

E. SENSITIVITY ANALYSIS

A sensitivity analysis was conducted to determine the effect of changes made to FORPLAN between the DEIS and FEIS. Based on public review and comment, timber prices, price trends, and management costs were reviewed and changed. Other costs and model assumptions were also reviewed and modified. This section summarizes the testing procedure and describes the sensitivity of FORPLAN to these changes. Additional details are available in the planning records.

The analysis was done in two steps. The first step examines the effects of model changes excluding changes in timber prices and timber price trends. The second step analyzes the effects of base timber prices and price trends.

1. Sensitivity Analysis of Model Changes (Excluding Base Timber Prices and Price Trends).

The major FORPLAN changes made between the Draft and Final EIS are as follows:

a. Designation of Analysis Areas to Wilderness and Roadless

Because the acreage constraints in the model were not site specific, FORPLAN selected the least productive timberlands to make up recommended unroaded and wilderness, and the highest productive lands were assigned to timber management. Some of the land assigned to timber management was thus actually in recommended unroaded and wilderness. In this EIS the analysis areas which actually exist within the boundaries of recommended wilderness and unroaded management areas are identified and constrained.

b. Elk Winter Range Prescriptions

Winter range burning prescriptions in the DEIS assumed spring burning. Based on public comment these prescriptions were modified. Burning prescriptions now provide for the use of summer/fall burning, as well as spring burning.

c. Local/ Collector/Arterial Road Construction and Maintenance

In the DEIS, all road construction and maintenance costs were not considered in FORPLAN. For example, the model's total road maintenance costs per year in the first decade was only \$8,400, about 100 times less than required. Corrections to cost figures were made outside the model. Between the DEIS and FEIS the logic and assumptions for road construction and maintenance were changed to more accurately portray costs.

Existing road mileage has been determined by District, roaded/roadless status, and greater than or less than 55 percent slope. Additional miles of roads are needed to support the future timber program. The ultimate road densities needed for timber management are:

Road Densities
(miles/square mile)

	<u><55%</u>	<u>>55%</u>
Local	4.32	4.11
Local-Aerial	NA	3.00
Collector-Arterial	0.71	0.71

Each timber prescription that goes into solution picks up the additional mileage to reach the theoretical densities. The remaining local roads are assumed to be built during the first decade in which actual timber harvest occurs. The remaining collector-arterial roads are assumed to be built on a fixed rate according to the following schedule: 35 percent in the first and second decades; 20 percent in the third decade; and 10 percent in the fourth decade.

In FORPLAN, road construction and reconstruction costs are modeled using separate scheduled outputs for local and collector-arterial roads. An assumption is made that 40 percent of existing roads will be reconstructed at the time of initial entry and that normal maintenance will provide an adequate road thereafter. The per mile costs for construction and reconstruction are provided below.

Per Mile Construction/Reconstruction Road Cost

	(1978 \$)	
	<u><55%</u>	<u>>55%</u>
Collector-Arterial Cost	81200	81200
Collector-Arterial Reconst.	30700	30700
Local Construction	59700	135200

Scheduled outputs are also used which contain the cumulative miles of local and collector-arterial roads. The term "cumulative" means that newly constructed road miles are added to existing road miles. Road maintenance costs for each decade are calculated by multiplying cumulative road miles by the maintenance costs/mile/decade. These costs are as follows:

	<u>Cost/Mile/Decade</u>	
	(1978 \$)	
	<u><55%</u>	<u>>55%</u>
Local	1470	1730
Collector-Arterial	1530	1530
Local Reconstruction	6800	6800

d. Riparian Prescription

Riparian areas were modeled in the DEIS using an even-aged timber management prescription. Between the DEIS and FEIS this was changed to an uneven-aged

prescription. This prescription does a better job of representing the objectives of riparian area management and more accurately estimates outputs and effects.

e. Roadless Access

In the DEIS access to roadless areas was limited to 15 percent of the area in decade one. The justification for the limit was budget and work force. Upon review these reasons were determined to be invalid, and the limit was changed to 30 percent. The spatial feasibility of designing projects is now the limiting factor.

f. Sequential Bounds

The "sequential bounds" limit changes in timber harvest volume from one decade to the next. In the DEIS the volume could increase 20 percent from decade to decade. This was changed to 30 percent in the FEIS. This change was a result of the Forest Service's study, A Report on Idaho's Timber Supply, which indicates a declining timber supply from private industrial lands in decade two. The increase in this constraint allows the Clearwater to be responsive to future needs of the timber industry.

g. Sediment

Between the DEIS and FEIS the procedure used to model sediment in FORPLAN was revised. Sediment is entered in FORPLAN as a scheduled output. The coefficients are a function of logging treatments, road construction/reconstruction, residual sediment, and sediment from private land management.

The residual sediment is a result of past Forest Service activities and occurs on all roaded ground for the first two decades. The sediment from private land management is based on expected plans of private landowners. This sediment is modeled for two decades on Kelly Creek and Powell roaded areas and for three decades on the Palouse District.

