lassen NF indicate that the current primary use of the NFTS is to facilitate the economic extraction of timber products, which reduces concentrations of hazardous forest fuels, as directed by the Herger-Feinstein Quincy Library Group Forest Recovery Act (HFQLG). The secondary use of the NFTS is recreation activity participation, discussed in Chapter 3: Recreation Resources. The tertiary NFTS use is resource area management access and fire protection and suppression activities.

Access

The reduction of hazardous forest fuels under HFQLG, as discussed in Chapter 3: Forest Vegetation, requires an efficient road network for forest ingress, access, and egress (USDA FS 2003). Roads for direct project access may exist on either a short- or long-term basis, depending on immediate project needs and future administrative needs. Many terminal-type project roads are temporary and are decommissioned and rehabilitated once management activities are completed.

Livestock movement and access to forest products such as firewood similarly require an efficient road network, though on a much smaller scale. National Forest System Roads provide access to private in-holdings and research and development areas, including the three experimental forests on or adjacent to Lassen NF (e.g., Blacks and Swain Mountain, managed by the Pacific Southwest Research Station, and LaTour State Forest managed by the California Department of Forestry). In some instances permits are sometimes issued to individuals and companies for NFS road use to provide access to their approved activities. Finally, the Forest Service and other agencies, such as the California Department of Forestry and Fire Protection, Bureau of Land Management, California Department of Fish and Game, and the counties of Lassen, Shasta, Plumas, Modoc, Siskiyou, Butte, and Tehama, use NFTS roads administratively.

During project initiation (e.g., timber, livestock, or energy), the benefiting commercial operator may construct and maintain the roads needed to access the affected project area. This cooperative arrangement applies only during the construction and operational phases of the project. Many users are authorized to maintain or upgrade NFTS roads in this manner to accommodate their specific needs.

Recreation

This document section considers public access to recreational facilities and general forest areas for highway-legal motor vehicles. Forest access is critical for accommodating recreational uses. The NFTS serves two main types of recreation. One type is destination recreation; the roads provide access to a drop-off point where the recreational activity occurs, begins or becomes accessible by foot (such as a trailhead, scenic view, or fishing, picnic, or camping site). The other type is road-based recreation; when visitors use roads for hiking, biking, horseback riding, pleasure driving in highway-legal vehicles, motorcycling, ATV riding, snowmobiling, and cross-country skiing on groomed trails.

Within the realm of destination recreation access, another aspect of the road network that the Forest is working through with private timberland owners is that of road easement agreements. The NFTS road system is a seamless transportation network across the Forest landscape which encompasses public and private property. Road use agreements and easements are common, are utilized by both forest service and private timberland parties,

and are beneficial in a myriad of ways including motorized recreation access. As the initial MVUM – motor vehicle use map is created, and as future iterations are developed, the forest service, private companies, and the public will continue to develop a cooperative and comprehensive plan of OHV forest use that respects private land owners and their associated easement agreements.

A second analysis component of forest access is whether to authorize mixed vehicle classes of highway- and non-highway-legal vehicles to share certain NFTS roads open to public travel and maintained for passenger car traffic. California Vehicle Code prohibits non-highway-legal motor vehicle use on public roadways maintained for passenger cars, such as Forest Service ML 3–5 roads open to public travel.

Certain NFTS roads have seasonal or year-long use restrictions to protect resources. Some restrictions are directed at protecting the road infrastructure. Un-surfaced roads with soils prone to erosion can be damaged during spring precipitation events, and are prone to rutting during early fall snows. Other road access restrictions to specific geographical portions of the Forest provide an annual safe-zone for wildlife during mating-season/birthing season. Other biologically sensitive areas may be restricted during critical time-periods such as extreme fire danger during fire season.

The MVUM will identify legal motor vehicle uses on Lassen NF, addressing seasonal or yearlong resource protection motor vehicle restrictions. If needed, the Forest Supervisor may issue emergency or temporary forest orders restricting access to protect users and/or resources. As discussed above, such restrictions are commonly implemented to respond to high fire danger and fire suppression, high water, extreme weather conditions, and during eradication of forest pests.

According to Lassen Forest Recreation Use Surveys in 2000 and 2005 (USDA FS 2001a, 2006b), the demographics of drivers on mountain roads in Lassen NF have changed during the last 20 years. Today, many forest drivers are from urban and metropolitan areas, are unfamiliar with mountainous roads, and are therefore less aware of the risks common on different types of forest roads.

Technological advancements in the capabilities of vehicles used to travel forest roads have resulted in increases in the number and variety of vehicles on NFS roads. With these changes come associated safety concerns. Advancements in OHVs allow visitors to travel to more challenging areas with less operating skill than needed in the past. Today visitors driving standard passenger cars may encounter full-size four-wheel-drive vehicles, ATVs, motorcycles, mountain bikes, and/or large commercial trucks, all on the same road.

As described in preceding sections, the NFTS was developed primarily for timber removal, mining access, livestock grazing, and inter-community or intra-regional travel. The existing road network is an inherited system that was physically designed for industrial use by large and slow commercial vehicles. The recreational vehicles in use today did not exist

when the roads were constructed. Therefore, some segments of the road network are being force-fitted to accept vehicles and uses they were not designed for (FSH 2003). In essence, much of the road system was not originally designed to safely accommodate the many types of motor vehicles that are used today to access and travel through Lassen NF.

The mission of the agency has evolved during the past 25 years to include an increasing emphasis in motorized recreation. With this change in use of the transportation system, safety of the motoring public is a priority. The challenge is to keep users of the road system safe when they are no longer driving--for example--dual-sport 90cc motorcycles and surplus military Jeep 4x4 trucks, but are now riding motorcycles with 125 horsepower/1.5 feet of suspension and sport utility trucks that can drive off-road at 60+ MPH. Safety must be a principal factor to consider when deciding what types of motorized use to authorize, and where to authorize the various types of motorized use.

Seasonal of Use

Roughly surfaced roads located in soils prone to erosion can be damaged during wet weather, increasing the potential for rutting, deterioration of the road bed and sedimentation. Therefore, certain NFTS roads have seasonal restrictions to protect soil and water resources and the road infrastructure. Other restrictions limit disturbances to wildlife and other sensitive areas during critical nesting or migration periods.

The MVUM will identify legal motor vehicle uses on Lassen NF, including seasonal restrictions. If needed, the Forest Supervisor may also issue emergency forest orders restricting access to protect users and/or resources. Such restrictions are commonly imposed in response to high fire danger, ongoing fire suppression efforts, high water levels, and extreme weather conditions.

Road Network

Access to Lassen NF begins with two-lane state highways and interconnecting county two-lane roads. There are no U.S. or interstate highways within Lassen NF. State Highways 36, 44, and 299 are the primary east–west routes across Lassen NF. State Highways 89 and 32 are the primary north–south routes across Lassen NF. Due to the ease of access and overall demographic changes, such as population increases in the Sacramento, San Francisco Bay, and Reno areas, several resort-type seasonal-influx communities have grown rapidly along the Highway 36 corridor and along forest roads that connect to Highways 36, 44, and 89. These routes serve the local population for daily commutes and forest access, and are continually upgraded by the State (CALTRANS) to meet the increasing demand.

Numerous county roads are connected to the state highways. Many of these roads have been on the landscape since first constructed by European settlers. Some county roads lead

directly into Lassen NF. Roads under county jurisdiction are usually designed to accommodate passenger cars, but may not always be graveled or hard-surfaced. Roads crossing NFS lands may fall under several jurisdictions. The roads located within the national forest are predominately under Forest Service jurisdiction (NFTS roads). However, as noted above, the forest also contains interconnected county, state, and private roads. To keep track of the myriad of jurisdictional responsibilities, the forest maintains an Access Management/INFRA database inventory of all roads that cross the forest and their jurisdiction and maintenance responsibilities. National Forest Transportation System roads are necessary for the administration, utilization, and management of NFS lands. The counties, State, United States Department of Interior (USDI) Bureau of Land Management (BLM), and private landowners have received rights-of-way, or in some cases obtained jurisdiction, over some of the roads or road segments on NFS lands. Formal agreements of this nature are not affected by this project.

Functional Class

The NFTS roads are divided into three classes by function. These classes are arterials, collectors, and local roads. The road network can be compared to the structure of a tree. The arterial is akin to the trunk of a tree, the collectors are similar to the intermediate branches leading from the trunk, and the more numerous and less-developed local roads are similar in concept to the smallest branches of the tree.

Arterials are the main trunk roads, designed to handle higher volumes of traffic (ADT – average daily traffic for the NFTS as defined by FSM/FSH are much lower than FHWA low-volume traffic definition of under 400 vehicles per day) and to provide access to key areas of the forest. Some may connect a State highway, a forest community or major watershed drainage system to another. These roads are generally held to higher maintenance standards. Collectors are intermediate branch roads that collect traffic from local roads and connect local roads to arterials. Collectors vary in both volume of traffic and maintenance standard. Local roads are often terminal facilities and were established to service end-of-road needs such as camping, trailhead access and general forest access. Local roads are generally held to lower maintenance standards and receive the lowest volume of traffic. The bulk of the NFTS road network is comprised of local class roads followed by collectors and then arterials.

Administrative Roads

Administrative roads are, by definition, managed for administrative access to the forest by the agency. Maintenance levels for these roads may range from Forest Service ML 2–5, depending on operational needs. These roads may have specified access-related easements or reservations across private lands for Forest Service needs. Administrative

roads may also be used by timber purchasers and for access to private land when expressly authorized by the agency. Administrative roads are generally not open to the public.

Unauthorized Routes

Referred to as “unauthorized” or “unclassified”, unauthorized routes are non-permitted roads and trails on NFS lands that are neither managed nor recognized by the Forest Service as part of the NFTS. Field observations indicate that off-road recreation, including woodcutting and hunting/fishing access, has generated only a small portion of the unauthorized routes on Lassen NF. The majority of these unauthorized routes were originally established by the Forest Service to serve a short-term land management objective which was to be followed by an immediate or scheduled decommissioning of the road. This did not always occur as planned. Examples are former timber sale temporary roads, grazing allotment access routes, mining access routes, and land exchange areas that had previously been roaded and used by private owners.

Temporary timber sale roads are generally used for one season, and do not adhere to NFTS road engineering standards (grade, density compaction, drainage requirements). Temporary roads which were not decommissioned with the timber sale or associated vegetation management project become unauthorized routes and tend to be problematic as annual producers of sediment and agents of resource damage. These routes are commonly single- and two-track travel ways, nine feet wide or less, relatively short – perhaps less than one-quarter mile long – and/or overgrown with vegetation. Over the years, Ranger District efforts have worked through project NEPA protocol to decommission or rehabilitate many of these routes, especially in places of identified resource damage or sedimentation into impaired watersheds or anadromous fisheries.

