3.08. Transportation

Affected Environment

Introduction

This section of the environmental analysis examines the extent to which alternatives respond to transportation facilities direction established in the Tahoe National Forest Land and Resource Management Plan. The Forest Plan transportation facilities direction was established under the implementing regulations of the National Forest Management Act (NFMA) and the National Forest Roads and Trails Act (FRTA). The National Forest Transportation System (NFTS) consists of roads, trails, airfields, and areas. 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. Transportation facilities considered in this analysis include roads and trails that are suitable for motor vehicle use. This analysis considers changes needed to the NFTS to meet the purpose and need of this analysis. Decisions regarding changes to the transportation facilities must consider: 1) providing for adequate public safety, and 2) providing adequate maintenance of the roads and trails that will be designated for public use. The analysis in this section primarily focuses on these two aspects of the NFTS.

Background

A majority of national forest visitors travel on national forest system roads. Roads have opened the Tahoe National Forest to millions of national and international visitors. Forest roads are also an integral part of the transportation system for rural counties. They provide access for research, fish and wildlife habitat management, grazing, timber harvesting, fire protection, mining, insect and disease control, and private land use.

Roads in the National Forest Transportation System are not public roads in the same sense as roads that are under the jurisdiction of State and county road agencies. National forest system roads are not intended to meet the transportation needs of the public at large. Instead, they are authorized only for the use and administration of national forest lands. Although generally open and available for public use, that use is at the discretion of the Secretary of Agriculture. Through authorities delegated by the Secretary, the Forest Service may restrict or control traffic to meet specific management direction (USDA Forest Service, Forest Service Manual 7731).

The Tahoe National Forest has approximately 2,800 miles of NFTS roads. Roads are defined as motor vehicle travelways over 50 inches wide, except those designated and managed as a trail. Trails, including off-highway vehicle (OHV) trails, are covered further in the recreation section (Part 3.07) of this Chapter.

Some roads and trails are present on the acres where the decision to prohibit cross-country travel will be made. These routes are not currently authorized for motor vehicle use by the public. These routes will continue experiencing use in the no-action alternative, while some will be added to the NFTS in the action alternatives as motorized trails.

NFTS roads are each managed in one of three ways: as closed long term to motor vehicles (closed roads), roads maintained for high-clearance vehicles only (high clearance roads), and roads maintained

for standard four wheel passenger cars (passenger car roads). Those roads maintained for standard four-wheel passenger cars are subject to the Highway Safety Act and are considered by the Forest Service to be highways for purposes of the California Vehicle Code (CVC).

Costs and Funding for Road Maintenance

Need for Maintenance and Administration

National forest transportation system roads must be maintained to avoid problems that can arise when they fall into disrepair. Each year, the Tahoe National Forest prepares a road maintenance plan, which lines out the road work for the year. Resource protection and public safety are the maintenance priorities.

Administration needs include data recording and updates as well as permit issuances.

In recent years, annual road maintenance budgets have not been sufficient to maintain the entire road system to standard. This has led to an increase in deferred maintenance. In past decades, commercial users (typically timber purchasers) maintained a substantial portion of the national forest road system on the Tahoe National Forest during timber sale activities. With the decrease in timber sales, however, fewer roads are being fully maintained (meaning deferred maintenance needs did not increase). An estimated 28 percent of the Tahoe National Forest road system was fully maintained in 2007. Table 3.08-1 presents average maintenance costs for the Tahoe National Forest.

Table 3.08-1. Average Costs for Annual Road and Trail Maintenance in the Tahoe National Forest

Maintenance Class	Cost per Mile
Closed Roads	$500
High Clearance Roads	$5,772
Passenger Car Roads	$26,081
Trail Open to All Trail Vehicles	$1,350
Trail Open to ATVs	$1,275
Trail Open to Motorcycles Only	$1,500

Sources: Open roads: Gary Lybrand, Transportation Specialist, Pacific Southwest Region. Trails: Bonnie Petitt, Tahoe Recreation Officer. Closed roads receive negligible maintenance.

Availability of Resources

While the federal budget currently exceeds revenues, it is not projected to do so after 2012. Revenues are expected to increase, but mandatory spending will increase at a faster rate. As a result, federal discretionary spending will decrease, likely leading the Forest Service to experience declining budgets through 2017. Figure 3.08-1 shows a graph of economic growth and mandatory program spending. The GDP is projected to increase, but Medicare/Medicaid and Social Security outlays are projected to increase at faster rates.

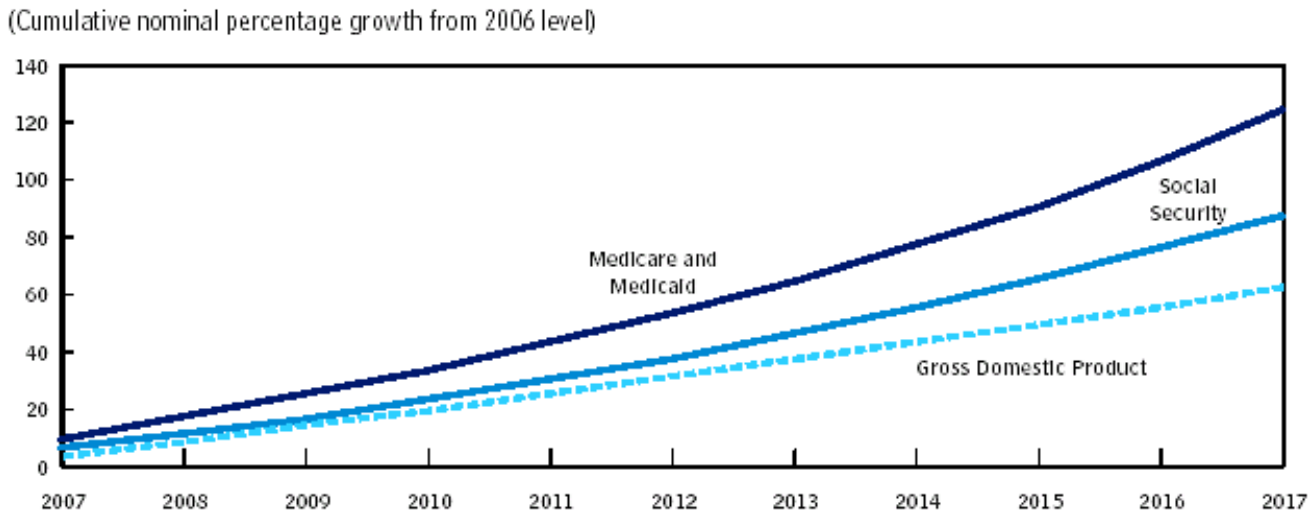

Figure 3.08-1. Congressional Budget Office's Projected Growth of the U.S. Economy and Federal Spending for Major Mandatory Programs, 2007-2017

Source: Congressional Budget Office. The Budget and Economic Outlook: Fiscal Years 2008-2017. January 2007.

Forest Service funding for road maintenance and administration has mostly decreased over the last five years. Collections from commercial users can only be spent on roads where collections were made. Maintenance performed by non-Forest Service funds varies greatly from year to year and tends to be work associated with timber haul. For example, the purchaser may blade a road before hauling timber on it.

Table 3.08-2. Tahoe National Forest's Past Years' Road Budgets (in nominal dollars)

	Fiscal Year				
Source:	**2003**	**2004**	**2005**	**2006**	**2007**
Base Allocation	1,075,644	903,000	751,000	719,000	924,300
Collections from Cooperative Agreements	1,006,629	535,324	187,728	226,260	310,373
Maintenance Performed by Non-Forest Service Funds	642,000	223,204	25,000	129,500	*

*Fiscal Year 2007 data was not required to be submitted.

Public Safety

Public safety affects the selection of geometric elements and design speed of roads, requires the examination of possible hazards and corrective actions needed, and identifies the needs for traffic control and maintenance activities (USDA Forest Service Handbook 7709.56).

Conflicts among Different Classes of Motor Vehicle Uses

NFTS roads are designed primarily for use by highway-legal vehicles (motor vehicles that are licensed or certified for general operation on public roads within the State), such as passenger cars or log trucks. Some NFTS roads also provide recreational access for all-terrain vehicles and other non-highway-legal motor vehicles. Motorized mixed use (MMU) is defined as designation of an NFS road for use by both highway-legal and non-highway-legal motor vehicles (USDA Forest Service, Engineering Publication

EM-7700-30). Designating NFTS roads for motorized mixed use involves safety and engineering considerations.

The policy of Region 5 is to conduct a motorized mixed use analysis on all roads maintained for passenger cars where mixed use is proposed and on any high clearance roads that have a crash history or where mixed use was not allowed in the past. The baseline for the analysis will be Forest Service regulations and directives and applicable State and local laws. The qualified engineer will determine how detailed the analysis is to be and may choose to do an evaluation based on factors in EM-7700-30 or other factors. (*Qualified Engineer* is defined as "An engineer who by experience, certification, education, or license is technically trained and experienced to perform the engineering tasks specified and is designated by the Director of Engineering, Regional Office" (FSM 7705)). The qualified engineer determines the factors to be considered for the specific road, road segment, or road system being analyzed. Based on the analysis conducted, the qualified engineer will determine the probability of a crash occurring and the severity of the crash. He or she may also provide mitigation measures that would tend to reduce the probability or severity of a crash. Under certain conditions, the qualified engineer may document engineering judgment without preparing a full engineering report. Otherwise, when issues are more complex, the qualified engineer will prepare a detailed engineering report.

Speed, Volume, Composition, and Distribution of Traffic

Roads on the Tahoe National Forest are used by a variety of vehicles, including logging trucks, chip vans, passenger cars, pick-up trucks, and OHV's. Traffic volumes change depending on the time of year and activities occurring along the road. Forest roads experience the highest vehicle use when recreationists, logging trucks, chip vans, and agency personnel all need the same road at the same time, often in the summer.

Compatibility of Vehicle Class with Road Geometry and Road Surfacing

Roads are designed based on design vehicles, or vehicles with representative weight, physical dimensions, and operating characteristics. Design vehicles are selected based on the largest vehicle likely to use the facility or facilities accessed by the proposed road. For example, on the Tahoe National Forest, if a new road is planned for a fuels project, the design vehicle will be a chip van or logging truck.

Additionally, the volume, composition, distribution, and whether the road is subject to the Highway Safety Act are elements of traffic criteria used in the design of turnouts, road widths, surfacing, safety features, and traffic control. Roads designed and maintained for high clearance vehicles are not subject to the Highway Safety Act. The applicability of the Highway Safety Act is determined during transportation system planning.

As stated, forest roads were designed primarily for highway-legal vehicles. Since some non-highway-legal vehicle classes differ than those of highway-legal, the qualified engineer will consider how those different classes can be expected to function depending on the road characteristics.

Effects Analysis Methodology

Transportation Specific Assumptions

1. Any motor vehicle use authorized by state law is occurring on the NFTS unless there are Forest specific prohibitions.
2. Motor vehicle use by special use permit or other permitted activities is outside the scope of this proposal (for example, fuelwood gathering, motorized SUP events, recreation residences, etc.)
3. Eligible motorized trail vehicle classes are high clearance vehicles (4WD, etc.), ATVs, and motorcycles. Low clearance highway legal vehicles are not prohibited on trails but will not be found using trails.
4. There is some cost for maintenance that will have to be born by the Forest Service for any route open to motor vehicle use by the public.
5. State law regulating motor vehicle drivers sets the standard of care for the safety of drivers themselves and other users of the NFTS.

Transportation Sources of Information

Information on individual roads and trails can be found in Appendix A, "Road Cards," and Appendix S, "Mixed Use." Additional information is part of the project record.

Required Considerations

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 their effects on public safety. Refer to Appendix A for specific information on each road or trail considered to be added to the NFTS.

Affordability

36CFR212.55 requires consideration of the need for maintenance and administration of the designated NFTS. NFTS expenses include needed maintenance work that has not been completed (deferred maintenance) and costs of routine maintenance to maintain the facility at its current standard (annual maintenance). Proposed changes to the NFTS may have additional implementation costs such as sign installation and resource improvements.

A current estimate of road deferred maintenance on the Tahoe National Forest is $115,000,000. Note this value is based on a random sample of deferred maintenance needs taken nationally in 2007; it is not statistically valid at the national forest level, however, it can be used as an indicator of maintenance needs for the existing road system.

Environmental Consequences

Measurement Indicators

Measurement Indicators are intended to address how each action individually (via direct and indirect effects) and each alternative as the sum total of its proposed actions (via cumulative effects) respond to the need for a safe and affordable NFTS. Direct effects of this decision are due to additions to the NFTS and changes in class of vehicle allowed on NFTS roads and trails. Conflicts with other resources are examined in other sections.

The measurement indicators used to display differences between the effects of the alternatives on NFTS roads and trails are: 1) Public Safety, and 2) Affordability.

Forest Plan and Other Regulatory Direction

All the action alternatives comply with the Forest Plan and the Transportation Rule. Additionally, roads analyzed for motorized mixed use were assessed for compliance with the California Vehicle Code (see Appendix S – Mixed Use).

> **Transportation Rule (36 CFR 212, 251, 261 and 295)**: The alternatives in this EIS are designed specifically to implement the requirements of the November 5, 2005, rule for travel management; *Designated Routes and Areas for Motor Vehicle Use*. In particular, it addresses the requirements of *36 CFR § 212 Designation of roads, motorized trails, and motorized areas* which states in part "*Motor vehicle use on National Forest System roads, on National Forest System trails, and in areas on National Forest System lands shall be designated by vehicle class and, if appropriate, by time of year by the responsible official on administrative units or Ranger Districts of the National Forest System*."

Forest Plan Goals call for providing a broad spectrum of recreational opportunities in accordance with need, demand, and type of use (LMP page 97). Additionally, the Forest Plan calls for closures where obvious conflicts exist (LMP page 97). Furthermore, the Forest Plan calls for providing safe recreational access (LMP page 100).

Public Safety

Alternatives 2 and 5 present the greatest risks to public safety, as they contain the most miles where motorized mixed use would occur on roads with either high crash severities or high crash probabilities or both. Alternative 6 follows with some roads evaluated as having high crash severities and no roads with high probabilities. It also has less roads that are inconsistent with the CVC than alternatives 2 and 5. The remaining alternatives, 1, 3, 4, and 7, all have less than 3.4 miles of road with a change in class from "Open to Highway Legal Vehicles Only" to "Open to All Vehicles."

Changing passenger car roads to high clearance roads does not present a safety risk in and of itself, but by changing these roads, motorized mixed use will be allowed where it previously was not. Therefore, these roads were also analyzed for motorized mixed use.

The new trails proposed in Alternatives 2, 4, 5, 6, and 7 were evaluated for safety and compliance with design standards (see Appendix A, Road Cards, for specific routes). None of the trails present an unacceptable safety risk.

Table 3.08-3. Summary comparison of alternatives with respect to public safety

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Miles of passenger car roads changed to high clearance roads	0	285.6	0	3.4	285.6	285.6	3.4
Miles of routes unauthorized for motor vehicles added as trails	0	66.3	0	27.0	276.6	64.1	45.1
Miles of Passenger Car Road with Change in Allowed Classes of Vehicles from "Highway Legal Only" to "All Vehicles"	0	481.2	0	3.4	481.2	276.4	3.4
Miles of passenger car roads with high crash severity MMU	0	247.7	0	0	247.7	86.1	0
Miles of passenger car roads with high crash probability MMU	0	28.0	0	0	28.0	0	0
Number of MMU roads consistent with CVC	0	80	0	1	80	69	1
Number of MMU roads not consistent with CVC	0	12	0	0	12	9	0

Affordability

All alternatives require over $20 million annually to fully maintain. Alternatives 1, 3, 4, and 7 all cost the most at over $28 million because little or no roads will be downgraded from passenger car to high clearance. Continuing to maintain these roads for passenger cars presents a significant expense. Alternatives 2, 5, and 6 all cost approximately $23 million annually to maintain, or approximately $5 million less than the other alternatives.

Wet weather seasonal restrictions on roads will decrease road maintenance needs, but the amount is difficult to quantify. Based on the Tahoe National Forest road equipment operator's field experience, if a road is bladed in the fall and motorized vehicles do not use the road again until late spring, the road will not need to be bladed the following year. Therefore, under ideal conditions, the blading frequency could be increased from annually to once every two years.

Table 3.08-4. Summary comparison of alternatives with respect to affordability

	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
NFTS roads (miles)	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0	2529.0
High Clearance	1896.2	2181.8	1896.2	1899.6	2181.8	2181.8	1899.6
Passenger Car	632.8	347.2	632.8	629.4	347.2	347.2	629.4
Roads open seasonally	141.2	141.4	141.4	1,930.8	2,086.4	2,083.6	141.1
Trail Maintenance Needs (miles)	1,596.2	253.7	207.3	223.7	463.5	256.5	235.0
Annual Maintenance ($):							
Roads	27,698,123	21,897,873	27,698,123	27,629,073	21,897,873	21,897,873	27,629,073
Trails	469,643	570,765	469,643	512,865	854,970	566,970	532,770
Subtotal	**28,167,766**	**22,468,638**	**28,167,766**	**28,141,938**	**22,752,843**	**22,464,843**	**28,161,843**
Implementation Costs:							
Passenger car road changed to high clearance road	$0	$54,221	$0	$919	$54,221	$54,221	$919
MVUM	$0	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
MMU	$0	$143,500	$0	$0	$143,500	$82,500	$0
Subtotal	**$0**	**$297,721**	**$100,000**	**$100,000**	**$297,721**	**$236,721**	**$100,919**
Total estimated cost (millions)	**$28.2**	**$22.8**	**$28.3**	**$28.2**	**$23.1**	**$22.7**	**$28.3**

The key costs associated with changing passenger car roads to high clearance roads are signing and administrative costs. For this estimate, three signs were assumed to need replacing for every road; each sign costs about $300 to install. And ½ hour of the data steward's time will be needed to update the INFRA database, which costs about $19. In total, approximately $919 will be needed to make the change from passenger car to high clearance road for each road.

Costs associated with producing the Motor Vehicle Use Map (MVUM) are primarily labor, as the INFRA database will need to be updated and draft maps produced and edited. The Regional Office will pay for printing.

Most of the costs for allowing motorized mixed use on roads will be associated with signing. However, some roads would also require brushing and grading.

3.09. Inventoried Roadless Areas & Special Areas

This chapter describes the affected environment and environmental consequences for Inventoried Roadless Areas (IRAs) and Special Areas on the Tahoe National Forest and the potential environmental consequences. Special Areas include Research Natural Areas (RNAs), Experimental Forests, Special Interest Areas, Wilderness Areas, and Wild and Scenic Rivers.

Roadless Areas: Affected Environment

The Tahoe National Forest has eleven inventoried roadless areas totaling 200,675 acres including private land in holdings. The names and gross acres are listed below:

North Fork of the Middle Fork American River	11,153
Duncan Canyon	9,403
Granite Chief (Granite Chief Wilderness within this)	35,572
North Fork American River (NFAR Wild River within)	50,669
Grouse Lakes (Grouse Lake vehicular closure within)	20,996
Castle Peak	17,251
Middle Yuba	13,273
Bald Mountain (Extends onto the Humboldt-Toiyabe NF)	6,545
West Yuba	16,639
East Yuba	18,623
Lakes (Basin) (Extends onto Plumas NF)	551

These inventoried roadless areas were identified in the late 1970s during the Roadless Area Review and Evaluation (RARE I and RARE II). The character and amount of roads, private land, and motorized trails varies greatly by roadless area. Both Castle Peak and Duncan Canyon inherited roads through land purchase or exchange that were built while in private ownership. The Middle Yuba has a lot of private land and road access to private land. East and West Yuba have some primitive 4WD routes and several motorcycle system and non-system trails. The North Fork of the American has one private access road and two minor user created roads in the entire 50,669 acres. Each of the inventoried roadless areas are described in more detail below and displayed on maps.

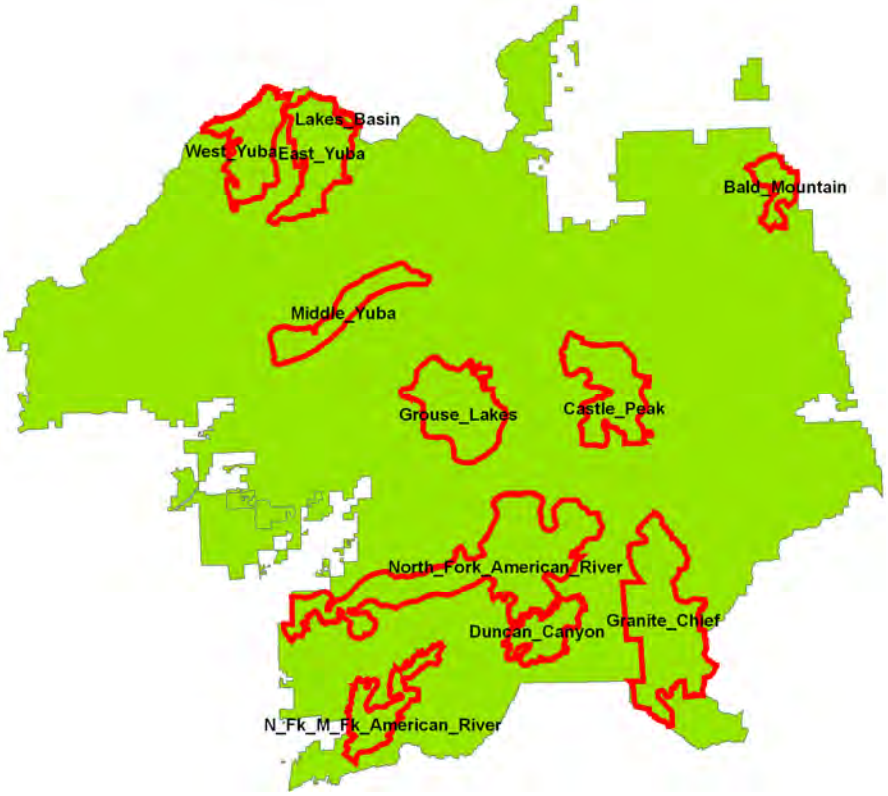

Figure 3.09-0. Roadless Areas on the Tahoe National Forest

West Yuba Inventoried Roadless Area

This area is situated north of Downieville and west of Craycroft Ridge in the Rattlesnake Creek drainage contiguous to the Plumas National Forest Roadless Area in the Table Rock and Skyhigh area.

The 6,347 acres (net and gross) that are on the Plumas National Forest are also described and displayed in this analysis.

A series of peaks (Fir Cap, Saddleback, Mt. Alma, Democrat Peak, and Deadwood Peak) form the western boundary of the area. Craycroft Ridge marks the eastern boundary. The southern boundary roughly follows a line drawn between the former town of Monte Cristo and Craycroft Diggins. The northern boundary encompasses the canyon lands (Canyon Creek drainage) in the vicinity of Table Rock, Skyhigh Peak, Stafford Mountain, Beartrap Mountain, and Gibraltar Peak.

Elevations range 3,600 to 6,800 feet. Sixty-four percent of the unit has slopes over 50 percent. Thirty percent of the area is within sensitive watershed lands. Annual precipitation averages about 75 inches; precipitation is primarily in the form of snow on the 78 percent of the area over 5,000 feet and primarily as rain below that elevation.

The Downie River, Rattlesnake Creek, and Canyon Creek are the major streams in the area. There is a total of 45 miles of perennial streams. Water quality is very high. The terrain is dissected with steep canyons and narrow sinuous ridges characterize most of the area.

The vegetation is representative of the Sierran Forest Province (Bailey classification M2610 with primarily a mixed conifer forest community (Kuchler Vegetation Type 005).

The area contains 9,671 acres of mixed conifer and 2,249 acres of red fir forest types. This forested land is scattered throughout the entire area. The remaining acres consist of hardwoods, brush, riparian vegetation, barren areas, and other non-forested land. There are 680 acres of wetlands, comprising four percent of the area.

The West Yuba area has high scenic quality throughout most of the area. Seventy seven percent of the area is in a variety class "A," which is highly distinctive landscape. The remaining 23 percent is common variety class "B" landscape. (Most of the less scenic lands are in the southern portion of the area.)

The amount of alteration of the existing visual condition of the area varies. Less than 1 percent of EVC class I (untouched), 75 percent is class II (not noticeably altered), 14 percent is class III (alterations visible but not dominant), and 10 percent is class IV (dominated by alteration). Overall, a natural condition predominates.

There is much evidence of historic mining which has occurred during the past 100 years. Such evidence exists as roads, mine shafts, diggings, old buildings, and tailings. The historic town of Poker Flat, which Bret Harte wrote about in the "Outcast of Poker Flat," is located in the northern portion of this area. There are numerous active mining claims throughout the area. Geological studies for this area indicate moderate to high potential for the discovery of valuable minerals.

The main attractions to the area are the stream bottoms and mountain peaks that create a variety of scenery.

Hunting, hiking, and fishing are the primary recreation uses of the area. There is OHV use associated with hunting throughout the area. The Poker Flat and Saddleback Ridge areas are also popular for summer OHV use. Annual recreation visitor days total 145,900 for the area. A portion of one cattle allotment is within the area.

National Forest Systems lands surrounding the West Yuba area are primarily managed for vegetation management, and heavily prospected and mined for valuable minerals.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #3 Dispersed Motorized Recreation (30%), #13 Timber and Range (30%) and #15 Visual & Timber (40%).

Table 3.09-1 shows the amount of roads and trails in the West Yuba Roadless Area by category.

Table 3.09-1. Roads and Trails in the West Yuba Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross Country Travel		
Acres	Not Applicable	16,057
Motorized trails un-authorized for motorized use	Not Applicable	11.3
Roads open to all vehicles	All Year	6.32
Trails open to high clearance trail vehicles	All Year	8.20
Trails open to motorcycles	All Year	9.58
Roads/trails on private land	All Year	0.26
	Subtotal Motorized	**35.65**

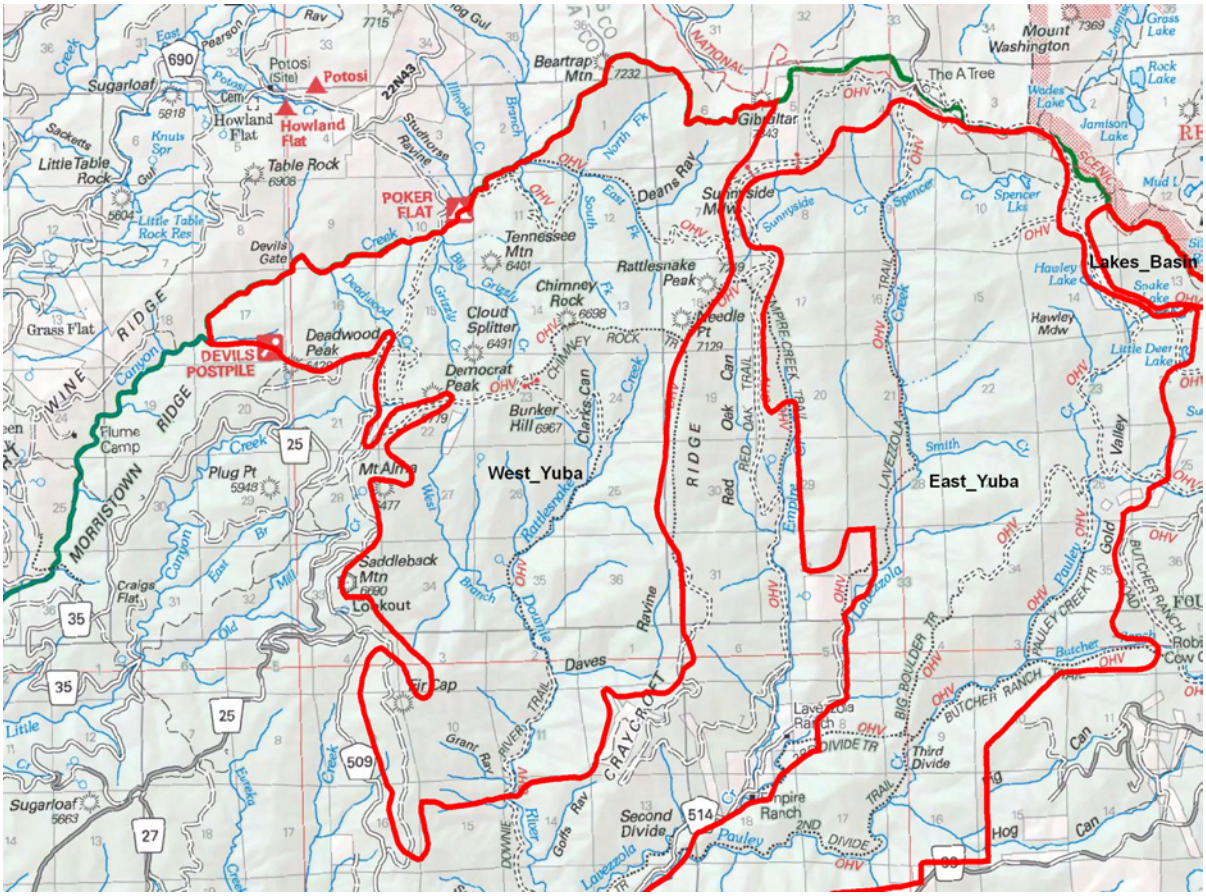

Figure 3.09-1. West Yuba Inventoried Roadless Area

Granite Chief Inventoried Roadless Area

> **Note**: This section describes the entire roadless area, including the 18,750-acre portion designated the Granite Chief Wilderness in 1984.

This area is located adjacent to the western watershed boundary of Lake Tahoe on the Truckee and American River Ranger Districts. A small portion (1,243 acres) is located within the Lake Tahoe Basin Management Unit (LTBMU). The Wilderness Act of 1984 designated 18,705 acres to the Granite Chief Wilderness.

Elevations range from 5,000 to 8,000 feet. Twenty-seven percent of the unit has over 50 percent slopes. Forty percent of the area is within sensitive watershed lands. There are 49 miles of perennial streams. Precipitation averages 70 inches annually, the great majority occurring as snow. Water quality is very high.

The appearance of the Granite Chief area consists of a varied landscape of forest, meadows, and glacially exposed granitic landscapes. The area has high scenic value because of this variety. The major streams in the area are Five Lakes Creek and the headwaters of the North Fork and the Middle Fork of the American River. The topography varies from steep granitic cliffs interspersed with broad glaciated valleys in the north, to dissected landforms in the south. The most scenic class of landscapes, variety class A, comprises 98 percent of the northern part of the area with the remainder falling in variety class B

(common landscapes). The southern portion has a slightly lower proportion of variety class A (83 percent) and more variety class B (17 percent). Granite Chief Unit 8 is 98 percent variety class A and 5 percent variety class B.

The existing visual condition of the area is predominately without visible alterations, although it is not totally pristine. In the north and in Unit 8 of the Truckee-Little Truckee Rivers Land Use Plan virtually all of the area still appears natural (EVC class II). In the southern part, 12 percent is EVC class I (untouched), 83 percent is class II (natural, no noticeable alterations), 4 percent is class III (visible alterations but still predominately natural), and, as in the north, there is a trace of class IV (alterations dominate).

The vegetation represents the Sierran Forest province (Bailey classification M2610), with primarily a coniferous forest community composed of deciduous and evergreen woodlands at lower elevations. The Kuchler vegetation type is Red fir forest (007). The area on the Tahoe NF contains 4,015 acres of mixed conifer, 12,425 acres of red fir, and 430 acres of lodge pole pine forest types. This forested land is concentrated in the southern portion of the area. The remaining 8,405 acres consist of aspen, riparian vegetation, brush, barren, and other non forested land, primarily north of Whiskey Creek Camp. There are 1,920 acres of wetlands comprising eight percent of the area. The area on the LTBMU contains 283 acres of mixed conifer, 111 acres of red fir, 153 acres of hemlock and lodge pole, and 696 acres of non-forested land. Most of the area was also included in the RARE I inventory. Sierra Pacific Industries is the major private landowner in this area. The company plans to intensively exchange their lands for vegetation management and have, in the past, received approved timber harvest plans from the State. They have also received non-cost share road easement for access to their lands in the Five Lakes Creek drainage.

The east side of the area is bordered by electronic sites, roads, ski areas (ski lift terminals), and logged over land. Portions of the west side are bordered by private lands logged in the past.

A majority of the area is unsuitable for OHV use due to steep topography and sensitive watershed lands. The Pacific Crest National Scenic Trail is located along the eastern boundary. A large sheep allotment is located in this area. There are no known mining claims in the area.

The southern portion of the area (south of Bear Pen Creek and the vehicle closure area) is “Designated Routes Only” for OHV use. The Powderhorn Trail has been used in the past by OHV enthusiasts. This area is an alternate ownership pattern, with the major private landowner being Sierra Pacific Industries. None of the private land is accessed or harvested. There are fences, some buildings and meadow restoration structures throughout the area. There is less landscape variety in this area than in the northern section. There are four power withdrawals in the Five Lakes Creek area and along the headwaters of the Middle Fork of the American River. Sheep and cattle grazing occur within portions of the area.

The portion of the LMTBU is in two equal-sized parcels. The northern parcel is in Ward Valley. Alpine Meadows Ski Area does avalanche control in this area. The southern parcel is at the headwall of Blackwood Canyon and shows signs of the overgrazing that occurred prior to 1950. Blackwood Creek does not meet water quality standards because of past logging, grazing, and quarry operations. The Forest Service is in the process of restoring the creek to a self-sustaining stream system meeting all applicable water quality goals.

Recreation use in the area totals approximately 65,500 RVDs per year. The area is used primarily by hikers, fishermen, and hunters, with some OVH use in the southern portion. Approximately 3.5 miles of trail is used for the annual Tevis Cup 100-Mile Endurance Ride. The Westerns States Endurance Run and the Capital-to-Capital Endurance Ride are within the roadless area boundaries. The Tevis Cup Ride has occurred traditionally every year since 1954.

The major attractions of this area are high, rugged granitic cliffs and broad glaciated valleys found in the northern portion. The numerous streams distributed throughout the area provide opportunities for hiking, camping, and sightseeing. The abundance of game and non-game animals also attracts a large number of visitors. Portion of a State game refuge extend into the area and consists of all of Picayune Valley, Little American Valley, and the west slope of Mt. Mildred.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #1 Wilderness (74%), #2 Dispersed Non-Motorized Recreation (18%), #5 Research and Botanical (2%) and #13 Timber an Range (6%).

Table 3.09-2 shows the amount of roads and trails in the Granite Chief Roadless Area by category.

Table 3.09-2. Roads and Trails in the Granite Chief Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross Country Travel		
Acres	Not Applicable	5,896
Motorized trails un-authorized for motorized use	Not Applicable	.34
Roads/trails on private land	All year	0.44
Trails open only to non-motorized users	All year	0.06
Trails open only to hikers and equestrians (No mountain bikes allowed)	All year	51.70

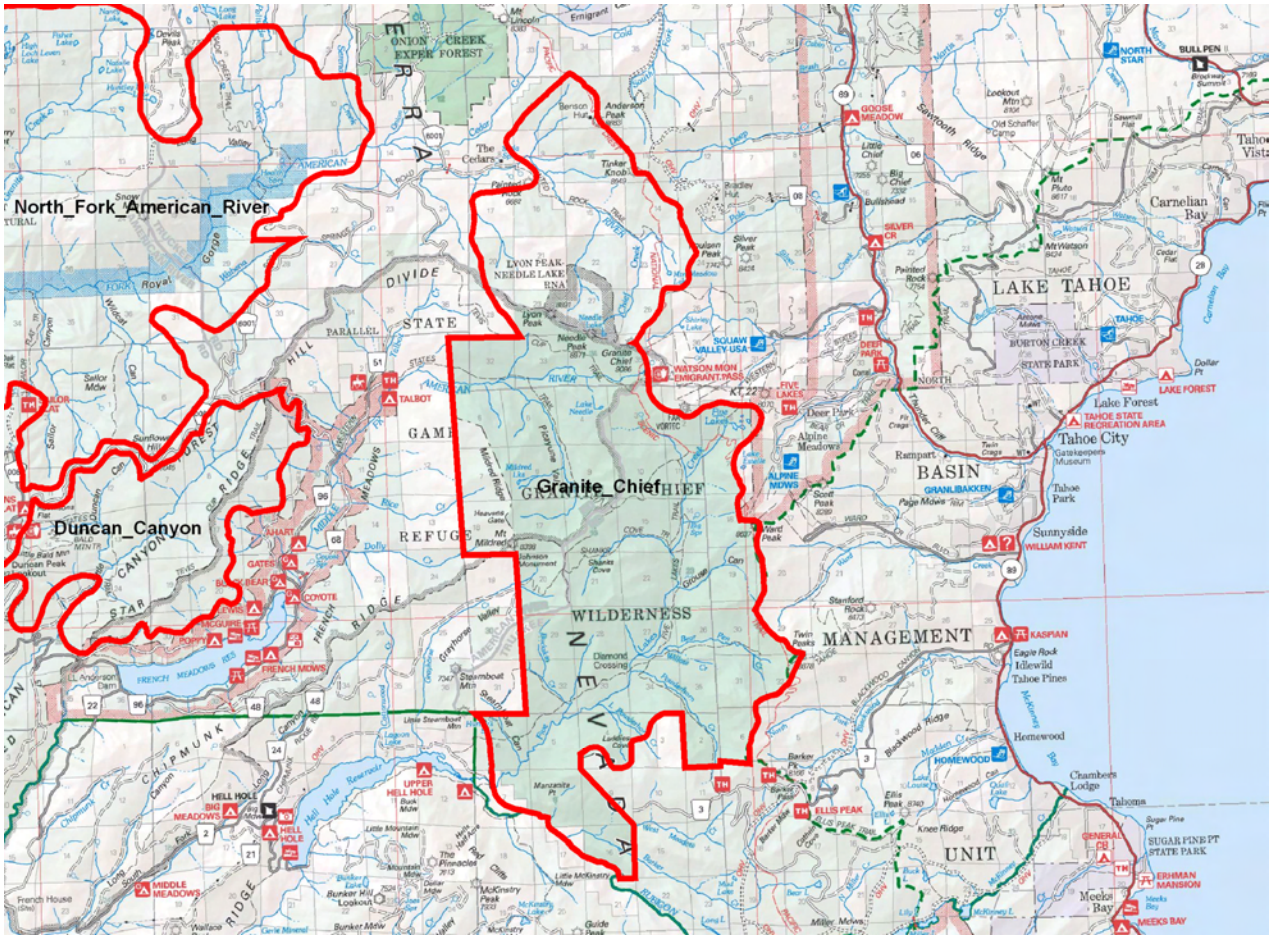

Figure 3.09-2. Granite Chief Inventoried Roadless Area

North Fork American River Inventoried Roadless Area

This area is situated on both sides of the North Fork of the American River. The North Fork of the American Wild River that was designated by Congress contains approximately 5,800 acres of National Forest System land and is included within and surround by the roadless area. The area extends from the western forest boundary near Giant Gap to approximately 1½ miles east of Heath Springs, and is located with the American River, Truckee, and Yuba River Ranger Districts.

Sixty-two percent of the unit has slopes over 50 percent. Twenty-seven percent of the area is composed of slopes greater that 70 percent. There are 84 miles of perennial streams. Water quality is very high. Annual precipitation ranges from 50 inches near Colfax to over 80 inches in the Cherry Point area; most of this occurs a rain below 5,000 feet and as snow above that elevation.

The area contains 14,831 acres of mixed conifer, 4,256 acres of red fir, and 555 acres of lodge pole pine forest types. The vegetation is representative of the Sierran Forest Province (Bailey Classification M2610) with both mixed conifer and red fir forest communities (Kuchler Vegetation Types 005 and 007). This forested land is concentrated in the southeastern and southwestern portions of the area around Sailor Meadow and Humbug Canyon. The remaining acres consist of hardwoods, brush, barren areas, riparian vegetation, and other non-forested land. There are 1,220 acres of wetlands, comprising four percent of the

area. Some sheep graze in the eastern portion of the area. Livestock graze a portion of three grazing allotments. Elevation ranges from 2,100 feet in the Giant Gap–Green Valley area to 8,000 feet at Snow Mountain. The river is designated as a Wild Trout Stream by the California Department of Fish and Game.

The natural scenic quality (variety class) of the area (not including the designated Wild River) is predominately distinctive, although a large portion is common in nature. Sixty-seven percent of the area is highly scenic variety class "A" land, 33 percent is variety class "B" land with average scenic quality, and a trace is variety class "C" within minimal scenic quality.

The degree of current human-caused alterations of the natural landscape (existing visual condition) within the area covers a full range from pristine landscapes to those totally dominated by unnatural alterations. Nine percent pf the area is untouched in appearance (EVC class I), 78 percent had no noticeable alterations (EVC class II), and 11 percent is predominately natural (EVC class III), and 2 percent is dominated by alterations (EVC class V). Despite this range, the overall appearance of the area remains overwhelmingly natural in character.

The northern two-thirds of the area have an alternate ownership pattern. Sierra Pacific Industries is the major private landowner and plans to intensively manage some of their parcels for vegetation management.

There have been over 2,000 mining locations filed within this area over the years (Bureau of Mines study). Some of these locations are within the Wild River, which was withdrawn from mineral entry in 1975. There are 14 claims that pre-date the withdrawal.

Hiking, fishing, and hunting are the primary recreation uses for the area. Use totals 46,000 visitor days annually.

The main attractiveness of this area is the North Fork American Wild River, which is protected under the Wild River Act. Other areas include the high-elevation lakes in the Loch Leven and Huysink area, which are sensitive to heavy, extended use by man. National Forest System lands surrounding the area are primarily managed for vegetation management.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #2 Dispersed Non-Motorized Recreation (48%), #3 Dispersed Motorized Recreation (17%) #5 Research and Botanical (2%), #6 Wild River (17%) and #13 Timber an Range (16%).

Table 3.09-3 shows the amount of roads and trails in the Fork American River Roadless Area by category.

Table 3.09-3. Roads and Trails in the North Fork American River Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	25,055
Motorized trails un-authorized for motorized use	Not Applicable	1.28
Roads open to highway legal vehicles only	All Year	0.04
Roads open to all vehicles	Seasonal Closure	0.31
Roads open to all vehicles	All Year	1.15
Trails open to high clearance trail vehicles	Seasonal Closure	2.89
Trails open to high clearance trail vehicles	All Year	0.60
Trails open to motorcycles	All Year	12.50
Trails open only to hikers and equestrians (No mountain bikes allowed)	All Year	0.02

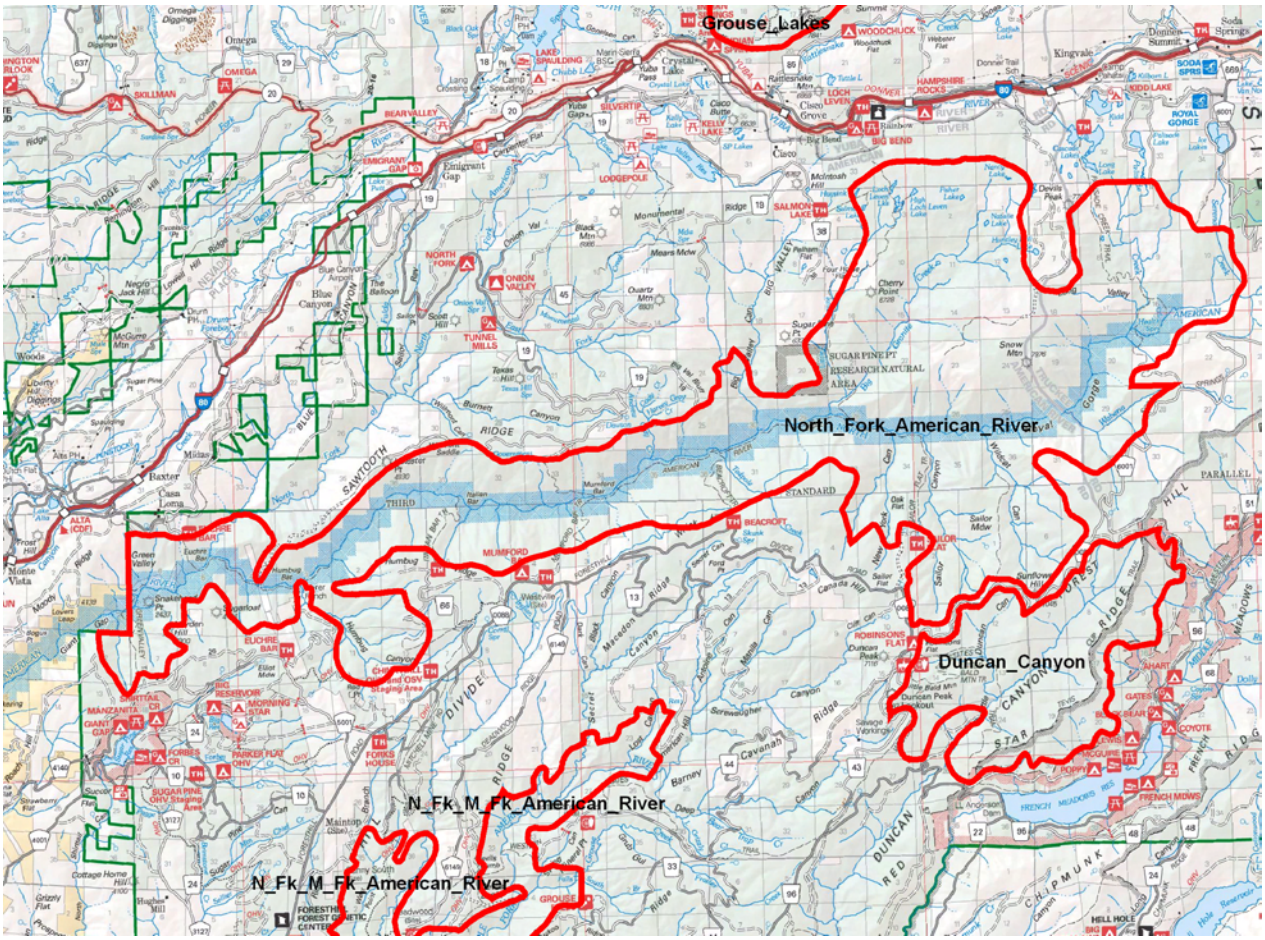

Figure 3.09-3. North Fork American River Inventoried Roadless Area

East Yuba Inventoried Roadless Area

This area is on the Yuba River Ranger District, bordered by the Plumas National Forest boundary in the Lavezzola Creek drainage. These are controversial travel ways to both OHV users and SPNM proponents.

The western boundary is roaded from the "A" Tree Road through Cowell Mine into Empire and Lavezzola drainages. The eastern portion of the area is accessed by OHV routes that receive heavy use. Elevations range from 3,600 feet to 7,240 feet and about 78 percent of the area is over 5,000 feet in elevation. An average of 70 inches of precipitation falls annually, most of it as snow.

The topography of the area is similar to that found in the West Yuba area (steep canyons and narrow ridges) except for the eastern portion, which is an area of glacially scoured rock with small lakes and meadows interspersed. Forty-nine percent of the area has over 50 percent slopes. Lavezzola, Spencer, Pauley, and Smith Creeks are the major streams and are all tributaries to the North Yuba River. There area about 42 miles of perennial streams and lakeshore. Water quality is very high. There are no major peaks in the area. About 43 percent of the area has sensitive watershed lands, including 5 percent with slopes over 70 percent.

The vegetation of the area is representative of the Sierran Forest Province (Bailey Classification M2610), with both mixed conifer and red fir forest types present (Kuchler Vegetation Type 005 and 007). The area contains 10,674 acres of mixed conifer and 2,445 acres of red fir forest types. The forested land is scattered throughout the entire area. The remaining acres consist of riparian vegetation, hardwoods, brush, barren areas, and other non-forested land. There a 940 acres of wetland comprising five percent of the area.

A majority of the East Yuba is characterized by distinctive, highly scenic landscapes; but a significant portion, most in the south is fairly common in nature. There is 63 percent variety class "A," and 37 percent in the less scenic variety class "B." Over 98 percent of the areas retain a natural, unaltered appearance (EVC class I). Less than 1 percent of the area is in either class III or IV (areas with obvious human-made alterations). The attractiveness of the area is focused on the canyon bottoms such as those immediately adjacent to Lavezzola, Spencer, and Smith Creeks, and the high country around Spencer and Hawley Lakes.

The Pacific Crest National Scenic Trail crosses the northern portion of the area. There are numerous routes constructed for mining during the past 100 years. Active prospecting and exploration occurs within the roadless area, such as at the Four Hills Mine located in the northeast portion. The Boy Scouts of America acquired an 80-acre campsite on private land on the eastern boundary. To the east of the area is the Lakes Basin-Sierra Buttes area, which receives heavy recreation use.

Livestock grazing occurs in one allotment during the summer months; no structural improvements exist.

The area has been impacted by human beings over the past 100 years, primarily by the search for valuable minerals. There are many active mining claims and evidence of historic mining (primitive roads, buildings, mineshafts, diggings, and tailings) which exist throughout the area.

Adjacent TNF lands are primarily managed for recreation use with intensive timber management restricted to the northern and eastern regions. The West Yuba roadless area is located 1 to 2 miles to the west.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #3 Dispersed Motorized Recreation (48%), #13 Timber and Range (20%), and #15 Visual and Timber.

Table 3.09-4 shows the amount of roads and trails in the Fork East Yuba Roadless Area by category.

Table 3.09-4. Roads and Trails in the East Yuba Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	15,229
Motorized trails un-authorized for motorized use	Not Applicable	9.36
Roads open to highway legal vehicles only	Open Year Around	0.01
Trails open to high clearance trail vehicles	Open Year Around	19.60
Trails open to motorcycles	Open Year Around	13.44
Roads/trails on private land	Open Year Around	0.18
Trails open only to non-motorized users	Open Year Around	0.93
Trails open only to hikers and equestrians (No mountain bikes allowed)	Open Year Around	1.58
Previously decommissioned roads	Closed	1.02

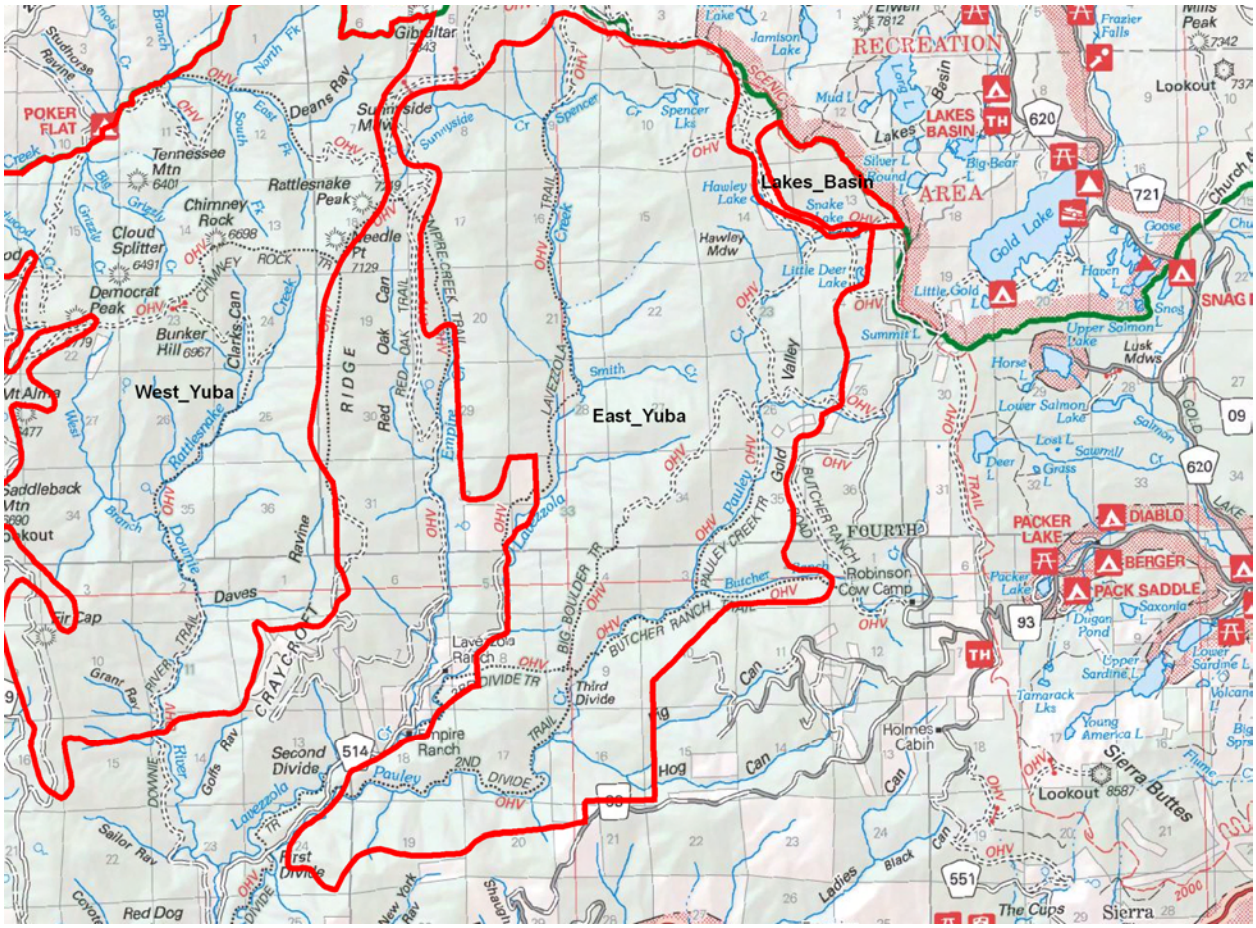

Figure 3.09-4. East Yuba Inventoried Roadless Area

Middle Yuba Inventoried Roadless Area

This area is situated on the Middle Yuba River, primarily on the Yuba River Ranger District. There is a small portion on the eastern edge in the Sierraville Ranger District.

Elevations range from 3,200 to 6,800 feet. Precipitation ranges from 60 to 75 inches per year; this occurs mostly as rain on 57 percent of the area below 5,000 feet and primarily as snow above that elevation.

The entire area is an alternate land ownership pattern. Over 40 percent is privately owned. Most of the private land would be managed for intensive forest management. The area is also included in cost-share supplements. The river bottom and canyon slopes have been heavily mined, and the entire canyon bottom is encumbered by power withdrawals.

There are some active mining claims in this area. There is abundant evidence of historic mining throughout the area, such as mineshafts, buildings, primitive roads, and tailings. Mining activity continues today, particularly placer mining. Recreation use totals 1,000 visitor days, most of which is fishing and river use associated with suction dredging, sluicing, and panning for gold.

This area includes the slopes of the Middle Yuba River canyon, which is typically steep and inaccessible. One section is aptly named “Gates of the Antipodes.” Seventy-one percent of the unit has slopes over 50 percent, with 17 percent of this being slopes over 70 percent. Thirty percent of the area is within sensitive watershed lands. There are 18 miles of perennial streams. Water quality is very high. A portion of the area was proposed for evaluation as a wild and scenic river by the Department of the Interior’s Heritage Conservation and Recreation Service.

The majority if the Middle Yuba has high scenic quality. Sixty one percent of the acreage is categorized as variety class “A,” signifying distinctive landscape features and high level of variety. The sizeable acreage that remains is basically common in scenic nature. The remaining 37 percent variety class “B” (common scenic quality), and two percent variety class “C” (minimal scenic features).

Most of the area retains its natural appearance without noticeable signs of alteration. Seventy-seven percent is in existing visual condition II, which denotes natural appearance, 17 percent appears predominately natural but has visual alterations (EVC class III); and six percent is dominated by the effects of man (EVC class IV).

The vegetation is representative of the Sierran Forest Province (Bailey Classification M2610) with primarily a mixed coniferous forest community (Kuchler Vegetation type 005).

The area contains 5,348 acres of mixed conifer and 94 acres of red fir forest types. The forested land is located on the upper slopes above the Middle Yuba River canyon. A large portion of this area has been logged and roaded. The remaining 2,424 acres consists of hardwoods, brush, barren areas, riparian vegetation and other non-forested lands, which are located on the steep canyon slopes. This includes about 200 acres of wetlands, comprising less that three percent of this unit. The Gold Creek Fire burned over a large portion of the southeast end of this area. A portion of one cattle allotment is within this area although grazing is limited by terrain.