Unauthorized routes are neither NFTS roads nor NFTS trails, and are not included in the forest transportation atlas. According to the current Lassen NF inventory and Unauthorized Route Travel Analysis (USDA FS PSW Region 2008c), there are currently 1,089 miles of unauthorized routes across the Lassen National Forest.

Access to private property in holdings may be served by duplicate roads/routes, including existing unauthorized routes. These routes may not be added and/or designated as reasonable access may already be provided over the designated NFTS system roads or permitted non-system routes. Commercial road-use permits are utilized for commercial use of a NFTS road and special-use permits may be used for the use of an unauthorized route. During the special-use period the route would not be considered “unauthorized”.

Maintenance of NFTS Roads - Maintenance Levels (ML)

NFS roads are planned, designed and constructed for different modes of travel. These planned modes of travel require an associated maintenance schedule and maintenance

intensity which is determined by the planned use, (e.g. fuel reduction projects, recreation residence access), the road management objectives, and road design components, (e.g., design speeds, inter-visible turnouts), for each specific road.

The NFTS road system receives annual and scheduled maintenance with associated internal Forest Service Maintenance Level (ML) designations listed numerically as one through five (1–5) as shown in Table 12. Roads have an Objective ML, which indicates the long-term planned maintenance strategy for that road, and an Operational ML, which is the current physical condition of the road. Operational and objective maintenance levels may or may not be the same for a given road. In this FEIS, maintenance levels listed for roads are their assigned Objective ML unless otherwise noted. A summary of road miles in each maintenance level is presented in Table 13.

The Lassen NF is relatively dry (basin and range) and flat (volcanic) topography that dominates the Eagle Lake and Hat Creek Ranger Districts with the exception of the Hat Creek Rim (strike-slip fault) and the Pit River channel. Roads on these Districts that receive annual maintenance and/or project pre-haul road maintenance tend to weather-out less and at a slower-rate of erosion and are typically at a higher operational level. This fact is reflected in a higher numerical operational road maintenance level than their assigned planned objective maintenance level.

On the Almanor Ranger District, the topography is quite varied, as is the geology (the confluence of the Cascade volcanic range with the Sierra granitic range). The associated mountainous terrain and terrenes are vertically variable with an associated increase in precipitation (snow and rain) and road weathering. The operational and objective maintenance levels are usually in agreement (e.g., an ML 2 looks like an ML 2, and an ML 3 will require regular maintenance to remain an ML 3).

Currently, NFTS roads are designed by Forest Service engineers and often constructed with the private capital of independent contractors. Just as in cities across this country, private developers use their capital to construct the city streets to enable access to home subdivisions and commercial sites/factories. Once the contractor builds the streets to designed engineering standards, cities are willing to take public ownership to maintain these streets, all of which allows the city to grow and prosper. The same public/private methodology is utilized to construct many roads on National Forests.

Maintenance Level 1 roads are managed for intermittent use and can be allowed to deteriorate and return to a more natural vegetative state. These roads can be put into service by being brought to an ML 2–5 standard during a timber sale or other intermittent project need, then later taken out of service and put back into long term “storage” and ML 1 status. The roads are kept in storage until a subsequent need arises. While in storage, they are an ML 1 category, which allows no motor vehicle access. Non-motorized access, such as horseback riding, bicycling and hiking, may occur on ML 1 roads while they are in

storage, however, the Forest Service will generally not maintain these ML 1 roads for such uses.

Maintenance Level 2 roads are generally local and managed for relatively slow rates of speed with low speed design features (5-15 mph) and advised for travel by high-clearance vehicles only. Maintenance Level 2 roads are considered single-purpose roads. Traffic is normally light, usually consisting of administrative, permitted, dispersed recreation, or other specialized uses. These roads provide for the greatest extent of dispersed recreation access on the forest and account for 2,568 miles, or 72 percent of the existing Lassen NFTS road network. Lassen NF completed a Travel Analysis on its ML 1-2 road system in April 2008.

Maintenance Level 3, 4, and 5 roads account for 710 miles of road on Lassen NF. These roads form the backbone arterial and collector system that enables relatively fast (25–55 mph) efficient transportation across the forest. The Forest completed a Roads Analysis on its ML 3–5 road system in July 2006 and it was accepted and signed by the Forest Supervisor in January 2007.

Tabel 12 National Forest System Road Maintenance Level (ML) Attributes on Lassen NF

Maintenance Level	Attributes
5	Subject to the requirements of the Highway Safety Act and Manual of Uniform Traffic Control Devices (MUTCD). Navigable/Passable by passenger car. Highest traffic volume and/or speeds. Typically connect to state and county roads. Bridges/Culverts provide drainage. Usually arterial and collector. May include some developed recreation roads. Usually paved or chip-sealed.
4	Subject to the requirements of the Highway Safety Act and Manual of Uniform Traffic Control Devices (MUTCD). Moderate traffic volume and speeds. Navigable/Passable by passenger car. Typically connect to county/state roads. Bridges/Culverts provide drainage. Usually collector or arterial. May include some developed recreation roads. Usually provide crushed-rock or volcanic cinder road surfacing.
3	Subject to the requirements of the Highway Safety Act and Manual of Uniform Traffic Control Devices (MUTCD). Moderate/low traffic volume. Navigable/Passable by passenger car. Typically connect to arterial and collector roads. A combination of dips and culverts provide drainage May include some dispersed recreation roads. Potholing or wash-boarding may occur. May provide various road surfacing to include native soil, crushed rock, cinder.

Maintenance Level	Attributes
2	Not subject to the requirements of the Highway Safety Act. Low traffic volume and moderate to low speeds. Navigable/Passable by high-clearance vehicles. Not maintained for passenger cars. Typically local roads. Typically connect to collectors and other local roads. Dips are the preferred drainage treatment, culverts common Surface smoothness is not a consideration.
1	Not subject to the requirements of the Highway Safety Act. Motor vehicle traffic is restricted, including administrative traffic. Physically blocked or entrance is disguised. Maintenance conducted to minimize resource impacts. Aside from a condition survey, no maintenance may be required if there is no likelihood of resource damage.

Source: USDA FS 2005b.

Annual and Deferred Maintenance Costs: Roads

Annual maintenance involves the regular, cyclical maintenance required to keep a road functioning in accordance with the assigned maintenance level. Annual maintenance needs for ML 2 roads average $2,094 per mile. Maintenance for these low standard roads typically involves addressing resource concerns, including drainage. User-comfort is not a consideration.

Table 13 Current Miles of National Forest System Roads

Maintenance Level	Miles
5	17
4	149
3	544
2	2,568
1	280

Source: Current INFRA database inventory. Note: Includes roads where right-of-way may cross non-NFS lands.

Annual maintenance needs for ML 3 roads average $12,806 per mile, and ML 4 roads average $15,915 per mile. Costs are higher because these roads tend to be wider, require a higher standard of maintenance (road number signing, sight-distance vegetation clearing, cleaning road drainage culverts, cleaning drainage catch basins, cleaning culvert outlets, road traffic signing, cleaning drainage ditches, surface blading and road shaping, aggregate replacement), and usually have smooth aggregate surfacing for passenger car vehicle use and comfort. Lassen NF completes an average of approximately 318 miles of ML 3+ road maintenance per year.

Deferred maintenance tasks are the cumulative total of all annual maintenance tasks that are not accomplished as needed or scheduled. Deferred maintenance costs for ML 3 and 4

roads currently average $45,738 to $82,957 per mile. If annual maintenance funds and accomplishments do not keep up with the required tasks, deferred maintenance backlogs continue to grow. Smaller tasks not accomplished over time may result in major reconstruction needs.

Annual and deferred maintenance costs reflect necessary expenditures to keep roads at the Road Management Objective (RMO) standard. Improvement costs are also necessary when Lassen NF needs to upgrade or enhance a road. These improvements include informational, regulatory or warning signs; aggregate surfacing or hardening of the road surface; adding turnouts; replacing old culverts with arch culverts to enhance fisheries; road widening; road realignments; and adding safety features such as guardrails, etc. Lassen NF also monitors road conditions and safety by conducting engineering analyses and road condition surveys.

Additional Maintenance of NFTS Roads/Access to – NFRTA (forest roads and trails act), Cooperative Road Rights of Way, Construction and Use Agreements, and In holdings.

The Forest Service implements the authority found in the NFRTA – National Forest Roads and Trails Act of October 13, 1964 as amended (16 USC 532-538, Pub. L. 88-657) and FSM 7705/7732 which provides that commercial users perform maintenance of roads and a variety of easements made necessary by their use.

Some NFS roads are cooperatively planned, designed and constructed for different modes of commercial and public travel. These planned modes of travel require an associated set of regional agreements with private landholders, implementation of an associated set of the CFR – Code of Federal Regulations, and an associated set of FSM - Forest Service Manuals and FSH - Forest Service Handbooks. These agreements are exempt from the MVUM – Motor Vehicle Use Map requirements.

A substantial amount of Lassen NFTS road maintenance (between 2001 – 2005 the Forest had prepared road maintenance sale packages on 575 miles of ML 3-5 roads) is accomplished annually in this manner.

Costs for Trail Maintenance

Fifty-seven miles of motorized NFS trails are included in the project area. Most of these trails are located on the Almanor RD. Motorized trails are typically managed in a “rougher is better” condition to provide users with a challenging 4x4 driving experience. Maintenance is therefore typically limited to addressing emerging or ongoing resource concerns. The only other basic maintenance on these trails is roadside brushing to accommodate planned vehicle traffic.

General costs for various types of motorized trail maintenance were derived from national USDA Forest Service Enterprise Team data for motorized trail maintenance, and the resulting costs per mile are listed below:

Light maintenance	$2,500/mile
Heavy maintenance	$6,000/mile
New construction	$6,000 – $25,000/mile

Maintenance of the motorized trail system is only one cost associated with the trails program. Other costs include planning, trail system design and construction, management, and volunteer program coordination, tracking, and reporting.

The annual forest budget includes an allocation specifically for the maintenance and operation of forest trails. Motorized NFS trails, however, are a very small component of the entire Lassen NF trail system. Table 14 shows the recent budget allocations received by the forest to accomplish work on all types of forest trails.

Table 14 Funding allocated to Lassen NF for trails construction and maintenance (CMTL) (all trails – motorized and non-motorized)

Fiscal Year	Amount Allocated
2007	$59,000
2008	$133,000
2009	$141,000

Source: Lassen National Forest Work Plan.

Unauthorized Routes

After the scoping period for this project, scoping comments went through a formal content analysis and the resulting report was utilized for a GIS-based roads analysis of the 768 miles of unauthorized routes for which the public provided specific comments. These routes were important components of the Forest ML 1-2 TAP and the associated data and recommendations can be found in the TAP document, which is included in the project analysis, file/planning record.