The main attractiveness of this area is the Middle Yuba River and canyon walls which are located in the center of the area. Other scenic attributes are the tributary creeks with their steep drainages and vegetated slopes. The area is popular for fishing.

National Forest System lands surrounding the area are managed primarily for vegetation management.

In the 1990 Tahoe National Forest Land and Resource Management Plan, this roadless area was allocated to the following Management Prescriptions; #3 Dispersed Motorized Recreation (76%) and #13 Timber an Range (24%).

Table 3.09-5 shows the amount of roads and trails in the Middle Yuba Roadless Area by category.

Table 3.09-5. Roads and Trails in the Middle Yuba Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	7,382
Motorized trails un-authorized for motorized use	Not Applicable	5.95
Roads open to highway legal vehicles only	Open Year Around	0.60
Roads open to all vehicles	Open Year Around	7.08
Trails open to high clearance trail vehicles	Open Year Around	0.75
State, County or other jurisdiction roads	Open Year Around	0.32
Roads/trails on private land	Open Year Around	14.81

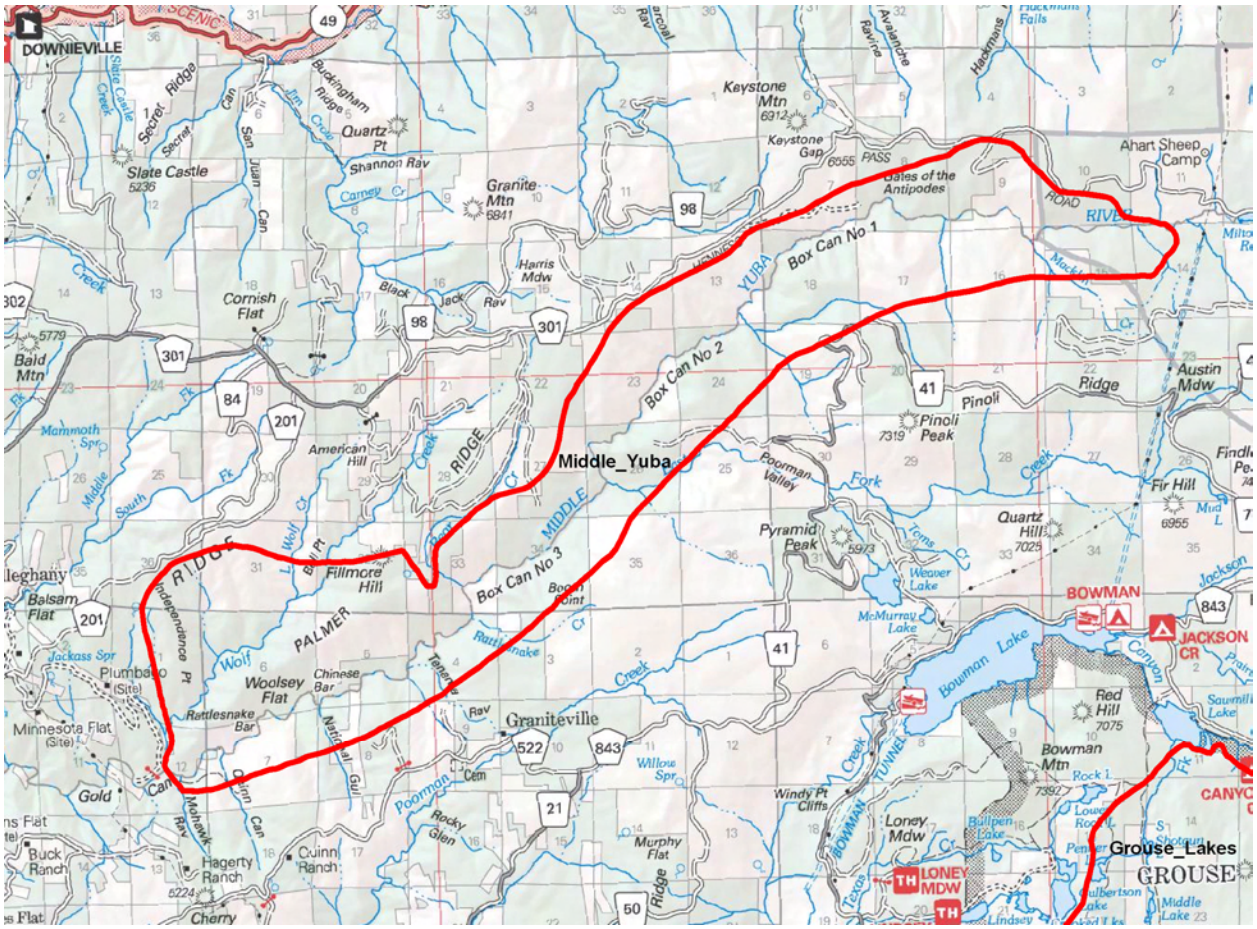

Figure 3.09-5. Middle Yuba Inventoried Roadless Area

Grouse Lakes Inventoried Roadless Area

The Grouse Lakes area is located in western Nevada County on the Yuba River Ranger District. The area includes numerous lakes and streams that are the focus of much recreation use. It includes about 17 miles of perennial streams and lakeshore. Water quality is high.

Annual precipitation averages 70 inches, largely falling as snow.

The landscape is broken, with much of the area characterized by glaciated granitic landforms. Elevations in the area range from 5500 feet near Eagle Lakes near the southwestern boundary to over 8000 feet in the Black Buttes region. Signal Peak and Old Man Mountain, near the southeastern boundary, both rise above 7700 feet in elevation.

About 21 percent of the area has over 50 percent slopes. Fifty-seven percent of the watershed lands are sensitive.

The vegetation is representative of the Sierran Forest Province (Bailey Classification M2610) with both red fir and mixed conifer forest communities. (Kuchler vegetation type 045 predominates according to the RARE II analysis. This determination is erroneous, however, as red fir (007) and mixed conifer (005) is the correct types for this area.) The remaining acres consist of riparian vegetation, hardwoods, barren ground, brush, and water. There are 550 acres of wetlands, comprising five percent of the area.

The high natural scenic quality if the area is underscored by the fact that 99 percent is variety class "A," highly scenic.

The degree of current man-caused alterations of the landscape (existing visual condition) is minimal within the area. Approximately 99 percent of the area shows no evident change to the natural condition (EVC classes I and II).

Over one-half of the Grouse Lakes is in Private ownership. The primary owner is Sierra Pacific Industries. The company manages most of their forested land for vegetation management.

There was a great deal of mining activity in the eastern and southern portions of the area during the late 19th century and the early 20th century, but little gold was recovered due to the nature of the ore. The granitic nature of most of the area makes for an overall low mineral potential.

Dispersed recreation (hunting, fishing and hiking) is the primary use of the area. The majority of the area is prohibited to OHV use, with several exceptions. One is a small segment of the Meadow Lake jeep road which passes through a portion of the motor vehicle closure area. The area south of Fordyce Creek is open to OHV use with moderate to heavy use of Red Mountain and Signal Peak jeep trails.

There are a number of heavily used trails within the area. Many of these allow hiker access to the lakes in the region. Recreation use is concentrated around these lakes and totals 26,100 visitor days.

Grazing use occurs within the area during the summer months. Portions of two allotments are within the Grouse Lakes area. There are no fences or other range structural improvements. The main attractiveness of the area is the many lakes and highly scenic quality of the area.

Interstate 80, which has a heavy volume of traffic and noise, is adjacent to the southern edge of the area. Most of the surrounding area contains heavily used recreation complexes.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #2 Dispersed Non-Motorized Recreation (90%), #3 Dispersed Motorized Recreation (7%) and #13 Timber an Range (3%).

Table 3.09-6 shows the amount of roads and trails in the Grouse Lakes Roadless Area by category.

Table 3.09-6. Roads and Trails in the Grouse Lakes Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	6,150
Motorized trails un-authorized for motorized use	Not Applicable	3.28
Roads open to all vehicles	Open Year Around	5.31
Trails open to high clearance trail vehicles	Open Year Around	8.77
Roads/trails closed to motorized users	Seasonal Closure	0.17
Roads/trails on private land	Open Year Around	1.12
Trails open only to non-motorized users	Open Year Around	27.15

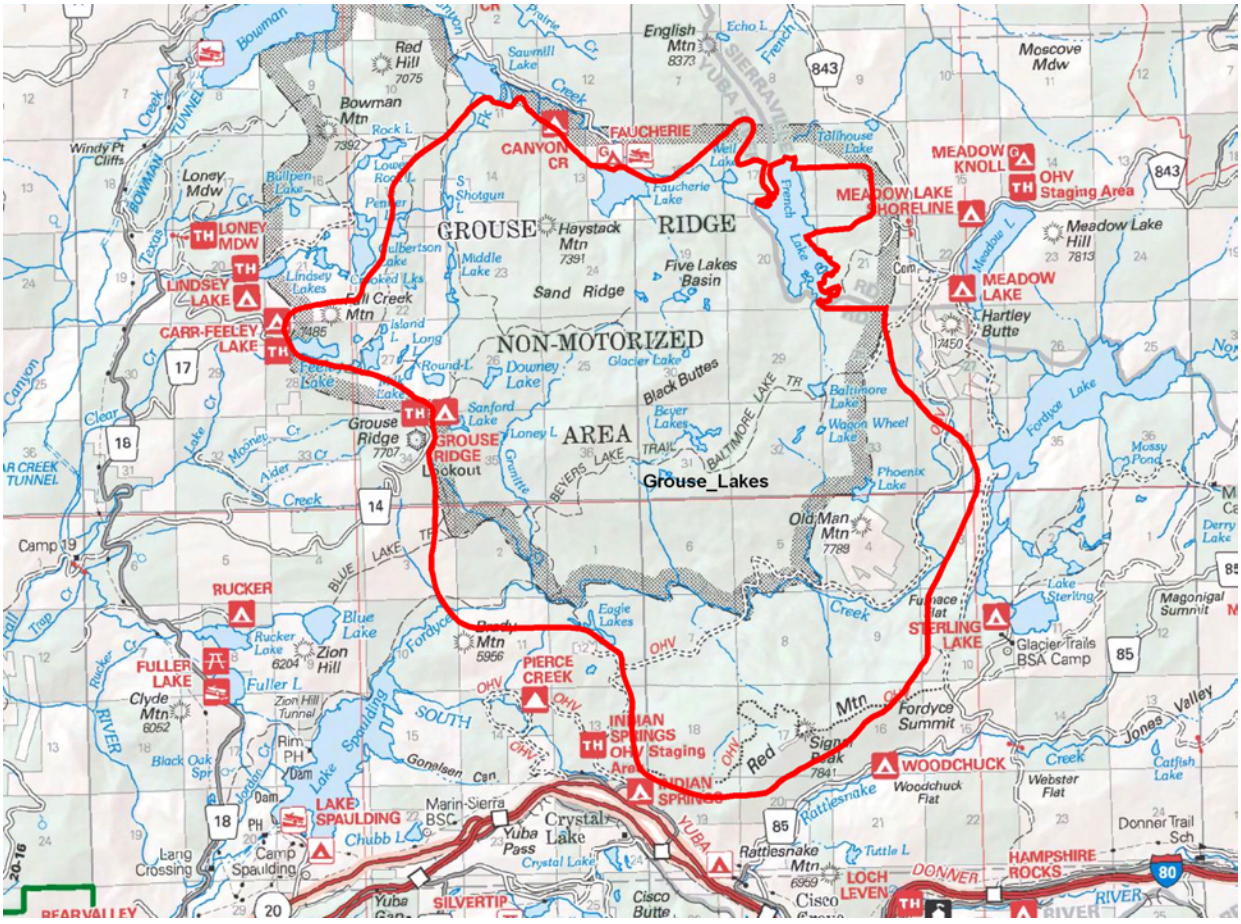

Figure 3.09-6. Grouse Lakes Inventoried Roadless Area

Bald Mountain Inventoried Roadless Area

The Bald Mountain area is located east of the Sierra Nevada range on the Sierraville Ranger District. Approximately 960 acres are located within the Toiyabe NF.

The area is characterized by dry, rugged canyons and forested ridges. The landscape is rocky and soils are often poor. Elevations range from 8,760 feet at Babbitt Peak on the eastern boundary to 6,300 feet on Rock Creek near the western boundary.

About three percent of the unit has over 50 percent slopes. Twenty-three percent of the area is within sensitive watershed lands. There are eight miles of perennial streams. Precipitation averages about 25 inches annually, largely as snow. Water quality is very high.

The vegetation is representative of the Sierra Forest Province (Bailey Classification M2610) with primarily an eastside pine forest type (Kuchler vegetation type 005). There are 4,866 acres of eastside (primarily Jeffrey) pine, about 350 acres of Washoe pine, juniper, and pinyon pine. The remaining acres are brush, grass, barren areas, or riparian vegetation. There are 300 acres of wetlands, comprising 5 percent of the area.

The majority (77 percent) of the area is of average scenic quality (variety class “B”), with only 22 percent classed as being highly scenic (variety class “A”). The degree of human-caused alterations of the natural landscape (existing visual condition) ranges from no evident ecological change (EVC II) to moderate change (EVC V). The areas of moderate change are those which have been logged in the past few years. Timber harvesting has occurred in the past in an area covering approximately 200 acres in the central portion of the area. An additional 480 acres was logged in 1983.

A small portion of the Bald Mountain area is in private ownership. The private land is near the northern boundary. Recreation use is low; averaging around 6,100 RVDs each year. Most of this is hunting, hiking, and OHV use. There are a number of unimproved roads, trails, and dispersed camping locations within the area. There are some rock exposures and steep terrain which provide some challenge for recreationists. The primary attractiveness of the area is the good hunting which may be found there.

Approximately 1,061 acres have been established as a Research Natural Area (RNA). A portion of a cattle grazing allotment is also located within the Bald Mountain area.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #5 Research and Botanical (15%) and #13 Timber an Range (85%).

Table 3.09-7 shows the amount of roads and trails in the Bald Mountain Roadless Area by category.

Table 3.09-7. Roads and Trails in the Bald Mountain Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	4,769
Motorized trails un-authorized for motorized use	Not Applicable	3.39
Roads open to all vehicles	Seasonal Closure	0.80
Roads open to all vehicles	Open Year Around	3.41
Roads/trails closed to motorized users	Seasonal Closure	1.88
State, County or other jurisdiction roads	Open Year Around	0.05
Trails open only to non-motorized users	Open Year Around	1.79

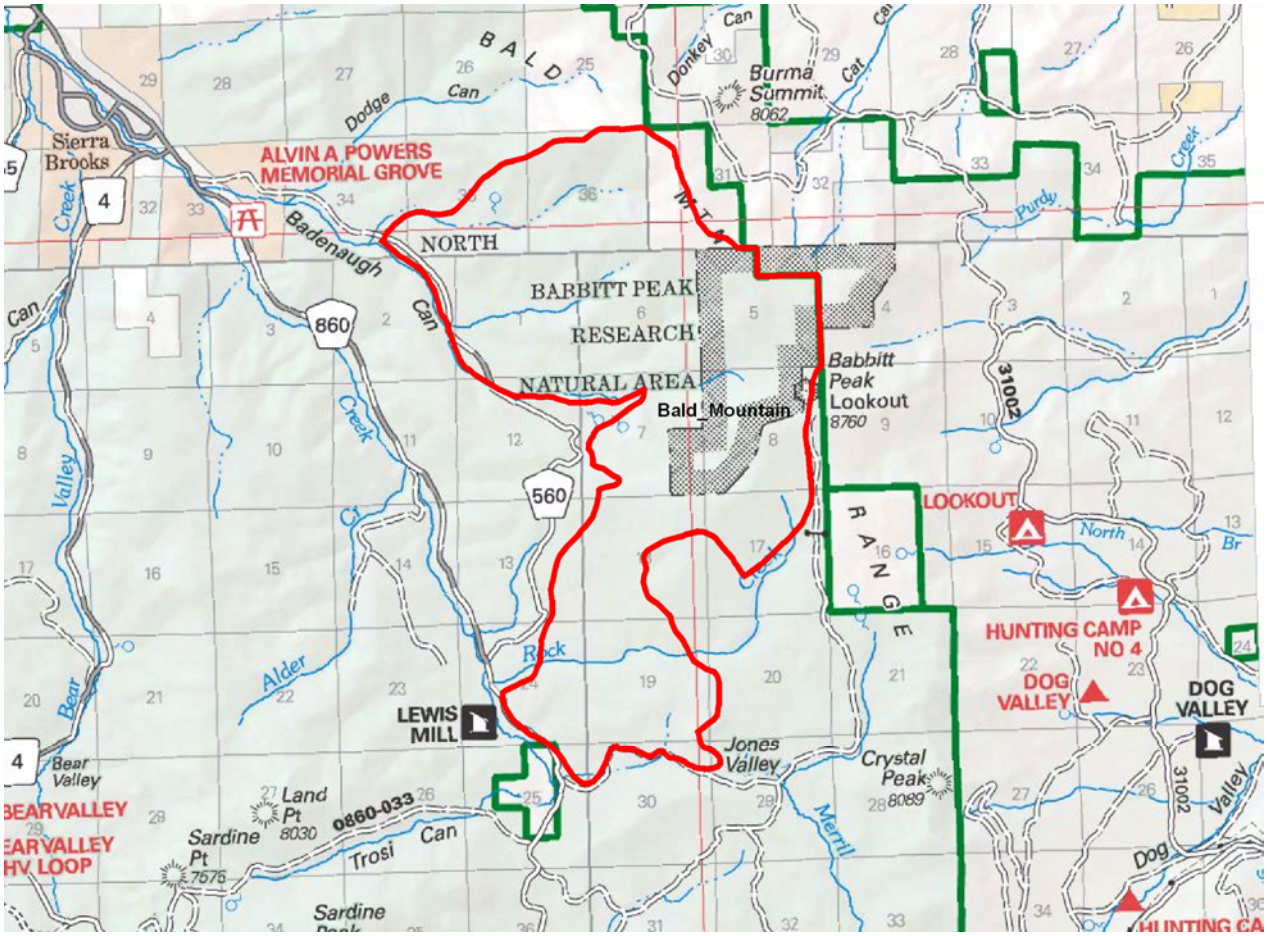

Figure 3.09-7. Bald Mountain Inventoried Roadless Area

Duncan Canyon Inventoried Roadless Area

This area is situated in eastern Placer County on the American River Ranger District. It includes portions of the State Game Refuge encompassing the French Meadows Reservoir recreation area.

The major feature of the area is the rugged Duncan Canyon. Red Star ridge forms the eastern and southern boundary of the area while Little Bald Mountain and Sunflower Hill mark the western boundary. The northern boundary is the French Meadows – Soda Springs Road.

About seven percent of this unit has over 50 percent slopes. Twenty percent of the area is within sensitive watershed lands. There are about 13 miles of perennial streams. Precipitation averages about 70 inches annually, most of it as snow. Water quality is very high.

The vegetation is representative of the Sierran Forest Province (Bailey Classification (M2610) with both red fir and mixed conifer forest communities (Kuchler Vegetation types 005 and 007). The area contains 3,448 acres of mixed conifer and 4,536 acres of red fir. The remaining acres consist of riparian vegetation, hardwoods, brush, barren areas, and other non-forested land. There are 400 acres of wetlands, comprising 5 percent of the area.

Elevations within the area range from 5,100 feet along Duncan Creek to 7,182 feet at Little Bald Mountain.

The natural scenic quality (variety class) of the area is predominantly lands with average scenic potential. As inventoried by the TNF Landscape Architect, the area is 34 percent highly scenic variety class "A" and 66 percent of the area is variety class "B," average scenic quality land. The degree of current human-caused alterations of the natural landscape (existing visual condition) within the area is minimal with most of the area appearing natural. Approximately 91 percent of the area has no noticeable alterations (EVC class II), 8 percent is predominantly natural (EVC class III), and one percent is dominated by alterations (EVC class IV).

One section (640 acres) near Sunflower Hill is in private ownership. In 1979, the Erickson Lumber Company constructed a road under special-use permit to access their lands. The company plans to manage their land for vegetation management.

There are several unpatented mining claims within the area. The overall mineral potential is not considered significant.

Portions of two grazing allotments are located within the Duncan Canyon area. There are no range improvements.

Hunting, fishing, hiking, and plant study are the principal recreation uses, totaling 2,300 visitor days annually. The Tevis Cup Loop passes through the area along Red Star Ridge. This trail is used for an annual endurance ride and run.

The main attraction in this area is Little Robinson Valley in the western portion of the area. TNF lands surrounding the roadless area are managed primarily for vegetation management.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #2 Dispersed Non-Motorized Recreation (7%) and #15 Visual and Timber and (93%).

Table 3.09-8 shows the amount of roads and trails in the Duncan Canyon Roadless Area by category.

Table 3.09-8. Roads and Trails in the Duncan Canyon Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	9,253
Motorized trails un-authorized for motorized use	Not Applicable	7.85
Roads open to all vehicles	Open Year Around	1.30
Trails open to high clearance trail vehicles	Open Year Around	4.96
Trails open to motorcycles	Seasonal Closure	0.51
Trails open to motorcycles	Open Year Around	8.04
State, County or other jurisdiction roads	Open Year Around	0.02
Trails open only to non-motorized users	Open Year Around	2.45

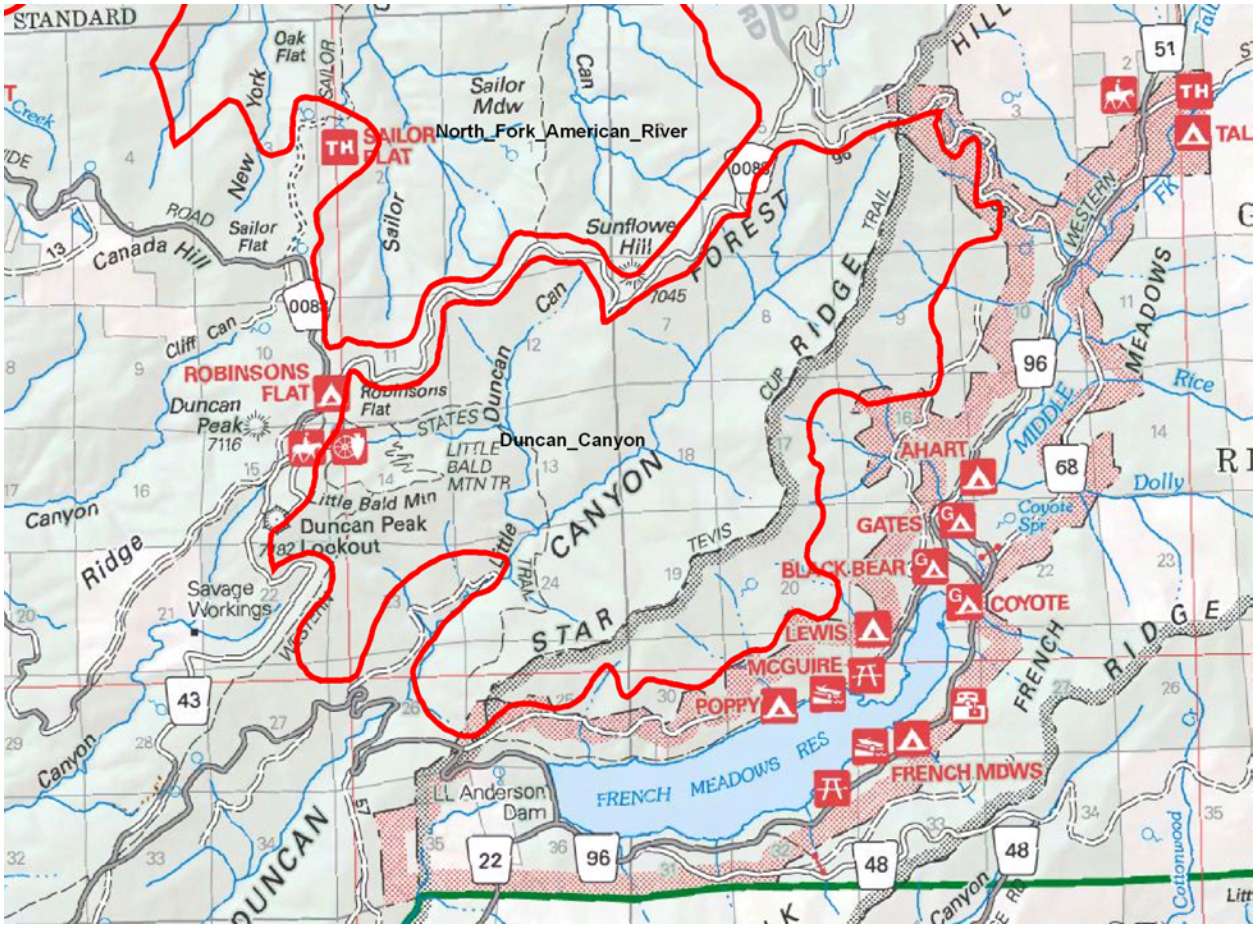

Figure 3.09-8. Duncan Canyon Inventoried Roadless Area

North Fork of the Middle Fork of the American River Inventoried Roadless Area

This area is located in Placer County on the American River Ranger District between Mosquito Ridge and the Foresthill Divide. The area is characterized by steep and rugged canyons. Ninety-seven percent of the area has over 50 percent slopes. The major attraction is the North Fork of the Middle Fork of the

American River. There is a total of about 41 miles of perennial streams. Water quality is very high. Elevations in the area range from around 4800 feet near the eastern boundary to 1600 feet along the river at the western boundary.

The area receives an average of 50 inches of precipitation annually, nearly all of it in the form of rain; snow accumulation is rare.

The scenic quality of the area is characteristic of most of the western Sierra Nevada intermediate elevation areas. Over 50 percent of the area is classed as highly scenic with 44 percent of the area having only average scenic quality. Four percent of the area has low scenic quality.

The degree of human-caused alterations of the natural landscape (existing visual condition) ranges from no apparent ecological change to moderate change to the natural condition. A total of 9,461 acres show no evident change (EVC II), 336 acres show little change (EVC III), 850 acres exhibit noticeable change (EVC IV), and six acres show moderate change to the natural condition.

About 57 percent of the area is described as being sensitive watershed lands; virtually all of this is on slopes over 70 percent.

The vegetation of the area is representative of the Sierran Forest Province (Bailey Classification M2610) with a mixed conifer forest community (Kuchler Vegetation Type 005). There are 6,374 acres of mixed conifer, 3,723 acres of commercial and noncommercial hardwoods, and most of the remaining acres are California gray pine, brush, or barren. Only about two percent of the area is wetlands.

Only 500 acres are in private ownership. Mining has been an important activity in the area since the early days of the Gold Rush. Numerous active mines occur in the area. Recreation use is low (2,700 visitor days) and primarily involves hunting, fishing, and hiking.

The remains of former mine structures and cabins are numerous and there are two standing structures.

Virtually all of the area is open to OHV use but the steep topography and lack of many roads limits use. There are several trails through the area which have a long history of use. Two annual competitive events use the trail system. Portions of three grazing allotments occur in the area. Use in the area by cattle is light due to terrain and lack of forage.

In the 1990 Tahoe National Forest Land and Resource Management Plan, this roadless area was allocated to the following Management Prescriptions; #3 Dispersed Motorized Recreation (90%) #5 Research and Botanical (2%), #7 Wildlife (5%) and #8 Visual (3%).

Table 3.09-9 shows the amount of roads and trails in the North Fork of the Middle Fork American River Roadless Area by category.