The rating data for Lassen NF unauthorized routes, was documented and includes interdisciplinary analyses and recommendations for specific route segments. Unauthorized routes considered for addition to the NFTS were examined on the ground and reviewed to ensure were needed, and are in good enough condition to be added to the NFTS as either an ML 2 road or a motorized NFTS trail. Table 13 shows the current miles of Lassen National Forest Transportation System roads by programmatic maintenance level. Although only ML 2 roads are available for OHV use, these currently represent 72% of the system's mileage.

Current projected deferred maintenance for roads on the Lassen National Forest for FY 2009 is $111,695,400. This figure can be used as an indicator of maintenance needs for the

existing road system and how proposed changes would affect the deferred maintenance backlog.

Forestwide annual average maintenance costs per-mile by operational maintenance level (ML) were estimated as in Table 15. These costs estimates were applied across the NFTS to calculate the total maintenance expense associated with each alternative.

Table 15 Current Operational Maintenance Levels and Associated Annual Maintenance Costs/Mile

Operational Maintenance Level	Annual Maintenance Cost per Mile
1	$500
2	$2,094
3	$12,806
4	$15,912
5	$7,691
Motorized Trail	$2,600 - $6,000

Source: Current INFRA database inventory. Note: Includes roads where right-of-way may cross non-NFS lands.

Direct Costs

Each year, Lassen NF is responsible for maintaining its NFTS roads. Table 16 displays number of miles accomplished of ML 3+ for 2002–2006. Roads require various levels of maintenance and investment to remain functional. These roads have annual maintenance such as surface grading, ditch cleaning, culvert cleaning, dust abatement, gravel replacement, and roadside brushing/clearing. The NFTS roads also have deferred maintenance expenses, the amortized regular-maintenance which was not completed. If a road is scheduled for substantial road maintenance, or if it is delinquent, it is listed in the Forest Service infrastructure database known as INFRA, as a deferred maintenance item. Forest road maintenance tracking determines listing as planned or overdue.

Table 16 Road work accomplishments by year

Year	Road Maintenance ML 3+ (miles)
2002	483
2003	368
2004	325
2005	141
2006	275
5 Year Total	**1,592**
5 Year Average	**318**

Source: USDA FS PSW Region 2006d.

Lassen NF receives funding each year to cover costs of maintaining the NFTS, and for program support, such as transportation planning, transportation system design and construction, transportation management and operation, coordination with local counties, tracking, and reporting. Table 17 reflects the funding levels for the past five years in this funding category (CMRD). These allocations for 2008 are slightly higher than in 2007. Because the funding increase is offset by increased operating costs, the increase in 2008 is negligible. A flat to slightly decreasing funding trend is anticipated to continue at least through Fiscal Year 2012.

Table 17 CMRD funding – annual construction and maintenance of roads

Fiscal Year	Amount Allocated
2004	$938,000
2005	$1,255,000
2006	$870,100
2007	$889,800
2008	$1,089,000
5 Year Average	**$1,008,400**

Source: Lassen National Forest Financial Management Department.

Lassen NF has Road Use Agreements with each of the counties within its boundary. These agreements allow Lassen NF and counties to cooperatively share in maintenance and reconstruction of NFS roads and county roads. A limited amount of additional funding comes from commercial road use permits and deposit accounts from road users.

Other roads are maintained/funded under project work such as in hazardous forest fuels reduction treatments and timber sales. The type, location, and amount of project work varies from year to year. Certain roads are managed under the special use permit program, which can place maintenance responsibilities on the holder of the special use permit.

In addition to the above-mentioned long-term costs, there would also be an immediate implementation cost associated with the ML 3+ roads designated for motorized mixed use in this alternative. These motorized mixed use segments would cost approximately $3500-$5000 per segment for signage. Adding unauthorized routes to the system would also have a cost. Accounting for route identification signing, Forest transportation atlas updates, and obtaining necessary agreements for those routes within public road rights-of-way managed by other jurisdictions, an estimated implementation cost of approximately $3000 per mile would be associated with these additional routes. Once added to the system, these routes would also require maintenance and therefore contribute to the applicable annual and deferred maintenance expenses.

Environmental Consequences

Direct and Indirect Effects

Alternative 1– No action

Measurement Indicator 1 – Public Safety

The current Forest transportation system was designed to provide for administrative and public access to NFS lands. It was not specifically designed to provide non-highway-legal vehicle opportunities. If no action is taken, 2,568 miles of NFS roads remain available for non-highway-legal vehicles; however, the situation does not address improving safe access for these types of vehicles across the Forest. In addition, the unauthorized routes would not be managed or addressed, and any existing safety concerns with these routes and impacts to the adjacent managed system would continue to exist. Continued use of unmanaged routes would also likely have resource impacts requiring future rehabilitation efforts.

Measurement Indicator 2 – Transportation System Affordability

By not adding routes to the system, nor making any changes to the existing FTS, no additional costs would be incurred associated with implementation and increasing maintenance responsibilities. The costs associated with repairing resource damage associated with unmanaged use under Alternative 1 can be anticipated but not quantified.

No Forest-wide tool would exist to display where motor vehicles can be legally operated on NFS roads and NFS trails.

Alternative 2 – Proposed Action

Measurement Indicator 1 – Public Safety

Road Maintenance Expense: This alternative proposes the addition of unauthorized routes as either motorized trails or ML 2 roads. None of the routes added to the system would have safety concerns because the roughly graded condition of ML 2 roads and motorized trials accommodates OHV use in a safe manner. However, changes to improve and accommodate current uses and needs would improve safe public motorized opportunities on the Forest. In general, providing connector opportunities by adding unauthorized routes to the system would improve access and safety. Safety concerns along the designated system would be managed when appropriate, and use on those unauthorized routes not being managed by the Forest would be prohibited.

Motorized Mixed Use: Thirteen miles of motorized mixed use is being proposed under this alternative. Allowing motorized mixed use on higher standard passenger car roads (ML 3+) would increase the risk of crashes – both crash probability and crash severity. Of the 13 road segments proposed for mixed use, ten exhibit moderate crash probability and eleven exhibit a high probability of a severe crash if one were to happen. It will be important for the

Responsible Official to weigh the increased risk with the associated benefit of improved non-highway-legal vehicle access when making changes to allow motorized mixed use on the Forest.

Changing Objective Maintenance Levels: There are no roads being proposed for objective maintenance level changes under this alternative.

Seasonal Closures: There are no roads being proposed for seasonal closures under this alternative.

Measurement Indicator 2 – Transportation System Affordability

Changes to the Forest transportation system would have an associated implementation cost as well as a long-term maintenance responsibility. Compared to baseline (Alternative 1), costs for maintenance of the entire NFTS (Roads and Trails) under Alternative 2 change as follows:

Annual maintenance needs:	+ $46,498
Projected deferred maintenance (need) in 2013:	+ $309,124

Annual maintenance not funded or accomplished with the annual Forest roads allocation becomes deferred maintenance; backlogs continue to grow each year and a projection for 2013 is included above. Adding unauthorized routes to the system would also have an implementation cost. Accounting for route identification signing, Forest transportation atlas updates, and obtaining necessary agreements for those routes within public road rights-of-way managed by other jurisdictions, an estimated implementation cost of approximately $3,000 per mile would be associated with these additional routes. For this alternative, that would result in an implementation cost of approximately $63,000 to cover these tasks. Once added to the system, these routes would also require maintenance and therefore contribute to the applicable annual and deferred maintenance expenses. Additional expenses, although unquantifiable at this time, would arise from implementing resource mitigation measures prior to adding the unauthorized routes to the NFTS. Also factored into these changes in costs is the expense of additional motorized trails (See Table 19).

Motorized Mixed Use: In addition to the above-mentioned long-term costs, there would also be an implementation cost associated with the motorized mixed use designated on ML 3+ roads in this alternative. These motorized mixed use segments would cost approximately $3,500-$5,000 per segment for warning signing. With 13 proposed MMU segments, this would result in an approximate implementation cost of $65,000 for signing and labor.

Changing Objective Maintenance Levels: There are no roads being proposed for objective maintenance level changes under this alternative.

Seasonal Closures: There are no roads being proposed for seasonal closures under this alternative.

Alternative 3

Measurement Indicator 1 – Public Safety

Adding Unauthorized Routes to the FTS: No new routes would be added to the FTS under this alternative, therefore there are no safety concerns. Motorized travel would be prohibited on unauthorized routes and any existing safety concerns with these routes and impacts to the adjacent managed system would be minimized under this alternative.

Motorized Mixed Use: No motorized mixed is proposed under this alternative.

Changing Objective Maintenance Levels: There are no roads being proposed for objective maintenance level changes under this alternative.

Seasonal Closures: There are no roads being proposed for seasonal closures under this alternative.

Alternative 3 provides the safest riding conditions of all alternatives as cross-country travel is prohibited and no mixed use is proposed. Vehicles would be limited to those roads safely accommodating their particular class.

Measurement Indicator 2 – Transportation System Affordability

Road Maintenance Expense: By not adding routes to the system, nor making any changes to the existing FTS, no additional costs would be incurred associated with implementation and increasing maintenance responsibilities.

Minimal implementation costs would occur with the production of the MVUM and any annual changes occurring to that map.

Alternative 4

Measurement Indicator 1 – Public Safety

Adding Unauthorized Routes to the NFTS: This alternative proposes the addition of unauthorized routes as ML 2 roads. None of the routes added to the system would have safety concerns as the roughly graded condition of ML 2 roads and motorized trials accommodates OHV use in a safe manner. However, changes to improve and accommodate current uses and needs would provide for safer public motorized opportunities on the Forest. In general, providing connector opportunities by adding unauthorized routes to the system would improve access and safety. Safety concerns along the designated system would be managed when appropriate, and use on those unauthorized routes not being managed by the Forest would be prohibited.

Motorized Mixed Use: No motorized mixed is proposed under this alternative.

Changing Objective Maintenance Levels: Under Alternative 4, 79 miles of ML 3 and ML 4 roads are proposed for changing to objective ML 2 roads. Changing objective maintenance levels would be a step towards allowing non-highway-legal vehicle of current operational maintenance level 3 roads. Through “weathering” over time and through specific

downgrading activities analyzed and implemented during subsequent projects, these roads could be converted to high-clearance vehicle roads that would more safely allow shared use involving both highway-legal and non-highway-legal vehicles.

Seasonal Closures: Seasonal closures are proposed on a number of roads under this alternative. There are no safety concerns with seasonal closures. Since most closures are related to keeping motorized vehicles off roads during seasons when they may be slick or icy and therefore increasing the risk of vehicle accident, these would have the effect of providing added safety for the public.

Measurement Indicator 2 – Transportation System Affordability

Road Maintenance Expense: Changes to the Forest transportation system would have an associated implementation cost as well as a long-term maintenance responsibility. Compared to baseline (Alternative 1), costs for maintenance of the entire NFTS (Roads and Trails) under Alternative 4 change as follows:

Annual maintenance needs:	- $825,353
Projected deferred maintenance (need) in 2013:	- $5,903,987

Annual maintenance not funded nor accomplished with annual Forest roads allocation becomes deferred maintenance; backlogs continue to grow each year and a projection for 2013 is included above. Adding unauthorized routes to the system would also have an implementation cost. Accounting for route identification signing, Forest transportation atlas updates, and obtaining necessary agreements for those routes within public road rights-of-way managed by other jurisdictions, an estimated implementation cost of approximately $3,000 per mile would be associated with these additional routes. For this alternative, that would result in an implementation cost of approximately $30,000 to cover these tasks. Once added to the system, these routes would also require maintenance and therefore contribute to the applicable annual and deferred maintenance expenses. Additional expenses, although unquantifiable at this time, would arise from implementing resource mitigation measures prior to adding the unauthorized routes to the NFTS. Also factored into these changes in costs is the expense of additional motorized trails (See Table 19).

Alternative 4 is the most economical for the annual maintenance of the ML 3-5 road system, the cyclical maintenance of the ML 2 road system, the deferred maintenance of the ML 1-5 system, and meets national engineering and ecosystem standards and guidelines. Current and projected annual budgets do not cover current annual road maintenance costs and the backlog of deferred maintenance continues to increase. Although it does not solve this problem, Alternative 4 costs less than the current NFTS due to the proposed lowering of maintenance levels on 79 miles of ML 3 roads (changed to ML 2) and six miles of ML 2

(changed to motorized trails). The advantages are increased access miles for motorized recreation enthusiasts, a reduction of $825,353 in NFTS annual maintenance needs and a subsequent substantial annual reduction in deferred maintenance needs.

Motorized Mixed Use: No motorized mixed is proposed under this alternative.

Changing Objective Maintenance Levels: Seventy-nine miles of roads are being proposed for objective maintenance level changes from ML 3 to ML 2 under this alternative. This change will lower maintenance costs, resulting in a reduction of approximately $825,000 in annual maintenance needs over the No Action Alternative (see summary discussion above and Table 19).

Seasonal Closures: Seasonal closures are proposed under this alternative. It is assumed the MVUM will be sufficient to effectively close these roads to public motorized travel. Should other measures be required, Implementation costs could include potential signing and/or gating of road segments seasonally closed.

Minimal implementation costs would occur with the production of the MVUM and any annual changes occurring to that map.

Alternative 5

Measurement Indicator 1 – Public Safety

Adding Unauthorized Routes to the FTS: This alternative proposes the addition of unauthorized routes as either ML 2 roads or motorized trails. None of the routes added to the system would have safety concerns as the roughly graded condition of ML 2 roads and motorized trails accommodates OHV use in a safe manner. However, changes to improve and accommodate current uses and needs would provide for safer public motorized opportunities on the Forest. In general, providing connector opportunities by adding unauthorized routes to the system would improve access and safety. Safety concerns along the designated system would be managed when appropriate, and use on those unauthorized routes not being managed by the Forest would be prohibited.

Motorized Mixed Use: Fifty-one miles of motorized mixed use are being proposed under this alternative. Allowing motorized mixed use on higher standard passenger car roads (ML 3+) would increase the risk of crashes – both crash probability and crash severity (Appendix G, Table G-3). Of forty-seven road segments proposed for mixed use, twenty three exhibit a moderate probability (after mitigation) of a vehicle collision. All proposed mixed use road segments exhibit either moderate (9 segments) or high (38 segments) severity of a crash, should it occur. It will be important for the Responsible Official to weigh the increased risk with the associated benefit of improved non-highway-legal vehicle access when making changes to allow motorized mixed use on the Forest.

Changing Objective Maintenance Levels: Under Alternative 5, 79 miles of ML 3 and ML 4 roads are proposed for changing to objective ML 2 roads. Changing objective maintenance levels would be a step towards allowing non-highway-legal vehicle of current operational maintenance level 3 roads. Through "weathering" over time and through specific downgrading activities analyzed and implemented during subsequent projects, these roads could be converted to high-clearance vehicle roads that would more safely allow shared use involving both highway-legal and non-highway-legal vehicles.

Seasonal Closures: Seasonal closures are proposed on a number of roads under this alternative. There are no safety concerns with seasonal closures. Since most closures are related to keeping motorized vehicles off roads during seasons when they may be slick or icy and therefore increasing the risk of vehicle accident, these would have the effect of providing added safety for the public.

Measurement Indicator 2 – Transportation System Affordability

Road Maintenance Costs: Changes to the Forest transportation system would have an associated implementation cost as well as a long-term maintenance responsibility. Compared to baseline (Alternative 1), needs for maintenance of the entire NFTS (Roads and Trails) under Alternative 5 change as follows:

Annual maintenance needs:	- $688,391
Projected deferred maintenance (need) in 2013:	-$5,154,488

Annual maintenance not funded nor accomplished with annual Forest roads allocation becomes deferred maintenance; backlogs continue to grow each year and a projection for 2013 is included above. Adding unauthorized routes to the system would also have a implementation cost. Accounting for route identification signing, Forest transportation atlas updates, and obtaining necessary agreements for those routes within public road rights-of-way managed by other jurisdictions, an estimated implementation cost of approximately $3,000 per mile would be associated with these additional routes. For this alternative, that would result in an implementation cost of approximately $159,000 to cover these tasks. Once added to the system, these routes would also require maintenance and therefore contribute to the applicable annual and deferred maintenance expenses. Additional expenses, although unquantifiable at this time, would arise from implementing resource mitigation measures prior to adding the unauthorized routes to the NFTS. Also factored into these changes in costs is the expense of additional motorized trails (See Table 19).

Current and projected annual budgets do not cover current annual road maintenance costs and the backlog of deferred maintenance continues to increase. Although it does not solve this problem, Alternative 5 costs less than the current NFTS due to the proposed lowering of maintenance levels on 79 miles of ML 3 roads (changed to ML 2) and six miles

of ML 2 (changed to motorized trails). The advantages are increased access miles for motorized recreation enthusiasts, a reduction of $688,391 in NFTS annual maintenance needs and a subsequent substantial annual reduction in deferred maintenance needs.

Motorized Mixed Use: In addition to the above-mentioned long-term costs, there would also be an implementation cost associated with the motorized mixed use designated on ML 3+ roads in this alternative. These Motorized mixed use segments would cost approximately $3,500-$5,000 per segment for warning signing. With 47 proposed MMU segments, this would result in an approximate implementation cost of $235,000 for signing and labor.

Changing Objective Maintenance Levels: Seventy-nine miles of roads are being proposed for objective maintenance level changes from ML 3 to ML 2 under this alternative. This change will require fewer maintenance costs resulting in a reduction of approximately $699,391 in annual maintenance needs over the No Action Alternative (see summary discussion above and Table 10).

Seasonal Closures: Seasonal closures are proposed under this alternative. It is assumed the MVUM will be sufficient to effectively close these roads to public motorized travel. Should other measures be required, Implementation costs could include potential signing and/or gating of road segments seasonally closed.

Minimal implementation costs would occur with the production of the MVUM and any annual changes occurring to that map.

Modified Alternative 5

Measurement Indicator 1 – Public Safety

Adding Unauthorized Routes to the FTS: Modified Alternative 5 was designed to enhance and improve motorized recreation across the Lassen NF, responding to the need for providing diverse riding opportunities without compromising safety. This alternative proposes the addition of unauthorized routes as either ML 2 roads or motorized trails. None of the routes added to the system would have safety concerns as the roughly graded condition of ML 2 roads and motorized trails accommodates OHV use in a safe manner. However, changes to improve and accommodate current uses and needs would provide for safer public motorized opportunities on the Forest. In general, providing connector opportunities by adding unauthorized routes to the system would improve access and safety. Safety concerns along the designated system would be managed when appropriate, and use on those unauthorized routes not being managed by the Forest would be prohibited.

Motorized Mixed Use: The mixed use safety analysis demonstrated that all of the NFTS road segments proposed for mixed use exhibit either moderate or high probability of a severe crash (Appendix G, Table G-3). The routes with moderate probability of high severity crash are analyzed in this alternative and the high probability routes are dropped.

As we looked for ways to create the riding loops people told us they wanted; we identified 9 and 3 tenths miles of lesser-used ML 3 road segments where mixed use could be designated and 79.6 miles where ML 3 objective maintenance levels could be reduced to ML 2, this is an increase of 0.6 miles over Alternative 5. It was discovered in the process of conducting the mixed use safety analysis on routes in Alternative 5 that one of the segments, 0.6 miles of 28N70, proposed in that alternative had already operationally changed from a ML 3 to a ML 2. Over time, all 79.6 miles of these ML 2 roads will be made available for non-street-legal vehicles and link currently disconnected ML 2 road segments to form continuous OHV circuits.

Changing Objective Maintenance Levels: Under Modified Alternative 5, 79.6 miles of ML 3 and ML 4 roads are proposed for changing to objective ML 2 roads. Changing objective maintenance levels would be a step towards allowing non-highway-legal vehicle of current operational maintenance level 3 roads. Through "weathering" over time and through specific downgrading activities analyzed and implemented during subsequent projects, these roads could be converted to high-clearance vehicle roads that would more safely allow shared use involving both highway-legal and non-highway-legal vehicles.

Seasonal Closures: Seasonal closures are proposed on a number of roads under this alternative. There are no safety concerns with seasonal closures. Since most closures are related to keeping motorized vehicles off roads during seasons when they may be slick or icy and therefore increasing the risk of vehicle accident, these would have the effect of providing added safety for the public.

Measurement Indicator 2 – Transportation System Affordability

Road Maintenance Costs: Changes to the Forest transportation system under Modified Alternative 5 would primarily be realized in decreased implementation costs, discussed below, as well as a long-term maintenance responsibility. Compared to baseline (Alternative 1), costs for actual maintenance of the entire NFTS (Roads and Trails) under Modified Alternative 5 change negligibly from Alternative 5, and are as follows:

Annual maintenance needs:	- $702,181
Projected deferred maintenance (need) in 2013:	-$5,262,524

Annual maintenance not funded nor accomplished with annual Forest roads allocation becomes deferred maintenance; backlogs continue to grow each year and a projection for 2013 is included above. Adding unauthorized routes to the system would also have a implementation cost. Accounting for route identification signing, Forest transportation atlas updates, and obtaining necessary agreements for those routes within public road rights-of-way managed by other jurisdictions, an estimated implementation cost of approximately $3,000 per mile would be associated with these additional routes. For this alternative, that

would result in an implementation cost of approximately $167,100 to cover these tasks. Once added to the system, these routes would also require maintenance and therefore contribute to the applicable annual and deferred maintenance expenses. Additional expenses, although unquantifiable at this time, would arise from implementing resource mitigation measures prior to adding the unauthorized routes to the NFTS. Also factored into these changes in costs is the expense of additional motorized trails (See Table 19).