Table 3.09-9. Roads and Trails in the North Fork of the Middle Fork American River Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	11,191
Motorized trails un-authorized for motorized use	Npt Applicable	1.28
Roads open to highway legal vehicles only	Open Year Around	0.04
Roads open to all vehicles	Seasonal Closure	0.31
Roads open to all vehicles	Open Year Around	1.15
Trails open to high clearance trail vehicles	Seasonal Closure	2.89
Trails open to high clearance trail vehicles	Open Year Around	0.60
Trails open to motorcycles	Open Year Around	12.50
Trails open only to hikers and equestrians (No mountain bikes allowed)	Open Year Around	0.02

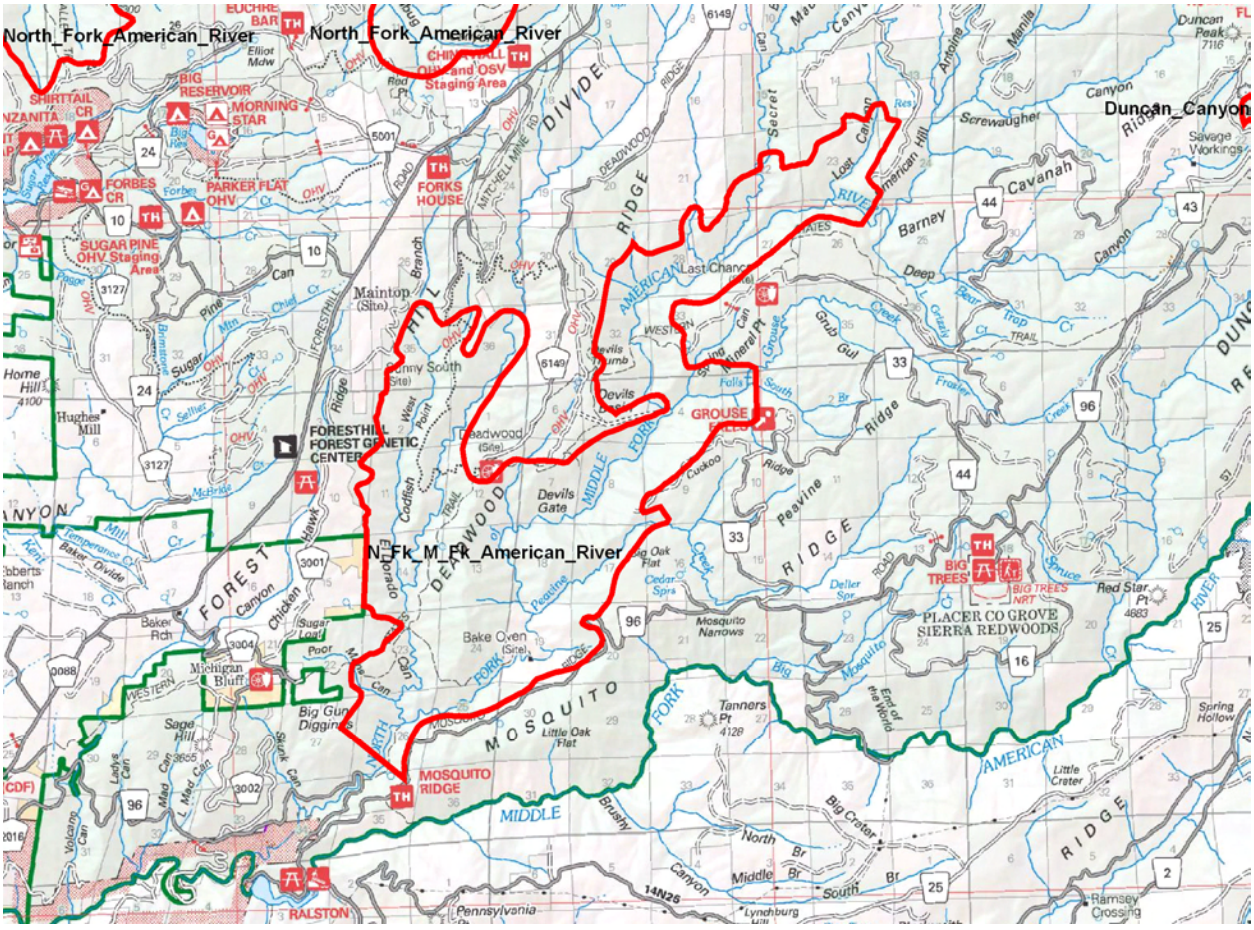

Figure 3.09-9. North Fork of the Middle Fork American River Inventoried Roadless Area

Castle Peak Inventoried Roadless Area

This area is located along the crest of the Sierra Nevada between Castle Peak on the south and Mt. Lola on the north. The area is characterized by sparse vegetation, high elevations, steep, rocky terrain, and shallow soils. About 21 percent of the area has over 50 percent slopes. Forty-one percent of the area is within sensitive watershed lands. Mt. Lola and Basin Peak, both over 9,000 feet, are the highest peaks in the area. The lowest point within the area is along Lower Castle Creek near the southwestern boundary where the elevation drops to 6,900 feet. Precipitation averages about 65 inches annually, an estimated 90 percent of it as snow.

There are several lakes within the area; White Rock and Warren are the largest. Prosser, White Rock, and Lower Castle Creek are the principal streams. There are over 12 miles of perennial streams and lakeshore in this area. Water quality is high.

Castle Peak and its surroundings are among the most scenic areas on the Tahoe National Forest. This is due to the rugged topography, presence of vistas of lakes, rock outcrops, etc. Nearly the entire area (99 percent) is variety class "A," highly scenic. The degree of human-caused alterations of the natural landscape (existing visual condition) within the area is minimal.

Approximately 97 percent of the area shows no evident change to the natural condition (EVC classes I and II). The remaining 3 percent shows little change to the natural condition.

The vegetation of the area is representative of the Sierran Forest Province (Bailey Classification M2610) with both red fir and mixed conifer forest communities (Kuchler Vegetation Type 007, red fir forest). The area contains 5,206 acres of red fir, 468 acres of mixed conifer, and 469 acres of lodge pole pine. The remaining acres consist of grass, riparian vegetation, brush, or are barren. There are 960 acres of wetlands comprising ten percent of the area.

Nearly one-half of the area is in private ownership. The primary land owner manages its' land for vegetation management. Logging has occurred on their land in the White Rock area.

The Castle Peak area has been used primarily for recreation over the last 100 years. No major mining activity has occurred in the area and there is little mineral potential. Several timber sales have been completed in the area.

There is no accurate information on the amount of recreation use but the area is popular for hiking in the summer and sees heavy cross-country skiing and snowmobile use in the winter. The Sierra Club maintains a cabin (Peter Grubb Hut) for recreation users in the Round Valley area.

Most of the area is open to OHV use on designated routes only. The general lack of OHV routes, however, contributes to low use except for snowmobiling in winter. There are several trails through the area, including a portion of the Pacific Crest Trail, but few roads. Through cooperative agreement a road has been constructed through Sections 3 and 9, T.18N. R.14E., MDM.

Portions of three grazing allotments are located within the area. Most of the grazing is by sheep. The White Rock allotment is currently closed.

The main attractiveness of this area is its' highly scenic character and the lakes and streams.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the following Management Prescriptions; #3 Dispersed Motorized Recreation (93%) and #11 Winter Recreation (7%).

Table 3.09-10 shows the amount of roads and trails in the Castle Peak Roadless Area by category.

Table 3.09-10. Roads and Trails in the Castle Peak Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	12,918
Motorized trails un-authorized for motorized use	Not Applicable	10.07
Roads open to all vehicles	Open Year Around	5.04
Trails open to high clearance trail vehicles	Open Year Around	1.07
Roads/trails on private land	Open Year Around	2.83
Trails open only to non-motorized users	Open Year Around	14.78
Trails open only to hikers and equestrians (No mountain bikes allowed)	Open Year Around	6.85

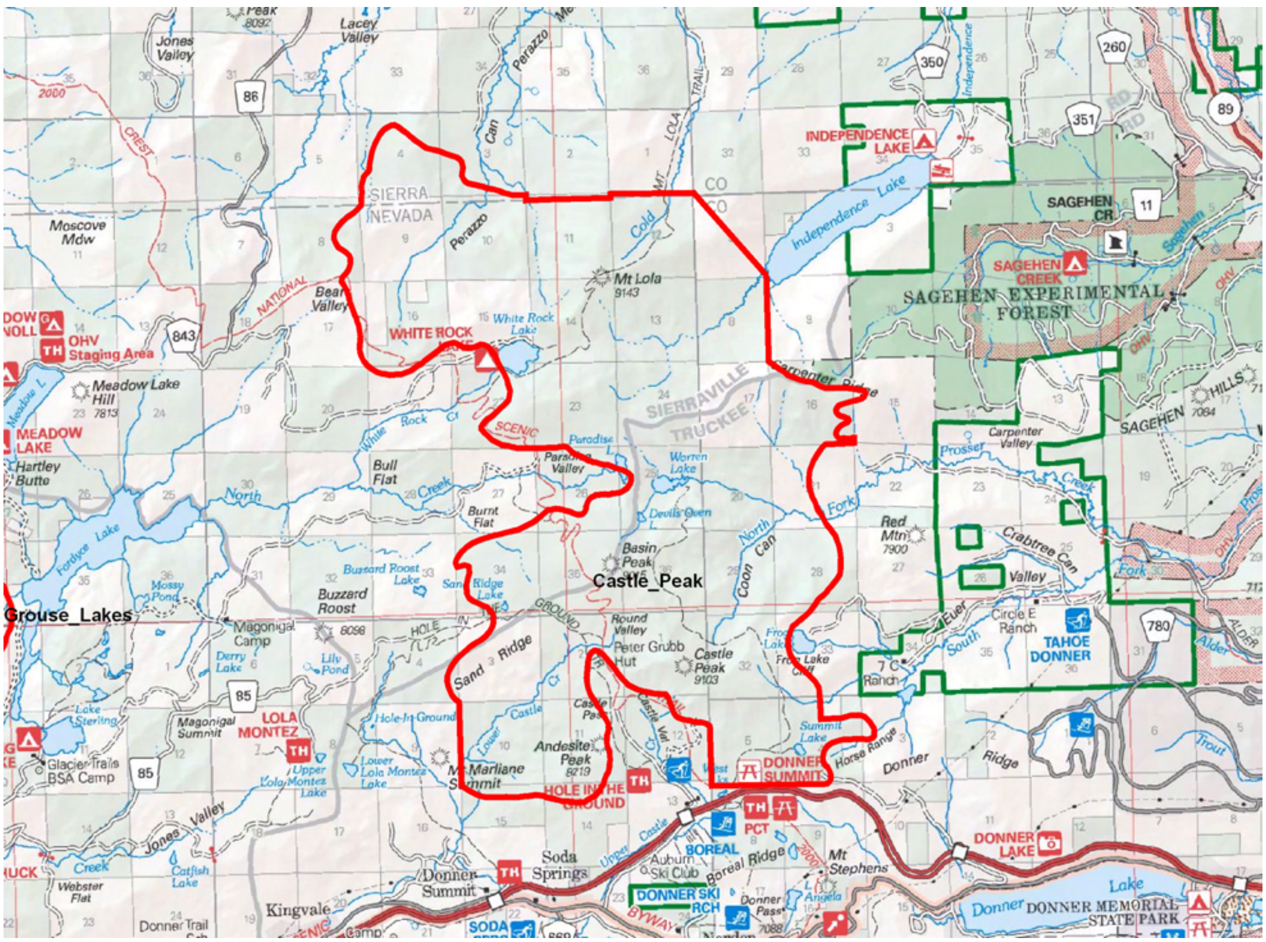

Figure 3.09-10. Castle Peak Inventoried Roadless Area

Lakes Basin Inventoried Roadless Area

This area is situated on both the Plumas and Tahoe National Forests. It is about seven miles south of Blairsden and Plumas Eureka State Park. Principal access is via the Gold Lake Highway or the State Park. Access from the TNF is via a jeep road through Gold Valley. The portion of the area on the TNF is very

rocky and sparsely vegetated. The southern boundary follows a jeep road from the vicinity of Oakland Pond to Snake Lake then extends westerly to the private lands near Hawley Lake. These private lands form the western boundary.

The Tahoe portion ranges in elevation from 6,640 feet to 7,440 feet. About 3 percent of this area has over 50 percent slopes. Twenty-five percent of the watershed lands are sensitive. There are no perennial streams or lakes on the Tahoe portion. Precipitation averages 60 inches annually, nearly all of it as snow. Wetlands are negligible.

The Pacific Crest Trail (PCT) passes through the area near the administrative boundary between the Plumas NF and Tahoe NF. OHV use occurs on several jeep roads adjacent to the area, but overall the steep terrain of the TNF portion limits recreation use.

The TNF portion is highly mineralized, and mining has occurred in the vicinity since the 1850's. The Four Hills Mine is located just west of the roadless area boundary.

There is a portion of one grazing allotment in the Lakes Basin area.

The entire roadless area contains 7,140 acres (gross and net); the remainder of the acreage (6,939 acres) is on the Plumas NF.

In the 1990 Tahoe National Forest Land and Resource Management Plan this roadless area was allocated to the Management Prescriptions #3 Dispersed Motorized Recreation (100%).

Table 3.09-11 shows the amount of roads and trails in the Lakes Basin Roadless Area by category.

Table 3.09-11. Roads and Trails in the Lakes Basin Inventoried Roadless Area

Road and Trail Category	Season of Use	Miles
Cross country travel		
Acres	Not Applicable	557
Motorized trails un-authorized for motorized use	Not Applicable	.07
Trails open to high clearance trail vehicles	Open Year Around	0.40
Trails open only to hikers and equestrians (No mountain bikes allowed)	Open Year Around	2.00
Previously decommissioned roads	Closed	1.79

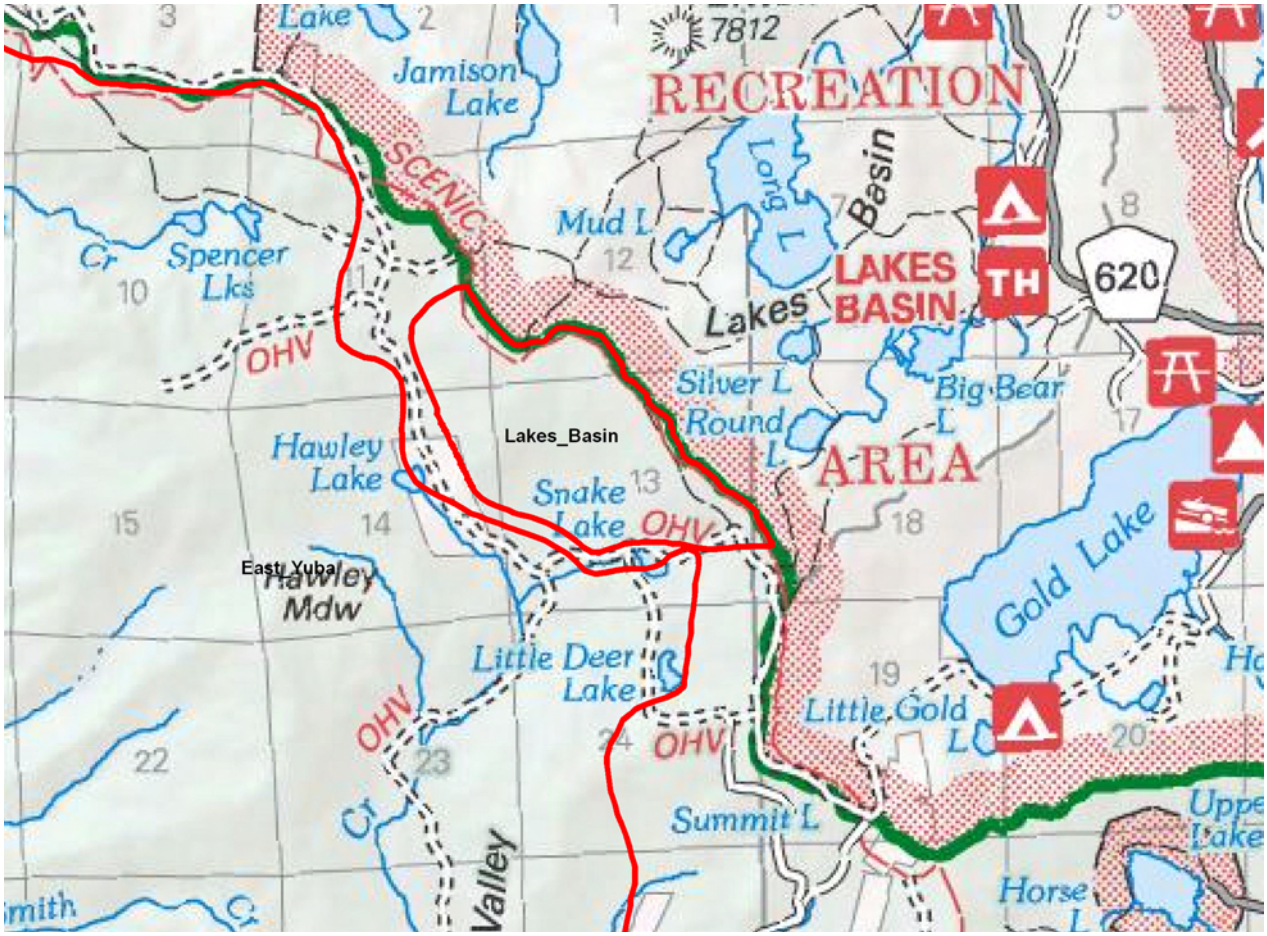

Figure 3.09-11. Lakes Basin Inventoried Roadless Area

Regulatory Framework and Roadless Area Characteristics

The Forest Service issued the Roadless Area Conservation rule in 2001. This rule was replaced by the State Petitions for Inventoried Roadless Management rule in 2005 (referred to as the State Petitions rule; Source 70 FR25661, May 13, 2005). Subsequently the State Petitions rule was set aside on September 20, 2006 by Judge Elizabeth LaPorte of the U.S. District Court of Northern California. Based on this injunction, the regulation for Roadless Areas reverted to the 2001 Roadless Area Conservation Rule (referred to as the 2001 Roadless Rule; Source 66 Federal Register 3272, January 12, 2001).

The Code of Federal Regulations (36 CFR Part 294, Subpart B – Protection of Inventoried Roadless Areas, 294.11) describes nine *Roadless area characteristics*. Roadless area characteristics are described as "resources or features that are often present in and characterize inventoried roadless areas."

1. High quality or undisturbed soil, water, and air;
2. Sources of public drinking water;
3. Diversity of plant and animal communities;
4. Habitat for threatened and endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;

5. Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation;
6. Reference landscapes;
7. Natural appearing landscapes with high scenic quality
8. traditional cultural properties and sacred sites; and
9. Other locally identified unique characteristics - solitude

To discuss these effects, this analysis will focus on

1. Primitive/semi-primitive recreation opportunities,
2. Reference landscapes, and
3. Natural appearing landscapes with high scenic quality, and
4. Other locally identified unique characteristics including opportunities for solitude.

The other criteria will be addressed in a summary fashion and readers will be asked to refer to other resource areas in the EIS to see more detail.

Roadless Areas: Environmental Consequences

Each roadless area will be listed and environmental consequences described for the alternatives where relevant. The no action alternative will be described first for all roadless areas.

Alternative 1 (no action) has a high potential to reduce roadless character in all roadless areas because the no action allows for cross country travel where not currently prohibited. Cross Country travel would have the potential to significantly reduce:

1. The high quality and undisturbed soil, water, and air resources;
2. The quality of water resources in the upper watersheds that all become sources of public drinking water;
3. The diversity of plant and animal communities due to physical disturbance and possible noxious weed introduction;
4. The habitat for sensitive species and species dependent on large, undisturbed areas of land;
5. Opportunities for semi-primitive non-motorized and primitive recreation opportunities;
6. Possible deterioration of reference landscapes;
7. Reduction of Natural appearing landscapes of high scenic quality due to the introduction of multiple site specific aesthetic impacts to the landscape;
8. Impacts to traditional cultural properties; and
9. Reduction of opportunities for solitude due to the increase in noise by motorized vehicles and more evidence of human activity due to more and more trails being created by the cross country travel as well as multiple aesthetic impacts listed under item 7.

The following describes how proposed motorized routes could affect roadless character. Motorized use in generally has an adverse effect on roadless character. Conversely, reducing the amount of motorized use within a roadless area has a positive effect on roadless character. All of the routes currently being considered for motorized use already are available motorized use. The effect of this motorized use is already part of the existing situation. Prohibiting motorized use on these routes will improve the

roadless character within the inventoried roadless areas (IRA). All of the action alternatives improve the roadless character of Inventoried Roadless Areas (IRAs) by reducing the amount of roads and trails available for motorized use. Routes prohibited to motorized use will be available for non-motorized use. This non-motorized use, especially by mountain bikes and equestrians, can also adversely affect roadless character, but to a significantly lesser degree than motorized use.

Table 3.09-12 shows the total effects on all roadless areas cumulatively.

- **Cross Country Travel**: Cross country travel is prohibited 109,103 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized vehicle use. Alternatives 3 and 4 reduce the amount of roads and trails available for motorized use from 206.4 to 152.3 miles. Alternatives 2, 5, 6 and reduce the amount of motorized roads and trails from 206.4 miles to 160.9, 167.5, 160.0 and 159.4 miles respectively. The prohibition of cross country travel will benefit the roadless area characteristics of each IRA by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.
- **Additions to the National Forest System**: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3 and 4 add no motorized trails to the National Forest Transportation System. Alternative 5 has the largest increase in motorized trails increasing the mileage from 95.6 to 111 (+16%). Alternatives 2, 6, and 7 increase the mileage of motorized trails from 95.6 to 104.4 (+9%), 103.5 (+8%), and 109.9 (+8%) respectively. The impact these additions have on roadless area characteristics are described below for each individual roadless area.
- **Changes in class of vehicle and season of use**: Alternatives 2 and 5 change the class of vehicles allowed on all existing National Forest System roads in roadless areas from highway legal vehicles only to open to all vehicles. Alternative 6 changes the class of vehicles allowed on .6 of the .7 miles of existing National Forest System roads in roadless areas from highway legal vehicles only to open to all vehicles. This change in class of vehicles will not impact the roadless area characteristics of the inventoried roadless areas.

  Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.
- **Cumulative Effects**: All of the action alternatives improve the character of roadless areas by allowing motorized use on fewer miles of roads and trails as well as prohibiting cross country travel. There are currently 209 miles open for motorized use in the no-action alternative. The action alternatives all reduce this number. The action alternatives range from 178 miles open for motorized use in Alternative 5, to 153 miles in Alternatives 3 and 4. The following sections describe the effects on each individual inventoried roadless area separately.

Table 3.09-12. Total Roads/Trails/Areas in Inventoried Roadless Areas by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	109,103	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	54.1	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Open Year Around**	0.7	0.0	0.7	0.7	0.0	0.1	0.7
Roads open to all vehicles	**Seasonal Closure**	1.3	1.5	1.5	33.0	33.0	33.0	1.3
Roads open to all vehicles	**Open Year Around**	31.7	32.2	31.5	0.0	0.6	0.6	31.7
	Subtotal NFS Roads	**33.7**	**33.7**	**33.7**	**33.7**	**33.7**	**33.7**	**33.7**
Trails open to high clearance trail vehicles	**Seasonal Closure**	2.9	2.9	2.9	51.5	63.6	56.8	2.9
Trails open to high clearance trail vehicles	**Open Year Around**	48.6	54.1	48.6	0.0	0.0	0.0	53.3
Trails open to motorcycles	**Seasonal Closure**	0.5	0.5	0.5	44.1	47.4	46.7	0.5
Trails open to motorcycles	**Open Year Around**	43.6	46.9	43.6	0.0	0.0	0.0	46.2
	Subtotal NFS Motorized Trails	**95.6**	**104.4**	**95.6**	**95.6**	**111**	**103.5**	**102.9**
State, County or other jurisdiction roads	**Open Year Around**	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Roads/trails on private land	**Open Year Around**	22.6	22.3	22.6	22.6	22.3	22.3	22.3
	Total Motorized	**206.4**	**160.9**	**152.3**	**152.3**	**167.5**	**160.0**	**159.4**
Roads/trails closed to motorized users	**Closed to motorized**	2.1	47.5	56.2	56.2	40.9	48.5	49.1
Trails open only to non-motorized users	**Closed to motorized**	88.0	88.0	88.0	88.0	88.0	88.0	88.0
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	62.2	62.2	62.2	62.2	62.2	62.2	62.2
	Subtotal Non-Motorized	**152.3**	**197.7**	**206.4**	**206.4**	**191.1**	**198.7**	**199.3**
Previously decommissioned roads	**Closed to motorized**	2.8	2.8	2.8	2.8	2.8	2.8	2.8

Bald Mountain Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 4,769 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country use will also reduce the total amount of roads and trails available for motorized use. Alternatives 3, 4 and 7 reduce the amount of roads and trails available for motorized use from 7.7 to 4.3 miles. Alternatives 2, 5, 6 and reduce the amount of motorized roads and trails from 7.7 to 5.2 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Bald Mountain roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3, 4 and 7 also add no motorized trails to the National Forest Transportation System. Alternatives 2, 5 and 6 add one trail (SV-P13) totaling .9 miles which will be open to high clearance trail vehicles. This route would have a minor effect on the naturalness of the immediate area and little effect on the character of the IRA overall due to past wildfire and logging activities. Use of this motorized trail would be prohibited during the wet season in Alternatives 5 and 6.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on existing National Forest System roads in any of the alternatives.

Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Bald Mountain IRA by prohibiting motorized cross country travel on 4,769 acres and reducing the amount of motorized access. Alternatives 2, 5, and 6 reduce the miles available for motorized use from 7.7 to 5.2 miles. Alternatives 3, 4 and 7 reduce the miles available for motorized use to 4.3. Alternatives 2, 5 and 6 add one motorized trail (SV-P13) to the National Forest System of the less than one mile in length within the Bald Mountain IRA. This route would have a minor effect on the naturalness of the immediate area and little effect on the character of the IRA overall due to past wildfire and logging activities. Use of this route would be prohibited during the wet season in Alternatives 5 and 6. The number of miles available for non-motorized uses goes up in all of the action alternatives which could have an adverse impact upon the roadless area character, however to a lesser degree than motorized access. Table 3.09-13 displays the miles of roads and trails within the Bald Mountain IRA by alternative.

Table 3.09-13. Miles of Roads/Trails/Areas in Bald Mountain Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	4,769	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	3.4	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.8	0.8	0.8	4.2	4.2	4.2	0.8
Roads open to all vehicles	**Open Year Around**	3.4	3.4	3.4	0	0	0	3.4
	Subtotal NFS Roads	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.0	0.9	0.9	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.0	0.9	0.0	0.0	0.0	0.0	0.0
	Subtotal NFS Motorized Trails	**0**	**0.9**	**0**	**0**	**0.9**	**0.9**	**0**
State, County or other jurisdiction roads	**Open Year Around**	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Total Motorized	**7.7**	**5.2**	**4.3**	**4.3**	**5.2**	**5.2**	**4.3**
Roads/trails closed to motorized users	**Closed to motorized**	1.9	4.4	5.3	5.3	4.4	4.4	5.3
Trails open only to non-motorized users	**Closed to motorized**	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Subtotal Non-Motorized	**3.7**	**6.2**	**7.1**	**7.1**	**6.2**	**6.2**	**7.1**

Castle Peak Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 12,918 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. Alternatives 3 and 4 reduce the amount of roads and trails available for motorized use from 19.0 to 8.9 miles. Alternatives 2, 5, 6 and reduce the amount of motorized roads and trails from 19.0 to 9.9 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Castle Peak roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3 and 4 also add no motorized trails to the National Forest Transportation System. Alternatives 2, 5, 6 and 7 add three motorized trails (TKN-J4, TKN-J5 and TKN-J6) to the National Forest Transportation System totaling one mile within the boundary of the roadless area. TKN J5 is a route located in Castle Valley with a short distance (several hundred yards) of the route within the roadless area terminating at "Slab Rock." TKN J4 is west of Andesite Peak totaling around 2 miles in distance of which about half the distance is within the roadless area. The third route, TKN J6 enters the eastern side of the roadless area for about a quarter mile and provides access to the eastside of Summit Lake. All three of these routes enter the edges of Castle Peak IRA. All three routes are close enough to Interstate 80 that traffic noise is still noticeable. All three routes are presently used for motorized vehicle use. All three of these routes have a minor impact on solitude because the noise of motorized vehicles would not be louder than the background noise from the freeway in the immediate vicinity. These three routes would continue to keep a zone of influence that would be considered semi-primitive. There would continue to be a minor impact to the natural appearing high scenic quality landscape due to disturbance to vegetation, compaction to vegetation at turnaround points and occasional route changes due to fallen trees. The majority of the Castle Peak IRA would remain a good candidate as a reference landscape because the changes to the natural landscape are on the periphery of the roadless area. Sensitive plants would be affected based on surveys identifying specific plants and locations. See the Chapter 3.06 for more details.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Castle Peak IRA by prohibiting cross country motorized travel on 12,918 acres and thereby reducing the number of miles available for motorized use by approximately 50 percent. Alternatives 2, 5, 6, and 7 reduce the number miles open for motorized vehicles from 19 to 9.9. Alternatives 3 and 4 close all of the trails un-authorized for motorized use in this roadless area to motorized use.