Current and projected annual budgets do not cover current annual road maintenance costs and the backlog of deferred maintenance continues to increase. Although it does not solve this problem, Modified Alternative 5 costs less than the current NFTS due to the proposed lowering of maintenance levels on 79 miles of ML 3 roads (changed to ML 2), 6 miles of ML 1 (changed to motorized trails), and proposing motorized-mixed-use on 9.3 miles of current ML 3-4 roads. The immediate, first-year advantages are increased access miles for motorized recreation enthusiasts, an immediate reduction of $702,181 in NFTS annual maintenance needs and a subsequent substantial annual reduction in deferred maintenance needs.

Although Alternative 4 is the least costly alternative because it does not add any unauthorized routes as motorized trails, the motorized trails added in Alternatives 5 and Modified 5 are a small fraction of the entire NFTS. Alternative 5 and Modified 5 are also very similar in cost savings to Alternative 4 as a result of the significant savings from Maintenance Level changes to 79 miles of ML 3 roads in all three of these alternatives.

Motorized Mixed Use: In addition to the above-mentioned long-term costs, there would also be an implementation cost associated with the motorized mixed use designated on ML 3+ roads in this alternative. These Motorized mixed use segments would cost approximately $3,500-$5,000 per segment for warning signing. With 7 proposed MMU segments, this would result in an approximate implementation cost of $35,000 for signing and labor.

Changing Objective Maintenance Levels: Seventy-nine miles of roads are being proposed for objective maintenance level changes from ML 3 to ML 2 under this alternative. This change will require fewer maintenance costs resulting in a reduction of approximately $702,181 in annual maintenance needs over the No Action Alternative (see summary discussion above and Table 10).

Seasonal Closures: Seasonal closures are proposed under this alternative. It is assumed the MVUM will be sufficient to effectively close these roads to public motorized travel. Should other measures be required, Implementation costs could include potential signing and/or gating of road segments seasonally closed.

Minimal implementation costs would occur with the production of the MVUM and any annual changes occurring to that map.

Cumulative Effects

Alternative 1– No action

Measurement Indicator 1 – Public Safety

The No-action Alternative does not address improving safe and efficient access for non-highway-legal vehicles across the Forest. In addition, the unauthorized routes would not be managed or addressed, and any existing safety concerns with these routes and impacts to the adjacent managed system would continue to exist. Continued use of unmanaged routes would also likely have resource impacts requiring future rehabilitation efforts. Future public use would not be restricted to a designated and managed system, increasing the risk of users encountering unmitigated hazards.

Transportation System Affordability

By not adding routes to the system, no additional costs would be incurred associated with implementation and increasing maintenance responsibilities.

Action Alternatives – Alternatives 2, 3, 4, 5, Modified 5

Measurement Indicator 1 – Public Safety

In general, changes to improve and accommodate current uses and needs would improve safe public motorized opportunities on the Forest. Providing connector opportunities by adding unauthorized routes to the system would improve access and safety when designated. Safety concerns along the designated system would be managed when appropriate, and use on those unauthorized routes not being managed by the Forest would be prohibited.

Allowing motorized mixed use on higher standard passenger car roads (ML 3+) would increase the risk of crashes – both crash probability and crash severity. Under these conditions OHV users will share the routes with a variety of vehicles of different sizes: from other OHVs to commercial log trucks and chip vans. It will be important for the Responsible Official to weigh the increased risk with the associated benefit of improved non-highway-legal vehicle access when making changes to allow motorized mixed use on the Forest. In addition, other projects taking place on the Forest and adjacent lands often use these higher standard roads as primary access and major haul routes. This would translate to an increasing frequency of encounters with large, commercial vehicles as well as significant passenger and high-clearance vehicles accessing the forest for a variety of recreation purposes. There would be an increased exposure to high severity crashes associated with these uses.

Measurement Indicator 2 – Transportation System Affordability

Changes to the Forest transportation system would have an associated implementation cost as well as a long-term maintenance responsibility. Costs associated with changes to the

Forest transportation system would be incurred associated with implementation and increasing maintenance responsibilities. Depending on the changes being made, there may either be an increase to long-term management costs (additions to the system, increased safety mitigations) or a savings (downgrading of roads).

Summary of Effects Analysis Across All Alternatives

Public Safety Summary

The goal of motorized travel management is to create a safe, affordable and sustainable National Forest Transportation System. The potential changes in public safety from each alternative are not definitive, but can be discussed in qualitative terms based on the results of engineering safety analysis conducted for each route where motorized mixed use is being considered under one or more alternatives. The information needed to provide this qualitative, comparative assessment is provided in Table 18. This table lists the number of miles for which changes to the operational road maintenance objectives are proposed under each alternative by category of change. In particular, and of greatest concerns are the changes in authorized use patterns that will result from permitting mixed use on ML 3 roads and from changing the operational maintenance levels for some ML 3 roads to ML 2. In either case, an engineering safety analysis provides additional information from which the public safety implications of the proposed changes can be assessed.

Adding unauthorized routes to the FTS: Most of the routes added to the system would not have safety concerns due to low design speeds, rough surfaces and infrequent use. If safety concerns arise during project implementation, corrections can be made during trail maintenance work.

Motorized Mixed Use: The Travel Management Rule (TM), 36 CFR 212, 251, 261, and 295, supersedes past practices and enforcement of OHV use on the National Forests. In consideration of public safety and to best comply with State traffic laws, as required by 36 CFR 212.5a, the Pacific Southwest Region, R5,equates Forest Service roads maintained for passenger vehicle use (ML 3, 4, and 5) to roads defined as “highways” under the California Vehicle Code (CVC). In making this determination, the Forest Service has aligned OHV use on ML 3, 4 and 5 roads to CVC restrictions and requirements for OHV use on highways. This policy was further clarified by the Regional Forester by letter, dated January 13, 2009, entitled Motorized Mixed Use on National Forest Roads in the Pacific Southwest Region. Travel Management on the Lassen NF is consistent with this direction.

Table 18 Miles of roads/trails/unauthorized routes changing maintenance levels

Maintenance Level Change Recommendations	Alt. 1 (miles)	Alt. 2 (miles)	Alt. 3 (miles)	Alt. 4 (miles)	Alt. 5 (miles)	Alt. 5 and Mod 5 (miles)
ML 1 miles to be added as motorized NFS trails	0	0	0	0	6	6
Unauthorized routes to be added as ML 2 roads	0	16	0	10	10	10
Unauthorized routes to be added as motorized NFS trails	0	5	0	0	43	46
ML 2 miles to be changed to ML 1 miles	0	0	0	0	0	0
Motorized Mixed Use, ML 2 miles	2,568	2,584	2,568	2,657	2,657	2,657
ML 3-4 miles to be Changed to ML 2 miles	0	0	0	79	79	79
ML 3-4 miles to be Changed to motorized mixed-use	0	13	0	0	51	9

Source: Lassen National Forest, GIS data.

Motorized mixed use (MMU) on high clearance roads (ML 2): All of the high clearance roads currently open to the public on the Lassen National Forest were determined to have minimal safety concerns and will be designated as open to all vehicles.

Motorized mixed use (MMU) on passenger car roads (ML 3+): depending upon the alternative, 9 to 51 miles of passenger car roads have been proposed for mixed use. Appendix G, Table G-3 presents the results of the engineering analyses conducted to assess crash risk, including both crash probability and crash severity, for those segments of passenger car roads proposed for motorized mixed use in the various alternatives. The table displays the risk without mitigation and the risk after mitigation measures take place. Mitigation measures include warning signs to assist road users in identifying when entering a designated motorized mixed use section of operational maintenance level 3+ roads.

Crash probabilities represent the likelihood of a crash occurring. Crash severities document the potential damage that would occur in the event of a crash. Because non-highway-legal operators often are more exposed than operators protected in a cab with a seatbelt, crash severities are naturally higher for these vehicle types. Low severities indicate situations where little vehicle damage or bodily injury is expected. High severities represent expected major vehicle damage and serious bodily injury or death in the event of a crash.

Changing Objective Maintenance Levels: Under Alternative 4, 5, and Modified 5, 79 miles of ML 3 and ML 4 roads are proposed for changing to objective ML 2 roads. Changing objective maintenance levels would be a step towards safely allowing non-highway-legal vehicle of current operational ML 3 roads. Through "weathering" over time and through specific downgrading activities analyzed and implemented during subsequent projects, these roads could be converted to high-clearance vehicle roads that would more safely allow shared use involving both highway-legal and non-highway-legal vehicles.

Seasonal Closures: There are no safety concerns with seasonal closures. Since most closures are related to keeping motorized vehicles off roads during seasons when they may be slick or icy and therefore increasing the risk of vehicle accident, these would have the effect of providing added safety for the public.

Affordability Summary

Table 19 identifies the relative affordability of FTS roads and trails under each alternative. Alternatives 1 and 3 reflect the current NFTS and associated maintenance costs. Alternative 2 cost more because it adds 5 miles of trails and 16 miles of roads. Alternatives 4, 5, and Modified 5 all save about 5% in annual maintenance costs because they would convert 79 miles of ML 3 roads to ML 2 roads which are maintained less frequently. Slight differences in costs among these three alternatives reflect the number of miles and trails that are proposed for addition. Alternatives 5 and modified 5 also differ from alternative 4 in that 6 miles of current ML 1 roads are changed to motorized trails.

The Forest may incur significant implementation costs to physically manage routes consistently with the Motor Vehicle Use Map, (such as installing road/route signage in accordance with the Manual on Uniform Traffic Control Devices as implemented by the Forest Service in EM 7100-15 December 2005 Sign and Poster Guidelines for the Forest Service and the Federal Highway Administration Manual on Uniform Traffic Control Devices-2003 Edition), physically altering road entrance treatments, and managing roadside vegetation.

In addition to the above-mentioned long-term costs associated with each alternative, Table 20 summarizes the estimated one-time implementation costs for each alternative. These estimates include the costs of additional signing, agreement facilitation, and atlas data management that are associated with the proposed changes to the transportation system.

Over time and as funding permits, RAP/TAP recommendations may provide the travel management program with a strategic transportation plan. With publication of the MVUM, the public will be able to clearly identify the modes of travel permitted on specific NFTS roads and NFTS trails.

Table 19 Measurement Indicator 2 - Affordability

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 5 Mod
NFTS Road Miles open to all motorized use	3,278 miles	3,294 miles	3,278 miles	3,288 miles	3,288 miles	3,288 miles
NFTS Road Miles open to Highway Legal Vehicles	710 miles	697 miles	710 miles	631 miles	631 miles	631 miles
NFTS Road Miles open to Non-Highway Legal Vehicles	2,568 miles	2,597 miles	2,568 miles	2,657 miles	2,663 miles	2,657.6 miles
Annual Maintenance Needs for Roads, current[1]	$14,984,719	$15,018,217	$14,984,719	$14,159,366	$14,168,928	$14,149,938
Deferred Maintenance Needs for roads at 5 years[2]	$182,331,377	$182,571,001	$182,331,377	$176,427,390	$176,495,789	$176,359,953
NFTS Trail Miles open to Motorized Use	57	62	57	57	106	108
Annual Maintenance Needs for Motorized Trails, current	$148,200	$161,200	$148,200	$148,200	$275,600	$280,800
Deferred Maintenance Needs for Motorized Trails at 5 years[2]	$692,300	$761,800	$692,300	$692,300	$1,373,400	$1,401,200
Total Annual Maintenance Needs for the NFTS (Roads & Trails), current	$15,132,919	$15,179,417	$15,132,919	$14,307,566	$14,444,528	$14,430,738
Total Annual Maintenance Needs for the NFTS (Roads & Trails) at 5 years	$183,023,677	$183,332,801	$183,023,677	$177,119,690	$177,869,189	$177,761,153
Annual increase or decrease from current NFTS	N.A.	$46,498	N.A.	-$825,353	-$688,391	-$702,181
% Change from Current NFTS	N.A.	0.31	N.A.	-5.45	-4.55	-4.64
Deferred increase or decrease from current NFTS	N.A.	$309,124	N.A.	-5,903,987.00	-5,154,488.00	-5,262,524.00
% Change from Current NFTS at 5 years	N.A.	0.17	N.A.	-3.23	-2.82	-2.88

Footnotes:

1. These values were calculated with a spreadsheet that used $ amounts to two digits, so results do not exactly match calculations based on values provided in Tables 13 & 15
2. Five year deferred maintenance values for roads include a 7% per annum cumulative inflation factor. Deferred trail maintenance costs were not adjusted for inflation.

Assumptions:

1. Annual maintenance needs for motorized NFS Trails = $2,600/mile/year
2. $20,000 per year of motorized trail annual maintenance is accomplished with allocated funds. Additional funds are allocated to maintaining non-motorized trails (Table 14).
3. Current deferred maintenance for motorized trails = $900/mile

Table 20 Estimated Implementation Costs for Agreements, Signing & Data Management

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 5 Modified
Cost ($)	$0	$128,000	$0	$30,000	$394,000	$202,000

Through subsequent planning efforts, Lassen NF will continue to evaluate the NFTS in order to provide a safe, economically sustainable, and environmentally sound transportation system that provides multiple users with a quality experience.

Table 21 Summary Comparison of Alternatives by Environmental Effects for Facilities

Indicators – Facilities Resources	Ratings of Alternatives for Each Indicator1					
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. Mod 5
Public Safety	1	2	5	4	3	4
Transportation System Affordability	2	3	2	4	4	4
Average for Facilities Resources	2	3	4	4	4	4

[1] A score of 5 indicates the alternative is the best for facilities resources related to the indicator; A score of 1 indicates the alternative is the worst for facilitiesl resources related to the indicator

Compliance with the Forest Plan and Other Direction

All alternatives comply with the Lassen National Forest Land and Resource Management Plan and other regulatory directions.

Recreation Resource Errata (From FEIS Chapter 3.3)

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Summary of Effects Analysis across All Alternatives

Tables 37 and 38 provide a summary of the effects analysis for each alternative as it relates to non-motorized recreational activities (Table 37) and motorized recreational activities (Table 38). An indicator core of 5 indicates the most beneficial for recreation resources and an indicator score of 1 indicates the least beneficial to recreation resources.

Table 37 Non-motorized Recreation Summary

Indicators – Recreation Resources	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Modified Alt 5
Non-motorized recreation opportunity	1	4	5	4	4	4
Impact of proposed changes to the NFTS on neighboring private and Federal lands (dust, noise, use conflicts)	1	4	5	4	4	4
Average rating for non-motorized Values	1	4	5	4	4	4

Table 38 Motorized Recreation and Access Summary

Indicator	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Modified Alt 5
Motorized recreation opportunity	5	3	3	4	4	4
Type of motorized access to dispersed recreation	5	3	3	4	4	4
Average rating for motorized values	5	3	3	4	4	4

Cross-country travel currently includes 1,072,488 acres, including 1089 miles of unauthorized routes; Currently there are 271 miles of winter recreation closures

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Summary of Environmental Consequences

Table 2 Comparison of Alternatives with regards to Purpose and Need for Action, the Issues raised in Public Scoping, and route designation criteria in Subpart B of the Travel Management Rule.

Resource Area	Ratings for Alternatives, averaged across indicators					
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Mod Alt 5
Purpose and Need/Issue Measures						
Prohibition on Cross-Country Travel[PN1]	1	5	5	5	5	5
Motorized Dispersed Recreation Access [PN2a]	5	3	3	4	4	4
Diversity of Motorized Recreation Opportunities [PN2b]	5	3	3	4	4	4
Need for maintenance and administration of roads, trails and areas that would arise if the uses under consideration are designated.[PN2c, I2, TR(a)6,]	1	2	1	3	5	5
Motorized recreation opportunity [TR(a)2]	5	3	3	4	4	4
Conflicts between motor vehicles and existing or proposed recreational uses of NFS lands or neighboring Federal lands. (Non-motorized Recreation)[TR(b)3]	1	3	5	4	2	2
Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors. [TR(b)5]	1	3	5	4	2	2
Provide Public Safety [TR(a)2]	1	2	5	4	3	4
Effects to Resources						
Cultural Resources[TR(a)1]	1	4	5	4	3	3
Botanical Resources[TR(b)1]	3	4	5	4	4	4
Soil Resources[TR(b)1]	2	4	5	4	4	4
Hydrologic Resources[TR(b)1]	2	4	4	5	4	4
Noxious Weeds[TR(b)1]	1	4	5	4	4	4
Aquatic Biota[TR(b)2]	1	4	5	4	4	4
Wildlife Resources[TR(b)2]	1	4	5	4	4	4
Visual Resources	1	4	5	4	4	4
Air Quality	1	5	5	5	5	5
Overall Rating	**2**	**4**	**4**	**4**	**4**	**4**

Superscript notations in the Resource Area column refer to the Travel Management Rule sections.

Seasonal Restrictions Errata (Throughout FEIS)

Throughout the document, where Seasonal Restrictions are mentioned for Modified Alternative 5, a Seasonal Restriction should be added for unauthorized route 29N21Y to restrict the season of use during Spotted Owl nesting when it is brought onto the NFTS. The 2.1 miles of this route would be open to all vehicles from August 15 to March 1 as a motorized trail. This route is noted correctly in Tables A-1 and A-2 of the FEIS Appendices.

Appendix C: Response to Comments

This appendix provides the Lassen National Forest Response to Comments received during the 30 day review period between release of the FEIS on December 18, 2009 and January 19, 2010. This review period was provided to the public because a new Alternative was developed (Modified Alternative 5) which differed substantially from the Alternative 5 that the public had an opportunity to comment upon during the DEIS comment period. This Modified Alternative 5 was developed because Mixed Use Safety Analyses were completed after the DEIS Comment Period. When the Forest Supervisor, Kathleen Morse (the Responsible Official), reviewed these safety analyses, she determined that only 9.3 miles of the 51 miles originally proposed for Mixed Use in Alternative 5 were actually safe enough for a vehicle class change allowing non-highway legal vehicles to share the roads with highway legal vehicles. In order to allow the public an opportunity to review these changes, signing of the Record of Decision was delayed for a month. Comments received during this review period do not convey appeal rights, but they were considered.

During and after this period, comments were received from 12 individuals, 4 organizations, 2 government agencies, 3 county governments and 1 company. The individuals were Deniz Bolbol, Steve Borchers, Larry Cabodi, Larry Crisman, Ryan W. Hadley, Norma Harrison, Kent Hatch, Robert & Renee Hoover, Phil Nemir, Robert Parker, Howard Peterson and T. K. Wang. Organizations providing inputs (and the individual submitting the input) were the California Wilderness Coalition (Ryan Henson), Recreation Outdoors Coalition (Sylvia Milligan), Sierra Access Coalition (Mike Lazzarino) and Trails West, Inc. (Rod Latimer). The two government agencies were the California Regional Water Quality Board - Lahontan Region (Taylor Farnum) and the Environmental Protection Agency, Region IX (Kathleen M. Goforth). The Butte County, Department of Public Works (Mike Crump) submitted two letters. The Lassen County Board of Supervisors (Robert Pyle) and Shasta County Board of Supervisors (Les Baugh) also submitted letters. Fruit Growers Supply Company (Dean A. Lofthus) likewise commented with a letter. The letters from the EPA and Shasta County were received after the comment period had ended.

The Lassen National Forest also held an open house for educating the public about these changes and collecting feedback. This event was held in the Chester Memorial Hall, Chester, CA from 2 to 6 PM on Thursday, January 7, 2010. Twenty individuals attended and Lassen Travel Management staff held in-depth conversations with these participants.

The topics of the comments we received and our summarized responses are listed in Table C-1.

Table C-1 Responses to Comments received during the 30 public review period after release of the Final Environmental Impact Statement

Topic	Comment	Response
Access	Several commentors supported Alternative 1, the No Action Alternative because they felt banning cross country travel took away their rights to access public lands. Others felt that outreach and education were much preferable to restricting ATV access. Other individuals, in addition to Lassen County, Shasta County, and Recreation Outdoor Coalition asked us to adopt a modified Alternative 1 that would prohibit cross country travel but incorporate all the unauthorized routes into our National Forest Transportation System. They also stated that only adding 56 miles of unauthorized routes to our system was not a reasonable or balanced outcome, given the 1,089 miles originally inventoried or the 768 miles upon which the public commented.	The Travel Management Rule stipulates that cross-country travel must be prohibited and routes that are not currently part of the Lassen National Forest Transportation System (NFTS) are by definition "cross-country travel." Hence, current unauthorized routes must be added to the NFTS if continued use is to be allowed. The Travel Management Regulations have 14 criteria and considerations (listed under CFR 212.55 (a, b, & c)) that must be taken into account when selecting which unauthorized routes should be added to the NFTS. Forests must also comply with their Forest Plan and all applicable laws, rules, policies, regulations, directions, and inter-agency agreements. Adding roads and trails to the transportation system also entails increased maintenance costs; this fiscal responsibility must also be considered. Although the public commented on 768 miles of the 1,089 miles of unauthorized routes originally inventoried, many of these routes were simply listed because some members of the public wanted them all to remain available for use; that is, no specific access or riding opportunity was identified for many of these unauthorized routes. Given that adding all these routes would be fiscally irresponsible and entail unacceptable resource impacts, the Forest followed a logical step by step process of identifying which routes represented important recreational opportunities for OHV users and that either had no natural resource impacts or impacts that could be mitigated. All of the criteria mentioned in the previous paragraph were applied by specialists in the Supervisors Office and the Districts to thorough evaluate each route for the appropriateness of inclusion into our Transporation System. As described in the Public Involvement section of the FEIS (Chapter 1.7 starting on page 9) and the Public Involvement section of this ROD, multiple opportunties to further evaluate and comment upon our choices were available.