There are three separate motorized trails in alternatives 2, 5, 6 and 7 which would be added to the National Forest Transportation System (TKN J4, TKN J5, and TKN J6). TKN J5 is a route located in Castle Valley with a short distance (several hundred yards) of the route within the roadless area terminating at "Slab Rock." TKN J4 is west of Andesite Peak totaling around 2 miles in distance of which about half the distance is within the roadless area. The third route, TKN J6 enters the eastern side of the roadless area for about a quarter mile and provides access to the eastside of Summit Lake. All three of these routes enter the edges of Castle Peak IRA. All three routes are close enough to Interstate 80 that traffic noise is still noticeable. All three routes are presently used for OHV use. All three of these routes have a minor impact on solitude because the noise of OHV vehicles would not be louder than the background noise from the freeway in the immediate vicinity. These three routes would continue to keep a zone of influence that would be considered semi-primitive. There would continue to be a minor impact to the natural appearing high scenic quality landscape due to disturbance to vegetation, compaction to vegetation at turnaround points and occasional route changes due to fallen trees. The majority of the Castle Peak IRA would remain a good candidate as a reference landscape because the changes to the natural landscape are on the periphery of the roadless area. There is the potential for effects on sensitive plants based on surveys identifying specific plants and locations. See the Chapter 3.08 for more details. Cumulatively each additional route that allows motorized use effectively reduces the acres for semi-primitive non-motorized recreation opportunities.

Table 3.09-14. Miles of Roads/Trails/Areas in Castle Peak Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	12,918	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	10.1	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	5.0	5.0	5.0	0.0
Roads open to all vehicles	**Open Year Around**	5.0	5.0	5.0	0.0	0.0	0.0	5.0
	Subtotal NFS Roads	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	1.1	2.1	2.1	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	1.1	2.1	1.1	0.0	0.0	0.0	2.1
	Subtotal NFS Motorized Trails	**1.1**	**2.1**	**1.1**	**1.1**	**2.1**	**2.1**	**2.1**
Roads/trails on private land	**Open Year Around**	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	Total Motorized	**19.0**	**9.9**	**8.9**	**8.9**	**9.9**	**9.9**	**9.9**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	9.1	10.1	10.1	9.1	9.1	9.1
Trails open only to non-motorized users	**Closed to motorized**	14.8	14.8	14.8	14.8	14.8	14.8	14.8
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	6.9	6.9	6.9	6.9	6.9	6.9	6.9
	Subtotal Non-Motorized	**21.7**	**30.8**	**31.8**	**31.8**	**30.8**	**30.8**	**30.8**

Duncan Canyon Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 9,253 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. Alternatives 2, 3, 4, 6 and 7 reduce the amount of roads and trails available for motorized use from 22.7 to 14.8 miles. Alternative 5 reduces the amount of motorized roads and trails from 22.7 to 17.8 miles. The prohibition of cross country travel will benefit the roadless area characteristics of each area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 2, 3, 4, 6 and 7 also add no motorized trails to the National Forest Transportation System. Only Alternative 5 increases the amount of motorized trails in the roadless area from 13.5 to 16.5 miles (+22%). These routes were originally created for timber sales in the mid 1980's. Continuing use on these routes would have some effect on;

1. High quality or undisturbed soil, water, and air;
2. Sources of public drinking water;
3. Diversity of plant and animal communities; and
4. Habitat for sensitive species and those species dependent on large, undisturbed areas of land.

This effect would be somewhat limited in that the proposed routes add up to 3 miles. Effects on this area as a reference landscape would also be limited because this area was already roaded and logged in the past and would not significantly increase the impact beyond the existing effects. In addition these proposed routes are all on the south side of red star ridge and therefore these impacts would be blocked by the ridge and would not affect the heart of Duncan IRA. This same logic would apply to the Natural appearing landscapes with high scenic quality. The existing road system and logging has already diminished the natural appearing landscape and the proposed OHV use will not introduce additional change to the Natural appearing landscape. Red Star Ridge once again blocks the effects on the Natural landscape to the areas south of the ridge.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on existing National Forest System roads in the Duncan Canyon roadless area in any of the alternatives Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Duncan Canyon IRA. Alternative 5 proposes motorized trail additions to the National Forest Transportation System allowing use to continue on three miles of old logging roads within Duncan Roadless area south and east of Red Star Ridge. These routes were originally created for timber sales in the mid 1980's. Continuing use on these routes would have some effect on;

1. High quality or undisturbed soil, water, and air;
2. Sources of public drinking water;
3. Diversity of plant and animal communities; and
4. Habitat for sensitive species and those species dependent on large, undisturbed areas of land.

This effect would be somewhat limited in that the proposed trails add up to 3 miles. Effects on this area as a reference landscape would also be limited because this area was roaded and logged in the past. and would not significantly increase the impact beyond the existing effects. In addition these proposed routes are all on the south side of red star ridge and therefore these impacts would be blocked by the ridge and would not affect the heart of Duncan IRA. This same logic would apply to the Natural appearing landscapes with high scenic quality. The existing road system and logging has already diminished the natural appearing landscape and the proposed OHV use will not introduce much change to the Natural appearing landscape. Red Star Ridge once again blocks the effects on the Natural landscape to the areas south of the ridge.

The heart of Duncan IRA would remain mostly semi-primitive non motorized in character with the exception of motorized use on the Western States Trail and the motorized use continuing in Alternative 5 in the areas south and east of Red Star Ridge where the area would tend towards the roaded natural ROS class. Opportunities for solitude would continue unchanged in the heart of Duncan IRA where the sights and sounds of human activity are fairly limited with the exception of the occasional motorized use on the Western States Trail. The Star Fire burned through part of the IRA in recent years and reduced solitude by eliminating vegetative screening in the areas that burned with intensity. There would be far less opportunity for solitude in the area south and east of Red Star Ridge due to sounds from OHV use in Alternative 5 and the evidence of logging and roads within that area.

The other action alternatives would improve the existing opportunities for solitude; opportunities for semi-primitive recreation, natural appearing landscape, reference landscape because the miles available for motorized use are reduced from 22.7 to 14.8. Table 3.09-15 displays the miles open for motorized use within the Duncan Canyon IRA.

Table 3.09-15. Miles of Roads/Trails/Areas in Duncan Canyon Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	9,253	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	7.9	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	1.3	1.3	1.3	0.0
Roads open to all vehicles	**Open Year Around**	1.3	1.3	1.3	0.0	0.0	0.0	1.3
	Subtotal NFS Roads	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	5.0	7.9	5.0	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	5.0	5.0	5.0	0.0	0.0	0.0	5.0
Trails open to motorcycles	**Seasonal Closure**	0.5	0.5	0.5	0.5	8.6	0.5	0.5
Trails open to motorcycles	**Open Year Around**	8.0	8.0	8.0	8.0	0.0	8.0	8.0
	Subtotal NFS Motorized Trails	**13.5**	**13.5**	**13.5**	**13.5**	**16.5**	**13.5**	**13.5**
State, County or other jurisdiction roads	**Open Year Around**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Motorized	**22.7**	**14.8**	**14.8**	**14.8**	**17.8**	**14.8**	**14.8**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	7.9	7.9	7.9	4.9	7.9	7.9
Trails open only to non-motorized users	**Closed to motorized**	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Subtotal Non-Motorized	**2.5**	**10.4**	**10.4**	**10.4**	**7.4**	**10.4**	**10.4**

East Yuba Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 15,229 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. Alternatives 3 and 4 reduce the amount of roads and trails available for motorized use from 42.6 to 33.2 miles. Alternatives 2, 5, 6 and 7 reduce the amount of motorized roads and trails from 42.6 to 35.1, 36.6, 34.8 and 34.3 miles respectively. The prohibition of cross country travel will benefit the roadless area characteristics of the East Yuba roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3 and 4 also add no motorized trails to the National Forest Transportation System. Alternative 5 has the largest increase in motorized trails increasing the mileage from 33 to 36.3 miles (+10%). Alternatives 2, 6, and 7 increase the mileage of motorized trails from 33 to 34.8 (+5%), 34.6 (+5%), and 34.1 (+3%) respectively.

Route YRN-11 would be added as a motorized trail open to high clearance trail vehicles in Alternatives 2, 5, 6 and 7. This trail provides access to dispersed camping near Spencer Lake. This trail would have a slight effect on the roadless character because it is short segments which access a dispersed camp site. This trail stays relatively close to an existing motorized system route so there is already some reduction to roadless character.

Routes YRN-5a and YRN-5b would be added as motorized trail open to high clearance trail vehicles in alternatives 2, 5, 6 and 7. These trails provide access to a remote, well-defined dispersed camping spot off the Gold Valley four-wheel drive trail. Vehicle access tends to be by motorcycles and jeeps used by anglers, jeepers, and hunters. Closing this dispersed camping site could force individuals to utilize less desirable locations along the trail in the event they are forced to stay overnight. These trails would have slight effects on the roadless character because they are short segments which access dispersed camping sites. Both of these trails stay relatively close to an existing motorized system route so there is already some reduction to roadless character.

Route YRN-4 is added as motorized trail open to high clearance trail vehicles in alternatives 2, 5, 6 and 7. This trail, which comes off the Big Boulder four-wheel drive trail, is an historic mining route. The trail provides a vista into Gold Valley. It receives heavy motorcycle use and has received motorized use for a long time. This trail is also popular with mountain bikes. This trail would have a slight effect on the roadless character because it is a short segment which accesses a vista. This trail stays relatively close to an existing motorized system route so there is already some reduction to roadless character.

Route YRN-007 would be added as a motorized trail open to high clearance trail vehicles in Alternatives 2, 5 and 6. This trail provides access to an old mine used for dispersed camping and exploration. YRN 007 is a longer route but only the very end of the route enters East Yuba IRA along the eastern boundary. Since only the very end of the route is within the roadless area boundary there would be a slight effect on the roadless area character.

Route YRN-9 would be added as a motorized trail open to high clearance trail vehicles in alternatives 2 and 5. This trail is very faint on the ground. This trail is longer and has more effect on roadless character

because it is in the heart of the roadless area and ventures farther from existing motorized system routes. It reduces the opportunities for solitude in a band along the trail because of the noise from the motorized vehicles. It would also retain a band of semi-primitive motorized character in that part of the roadless area. The effect on the natural landscape with high scenic quality would be slight due to the low key nature of the trail. Likewise the ability for the area to be a reference landscape would remain due to the low key nature of the trail.

Changes in class of vehicle and season of use: There are no changes in the class of vehicles allowed on all existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the East Yuba IRA by prohibiting cross country motorized travel on 15,229 acres and reducing the number of trails with motorized use. Alternatives 2, 5, 6 and 7 add motorized trails YRN 11, YRN 5a, YRN 5c, andYRN-4 to the National Forest Transportation System. All of these motorized trails would continue their slight effects on the roadless character because they are short segments of motorized trails which primarily access dispersed camping sites. All of these routes stay relatively close to an existing motorized system route so there is already some reduction to roadless character. YRN 007 is added to National Forest Transportation System as a motorized trail in alternatives 2, 5 and 6. This is a longer route but only the very end of the route enters East Yuba IRA along the eastern boundary. YRN-9 would also be added as a motorized trail to the National Forest Transportation System in Alternatives 2 and 5. This motorized trail is longer and has more effect on roadless character because it is in the heart of the roadless area and ventures farther from existing motorized system trails. The effect on the natural landscape with high scenic quality would be slight due to the low key nature of the trail. Likewise the ability for the area to be a reference landscape would remain due to the low key nature of the trail. Alternative 5 would have the least improvement on roadless character because this motorized trail has some effects to roadless character. Alternative 6 would have the next higher benefit to roadless character. None of the motorized trails added to the National Forest Transportation System in Alternative 6 have significant effects, but in a cumulative fashion they add to the reduction in roadless character. Alternative 7 is similar to Alternative 6 but with a slightly greater improvement in roadless character because motorized trail YRN 007 is not included. Alternatives 3 and 4 have the greatest improvement in roadless character because no motorized trails are proposed to be added to the National Forest Transportation System in these alternatives in Inventoried Roadless Areas.

For the resource criteria, the effects to roadless character would be similar to the above assessment in that Alternative 5 would have the least benefit, followed by greater improvement in Alt. 6 and even greater improvement in Alternatives 7. Alternatives 3 and 4 have the greatest improvement in roadless character because no motorized trails proposed as additions to the National Forest Transportation System in Inventoried Roadless Areas. Table 3.09-16 displays the acres available for cross country travel and miles of roads and trails available for motorized use in the East Yuba IRA.

Table 3.09-16. Miles of Roads/Trails/Areas in East Yuba Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not applicable**	15,229	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	9.4	0	0	0	0	0	0
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	19.6	22.9	21.2	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	19.6	21.4	19.6	0.0	0.0	0.0	20.7
Trails open to motorcycles	**Seasonal Closure**	0.0	0.0	0.0	13.4	13.4	13.4	13.4
Trails open to motorcycles	**Open Year Around**	13.4	13.4	13.4	0.0	0.0	0.0	0.0
Subtotal NFS Motorized Trails		**33**	**34.8**	**33**	**33**	**36.3**	**34.6**	**34.1**
Roads/trails on private land	**Open Year Around**	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Motorized		**42.6**	**35.1**	**33.2**	**33.2**	**36.6**	**34.8**	**34.3**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	7.5	9.4	9.4	6.0	7.8	8.3
Trails open only to non-motorized users	**Closed to motorized**	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Subtotal Non-Motorized		**2.5**	**10**	**11.9**	**11.9**	**8.5**	**10.3**	**10.8**
Previously decommissioned roads	**Closed to motorized**	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Granite Chief Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 5,896 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. All of the action alternatives reduce the amount of roads and trails available for motorized use from .8 to .4 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Granite Chief roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads or trails added to the National Forest Transportation System in roadless areas in any of the alternatives.

Changes in class of vehicle and season of use: There are no existing changes in class of vehicle or season of use on National Forest System roads or trails in any alternatives.

Cumulative Effects: All of the action alternatives improve the roadless character of the Granite Chief IRA. The heart of Granite Chief IRA is a congressionally designated wilderness that precludes motorized use. The only possible impacts to roadless characteristics would be if cross country travel is allowed in the no action alternative in the parts of the IRA that are not wilderness and not part of the old Foresthill District. Cross country travel in the Truckee District areas that are still part of the IRA could have significant impact to all 9 criteria.

Table 3.09-17. Miles of Roads/Trails/Areas in Granite Chief Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	5,896	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	.3	0	0	0	0	0	0
Roads/trails on private land	**Open Year Around**	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Total Motorized	**0.8**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	0.3	0.3	0.3	0.3	0.3	0.3
Trails open only to non-motorized users	**Closed to motorized**	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	51.7	51.7	51.7	51.7	51.7	51.7	51.7
	Subtotal Non-Motorized	**51.8**	**52.1**	**52.1**	**52.1**	**52.1**	**52.1**	**52.1**

Grouse Lakes Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 6,150 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. Alternatives 3 and 4 reduce the amount of roads and trails available for motorized use from 18.5 to 15.2 miles. Alternatives 2, 5, 6 and 7 reduce the amount of motorized roads and trails from 18.5 to 16.4 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Grouse Lakes roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3 and 4 also add no motorized trails to the National Forest Transportation System. Alternatives 2, 5, 6, and 7 increase the mileage of motorized trails from 8.8 to 10.0 miles (+14%).

Route YRS-F1 consists of several small spur routes roads to dispersed camping sites on the Fordyce Jeep Trail that is within the Grouse Lakes IRA. The Fordyce Jeep trail is an existing National Forest Transportation System motorized trail that receives moderate to light use in general because Fordyce Creek limits crossing for most vehicles for most of the year. However the trail then receives very high use during the two week window of the Sierra Trek. Hundreds of 4x4's use the trail during this two week window while the water flow is reduced. The potential effects to roadless character are limited due to the short length of the routes and their close proximity to the existing motorized trail. The routes do extend the motorized influence into a wider band along the Fordyce Jeep trail. This results in slightly more impact on opportunities for solitude, creates a wider zone of influence for semi-primitive motorized activities and therefore affecting the area available for semi-primitive non-motorized recreation. These impacts would slightly affect the character of the landscape that would make it a good reference landscape.

One additional motorized trail (YRS-G3), about a mile in length will also be added to the National Forest Transportation System north and east of Baltimore Lake in Alternatives 2, 5, 6, and 7. This motorized trail has more effect to roadless character because it is separate from and beyond the Fordyce Jeep Trail. This motorized trail affects opportunities for solitude because of motorized vehicle noise. Since noise travels, there is a band of influence of a mile or two where opportunities for solitude would be less. Likewise there is a band of influence along the motorized trail where the ROS opportunities would be semi-primitive motorized rather than semi-primitive non-motorized. Continuing use of this motorized trail has some effect on the ability of the area to be a reference landscape, but due to the length of the trail is slight. The natural appearing landscape and high scenic quality is only slightly affected due to the continuing existence of the motorized trail. The other resource values effects are proportional to the less than one mile length.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on all existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Grouse Lakes IRA by prohibiting cross country travel on 6,150 acres and reducing the amount of roads and trails available for motorized use. Alternatives 2, 5, 6, and 7 would allow use to continue on several short motorized trail spurs to dispersed camping sites along the Fordyce Jeep Trail. The Fordyce Jeep trail is an existing National Forest Transportation System motorized trail that receives moderate to light use in general because Fordyce Creek precludes crossing for most of the year but then receives very high use

during the two week window of the Sierra Trek. Hundreds of 4x4's use the trail during this two week window while the water flow is reduced. The potential effects to roadless character are limited due to the short length of the motorized trails and their close proximity to the Fordyce trail. The motorized trails do extend the motorized influence into a wider band along the Fordyce Jeep trail. This results in slightly more impact on opportunities for solitude, creates a wider zone of influence for semi-primitive motorized activities and therefore affecting the area available for semi-primitive non-motorized recreation. These impacts would slightly affect the character of the landscape that would make it a good reference landscape. One additional motorized trail, about a mile in length will also be added to the National Forest Transportation System north and east of Baltimore Lake in Alternatives 2, 5, 6, and 7. This motorized trail has more effect to roadless character because it is separate from and beyond the Fordyce Jeep trail. Adding this motorized trail to the National Forest Transportation System affects opportunities for solitude because of OHV use noise. Since noise travels, there is a band of influence of a mile or two where opportunities for solitude would be less. Likewise there is a band of influence along the route where the ROS opportunities would be semi-primitive motorized rather than semi-primitive non-motorized. Continuing use of this motorized trail has some effect on the ability of the area to be a reference landscape, but due to the length of the route is slight. The natural appearing landscape and high scenic quality is only slightly affected due to the continuing existence of the route. The other resource values effects are proportional to the less than one mile length.

Table 3.09-18. Miles of Roads/Trails/Areas in Grouse Lakes Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	6,150	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	3.3	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	5.3	5.3	5.3	0.0
Roads open to all vehicles	**Open Year Around**	5.3	5.3	5.3	0.0	0.0	0.0	5.3
	Subtotal NFS Roads	**5.3**	**5.3**	**5.3**	**5.3**	**5.3**	**5.3**	**5.3**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	8.8	10.0	10.0	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	8.8	10.0	8.8	0.0	0.0	0.0	10.0
	Subtotal NFS Motorized Trails	**8.8**	**10**	**8.8**	**8.8**	**10**	**10**	**10**
Roads/trails on private land	**Open Year Around**	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Total Motorized	**18.5**	**16.4**	**15.2**	**15.2**	**16.4**	**16.4**	**16.4**
Roads/trails closed to motorized users	**Closed to motorized**	0.2	2.2	3.5	3.5	2.2	2.2	2.3
Trails open only to non-motorized users	**Closed to motorized**	27.2	27.2	27.2	27.2	27.2	27.2	27.2
	Subtotal Non-Motorized	**27.4**	**29.4**	**30.7**	**30.7**	**29.4**	**29.4**	**29.5**

Lakes Basin Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 557 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. All of the action alternatives reduce the amount of roads and trails available for motorized use from

.5 to .4 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Lakes Basin roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads or motorized trails added to the National Forest Transportation System in roadless areas in any of the alternatives.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on all existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Lakes Basin IRA by prohibiting cross country travel on 557 acres a reducing the amount of roads and trails available for motorized use. No trails un-authorized for motorized use would be added to the National Forest Transportation System within the IRA and the existing motorized system trail that forms the west boundary gets infrequent use.

Table 3.09-19. Miles of Roads/Trails/Areas in Lakes Basin Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	557	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	.1	0	0	0	0	0	0
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.4	0.4	0.4	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.4	0.4	0.4	0.0	0.0	0.0	0.4
Subtotal NFS Motorized Trails		**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**
Un-authorized trails open to motorized and non-motorized users	**Open Year Around**	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Motorized		**0.5**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Subtotal Non-Motorized		**2**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**	**2.1**
Previously decommissioned roads	**Closed to motorized**	1.8	1.8	1.8	1.8	1.8	1.8	1.8

Middle Yuba Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 7,382 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless area. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. All of the action alternatives reduce the amount of roads and trails available for motorized use from 29.5 to 23.6 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the Middle Yuba roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads or motorized trails added to the National Forest Transportation System in roadless areas in any of the alternatives.

Changes in class of vehicle and season of use: Alternatives 2 5 and 6 change the class of vehicles allowed on all existing National Forest System roads in roadless areas from highway legal vehicles only to open to all vehicles. This change in class of vehicles will not impact the roadless area characteristics of the inventoried roadless areas. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Middle Yuba IRA by prohibiting cross country travel on 7,382 acres and reducing the amount of roads and trails available for motorized use. No motorized trails would be added to the National Forest Transportation System within the IRA. The existing motorized system trail that forms the west boundary gets infrequent use.

Table 3.09-20. Miles of Roads/Trails/Areas in Middle Yuba Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	7,382	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	6.0	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Open Year Around**	0.6	0.0	0.6	0.6	0.0	0.0	0.6
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	7.1	7.7	7.7	0.0
Roads open to all vehicles	**Open Year Around**	7.1	7.7	7.1	0.0	0.0	0.0	7.1
	Subtotal NFS Roads	**7.7**	**7.7**	**7.7**	**7.7**	**7.7**	**7.7**	**7.7**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.8	0.8	0.8	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.8	0.8	0.8	0.0	0.0	0.0	0.8
	Subtotal NFS Motorized Trails	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**
Roads/trails on private land	**Open Year Around**	14.8	14.8	14.8	14.8	14.8	14.8	14.8
State, County or other jurisdiction roads	**Open Year Around**	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Total Motorized	**29.5**	**23.6**	**23.6**	**23.6**	**23.6**	**23.6**	**23.6**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	6.0	6.0	6.0	6.0	6.0	6.0

North Fork of the Middle Fork American River Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 11,191 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless areas. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. All of the action alternatives reduce the amount of roads and trails available for motorized use from 18.8 to 17.5 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the North Fork of the Middle Fork American River roadless area by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads or motorized trails added to the National Forest Transportation System in roadless areas in any of the alternatives.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on all existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: Due to the very steep canyon walls in this IRA there are only 1.3 miles of motorized trails un-authorized for motorized use. Use of all of these motorized trails is prohibited to motorized vehicles in all of the action alternatives. Therefore there are no expected changes to roadless characteristics for any of the action alternatives.

Table 3.09-21. Miles of Roads/Trails/Areas in North Fork Middle Fork American River Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	11,191	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	1.3	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.3	0.3	0.3	1.5	1.5	1.5	0.3
Roads open to all vehicles	**Open Year Around**	1.2	1.2	1.2	0.0	0.0	0.0	1.2
	Subtotal NFS Roads	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**
Trails open to high clearance trail vehicles	**Seasonal Closure**	2.9	2.9	2.9	16.0	16.0	16.0	2.9
Trails open to high clearance trail vehicles	**Open Year Around**	0.6	0.6	0.6	0.0	0.0	0.0	0.6
Trails open to motorcycles	**Open Year Around**	12.5	12.5	12.5	0.0	0.0	0.0	12.5
	Subtotal NFS Motorized Trails	**16.0**	**16.0**	**16.0**	**16.0**	**16.0**	**16.0**	**16.0**
Un-authorized trails open to motorized and non-motorized users	**Open Year Around**	1.3	0.0	0.0	0.0	0.0	0.0	0.0
	Total Motorized	**18.8**	**17.5**	**17.5**	**17.5**	**17.5**	**17.5**	**17.5**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	1.3	1.3	1.3	1.3	1.3	1.3
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Closed to motorized**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Subtotal Non-Motorized	**0**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**

North Fork American River Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 25,055 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless area. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. All of the action alternatives reduce the amount of roads and trails available for motorized use from 10.8 to 9.5 miles. The prohibition of cross country travel will benefit the roadless area characteristics of the North Fork American River by stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads or motorized trails added to the National Forest Transportation System in roadless areas in any of the alternatives.

Changes in class of vehicle and season of use: Alternatives 2, 5 and 6 change the class of vehicles allowed on all existing National Forest System roads in roadless areas from highway legal vehicles only to open to all vehicles. This change in class of vehicles will not impact the roadless area characteristics of the inventoried roadless areas.

Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Middle Yuba IRA by prohibiting cross country travel on 25,055 acres and reducing the amount of roads and trails available for motorized use. The North Fork American River remains intact with high levels of primitive to semi-primitive non-motorized recreation opportunities that maintain the high quality roadless characteristics in all the action alternatives.

Table 3.09-22. Miles of Roads/Trails/Areas in North Fork American River Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	25,055	0	0	0	0	0	0
Motorized trails un-authroized for motorized use	**Not Applicable**	1.3	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Open Year Around**	0.1	0.0	0.1	0.1	0.0	0.0	0.1
Roads open to all vehicles	**Seasonal Closure**	0.2	0.4	0.4	2.2	2.3	2.3	0.4
Roads open to all vehicles	**Open Year Around**	2.1	1.9	1.9	0.0	0.0	0.0	1.9
	Subtotal NFS Roads	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**
Trails open to high clearance trail vehicles	**Seasonal Closure**				4.2	4.2	4.2	
Trails open to high clearance trail vehicles	**Open Year Around**	4.2	4.2	4.2				4.2
	Subtotal NFS Motorized Trails	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**
State, County or other jurisdiction roads	**Open Year Around**	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Roads/trails on private land	**Open Year Around**	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Total Motorized	**10.8**	**9.5**	**9.5**	**9.5**	**9.5**	**9.5**	**9.5**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	1.2	1.2	1.2	1.2	1.2	1.2
Trails open only to non-motorized users	**Closed to motorized**	40.8	40.8	40.8	40.8	40.8	40.8	40.8
	Subtotal Non-Motorized	**0**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**

West Yuba Inventoried Roadless Area

Cross Country Travel: Cross country travel is prohibited on 16,057 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the roadless area. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use. Alternatives 3 and 4 reduce the amount of roads and trails available for motorized use from 35.7 to 24.4 miles. Alternatives 2, 5, 6 and 7 reduce the amount of motorized roads and trails from 35.7 to 28.0, 30.2, 27.3 and 27.3 miles respectively. The prohibition of cross country travel will benefit the roadless area characteristics of the West Yuba roadless area stopping the proliferation of un-authorized routes and reducing the amount of roads and trails available for motorized use.

Additions to the National Forest System: There are no roads added to the National Forest Transportation System in roadless areas in any of the alternatives. Alternatives 3 and 4 also add no motorized trails to the National Forest Transportation System. Alternative 5 has the largest increase in National Forest Transportation System motorized trails increasing the mileage from 17.8 to 23.9 (+34%). Alternatives 2, 6, and 7 increase the mileage of National Forest Transportation System motorized trails from 17.8 to 21.7 (+22%), 21 (+18%), and 21 (+18%) respectively.