Topic	Comment	Response
Access	At the Open House in Chester, one group of veterans were concerned that they would no longer have access to an area of the Front Country where they traditionally held annual gatherings.	Al Vasquez, District Ranger for the Almanor District, encouraged the group to become active in the ongoing planning efforts for the Front Country.
Access	Several individuals suggested that no new routes should be added to the NFTS until the OHV community assumes greater responsibility for teaching environmental ethics and controlling alcohol use and other inappropriate behavior.	The Purpose and Need for this action stipulates the need to provide continued access to dispersed recreational activities and a diversity of motorized recreational opportunities in accordence with the Lassen NF Management Plan. Law enforcement pertains to all forest users.
Access	One individual stated that motorized use should be limited to lower elevations to minimize impacts to the pristine character of most of the Lassen.	The Lassen NF already has an extensive road system at most elevations. We feel this action provides an appropriate balance between resource conservation and public access and recreational opportunities for all users.
Access	One individual stated that OHV users are a minority of Forest users and of society and Alternative 3 should be selected to limit the impacts that OHVs have on natural resources	We feel this decision provides an appropriate balance between resource conservation and public access and recreational opportunities for all users.
Access	Several commentors asked that more exceptions should be allowed for big game and firewood retrieval. Recreation Outdoor Coalition felt it was disingenuous to analyze the prohibition cross-country travel in general, but not such travel associated with special use permits.	Comment noted. Special use permits allow cross-country travel to retrieve cut firewood (not to search for it). This limits impacts from OHV use to the distance a person is willing to carry a chainsaw and fuel off our road system to cut the wood in the first place. The permits, therefore, do not allow open use of all our unauthorized routes. See Table J-2 of Appendix J of the FEIS (pg. 494) for further response.
Access	Several letters stated that vehicles should be allowed to park a greater distance off roads than one car length. This unrealistically restricts dispersed camping because cars on next to roads are subject to theft and vandalism and car-camping gear needs to be carried too far.	Comment noted. The Responsible Official considers this requirement to be reasonable because more lenient regulations would serve to countervene the prohibition of cross-country travel and many unauthorized routes that were added to access dispersed camping spots were defined so they lead close to the campng area. See Table J-6 of Appendix J of the FEIS (pg. 510).
Alternatives	Sierra Access Coalition reiterated that we should have completely analyzed their Alternative (Alternative 14 in the FEIS, pages 55-56.)	We explain in the FEIS (pp 55-56) why we did not analyze this Alternative in detail.

Topic	Comment	Response
Alternatives	Sierra Access Coalition, Recreational Outdoor Coalition and Lassen County felt we had an inadequate range of alternatives and asked us to start our analysis over, collaborate more closely with stakeholders and develop a plan with a "better balance."	Each stakeholder will naturally have a unique perspective on the best balance for motorized travel management on the Lassen National Forest. It is the job of the Lassen NF management staff to evaluate all of these perspectives for the best information each has to offer and then to apply this information to the development of alernatives that we feel best meet the needs of the public as a whole and which complies with all the constraints on Forest Management that are listed in the first "Access" comment above. Within that context, we believe that the DEIS and FEIS present a suitable range of alternatives, differing from emphasis on resource protection to emphasis on recreational opportunities. No plan can be perfect, but we believe this is a very carefully conceived, well-informed, and well-balanced first step towards developing a transportation system that appropriately serves the entire public and protects natural resoruces.
Coordination with local governments	Several commenters stated that we did not adequately coordinate our planning efforts with local governments.	Our coordination efforts were extensive. Organizations, governments, agencies, and tribes that were consulted are listed in Chapter 4 of the FEIS and our outreach efforts and consultation are described in the Public Involvement Section of this ROD. Coordination does not imply consensus or decisions that everyone likes. We do endeavor to reach balanced decisions that protect resources and serve the public as a whole.

Topic	Comment	Response
Coordination with County governments	The Boards of Supervisors from counties that the LNF overlaps have commented that the Forest should have been more proactive at coordinating with the counties to provide more riding loop opportunities that used county roads as connectors. Specifically: The *Lassen County* Board of Supervisors passed a resolution (09-043) on August 18, 2009 (after our DEIS comment period) supporting OHV use on selected unpaved county roads. This resolution was provided to us on the last day the FEIS review period, January 19, 2010. *Plumas County*, in their comments for the DEIS stated, in part, "Plumas County's Department of Public Works has prepared a draft ordinance that proposes mixed use of certain county roads located with in the Lassen National Forest….the DEIS needs to be more affirmative in assuring that the policy decisions…of Plumas County become integrated into the Forest's travel management program, even if such County actions occur following completion of the EIS process." During the FEIS review period, *Butte County* sent us a copy of a November 18, 2009 letter to Regional Forester Randy Moore, as well as a map and list of roads. The letter states, in part, "we join with Congressman Herger, the counties of Lassen, Plumas, and Shasta in support of mixed use on county maintained roads leading and connecting to the National Forest System (NFS) roads. We also support OHV access to NFS level 3 and 4 designated roads within the Lassan and Plumas National Forests." After the DEIS comment period, on August 25, 2009, *Shasta County* provided us with comments encouraging us to allow mixed use on Forest Service roads but did not elaborate on county roads nor provide us with any county resolutions. In the letter sent after the FEIS review period they stated they believed coordination with their county had been inadequate.	The LNF has proactively engaged the counties in this project since its inception. This coordination is documented in this ROD in the Public Involvement Section. We understand that historically the counties have not regulated OHV use on unpaved County Roads and that the Counties have been proactive in representing OHV user groups for continued use. In light of the recent County developments, it is important to note that this is not the end of Travel Management Planning on the Forest. When we undertake the analysis for Subpart A of the Travel Management Rule, we will be looking for cost savings opportunities. These might well include lowering maintenance levels on more of our ML 3 roads. We invite the County Engineering Staffs to work with our Engineers regarding the standards we use for road maintenance and for determining safe and appropriate mixed use. Such coordination might identify additional opportunities for extended OHV riding opportunities.

Topic	Comment	Response
Coordination with adjacent National Forests	Recreation Outdoor Coalition asked us to describe our collaboration with adjacent National Forests (Plumas, Shasta-Trinity, and Modoc) to ensure an interconnected road system, especially for OHV use.	The Lassen NF administers a small portion of the Shasta Trinity National Forest surrounding Lake Britton, and we have been following the Shasta Trinity planning efforts, including their considerations of motorized mixed use. The Lassen does administer parts of the Shasta and Modoc NFs adjacent to lands managed by the Modoc NF, and insofar as all the Modoc's ML 3 roads have been designated for mixed use, connection of our ML 2 roads with their road system will provide additional riding and loop opportunities. Coordination with surrounding BLM Districts and the Plumas NF on Motorized Travel Management Planning was complicated by the fact that their planning efforts were a year or more advanced than the Lassen. If missed opportunities present themselves for additional loops, we will consider them in future revisions of the MVUM.

Topic	Comment	Response
Economics	Butte County, Lassen County, and Recreation Outdoor Coalition (ROC) felt that our Economic Analyses were inadequate and predicted severe economic impacts to rural communities from restrictions on OHV use, especially on top of previous reductions in timber harvesting. Lassen County and ROC also pointed out that our population figures for Lassen county included the inmates from two state prisons and that it was inappropriate to include these individuals in forecasts of economic activity. We were asked to redo our Economic Analyses and make it much more thorough.	Without inmates, Lassen County has a population of 26,414 rather than 35,757. This smaller number is more appropriate, but if it had been used, the smaller population would have indicated fewer economic impacts. Perhaps more importantly, the Recreation Section of the FEIS (Figures 1-4 and Tables 28-31) show OHV use to be a small percentage of the primary reasons why people recreate on the Lassen National Forest. The commenters acknowledge this same fact when arguing that OHV use on ML 3 roads is safe due to low OHV traffic levels and when arguing that OHV use on roads and trails added to our Transportation System will not significantly impinge on adjacent quiet recreation because such use is so infrequent. That said, we understand that OHV ridership and economic activity is more common and important in the Butte Meadows area of Butte County than elsewhere on the Forest and that riding opportunities will diminish somewhat with this decision (in many cases, because ML 3+ roads were not legal to ride on in the first place). Please see our response to this issue in the first paragraph of the “Local Economic Impacts” Subject of Table J-4 in Appendix J of the FEIS (pg 500). Regarding the difficulties of specific economic analyses, please see the second paragraph. Given the low levels of OHV use noted above, we do not believe that putting more effort into such analyses would likely alter the factual outcome of our analyses nor, as a result, this decision. Analyzing the economic effects of reduced timber harvests or the combined effects of all Forest Service decisions is outside the scope of this analysis, but would be appropriate for inclusion in the upcoming revision of the Lassen Forest Management Plan. We encourage the counties and all members of the public to become involved in that process.

Topic	Comment	Response
FEIS Errors	Recreation Outdoor Coalition identified many instances in our FEIS where there were apparent errors or inconsistencies.	Thank you for thoroughly reviewing our document and identifying instances that require corrections. We will strive to remedy noted errors by posting the corrections in the FEIS Errata that we have on our web site. We intend for this Errata to be periodically updated as additional errors are found. We believe that none of the errors noted effect the overall outcome of our analyses or the decision described in this ROD.
Maintenance Costs and NFTS Affordability	Recreation Outdoor Coalition made numerous critiques of how our engineers calculate maintenance costs and evalute the affordability of our National Forest Transportation System (NFTS). They also pointed out mistakes in our FEIS.	As noted above we will strive to remedy noted errors by posting the corrections in the FEIS Errata that we have on our web site. That said, this analysis is based on the professional judgement and work of our engineers. None of the issues noted change the underlying fact that adopting Modified Alternative 5 will save approximately $700,000 per year in annual maintenance needs. It should also be noted, that the large current and foreseeable maintenance backlog does not mean that our roads are inadequately maintained. They *are* adequately maintained for safety and resource protection. The backlog is, in part, reflective of the type of condition survey used to generate these costs, based on an ideal scenario for maintenance conditions.
Motorized Mixed Use	Recreation Outdoor Coalition also made numerous critiques of our engineering procedures and how Mixed Use Safety Analyses were conducted.	Our procedures and analyses comply with Forest Service standards and reflect the best information available. The guidelines that our staff use are far too numerous to cite here. (By way of example, see the publication “Guidelines for Engineering Analysis of Motorized Mixed Use on National Forest System Roads EM 7700-30” available at this web site: http://www.fs.fed.us/eng/transp/em770030.htm.) We appropriately rely on the professional judgement of our engineering staff for conducting our analyses and informing our decisions.