Route YRN-M2 would be added to the National Forest Transportation System as a motorized trail open to motorcycles in Alternatives 2 and 5. Use of the motorized trail would be seasonally prohibited for wet weather in Alternative 5. This motorized trail connects Downieville single track trail to a difficult four-wheel drive trail. This motorized trail creates a loop to Chimney Rock and Poker Flat. It provides very challenging double black diamond riding (limited opportunities), requiring slower travel (less noise). The motorized trail parallels the Downie River for a short distance and connects challenging four-wheel drive and motorcycle trails along the river. The main effect this trail has is in solitude from motorcycle noise. Due to the low numbers of users this effect is primarily on the weekends and somewhat sporadic. The motorized use of this trail is consistent with semi-primitive motorized standards in the Forest Plan. The low key nature of this trail has a very slight effect on the overall natural appearing landscape and high scenic quality of the area. This motorized trail affects the naturalness for a reference landscape in a very slight way.

Route YRN-M3b would be added as motorized motorcycle trail in alternatives 2, 5, 6 and 7. Use of this motorized trail would be seasonally prohibited for wet weather in Alternatives 5 and 6. The route is an old historic mining trail. It comes off of the Downie River single track system trail. It is a little known trail which requires a high skill level. It provides loop connection from Downie River to Castle Rock trails. The main effect this trail has is in solitude from motorcycle noise. Due to the low numbers of users this effect is primarily on the weekends and somewhat sporadic. The motorized use of this trail is consistent with semi-primitive motorized standards in the Forest Plan. The low key nature of this trail has a very slight effect on the overall natural appearing landscape and high scenic quality of the area. This trail affects the naturalness for a reference landscape in a very slight way.

Route YRN-7 would be added to the National Forest Transportation System as a motorized trail open to high clearance trail vehicles in Alternatives 2, 5, 6 and 7. Use of this motorized trail would be seasonally prohibited for wet weather in Alternatives 5 and 6. This motorized trail is a short ¼-mile spur off two system routes: the Poker Flat and Texas Flat four-wheel drive routes. Poker Flat is a high value

recreation destination associated with this motorized trail. This motorized trail continues to a high quality vista point. Current use is low. This motorized trail is in the north east corner of roadless area. It has similar effects as described above with the motorcycle trails with there being a slightly higher impact because the width of the trail is greater.

Changes in class of vehicle and season of use: There are no changes to the class of vehicles allowed on existing National Forest System roads in any of the alternatives. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on all native surface roads and motorized trails. These seasonal restrictions increase the roadless areas values for; 1) High quality and undisturbed soil, water, and air resources; 2) Quality of water resources in the upper watersheds that all become sources of public drinking water and 3) Opportunities for semi-primitive non-motorized and primitive recreation opportunities during the closure period.

Cumulative Effects: All of the action alternatives improve the roadless character of the Middle Yuba IRA by prohibiting cross country travel on 16,057 acres and reducing the amount of roads and trails available for motorized use. YRN-M3b, and YRN-M2 if added to the National Forest Transportation System would have slight effects to roadless character as difficult relatively low use motorcycle trails. The main effect these motorized trails have is in solitude from motorcycle noise. Due to the low numbers of users this effect is primarily on the weekends and somewhat sporadic. The motorized use of these trails is consistent with semi-primitive motorized standards in the Forest Plan. The low key nature of these trails has a very slight effect on the overall natural appearing landscape and high scenic quality of the area. These motorized trails affect the naturalness for a reference landscape in a very slight way. YRN 7 is an jeep route in the north east corner of West Yuba which would be added to the National Forest Transportation System in Alternatives 2, 5, 6 and 7. It has similar effects as described above with the motorcycle trails with there being a slightly higher impact because the width of the trail is greater. Alternative 5 would have the least improvement in roadless character because four motorized trails would added to the National Forest Transportation System. While the effects from any one trail to roadless character are not great, the cumulative effects are greater particularly because all these motorized trails are within the heart of the roadless area. Alternatives 2, 6, and 7 have greater benefit to roadless character than Alternative 5 and each of the alternatives would be similar with just 2 motorized trails being added to the National Forest Transportation System. Alternatives 3 and 4 would have no motorized trails added to the National Forest Transportation System in roadless areas and therefore would have the most positive effect for maintaining roadless character.

For the resource criteria the benefits would be lesser with Alternative 5 greater with Alternatives 2,6, and 7 because of fewer motorized trails being added to the National Forest Transportation System and Alternative 3 and 4 would greatest benefit to roadless character because no motorized trails are added to the National Forest Transportation System in these alternatives.

Table 3.09-23. Miles of Roads/Trails/Areas in West Yuba Inventoried Roadless Area by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	16,057	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	11.3	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	6.3	6.3	6.3	6.3
Roads open to all vehicles	**Open Year Around**	6.3	6.3	6.3	0.0	0.0	0.0	0.0
	Subtotal NFS Roads	**6.3**	**6.3**	**6.3**	**6.3**	**6.3**	**6.3**	**6.3**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	8.2	11.0	8.8	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	8.2	8.8	8.2	0.0	0.0	0.0	8.8
Trails open to motorcycles	**Seasonal Closure**	0.0	0.0	0.0	9.6	12.9	12.2	0.0
Trails open to motorcycles	**Open Year Around**	9.6	12.9	9.6	0.0	0.0	0.0	12.2
	Subtotal NFS Motorized Trails	**17.8**	**21.7**	**17.8**	**17.8**	**23.9**	**21**	**21**
Roads/trails on private land	**Open Year Around**	0.3	0.0	0.3	0.3	0.0	0.0	0.0
	Total Motorized	**35.7**	**28.0**	**24.4**	**24.4**	**30.2**	**27.3**	**27.3**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	7.6	11.3	11.3	5.4	8.3	8.4

Wilderness: Affected Environment & Environmental Consequences

The Tahoe National Forest has one wilderness named Granite Chief Wilderness. It is about 24,864 acres and was carved out of the Granite Chief roadless area. The area is managed for primitive ROS recreation opportunities. Motorized vehicle use is prohibited. No changes to the Designated Wilderness Area will occur in any of the alternatives.

Experimental Forests: Affected Environment

The Onion Creek Experimental Forest, 2,846 acres, is located just south of Mt. Disney and the Sugar Bowl Ski Area. Roads are allowed within the experimental Forest but recreation and OHV use is not encouraged. The Sagehen Experimental Forest, 7552 acres, is located just west of State Highway 89 and about six miles north of the town of Truckee. Sagehen Experimental Forest includes one small campground and some designated four wheel drive trails. These recreation uses will be monitored for compatibility with the research purposes for this area.

Experimental Forests: Environmental Consequences

Onion Creek Experimental Forest

Cross Country Travel: Cross country travel is already prohibited in the Onion Creek Experimental Forest preventing the proliferation of additional un-authorized routes and associated resource damage.

Additions to the National Forest Transportation System: In Onion Creek Experimental Forest one motorized trail which provides access to a dispersed site immediately adjacent to the County Road will be added to the National Forest Transportation System in Alternatives 2, 5 and 6. This route is less than 2 tenths of a mile in length. OHV use of this route would be consistent with Experimental Forest

management objectives. The other action alternatives do not propose this route and therefore would not have any effects on the Onion Creek Experimental Forest.

Changes to Class of Vehicle and/or Season of Use on the existing National Forest Transportation System: No changes in class of vehicles are proposed in any alternative. Seasonal restrictions would be placed on all native surface roads and motorized trails during the wet periods of the year. These seasonal restrictions would be consistent with Experimental Forest management objectives.

Sagehen Experimental Forest

Cross Country Travel: Cross country travel is prohibited on 7,149 acres in all of the action alternatives. This prohibition stops the proliferation of new un-authorized routes within the experimental forest. The prohibition of cross country will also reduce the total amount of roads and trails available for motorized use.

Additions to the National Forest Transportation System: In the Sagehen Experimental Forest there is one motorized trail being considered for addition to the National Forest Transportation System. TKN 001 is included in Alternatives 2 and 5. This motorized trail is about a quarter mile in length and connects an existing OHV trail to a system road. Without this connection the OHV route ends up being an out and back route which is a less preferable recreation opportunity. The effects from this route on the Experimental Forest are likely to be slight due to the length of the route. However there is the possibility that it would be inconsistent with the Sagehen Experimental Forest management objectives.

Alternatives 3, 4, 6 and 7 would have no effects since no motorized trails are proposed for addition to the national Forest Transportation System within the Sagehen Experimental Forest. Alternatives 2 and 5 have the potential for some effects to Sagehen Experimental.

Tables 3.09-24 through 3.09-26 display the miles of roads and trails within Experimental Forests by Alternative.

Table 3.09-24. Miles of Roads/Trails/Areas in All Experimental Forests by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	7,149	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	11.0	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Seasonal Closure**	5.1	0.0	5.1	5.1	0.0	0.0	5.1
Roads open to highway legal vehicles only	**Open Year Around**	0.1	0.0	0.1	0.1	0.0	0.0	0.1
Roads open to all vehicles	**Seasonal Closure**	0.0	5.1	0.0	20.3	25.6	25.6	0.0
Roads open to all vehicles	**Open Year Around**	20.3	20.5	20.3	0.0	0.0	0.0	20.3
	Subtotal NFS Roads	**25.5**	**25.6**	**25.5**	**25.5**	**25.6**	**25.6**	**25.5**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	2.2	2.8	2.4	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	2.2	2.8	2.2	0.0	0.0	0.0	2.2
	Subtotal Motorized NFS Trails	**2.2**	**2.8**	**2.2**	**2.2**	**2.8**	**2.4**	**2.2**
State, County or other jurisdiction roads	**Open Year Around**	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Roads/trails on private land	**Open Year Around**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total Motorized	**41.5**	**31.2**	**30.5**	**30.5**	**31.2**	**30.8**	**30.5**
Roads/trails closed to motorized users	**Closed to motorized**	0.2	10.7	11.2	11.2	10.7	11.0	11.2
Trails open only to non-motorized users	**Closed to motorized**	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Table 3.09-25. Miles of Roads/Trails/Areas in the Onion Creek Experimental Forests by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	0	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	2.3	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	1.8	1.8	1.8	0.0
Roads open to all vehicles	**Open Year Around**	1.8	1.8	1.8	0.0	0.0	0.0	1.8
	Subtotal NFS Roads	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.0	0.2	0.0	0.0	0.0	0.0	0.0
	Subtotal Motorized NFS Trails	**0**	**0.2**	**0**	**0**	**0.2**	**0.2**	**0**
State, County or other jurisdiction roads	**Open Year Around**	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	Total Motorized	**5.9**	**3.8**	**3.6**	**3.6**	**3.8**	**3.8**	**3.6**
Roads/trails closed to motorized users	**Closed to motorized**	0.0	2.1	2.3	2.3	2.1	2.1	2.3
	Total Non-Motorized	**0**	**2.1**	**2.3**	**2.3**	**2.1**	**2.1**	**2.3**

Table 3.09-26. Miles of Roads/Trails/Areas in the Sagehen Creek Experimental Forests by Alternative

Road and Trail Category	Season Use	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres	**Not Applicable**	7,149	0	0	0	0	0	0
Motorized trails un-authorized for motorized use	**Not Applicable**	8.8	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Seasonal Closure**	5.1	0.0	5.1	5.1	0.0	0.0	5.1
Roads open to highway legal vehicles only	**Open Year Around**	0.1	0.0	0.1	0.1	0.0	0.0	0.1
Roads open to all vehicles	**Seasonal Closure**	0.0	5.1	0.0	18.6	23.8	23.8	0.0
Roads open to all vehicles	**Open Year Around**	18.6	18.7	18.6	0.0	0.0	0.0	18.6
	Subtotal NFS Roads	**23.8**	**23.8**	**23.8**	**23.8**	**23.8**	**23.8**	**23.8**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	2.2	2.6	2.2	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	2.2	2.6	2.2	0.0	0.0	0.0	2.2
	Subtotal Motorized NFS Trails	**2.2**	**2.6**	**2.2**	**2.2**	**2.6**	**2.2**	**2.2**
State, County or other jurisdiction roads	**Open Year Around**	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Total Motorized	**35.9**	**27.4**	**27.1**	**27.1**	**27.4**	**27.1**	**27.1**
Roads/trails closed to motorized users	**Seasonal Closure**	0.2	8.6	8.9	8.9	8.6	8.9	8.9
Trails open only to non-motorized users	**Open Year Around**	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	Total Non-Motorized	**1.9**	**10.3**	**10.7**	**10.7**	**10.3**	**10.7**	**10.7**

Wild and Scenic Rivers: Affected Environment

The North Fork of the American Wild River is a federally designated Wild and Scenic River. With a Wild classification it excludes motorized vehicle use. The South Yuba River is recommended for federal designation with a recreation and scenic classification. The South Yuba River is presently a State designated river with recreation and scenic classification. The interagency South Yuba River Management Plan directs that motorized use remain on designated routes and precludes cross country travel. The North Yuba River, its tributary Canyon Creek, and Sagehen are recommended for federal designation. Motorized trails are not automatically excluded from these river corridors but effects to outstandingly remarkable values and river classifications need to be evaluated. The following displays the management guidelines for motorized travel within the different classes of wild and scenic rivers.

1. **Wild River**: Motorized travel on land or water could be permitted, but is generally not compatible with this classification
2. **Scenic River**: Motorized travel on land or water may be permitted, prohibited or restricted to protect river values.
3. **Recreation Rivers**: Motorized travel on land or water may be permitted, prohibited or restricted. Controls will usually be similar to surrounding lands and waters.

The following describes each of the rivers in more detail.

North Yuba River

Description: The North Yuba River is located in the northern portion of the Tahoe National Forest. The river flows for approximately forty-five miles from its headwaters at Yuba Pass to New Bullards Bar Reservoir. There are a total of 14,228 acres within the river corridor. The watershed is highly mineralized

and characterized by large rock outcrops in the upper reaches with high gradient riffles and frequent deep pools with boulder substrate. The river is easily accessible as Highway 49 parallels 90 percent of the river. The segment above New Bullards Bar is accessible by rough foot trail. Virtually all of the open land along the river is covered by mining claims. Some existing power and telephone lines parallel the highway. There are numerous public campgrounds and picnic sites (some with toilet facilities) along the river corridor. A historic driving tour and six interpretive stops are located along Highway 49 between Oregon Creek and the top of Yuba Pass. The towns of Goodyear's Bar, Downieville, and Sierra City are located adjacent the river. Numerous special use permits have been issued along the river corridor including recreation summer homes north of Downieville, water system permits, and commercial rafting permits. There is a seasonal mining camp located at Shenanigan Flat.

Vegetation within the corridor includes riparian, foothill woodland, mixed conifer, and subalpine. Riparian vegetation grows along the creek banks and contains deciduous trees and shrubs that give way to lodgepole pine and red fir at the higher elevations. Riparian vegetation is also found in other areas of the corridor primarily in areas where the terrain is moist and shaded. There are known occurrences of *Lewisia cantelovii* (a sensitive plant) within the corridor. There are no other known occurrences of sensitive or watchlist plants or plant communities. There is potential habitat for *Botrychium ascendens, B. crenulatum, B. lineare, B. montanum, Clarkia biloba* ssp. *brandegeae, Clarkia stellata, Cypripedium fasiculatum, C. montanum, Erigeron miser, Epilobium howellii, Fritillaria eastwoodiae, Lewisia cantelovii, Lewisia serrata, Lupinus dalesiae, Meesia triquetra, M. uliginosa, Monardella follettii, Penstemon personatus, Phacelia stebbinsii, Scheuchzeria palustris* var. *americana* and *Vaccinium coccinium* within the study corridor.

The North Yuba River provides habitat for a variety of sensitive wildlife species. The federally listed endangered bald eagle uses the river corridor. California spotted owls and the northern goshawk also share the corridor. There are PACs (protected activity centers) within the area to provide for the spotted owls. The river environment is also potential habitat for Pacific fisher and marten. There are healthy populations of rainbow, brown, and eastern brook trout throughout the corridor. There are no other known federally listed threatened and endangered wildlife or fishery species within the area.

Eligibility: The North Yuba River is eligible for its fisheries, heritage resource values, vegetation, scenic, and recreation values. The fishery values were considered of Statewide significance in terms of fish diversity, quality of habitat and trophy fishery. The cultural values were considered to have high regional significance and probable national significance for the extent and complexity of the gold mining history and the existing and potential interpretive opportunities available along the North Yuba River. The recreation values are considered to be regionally significant due to the diversity of river associated recreation activities. The recreation activities range from whitewater rafting and kayaking to a whole range of day use and overnight camping opportunities as well as the recreation opportunities offered by the local communities and their overnight accommodations and eating establishments. The scenic values were identified as regionally significant due to the dramatic spatial definition of the river canyon, the lush quality of vegetation, and the diversity of scenic opportunities from the landmark Sierra Buttes, to the waterfalls, rapids, and cultural landscapes of the local towns. The vegetation values were considered of

regional significance due to the rare nature of *Lewisia* and the likelihood that they are genetically different than other *Lewisia cantelovii* populations because of geographic isolation.

Classification: During the eligibility phase of the study the North Yuba River was classified as wild, scenic, and recreation. The longest segment from the Yuba Pass area to Shenanigan Flat is classified as recreation due to the level of development along the corridor including towns, roads, and mining claims. The segment from Shenanigan Flat to Race Track Point is classified as wild due to the primitive setting and distinct lack of human development other than some mining claims. The final segment from Race Track Point to Wambo Bar is classified as scenic due to the existence of a Penstock at Wambo Bar that is clearly visible from the river for over a mile of its length.

Recommendation: The North Yuba River was considered to be a worthy addition into the National Wild and Scenic River System because of the National significance of the gold mining history and State level significance of the fishery. In addition the river provides a broad range of recreation opportunities, higher scenic quality, and plant values.

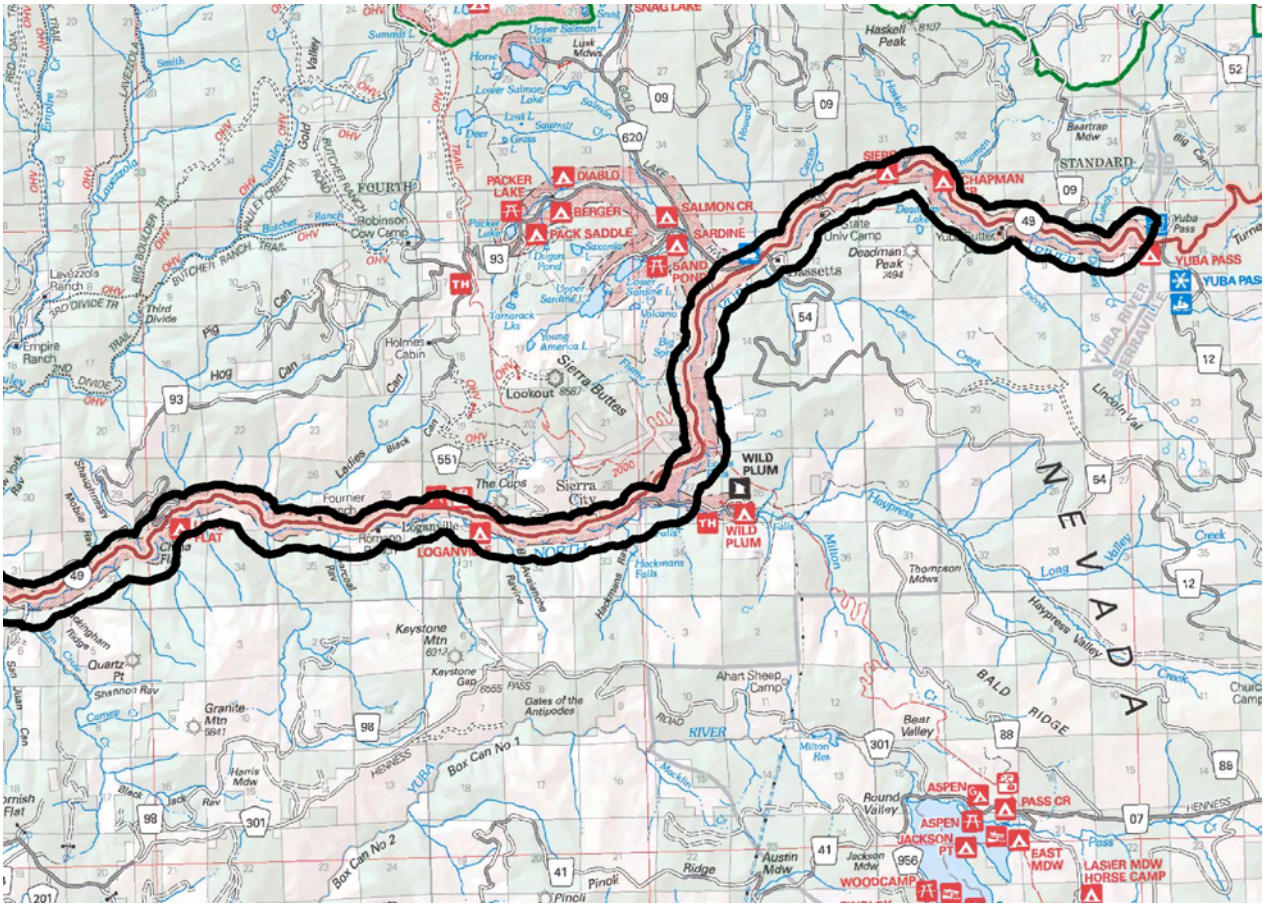

Figure 3.09-12. Upper North Yuba Wild & Scenic River

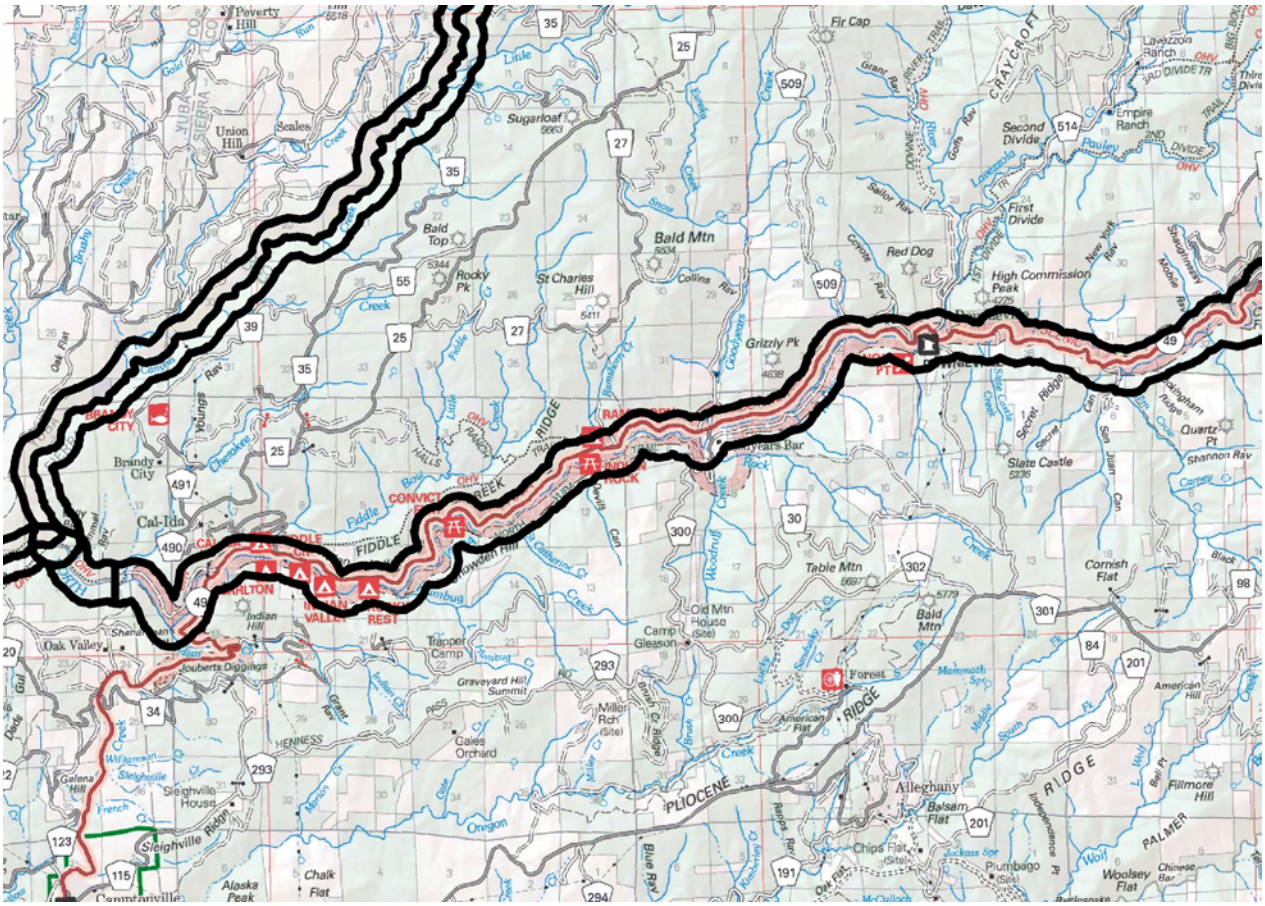

Figure 3.09-13. Lower North Yuba Wild & Scenic River

Canyon Creek

Description: Canyon Creek is located along the border between the Tahoe National Forest and the Plumas National Forest. The creek flows for approximately thirty miles from its headwaters to the confluence with the North Yuba River. The watershed is characterized by canyons surrounded by steep hills. There are a total of 8,945 acres within the river corridor. The study corridor is characterized by alders and willows which line the stream channel. The upper banks and ridges are densely covered by conifers. The stream channel is characterized by deep pools, riffles, cascades and bedrock chutes. The Creek flows through a highly mineralized area. Access into the corridor can be obtained at the North Yuba confluence by walking a trail from Shenanigan Flat or along the upper reaches at Poker Flat via two rough dirt roads. There are also several roads and primitive trails which follow old roads into the canyon. Primitive seasonal mining cabins are located near the creek in the Poker Flat area. There are no utility corridors, public facilities, or special use permits within the corridor.

Vegetation within the corridor includes riparian, mixed conifer, and subalpine. The corridor and surrounding ridges contain some large blocks of old-growth forest. Riparian vegetation grows along the creek banks and contains deciduous trees and shrubs that give way to conifers and shrubs at the higher elevations. Riparian vegetation is also found in moist areas of the Canyon Creek corridor. There is a

known occurrence of *Lewisia cantelovii* within the study corridor. There are no other known occurrences of sensitive or watchlist plants or plant communities. There is potential habitat for *Botrychium ascendens, B. crenulatum, B. lineare, B. montanum, Clarkia biloba* ssp. *brandegeae, Clarkia stellata, Cypripedium fasiculatum, C. montanum, Fritillaria eastwoodiae, Lewisia cantelovii, Lewisia serrata, Lupinus dalesiae, Meesia triquetra, M. uliginosa, Monardella follettii, Penstemon personatus, Phacelia stebbinsii, Scheuchzeria palustris* var. *americana* and *Vaccinium coccinium* within the study corridor.

The canyon is a major wildlife corridor. There are five PACs (protected activity centers) and two Home Range Core Areas (HRCAs) for the California spotted owl within the study area. The northern goshawk also occurs within the corridor. The canyon is potential habitat for the Pacific fisher. The creek supports a healthy, native population of Rainbow Trout. Fry are common in shallow, gravel-covered areas, and larger individuals are found in riffles and pools. Boulders, deep pools, and whitewater provide excellent cover. There are no known federally listed threatened or endangered wildlife / fishery species within the area.

Eligibility: Canyon Creek is outstanding for its heritage resources, scenic resources, and primitive recreation values. The remote canyon contains numerous historic mining sites. These sites include intact mining equipment, town sites, and their associated structures, a whole range of mining activities, and transportation routes. Steep rocky cliffs, deep plunge pools, dramatic waterfalls, and large boulders include some of the scenic values that extend for miles. There is very limited access to Canyon Creek which allows for primitive recreation opportunities providing solitude from human development.

Classification: During the eligibility phase of the study, Canyon Creek was classified as a wild river with the exception of about two miles of stream centered on the Poker Flat area. This area has been classified as scenic due to the mining camps, roads, and associated structures. The remainder of the river was classified wild due to the lack of roads, human development, lack of evidence of land management activities, and the overall primitive character. There are some mining claims in the corridor but their physical presence remains relatively low key.

Recommendation: Canyon Creek was considered to be a worthy addition into the National Wild and Scenic River System because of its semi-primitive and primitive recreation and scenic values as well as its historic mining values.

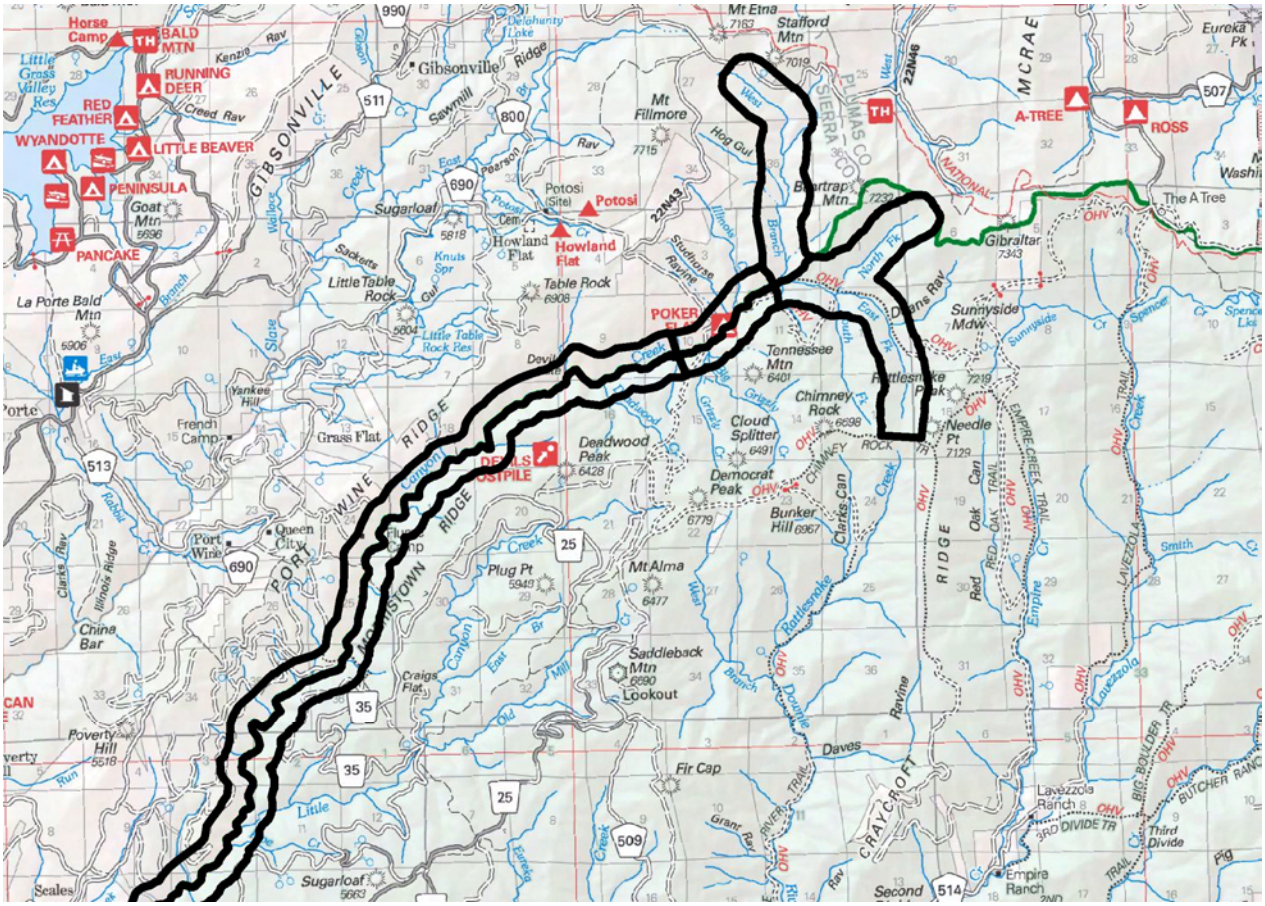

Figure 3.09-14. Upper Canyon Creek Wild & Scenic River

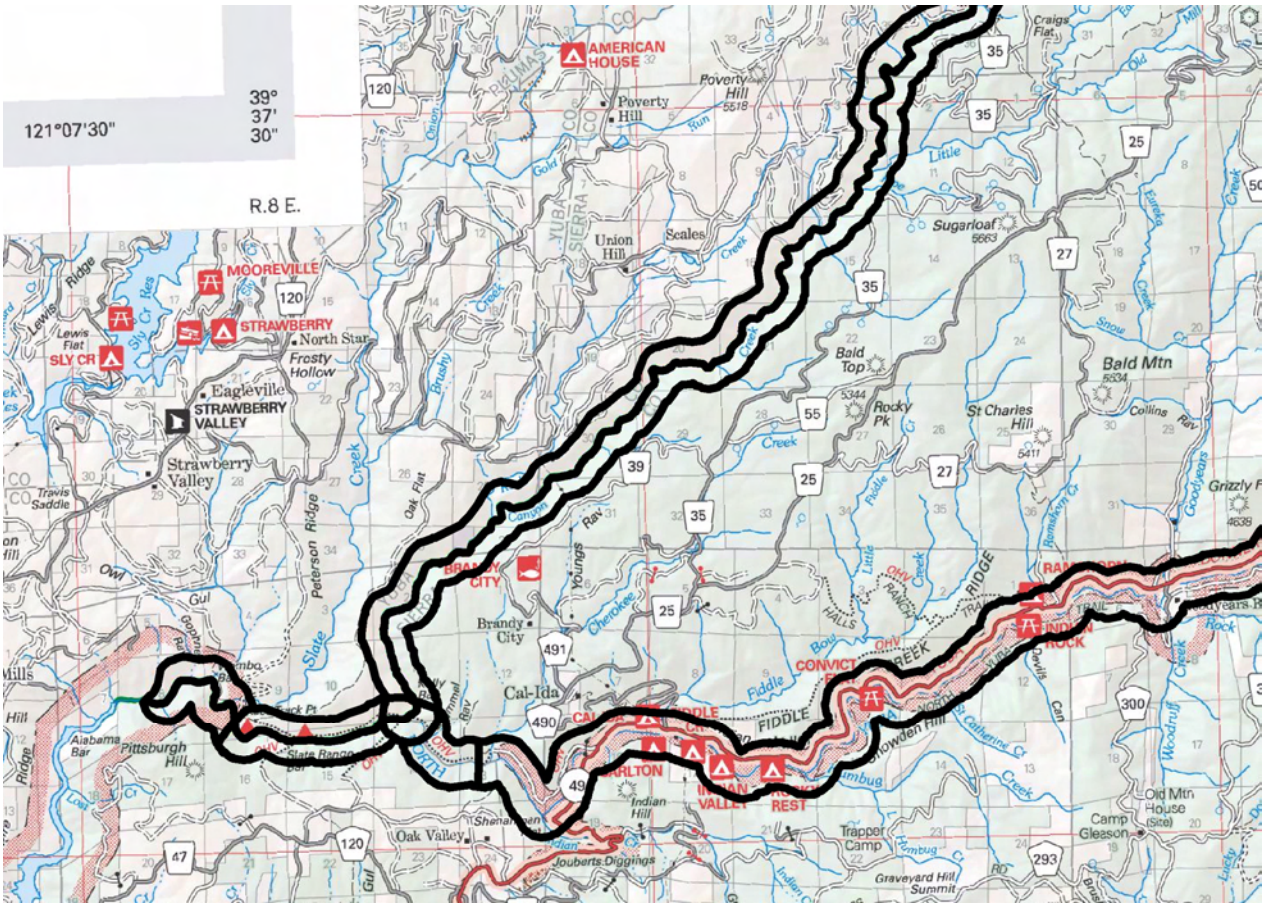

Figure 3.09-15. Lower Canyon Creek Wild & Scenic River

Lower South Yuba River (below Spaulding)

Description: This section of the South Yuba River flows for approximately thirty nine miles from the Langs Crossing area to Bridgeport. The end point of the river is located just below Bridgeport at the confluence of Kentucky Creek. There are approximately 12,609 acres within the river corridor. Half of the river flows through the Tahoe National Forest while the lower half of the river flows through Bureau of Land Management and the South Yuba River State Park. Nevada County has jurisdiction over the river corridor's private lands. The river is characterized by deep pools, cascades, waterfalls, and exposed worn rock outcroppings. The tertiary gravels of the ancient Yuba River have supplied gold to the river over time. The study area is within the Western Metamorphic Belt of the Sierra Nevada. The higher elevations of the river are covered with mixed conifer and oak woodlands.

The river is subject to both commercial and recreational placer and quartz mining. There are no utility corridors within the corridor. Langs Crossing, Edwards Crossing, Purdon Crossing, Highway 49, and Bridgeport are the major access points to the river. The South Yuba Trail along the north side of the river extends from the western Forest boundary to Poorman Creek near the town of Washington. The Bureau of Land Management lands along the South Yuba River Area east of the Forest boundary to Edwards Crossing has been withdrawn from mineral entry for many years. All mining is authorized through a

permit system. Private and public lands are dispersed in a checkerboard pattern throughout the river corridor. Large acreages of the private land are owned by large timber/land companies and intensively managed for forest products. The balance of the private lands is in patented claims or tract parcels. There are picnic areas at Keleher and Golden Quartz along the river. These areas have toilet facilities and picnic tables. The portion of river from the town of Washington up to Fall Creek is closed to overnight camping due to high fire hazards. The Lake Spaulding Dam, a major facility owned by PG&E, is located one mile upstream from Langs Crossing. The Spaulding dam is up for relicensing in the year 2013. there are also plans to improve the structure in the future. Bridgeport is the focus for the South Yuba River State Park which has toilet, picnic, and visitors' facilities. The majority of human activity revolves around the major access points mentioned in the beginning of this section. There are many private homes within the river corridor. Some are within remote sections of the river corridor and many are clustered within and near the town of Washington.

Vegetation within the corridor includes riparian, chaparral, foothill woodland, and mixed conifer. Riparian vegetation grows along the creek banks and contains deciduous trees and shrubs. Riparian vegetation is also found in other areas of the corridor were the terrain is moist and shaded. There are patches of mixed conifer old growth within the corridor. There are also known occurrences of *Lewisia cantelovii* within the study corridor. There are no other known occurrences of sensitive or watchlist plants or plant communities within the area. There is potential habitat for *Botrychium ascendens, B. crenulatum, B. lineare, B. montanum, Clarkia biloba* ssp. *brandegeae, Clarkia stellata, Cypripedium fasiculatum, C. montanum, Fritillaria eastwoodiae, Lewisia cantelovii, Lewisia serrata, Meesia triquetra, M. uliginosa, Monardella follettii, Penstemon personatus, Phacelia stebbinsii, Scheuchzeria palustris* var. *americana* and *Vaccinium coccinium* within the study corridor.

The river corridor provides an important wildlife migration corridor for a variety of raptors and other species including the federally endangered species bald eagle and the California spotted owl. The corridor also is potential habitat for northern goshawk, Pacific fisher, and Sierra Nevada Red Fox. The lower river supports warm water and cold water fisheries, as well as native and introduced species. There are no known federally listed threatened or endangered aquatic species known.

Eligibility: The Lower South Yuba River was found eligible because of the scenic, recreational, and historical values. The recreation use displays a wide variety of activities mostly associated with water oriented day use or appreciation of the historic values. Recreation activities include swimming, floating, sun bathing, picnicing, hiking, and nature appreciation. Whitewater boating occurs during a short spring seasonal flow. There are high levels of day use and users are from local as well as regional and out of State locations. The South Yuba trail is a National Recreation Trail and the Independence Trail is a unique almost one of a kind wheelchair accessible trail of regional and State significance. The scenic values are of particular note because of the wide variety of high quality features over the 39 mile length of river. Large sculptural smooth boulders and bedrock are one of the major attractions both for scenic and recreation values. Other water features such as pools and falls along with the steep canyon walls are the other scenic values. The cultural values are also dispersed along the entire length of the river featuring gold rush era history. Of particular note is the Bridgeport Covered Bridge (1862) which is on the National Register of Historic Places. It is designated as a California State Historic Landmark (#390), as well as

being listed as a Registered Civil Engineering Landmark (ASCE. The bridge is the longest single span wooden bridge in the West. For a time, all freight shipped to Virginia City (Comstock Silver Rush was transported across this bridge. Other eligible lists to the National Register of Historic Places are: Virginia Turnpike (1853-1901), Bridgeport Townsite (1849-1940's), Excelsior Mining Ditch (1855-1961), Miner's Tunnel (Circa 1872), Purdon Crossing Bridge (1895), Edwards Crossing Bridge (1904), and Highway 49Bridge No. 17-07 (1921). In addition further upstream there are several early gold mining sites with high potential historic value because the sites were not destroyed by subsequent mining activities. The town of Washington is also an historic town developed during the gold rush.

Classification: During the eligibility phase of the study the lower South Yuba River was classified as wild, scenic, and recreation. The segment from Jordan creek confluence to 0.3 mile below Langs crossing is classified Recreation because of roads, a canal, and a bridge in the corridor. The next segment starts below Langs Crossing and ends approximately one half mile downstream from Fall Creek and is classified as Wild due to the unroaded and primitive character of the corridor. The next segment continues down past the town of Washington to Jefferson Creek and is classified recreation due to roads, logging, housing, and various forms of human development. The last segment continues from Jefferson Creek to just below Bridgeport at the confluence of Kentucky Creek and is classified scenic due to a combination of roads and past logging activities within the half mile corridor.

Recommendation: The South Yuba River below Spaulding was considered to be a worthy addition into the National Wild and Scenic River System because of its outstanding broad recreation opportunities and high scenic qualities, water associated recreation activities, and historic values.

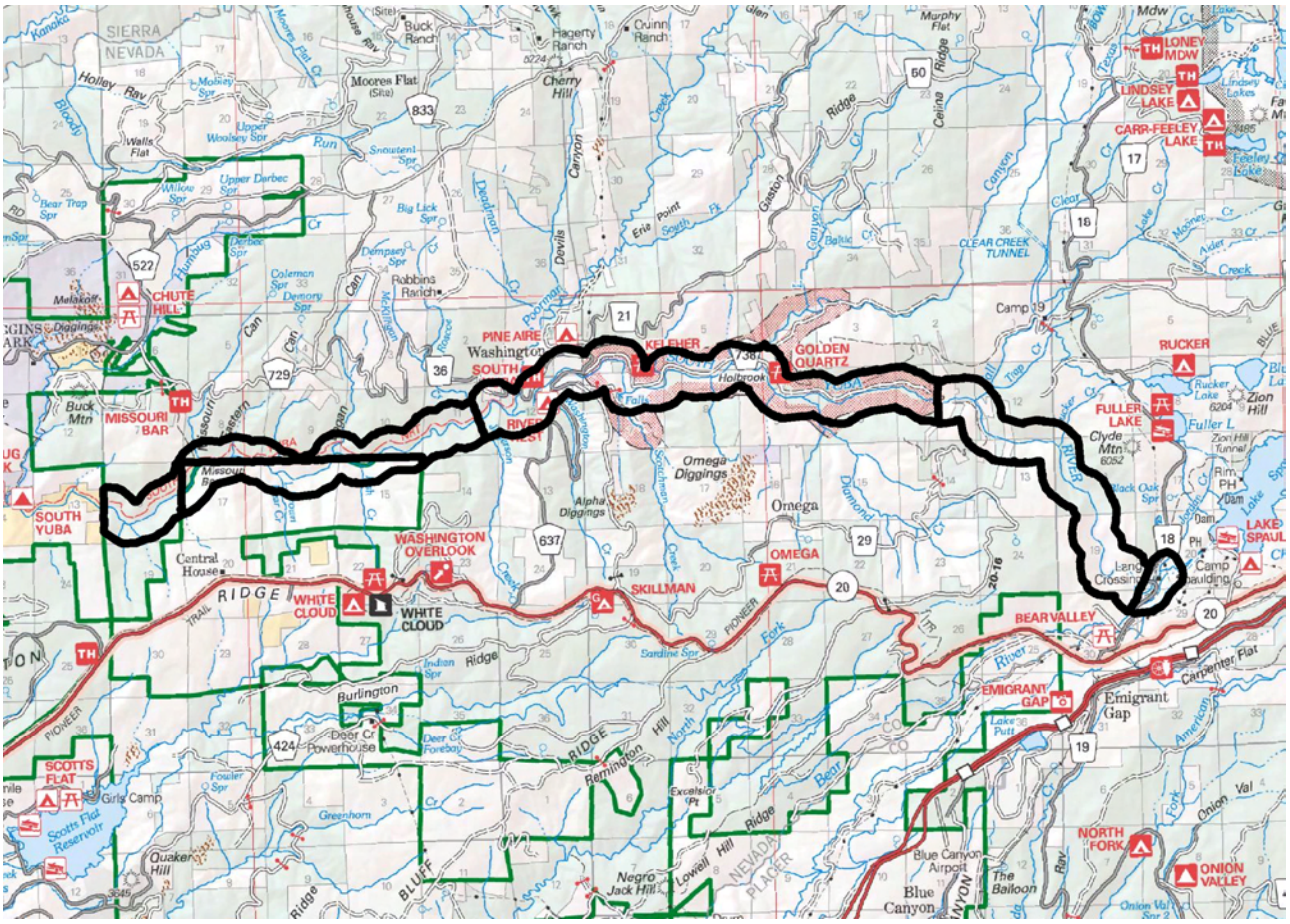

Figure 3.09-16. South Yuba River Wild & Scenic River

Sagehen Creek

Description: Sagehen Creek is an eight mile segment which flows from its headwaters to Stampede Reservoir. The lands adjacent to the stream are entirely National Forest System lands and are managed by the TNF. The University of California at Berkeley has conducted a variety of research activities on National Forest lands within the Sagehen Basin since 1951. There have been over 130 research publications, films, and thesis conducted in the area. Sagehen Creek is entirely within Nevada County, California.

The following is quoted from the Annual Report, Sagehen Creek Field Station (1990) produced by the Department of Forestry and Resource Management, University of California, Berkeley. "The Sagehen Creek Field Station (operated by the University of California at Berkeley) is devoted primarily to natural history research, secondarily to teaching at the university level. Some principal objectives of the research program are:

1. To determine the species composition, spatial distribution, and functional interrelationships of the various ecological communities in Sagehen Basin.
2. To understand the natural history of as many as possible of the individual species of plants and animals that constitute the ecological communities.

3. To study the stream and its tributaries, fens and riparian vegetation with a view to understanding the food chains that support aquatic life.
4. To follow the processes of plant succession following fire and other forms of vegetation disturbance, and to measure the effects on animal populations.
5. To determine the influence of weather, soils, competition, predation, and food and cover needs as they govern trends in animal populations.

The Station encourages basic biological and ecological studies and applied research directed towards solving current problems in the management of wildland resources. One such applied problem is to assess the interrelationships of timber management practices and wildlife and fisheries resources. Long-term experiments are given special consideration."

The Sagehen headwaters are an intact glacial cirque and part of a highly complex ecosystem. The glacial cirque gives rise to fens and bogs which are part of a complex hydrological system and are considered to have significant value for research purposes. The fens and bogs support a unique vegetative community and support over 40 different plant species, including two sundews, *Drosera rotundifolia* and *Drosera angelica*. Some of the largest and best studied fens in the entire Sierra Nevada occur in the Sagehen Creek Basin. There are known occurrences of *Ivesia Sericoleuca* and *Silene invisa* in the Basin. Sagehen Creek also provides numerous habitats for wildlife and an endemic Lahontan Basin native fish community.

There are 2,451 acres of National Forest System lands and no acres of private lands with the river corridor.

Flows are unregulated in Sagehen Creek and daily average flow is 12.3 cfs based on about 40 years of data. Sagehen has a large number of small springs that flow yearlong throughout the basin.

Recreation use is dispersed throughout the area and most of the recreation use results from deer hunting during the fall. There is one small campground within view of the stream.

The Visual Quality Objectives for the majority of Sagehen Creek is Partial Retention with the emphasis on views from US Highway 89. The overall visual quality is mostly low or moderate. The main visual interest in the corridor would be the stream itself and some of the associated bogs and fens.

Logging operations along Sagehen Creek began in 1874. Martin and Leach operated the Banner Mill eight miles from Truckee on Sagehen Creek until 1882. Lonkey and E.R. Smith operated this same mill from 1882 until 1889. A cordwood producer, Abner Week, was also operating in the headwaters of Sagehen Creek.

The primary lumber company which operated in the Sagehen Creek drainage was the Sierra Nevada Wood and Lumber Company (SNW&L) whose operations were centered at Hobart Mills. The SNW&L Company was in operation from 1896 until 1917, at which time the company's assets were turned over to the Hobart Estate. The mill at Hobart Mills continued to operate until 1936.

The historic sites associated with the Sierra Nevada Wood and Lumber Company within the Sagehen Creek basin are eligible for listing on the National Register of Historic Places as a historic district. The majority of these sites and associated features represent an intact railroad-based logging system. Additionally, the Banner Mill and associated animal-based transportation system are also represented as well as depression-era sites, which have received very little research to date.

Eligibility: Sagehen Creek hosts numerous interrelated outstandingly remarkable values that are best identified as ecosystem values. The stream is also considered highly representative of eastside Sierra Nevada stream ecology for native fisheries. The interdependence of values increases its level of significance including the broader hydrology. This ecological significance supports the stream being outstandingly remarkable and supports the hydrology, geology, wildlife, fisheries, and plants being considered outstandingly remarkable. This is the best ecological/botanical value of the Eastside Rivers. A fishery by itself is considered unique and outstandingly remarkable due to the natural assemblage of native fish. The University of California Research Station has provided extensive and professional reports and papers on the natural resources in and around Sagehen Creek over many years. These research values are considered a complimentary outstandingly remarkable value. In addition the cultural value of the often intact steam engine logging technology remnants is also considered regionally significant and therefore outstandingly remarkable.

Recommendation: Sagehen Creek was considered to be a worthy addition into the National Wild and Scenic River System because of its outstandingly remarkable ecosystem values in the form of fens, unique plants, special geologic formations that support the fens, unique water chemistry that supports rare caddis flies, an excellent assemblage of native fisheries, unique wildlife values, and historical logging values eligible to the National Register of Historic Places. The stream posses the best ecological/botanical value of the Eastside Rivers considered. These values are further enhanced by a University of California research station that has provided extensive documentation of their natural values existing in and along this stream. This stream is clearly the best candidate as a representative stream for the eastside Sierra Nevada.

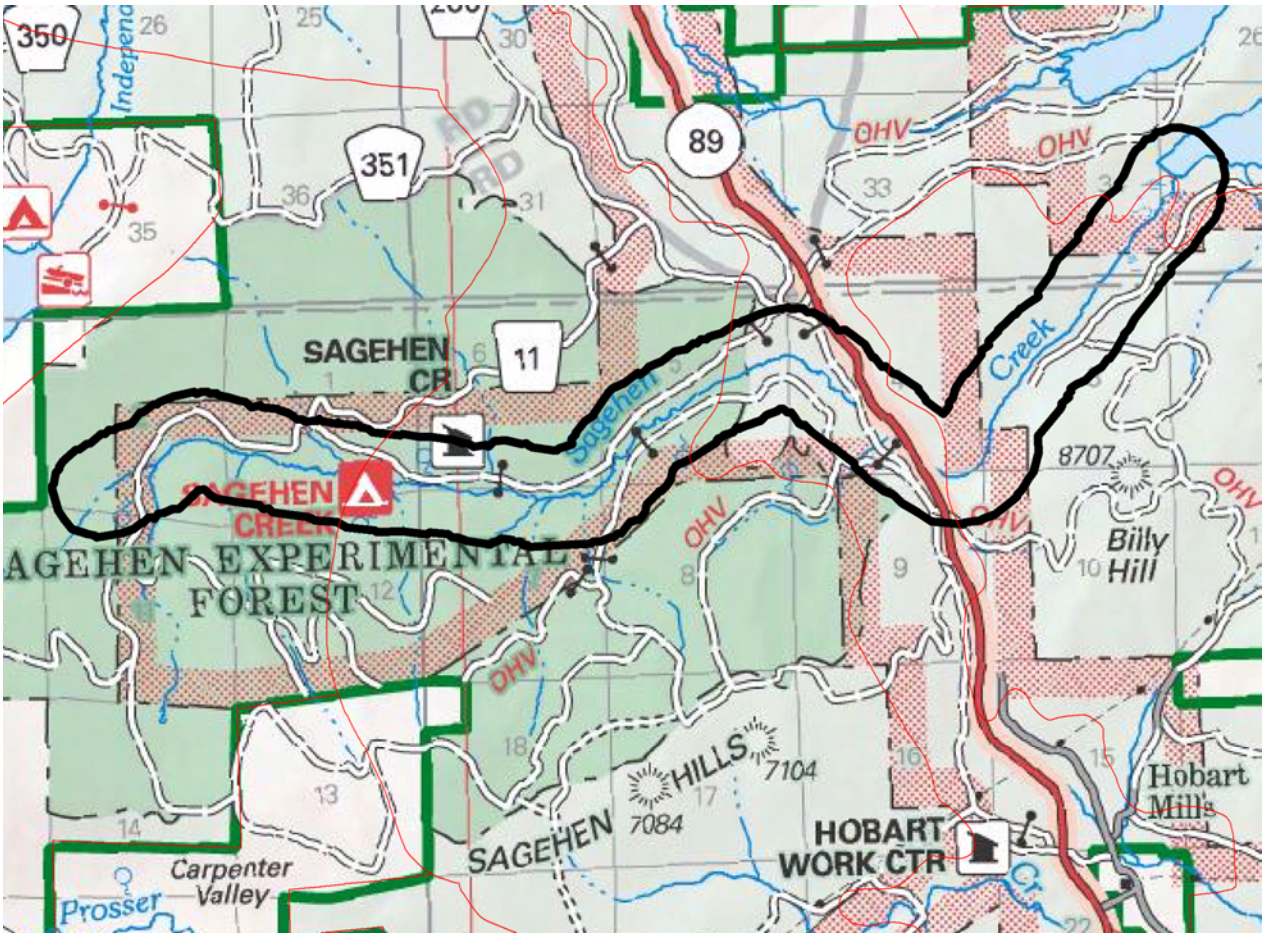

Figure 3.09-17. Sagehen Creek Wild & Scenic River

North Fork American River

Description: Public Law 95-625, November 10, 1978, amended Public Law 90-542, "The Wild and Scenic Rivers Act," and designated the North Fork American River as a part of the National Wild and Scenic Rivers System.

The portion of the North Fork American River designated as a component of the National Wild and Scenic Rivers System extends from a point 0.3 miles above Heath Springs at the north-south section line between Sections 15 and 16, T.16 N., R.14 E., Mount Diablo Meridian, downstream to a point approximately 1000 feet upstream of the Colfax-Iowa Hill Bridge, including the Gold Run Addition Area, a total distance of 38.3 miles.

The North Fork American River is one of three forks which make up the American River System. The headwaters of all originate just west of the Sierra Nevada Crest. The total drainage area of the designated component is about 241 square miles. All of the designated areas are located in Placer County.

The Forest Service and Bureau of Land Management presently share in the responsibility for administering the North Fork American Wild and Scenic River System. The State of California retains management responsibility for its lands (123 acres) within the designated river boundary; management of these lands is coordinated through a Memorandum of Agreement.

Classification: The River is classified in the "Wild" class as designated in the Act.

Designation: The North Fork American River was designated as a "Wild" river since it is free of impoundments and generally in accessible, except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. It represents a vestige of primitive America.

Management Guidelines: The following Management Guidelines are contained in the *North American Wild River Management and Development Plan* (USDA USDI 1979).

- **Recreation**, administration of uses and activities will be directed toward maintaining the natural values of the area. Recreation facilities or other development will be limited to those necessary to protect wild river values.
- **Water**, in cases of conflict between water quality and other resources, uses, and activities, protection of water quality will take precedence.
- **Wildlife and Fisheries**, priorities will be given to management which protects or enhances fish and wildlife values. Fish and wildlife habitat will be managed in a manner compatible with the naturalness of the wild river environment.
- **Transportation**, motorized land and water vehicles and suction dredges will be prohibited within the wild river boundary. Trails in close proximity (parallel) to the river will not be expanded without determination of the need for additional access. Transportation routes outside of the river must meet the visual quality standard specified in Land Management Plan direction.
- **Trail Access**, motorized vehicle use will be prohibited on all trails within the River Management Zone.