Topic	Comment	Response
Motorized Mixed Use	Recreation Outdoor Coalition also asked why we did not mention or evaluate the engineering study in 2005 of potential mixed use on the Share the Dream Trail.	We recognize the efforts made by ROC to conduct the study in 2005 and are aware of the document. The proposed motorized mixed use segments considered by the Lassen NF were different from those included in the ROC Share the Dream proposal, and therefore our own engineering analyses were used to inform this decision. Unlike the ROC proposal, only short segments less than 3 miles were proposed by the Lassen NF for motorized mixed use connectors. Our engineers used the latest FS policy direction to conduct analyses on these particular segments, and in some cases, there were differences from the ROC study– such as speed approximations and crash severities.
Motorized Mixed Use	ML 3 gravel roads on the Forest should not be considered "highways" and all of them should be open for OHV use. Recreation Outdoor Coalition has especially made very clear arguments in this regard.	We understand there is disagreement on this issue. The Lassen National Forest has chosen to follow National and Regional Guidance for managing our Transportation System.
Motorized Mixed Use	Plumas County and Recreation Outdoor Coalition cite a December 11, 2009 letter from T. A. Morrison, Lieutenanat and Acting Commander for the Redding Area of the California Highway Patrol to Regional Forester Randy Moore contesting the Forest Service definition of "highways."	Please note that 6 days later C. D. Jenkins, Chief of the Northern Division of the California Highway Patrol also wrote a letter to Randy Moore stating, in part, that "The conclusions of Lieutenant Morrison regarding the definition of a highway and the CHP's role in federal forestry roadway designations are not to be construed as a statement of fact. Lieutenant Morrison was expressing an opinion, which on review, is inconsistent with CHP policy."
Motorized Mixed Use	Lassen County and Recreation Outdoor Coalition cited the fact that the Modoc National Forest has chosen to designate all ML 3 roads as available for motorized mixed use as an example of what the Lassen could do also. They therefore encouraged us to do so.	It is true that Forest Supervisors have the authority to supercede the California Highway Code and Regional and National Direction regarding the appropriate application of Mixed Use on ML 3+ roads in National Forests. As noted, the Lassen NF has chosen to follow National and Regional Guidelines. In addition, other adjacent Forests including the Plumas and Shasta-Trinity have taken an approach that is similar to the Lassen's.

Topic	Comment	Response
Motorized Mixed Use	One individual believed that even if the ML 3 roads are administratively considered "highways" by the Forest Service, there is no evidence to suggest that there is a significant safety risk from mixed use because there have been no (zero) recorded mixed use accidents on the Lassen National Forest since records have been kept.	Accident records for the Lassen NFTS go back less than 10 years and are not all inclusive. The Mixed Use Safety Analyses were based on a systematic approach to evaluating the likelihood of accidents and their likely severity if they do occur. The professional judgement of the Lassen NF engineering staff also informed these analyses. The Responsible Official deemed the analyses appropriate for this decision.
Motorized Mixed Use	Several commentors noted that OHVs have long ridden on unpaved ML 3 roads on the Lassen National Forest with few, if any, problems, so this use should be allowed to continue.	It is important to note that, regardless of past enforcement, this use of ML 3 roads has not been legal.
Motorized Mixed Use	Butte County noted that many families enjoyed outings that involved loop riding from residences through the Forest and back, and that now these recreational experiences will involve trailering to segments of roads where OHV use is allowed.	Please see the response to the "Trailering" Subject of Table J-6 in Appendix J of the FEIS on page 513.
Language	Sierra Access Coalition made the point that our use of the term "unauthorized routes" is inappropriate because the Forest Service actually created most of the routes for management purposes. They suggest the term "unauthorized" creates a prejudiced evaluation and that the term "unclassified" would be more neutral.	The definition of an "unauthorized route" is provided in the Travel Management Rule (TMR), Subpart A, § 212.1. Discussion of the appropriateness of this term and how it was selected is provided in the Comments and Responses to Comments that proceed this section of the TMR. For access to the text, see Federal Register / Vol. 70, No. 216 / Wednesday, November 9, 2005 / Rules and Regulations, pages 68264-68291. The Lassen National Forest complied with this definition in its planning.
Motorized Mixed Use	OHV use should be allowed in campgrounds to access adjacent OHV routes without trailering into and out of the campgrounds. Alternately, OHV parking areas (even with a fee) should be provided at campground entrances.	Allowing OHV use in campgrounds raises many issues regarding safety and potential conflicts with other campers. In cases where campground roads lead directly to roads where non-highway-legal vehicles can ride, mixed use within the campground might be considered on a case by case basis after appropriate analyses. OHV parking areas at the entrance to campgrounds might be feasible. Such decisions should be pursued at the District Level.

Topic	Comment	Response
Recreational Opportunities	Recreation Outdoor Coalition criticized a statement on page 139 of the FEIS as an exaggeration of the impact of OHV use on non-motorized and “quiet” recreation.	The criticism ignores preceeding sentences in the same paragraph that describe the positive recreational benefits of adding more roads and trails for OHV use. The statement did not evaluate the degree of impact of either the benefits or negative impacts, only that they exist. Errors in some of our recreation tables (regarding conflicts and compatability between OHV use and other uses) had previously been pointed out by questions we received during the review period. These errors have been corrected in the Errata in Appendix B of this ROD and on-line. The corrections did not change the bottom line of the analyses for differences among Alternatives in how they meet the Purposes and Needs and Effects to Resources (Table 2, page xxv of the FEIS and of the Errata).
Recreational Opportunities	Sierra Access Coalition and Recreation Outdoor Coalition both critizied the fact that our alternatives do not include Open OHV Riding Areas.	Please see our response to this subject in Table J-6 of Appendix J of the FEIS on page 512.
Resource concern	Large 4W highway legal vehicles do much more damage than lighter OHVs with balloon tires.	Comment noted. This action is designed to keep all such damage to a minimum.
Resource concern	The California Wilderness Coalition commended us for not adding any unauthorized routes to our system that they believed caused resource concerns. They stated that they looked forward to working with us on future planning efforts.	Thank you. We look forward to working with you too.

Topic	Comment	Response
Resource concern	The LahotanRegion of the California Water Quality Control Board expressed concerns that unauthorized routes that are not added to our NFTS will continue to be used illegally causing ongoing resource concerns regarding water quality and that the Forest should have committed in this action to prioritizing routes for physical blocking. Similarly, the California Regional Office (IX) of the Environmental Protection Agency expressed concerns about inadequate analyses of sedimentation rates resulting from downgrading maintenance levels of some of our ML 3 roads.	These concerns are valid. However, the Forest has an ongoing commitment to operate within the context of all all applicable laws, regulations, policies, rules, directions and inter-agency agreements, as well as our Forest Plan. This includes protecting hydrological resources. Blocking roads would likely involve ground-disturbing activities outside the road prism (for instance, excavating bolders for blockages) and we have chosen to address such mitigations on a case by case basis subsequent to this analysis. Sedimentation rates from roads involve a complex balance of considerations. For instance, removing culverts and outsloping to accommodate less frequent maintenance can also prevent culverts becoming blocked and washing out in storm events. The Forest constantly strives to maintain roads in a manner that adequately prevents, mitigates, or eliminates potential resource damage. This is true of lower maintenance roads also.
Specific routes and roads	Trails West wishes us to seasonally open ULA 426 for use in following the East Branch of the historic Lassen Trail. This route segment involves crossing the Susan River. Trails West suggests that the crossing is typically dry during the summer and that seasonal restrictions would prevent resource impacts while allowing trail enthusiasts to follow a popular route.	We do recognize interest in following historic trails to be an important public use of the Forest. The Forest did consider this route, but for now has chosen not to add it because it repeatedly crosses a meadow and also the Susan River once. Unfortunately, in selecting the route, pioneers likely did not have the same resource concerns that are now salient for our densely populated country. If Trails West representatives believe such concerns can truly be mitigated, we do welcome further discussions about this route. There are no constraints on non-motorized access.

Topic	Comment	Response
Specific routes and roads	At the Chester Open House, it was pointed out that there was still one small segment of Road 28N70 on Turner Mountain (between its connection with roads 28N28 and 29N48) which prevents riding the entire outer loop (even after the southern half, Road 29N48, becomes an operational ML 2).	The Forest chose to downgrade the southern road, 29N48, from ML 3 to ML 2, in spite of recent improvements to the road, with the specific intention of creating a riding loop around the mountain. The portion of 28N70 to the top of the mountain was designated for mixed use to allow OHVs to ride to the top and to create a northern loop. This section can be accessed by OHVs via the northern road 28N28. However, the entire stretch of 28N70 is over 3 miles in length. Hence, it is ineligible for mixed use designation over its entire length. This is an issue that still needs to be resolved and the Forest is willing to seek creative solutions. It will be several years before the southern road reaches an operational ML 2 status, so 29N48 will not be shown on the MVUM during the interim until it is deemed safe for a vehicle class change that will allow both highway legal and non-highway legal vehicles.
Specific routes and roads	Several commentors reiterated their disappointment that the Forest has not been more proactive and consistent with developing the Share the Dream Trail proposed by the Recreation Outdoor Coalition	This issue has been addressed in Table J-8 of Appendix J of the FEIS. The complexity of this Motorized Travel Management analysis has diverted staff, time, and resources from other, more specific, planning efforts.
Specific routes and roads	One individual requested that OHV use be prohibited on Baxter Creek Road (29N07) which crosses their property. They claimed that the Lassen NF does not have a valid easement.	We believe our easements are valid with the exception of one short stretch across W. M. Beaty & Associates, Inc. land. We will not show this stretch of road as availble to OHV use on this year's Motor Vehicle Use Map and will endeavor to resolve this dispute within the coming year.
Specific routes and roads	Fruit Growers Supply Company noted that a road that we show as a county road connecting with the Lassen NF road 36N14 actually is their private road for three miles before it connects. They point out that we do not have an easement and that this portion of the road should not be shown on our maps or the MVUM	If this is indeed the case, we will ensure it does not show on the MVUM.
Specific routes and roads	At the Open House, one resident of the Spalding Tract (a residential community on the northwest shore of Eagle Lake) lamented the lack of connectivity for OHVs between the community and nearby Forest roads that allow OHV use.	The individual was encouraged to get involved with the Eagle Lake Ranger District to remedy this oversight.