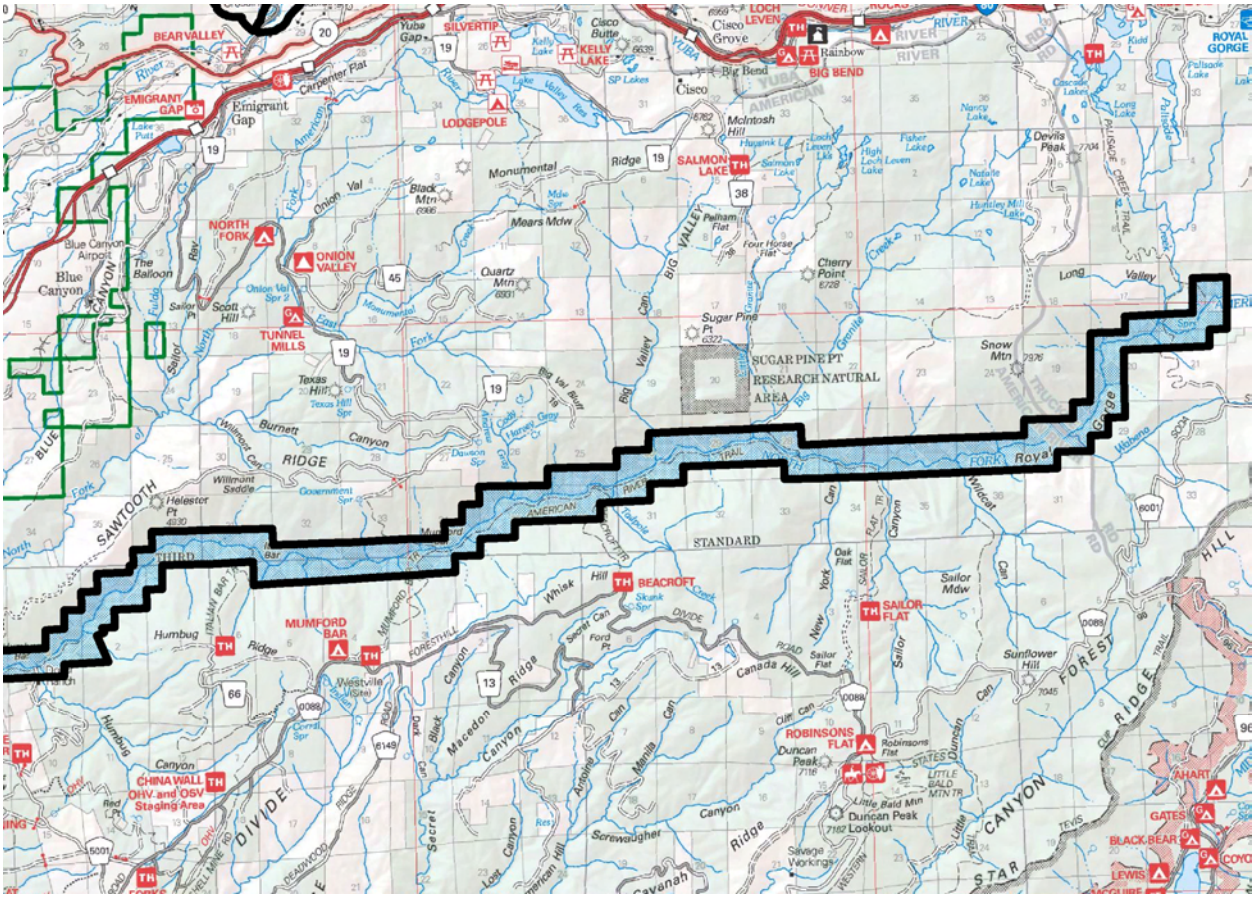

Figure 3.09-18. Upper North Fork American Wild & Scenic River

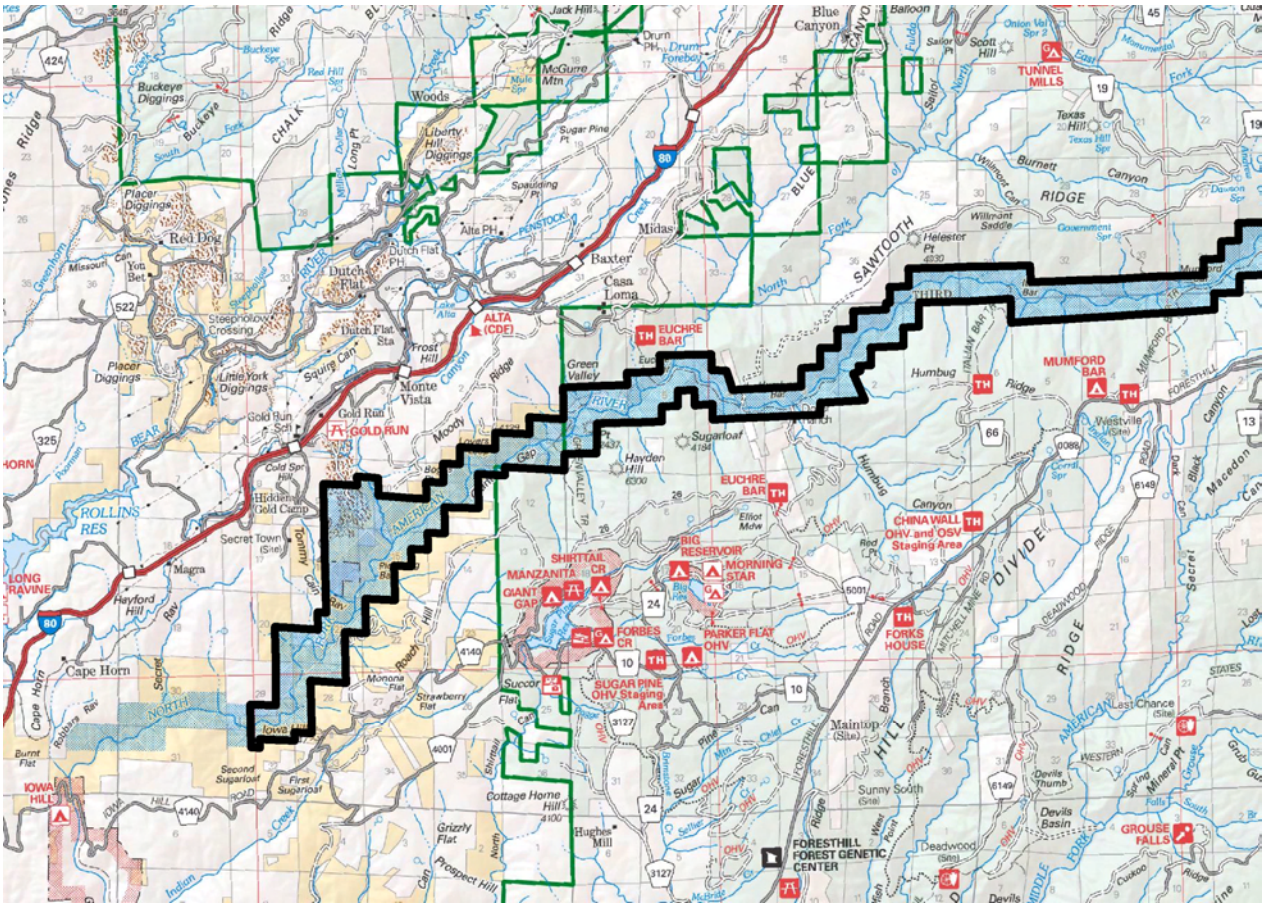

Figure 3.09-19. Lower North Fork American Wild & Scenic River

Table 3.09-24 summarizes the status, outstandingly remarkable values, and classification of all designated and recommended Wild and Scenic Rivers on the Tahoe National Forest.

Table 3.09-24. Wild & Scenic River Status on the Tahoe National Forest

River	Status	Outstandingly Remarkable Values	Classification
North Fork of the American River	Federally Designated	Free flowing character, inaccessibility except by trail, watersheds and shorelines essentially primitive, unpolluted waters, and outstanding features such as scenery, historic, cultural and other similar values.	**Wild** - Entire Length
North Yuba River	Recommended for designation	Gold mining history and State level significance of the fishery. In addition the river provides a broad range of recreation opportunities, higher scenic quality, and plant values.	**Recreation** -Yuba Pass area to Shenanigan Flat **Wild** - Shenanigan Flat to Race Track Point **Scenic** - Race Track Point to WamboBar
Sagehen Creek	Recommended for designation	Ecosystem values in the form of fens, unique plants, special geologic formations that support the fens, unique water chemistry, an excellent assemblage of native fisheries, unique wildlife values, and historical logging values	**Scenic** - Entire length

River	Status	Outstandingly Remarkable Values	Classification
Canyon Creek	Recommended for designation	Semi-primitive and primitive recreation and scenic values as well as its historic mining values	**Wild** - Headwaters to one mile above Poker Flat **Scenic** - One mile above Poker Flat to one mile below Poker Flat **Wild** - One below Flat to confluence with Yuba River
South Yuba River (Lower)	Recommended for designation	Broad recreation opportunities and high scenic qualities, water associated recreation	**Recreation** - Jordan creek confluence to 0.3 mile below Langs crossing **Wild** - 0.3 mile below Langs crossing to one half mile downstream from Fall Creek **Recreation** - One half mile downstream from Fall Creek to confluence of Jefferson Creek **Scenic** - Confluence of Jefferson Creek to confluence of Kentucky Creek

Table 3.09-25 shows the current mileage of roads and trails within Wild and Scenic Rivers on the Tahoe National Forest.

Table 3.09-25. Summary of Current Mileage of Roads and Trails within Wild and Scenic Rivers on the Tahoe National Forest

Road and Trail Category	Season Use	Canyon Creek	North Yuba River	Sagehen Creek	South Yuba River	North Fork American River
Cross country travel						
Acres		4,565	10,634	2,165	3,161	0
Motorized trails un-authorized for motorized use		2.4	10.3	4.8	2.4	0
Roads open to highway legal vehicles only	**Seasonal Closure**	0.0	0.0	2.0	0.3	0.0
Roads open to highway legal vehicles only	**Open Year Around**	0.2	9.8	0.1	4.1	0.0
Roads open to all vehicles	**Open Year Around**	1.4	3.5	7.6	0.7	0.1
	Subtotal NFS Roads	**1.5**	**13.3**	**9.7**	**5.1**	**0.1**
Trails open to high clearance trail vehicles	**Open Year Around**	1.7	2.7	0.2	0.8	0.0
Trails open to ATV's and motorcycles	**Open Year Around**	0.0	0.7	0.0	0.0	0.0
Trails open to motorcycles	**Open Year Around**	2.2	2.4	0.0	0.0	0.0
	Subtotal NFS Motorized Trails	**3.8**	**5.8**	**0.2**	**0.8**	**0.0**
State, County or other jurisdiction roads	**Open Year Around**	0.0	43.9	1.4	4.4	0.0
Roads/trails on private land	**Open Year Around**	0.0	12.3	0.0	6.5	0.0
	Total Motorized	**7.7**	**85.6**	**16.1**	**19.2**	**0.1**
Roads/trails closed to motorized users	**Open Year Around**	0.0	0.0	0.2	0.0	0.0
Trails open only to non-motorized users	**Open Year Around**	0.0	7.0	0.0	9.6	17.0
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Open Year Around**	0.0	2.7	0.0	0.0	0.0
	Subtotal Non-Motorized	**0.0**	**9.7**	**0.2**	**9.6**	**17.0**
Previously decommissioned roads	Closed	0.0	0.0	0.4	0.0	0.0

Wild and Scenic Rivers: Environmental Consequences

North Fork of the American River

The North Fork American River was designated as a "Wild" river since it is free of impoundments and generally in accessible, except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. It represents a vestige of primitive America.

Cross Country Travel: Cross country travel is already prohibited within the North Fork American Wild and Scenic River. There is no change in any of the alternatives. Continuing the prohibition on cross country travel will maintain or enhance the outstandingly remarkable values of the North Fork American River.

Additions to the National Forest System: There are no proposed additions to the National Forest Transportation System in any of the alternatives. Not adding any additional roads or trails to the National Forest Transportation System in North Fork American River will maintain or enhance the outstandingly remarkable values of the North Fork American River.

Changes in class of vehicle and season of use: There is one tenth of a mile of native surface road along the edge of the Wild & Scenic River Corridor. This road is currently managed as open to all vehicles all year. Alternatives 4, 5 and 6 impose wet weather seasonal restrictions on this road. These seasonal restrictions are consistent with maintaining the outstandingly remarkable values of the North Fork American River.

Table 3.09-26. Miles of Roads and Trails within the North Fork American River by Alternative

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres		0	0	0	0	0	0	0
Motorized trails un-authorized for motorized use		0	0	0	0	0	0	0
Roads open to all vehicles	**Seasonal Closure**	0	0	0	0.1	0.1	0.1	0
Roads open to all vehicles	**Open Year Around**	0.1	0.1	0.1	0	0	0	0.1
	Subtotal NFS Roads	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Trails open only to non-motorized users	**Open Year Around**	17.0	17.0	17.0	17.0	17.0	17.0	17.0
	Subtotal Non-Motorized	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**	**17.0**

North Yuba River

The North Yuba River was considered to be a worthy addition into the National Wild and Scenic River System because of the National significance of the gold mining history and State level significance of the fishery. In addition the river provides a broad range of recreation opportunities, higher scenic quality, and plant values. All of the action alternatives maintain or enhance the outstandingly remarkable values of the North Yuba River.

Cross Country Travel: Cross country travel will be prohibited on 10,634 acres within the river corridor in all of the action alternatives. The prohibition of cross country travel will prevent the proliferation of new un-authorized routes and will maintain or enhance the outstandingly remarkable

values of the North Yuba River. The prohibition of cross country travel also results in a reduction of the total amount of roads and trails available for motorized use in all of the action alternatives. The prohibition of cross country travel will enhance the outstandingly remarkable values associated with North Yuba River.

Additions to the National Forest System: There are no proposed additions to the National Forest Transportation System in any of the alternatives.

Changes in class of vehicle and season of use: Wet weather seasonal restrictions on all native surface roads and trails will be imposed in Alternatives 4, 5 and 6 which will improve the current water quality conditions. The class of vehicles allowed will be changed from "Roads open to highway legal vehicles only" to "Roads open to all vehicles" on 3.9 miles in Alternatives 2 and 5 and on 1.9 miles in Alternative 6. These changes in class of vehicles allowed are the result of a mixed use safety analysis on all but 4 tenths of a mile. Allowing mixed use will have no impact of the rivers outstandingly remarkable values. Table 3.09-27 displays the miles of roads and trails within the North Yuba Wild and Scenic River by alternative.

Cumulative effects: All of the action alternatives will enhance the outstandingly remarkable values associated with North Yuba River by prohibiting cross country travel and reducing the amount of roads and trails available for motorized use within the river corridor. Alternatives 4, 5 and 6 further enhance these values by imposing wet weather seasonal restrictions.

Table 3.09-27. Miles of Roads and Trails within the North Yuba River by Alternative

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres		10,634	0	0	0	0	0	0
Motorized trails un-authorized for motorized use		10.3	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Open Year Around**	9.8	5.9	9.8	9.8	5.9	7.9	9.8
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.0	3.8	3.8	0.0
Roads open to all vehicles	**Open Year Around**	3.5	7.4	3.5	3.5	3.6	1.5	3.5
	Subtotal NFS Roads	**13.3**	**13.3**	**13.3**	**13.3**	**13.3**	**13.3**	**13.3**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	2.7	2.7	2.7	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	2.7	2.7	2.7	0.0	0.0	0.0	2.7
Trails open to ATV's and motorcycles	**Seasonal Closure**	0.0	0.0	0.0	0.7	0.7	0.7	0.0
Trails open to ATV's and motorcycles	**Open Year Around**	0.7	0.7	0.7	0.0	0.0	0.0	0.7
Trails open to motorcycles	**Seasonal Closure**	0.0	0.0	0.0	2.4	2.4	2.4	0.0
Trails open to motorcycles	**Open Year Around**	2.4	2.4	2.4	0.0	0.0	0.0	2.4
	Subtotal NFS Motorized Trails	**5.9**	**5.9**	**5.9**	**5.9**	**5.9**	**5.9**	**5.9**
State, County or other jurisdiction roads	**Open Year Around**	43.9	43.9	43.9	43.9	43.9	43.9	43.9
Roads/trails on private land	**Open Year Around**	12.3	12.3	12.3	12.3	12.3	12.3	12.3
	Total Motorized	**85.7**	**75.4**	**75.4**	**75.4**	**75.4**	**75.4**	**75.4**
Roads/trails closed to motorized users	**Seasonal Closure**	0.0	10.3	10.3	10.3	10.3	10.3	10.3
Trails open only to non-motorized users	**Open Year Around**	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Trails open only to hikers and equestrians (No mountain bikes allowed)	**Open Year Around**	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	Subtotal Non-Motorized	**9.7**	**20.0**	**20.0**	**20.0**	**20.0**	**20.0**	**20.0**

Sagehen Creek

Sagehen Creek was considered to be a worthy addition into the National Wild and Scenic River System because of its outstandingly remarkable ecosystem values in the form of fens, unique plants, special geologic formations that support the fens, unique water chemistry that supports rare caddis flies, an excellent assemblage of native fisheries, unique wildlife values, and historical logging values eligible to the National Register of Historic Places. The stream posses the best ecological/botanical value of the Eastside Rivers considered. These values are further enhanced by a University of California research station that has provided extensive documentation of their natural values existing in and along this stream. All of the action alternatives maintain or enhance the outstandingly remarkable values of Sagehen Creek.

Cross Country Travel: Cross country travel will be prohibited on 2,165 acres within the river corridor in all of the action alternatives. The prohibition of cross country travel will prevent the proliferation of new un-authorized routes and will maintain or enhance the outstandingly remarkable values of Sagehen Creek. The prohibition of cross country travel also results in a reduction of the total amount of roads and trails available for motorized use in all of the action alternatives. Reducing the miles of roads and trails available for use by motor vehicles will enhance the outstandingly remarkable values associated with Sagehen Creek.

Additions to the National Forest System: There are no proposed additions to the National Forest Transportation System in any of the alternatives. Not adding any new roads or trails to the National Forest Transportation System will maintain or enhance the remarkably outstanding values associated with Sagehen Creek.

Changes in class of vehicle and season of use: Wet weather seasonal restrictions on all native surface roads and trails will be imposed in Alternatives 4, 5 and 6 which will improve the current water quality conditions and therefore enhance the outstandingly remarkable values associated with Sagehen Creek. The class of vehicles allowed will be changed from “Roads open to highway legal vehicles only” to “Roads open to all vehicles” on 2.1 miles in Alternatives 2, 5 and 6. These changes in class of vehicles allowed are the result of a mixed use analysis as described in Appendix S. Allowing mixed use on these existing National Forest System roads will have no impact of the rivers outstandingly remarkable values. Table 3.09-28 displays the miles of roads and trails within the Sagehen Creek Wild and Scenic River by alternative.

Table 3.09-28. Miles of Roads and Trails within Sagehen Creek by Alternative

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres		2,165	0	0	0	0	0	0
Motorized trails –un-authorized for motorized use		4.8	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Seasonal Closure**	2.0	0.0	2.0	2.0	0.0	0.0	2.0
Roads open to highway legal vehicles only	**Open Year Around**	0.1	0.0	0.1	0.1	0.0	0.0	0.1
Roads open to all vehicles	**Seasonal Closure**	0.0	2.0	0.0	7.6	9.7	0.0	0.0
Roads open to all vehicles	**Open Year Around**	7.6	7.7	7.6	0.0	0.0	0.0	7.6
	Subtotal NFS Roads	**9.7**	**9.7**	**9.7**	**9.7**	**9.7**	**9.7**	**9.7**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.2	0.2	0.2	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.2	0.2	0.2	0.0	0.0	0.0	0.2
	Subtotal NFS Motorized Trails	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**
State, County or other jurisdiction roads	**Open Year Around**	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	Total Motorized	**16.1**	**11.3**	**11.3**	**11.3**	**11.3**	**11.3**	**11.3**
Roads/trails closed to motorized users	**Seasonal Closure**	0.2	4.9	5.0	5.0	4.9	5.0	5.0
	Subtotal Non-Motorized	**0.2**	**4.9**	**5.0**	**5.0**	**4.9**	**5.0**	**5.0**
Previously decommissioned roads	**Closed**	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Canyon Creek

Canyon Creek was considered to be a worthy addition into the National Wild and Scenic River System because of its semi-primitive and primitive recreation and scenic values as well as its historic mining values. All of the action alternatives maintain or enhance the outstandingly remarkable values of Canyon Creek. By prohibiting cross country travel and reducing the amount of roads and trails open to motor vehicles.

Cross Country Travel: Cross country travel is prohibited on 4,565 acres within the Canyon Creek river corridor. The prohibition of cross country travel will prevent the proliferation of new un-authorized routes and will maintain or enhance the outstandingly remarkable values of Canyon Creek. The prohibition of cross country travel also results in a reduction of the total amount of roads and trails available for motorized use

Additions to the National Forest System: There are no proposed additions to the National Forest Transportation System in any of the alternatives. Not adding any new roads or trails to the National Forest Transportation System will maintain or enhance the remarkably outstanding values associated with Canyon Creek.

Changes in class of vehicle and season of use: There are no changes proposed to the class of vehicles allowed on existing National Forest System roads in any of the alternatives. Wet weather seasonal restrictions on all native surface roads and trails will be imposed in Alternatives 4, 5 and 6 which will improve the current water quality conditions. These seasonal restrictions will enhance the outstandingly remarkable values associated with Canyon Creek. Table 3.09-29 displays the miles of roads and trails within the Canyon Creek Wild and Scenic River by alternative.

Table 3.09-29. Miles of Roads and Trails within Canyon Creek by Alternative

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres		0	0	0	0	0	0	0
Motorized trails un-authorized for motorized use		2.4	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Open Year Around**	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Roads open to all vehicles	**Seasonal Closure**	0.0	0.0	0.0	1.4	1.4	1.4	0.0
Roads open to all vehicles	**Open Year Around**	1.4	1.4	1.4	0.0	0.0	0.0	1.4
	Subtotal NFS Roads	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**	**1.5**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	1.7	1.7	1.7	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	1.7	1.7	1.7	0.0	0.0	0.0	1.7
Trails open to motorcycles	**Open Year Around**	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	Subtotal NFS Motorized Trails	**3.8**	**3.8**	**3.8**	**3.8**	**3.8**	**3.8**	**3.8**
	Total Motorized	**7.7**	**5.3**	**5.3**	**5.3**	**5.3**	**5.3**	**5.3**
Roads/trails closed to motorized users	**Seasonal Closure**	0.0	2.4	2.4	2.4	2.4	2.4	2.4
	Subtotal Non-Motorized	**0.0**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**

South Yuba River

The South Yuba River below Spaulding was considered to be a worthy addition into the National Wild and Scenic River System because of its outstanding broad recreation opportunities and high scenic qualities, water associated recreation activities, and historic values. All of the action alternatives maintain or enhance the outstandingly remarkable values of the South Yuba River.

Cross Country Travel: Cross country travel will be prohibited on 3,161 acres within the river corridor in all of the action alternatives. All of the action alternatives also reduce the number of miles of roads and trails which will be available for motorized use. Reducing the miles of roads and trails available for use by motor vehicles will enhance the outstandingly remarkable values associated with the South Yuba River.

Additions to the National Forest System: Alternatives 2, 5 and 6 add a few short motorized trail spurs to the National Forest Transportation System which provide access to dispersed recreation sites. The nature of these motorized trails is fairly minor and they do not significantly detract from the outstandingly remarkable values associated with the river. Many of the motorized trails are used to provide access for water related recreation which is one of the outstandingly remarkable values of the river.

Changes in class of vehicle and season of use: The class of vehicles allowed will be changed from "Roads open to highway legal vehicles only" to "Roads open to all vehicles" on three tenths of a mile in Alternatives 2, 5 and 6. These changes in class of vehicles allowed are the result of a mixed use analysis as described in Appendix S. Allowing mixed use on these existing National Forest System roads will have no impact of the rivers outstandingly remarkable values. Wet weather seasonal restrictions on all native surface roads and trails will be imposed in Alternatives 4, 5 and 6 which will improve the current water associated recreation activities values of the South Yuba River. Table 3.09-29 displays the miles of roads and trails within the Canyon Creek Wild and Scenic River by alternative.

Table 3.09-30. Miles of Roads and Trails within South Yuba River by Alternative

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Cross Country Travel								
Acres		3,161	0	0	0	0	0	0
Motorized trails available for motorized use		2.4	0	0	0	0	0	0
Roads open to highway legal vehicles only	**Seasonal Closure**	0.3	0.0	0.3	0.3	0.0	0.0	0.3
Roads open to highway legal vehicles only	**Open Year Around**	4.1	2.3	4.1	4.1	2.3	2.7	4.1
Roads open to all vehicles	**Seasonal Closure**	0.0	0.3	0.0	0.7	1.3	1.3	0.0
Roads open to all vehicles	**Open Year Around**	0.7	2.5	0.7	0.0	1.5	1.1	0.7
	Subtotal NFS Roads	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**
Trails open to high clearance trail vehicles	**Seasonal Closure**	0.0	0.0	0.0	0.8	1.3	1.3	0.0
Trails open to high clearance trail vehicles	**Open Year Around**	0.8	1.3	0.8	0.0	0.0	0.0	0.8
	Subtotal NFS Motorized Trails	**0.8**	**1.3**	**0.8**	**0.8**	**1.3**	**1.3**	**0.8**
State, County or other jurisdiction roads	**Open Year Around**	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Roads/trails on private land	**Open Year Around**	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Total Motorized	**19.2**	**17.3**	**16.9**	**16.9**	**17.3**	**17.3**	**16.9**
Trails open only to non-motorized users	**Open Year Around**	9.6	9.6	9.6	9.6	9.6	9.6	9.6
Roads/trails closed to motorized users	**Open Year Around**	9.6	1.9	2.4	2.4	1.9	1.9	2.4
	Subtotal Non-Motorized	**19.3**	**11.5**	**12.0**	**12.0**	**11.5**	**11.5**	**12.0**

Research Natural Areas: Affected Environment and Environmental Consequences

The Forest has three areas: Lyon Peak/Needle Lake (700acres) located on the northern boundary of Granite Chief Wilderness, Sugar Pine Point (625 acres) located about 4 miles due south of Cisco Grove just north of the North Fork American River. Babbitt Peak (1061 acres) located north and west of Babbitt Peak on the Sierraville District. Babbitt Peak was designated for the distinctive and unusual occurrence of Washoe pine and mature stands of mountain mahogany and their significant potential for research and ecological study. Sugar Pine Point was designated for the good examples of the various stages of succession in a mixed conifer forest and the area represents a zone of overlap of ponderosa pine and Jeffrey pine. Lyon Peak was designated for the Mountain Hemlock and several other rare plants that provide high potential for research and ecological study. Motor vehicles are excluded from all three of these areas. No changes in management of these RNAs will occur under any alternative. There are no environmental consequences associated with RNAs in any of the alternatives.

Special Interest Areas: Affected Environment and Environmental Consequences

The 1990 Forest Land Management Plan designated 7 Special Interest Areas (SIA). Each area has specific language that may or may not permit some level of OHV use. In general due to the special nature of each of these areas, OHV trails would either be excluded or not encouraged. The Special Interest Areas are: Placer County Big Tree Grove Botanical Area (346 acres), Devils Postpile Geologic Area (69 acres), Glacier Meadow Geologic Area (84 acres) Grouse Falls Scenic Area (220), Meadow Lake Cultural Area (58 acres), Sagehen Headwaters (79 acres), and Mason Fen (30) acres. If an OHV trail is proposed within a SIA the land management plan direction and land allocation would have to be considered to determine if a trail was allowable and or appropriate. No changes in management of these SIAs will occur under any alternative. There are no environmental consequences associated with SIAs in any of the alternatives.