Sediment from road construction/reconstruction occurs in decreasing amounts for three decades after the road is built. Sediment from logging-treatments occurs only in the decade of treatment.

h. Costs

Between the DEIS and FEIS all management costs were reviewed and adjusted if better information was available.

i. Sensitivity Test Results

To examine the effect of these model changes Alternative E, the DEIS Proposed Action, was rerun using the new data and assumptions. The results of this run are compared with the original Alternative E in Table B-35. The data in this table shows changes in FORPLAN costs and outputs only.

Table B-35. Effects of Sensitivity Analysis on Alternative E

Effects	Prior to Model Changes with 1980 Prices and Trends	After Model Changes with 1980 Prices and Trends
Total Volume (MMBF) *		
Decade 1	149.5	149.7
Decade 2	183.4	194.6
Decade 3	214.3	253.0
LTSY (MMBF) *	442.5	435.2
Acres Harvested (M acres) **		
Clearcut	4.5	4.6
Shelterwood	1.9	2.0
Selection	0.1	3.7
Burning (M acres) **	3.4	1.4
Elk (M elk) **	17.0	17.7
Sediment (M tons) **	15.2	9.6
Suitable Base (M acres)	997.4	963.3
PNV (MM\$)	1051.0	880.0
Discounted Benefits (MM\$)	3409.0	3575.0
Discounted Cost (MM\$)	2358.0	2695.0
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* Average annual

** Average annual in decade one.

The first decade timber harvest volume was fixed and did not change with the new run. The volumes in decades 2 and 3 and changed due to the sequential bounds changing from 20 percent to 30 percent and a 3.4 percent decline in total suitable acres.

The acres of selection harvest went from 0.1 to 3.7 thousand acres while the acres which were clearcut and shelterwood cut remained virtually the same. The

change in selection acres occurs on riparian areas where we switched from an even-aged to an uneven-aged management system.

Changes in wildlife burning prescriptions resulted in a 59 percent annual reduction in burn acres and a 4 percent increase in elk numbers. The new model incorporates both spring and summer burning, whereas the old model emphasized only spring burning. The use of summer burning to accomplish browse improvement is more effective because it better emulates natural processes. Thus, even though burning acres decreased, elk numbers do not.

Sediment between the old model and new model is reduced by 37 percent. In the new model sediment is inherent in the modeling process and is a function of road development, harvesting, and past practices as described earlier in this section.

The present net value decreased from \$1051 million to \$880 million, a 16 percent decrease. Suitable acres went from 997.4 thousand acres to 963.3 thousand acres. This represents a 3 percent reduction. While the amount of some practices such as selection harvest and burning change as a result of modeling changes the effect on PNV and suitable acres were not great. Discounted costs increased by 14 percent due to the review of model assumptions and management costs.

2. Sensitivity Analysis of Base Timber Prices and Price Trends

The timber values used in the DEIS were based on high bid prices for the years 1975 through 1980 and price projections developed for the 1980 RPA program. Since 1980, average stumpage prices have generally declined. In addition the price projections made for the 1985 RPA program are substantially lower than those made for the 1980 program. The purpose of this analysis was to determine the effect of lower timber prices and projections on the FORPLAN solution.

a. Base Timber Prices

Stumpage prices in the original analysis were based on high bid prices for the years 1975 through 1980. To adjust the prices to a wider base decade, that includes both high and low points in the lumber market, a ten year average price was calculated. This price is based on actual receipts for the years 1975 through 1984. The new 10 year average stumpage price for the Clearwater Forest is \$59.69/MBF (first qtr, 1978\$). This compares to a 1975-1980 bid price of \$82.65/MBF.

Variations in stumpage price based on average stand diameter, species mix, volume/acre harvested, and the logging and harvest method employed were modeled using the 1984 Transaction Evidence regression equation. A description of the methodology for calculating the new base stumpage price and applying the regression equation are contained in the planning record document, "Stumpage Prices in FORPLAN," summer, 1985.

b. Timber Price Trends

Price projections were originally based on research used in building the 1980

RPA Program (Adam and Haynes, 1980). Price trends have since been re-estimated by Adams and Haynes for the 1985 Draft RPA Program. Both the 1980 and 1985 sets of projections show prices increasing over a 50-year time period. However, the 1985 Draft RPA projection increases at a slower rate. The following table shows the average effect of both the 1980 and 1985 RPA price trends as applied to the base timber prices.

Table B-36.

Projected Stumpage Prices/MBF
(1st qtr, 1978\$)

<u>Decade</u> <u>Year</u>	<u>0</u> 1980	<u>1</u> 1985	<u>2</u> 1995	<u>3</u> 2005	<u>4</u> 2015	<u>5</u> 2025	<u>6</u> 2030+
Original prices & 1980 RPA trends	82.65	100.73	131.32	169.12	225.30	282.38	314.68
Revised prices & 1985 RPA trends	59.69	59.69	62.82	73.37	91.89	112.87	122.78

c. Sensitivity Test Results

To test the sensitivity of the model to the new prices and trends, a modified version of the Preferred Alternative K was created. In this model the suitable timber acreage was allowed to vary, and the timber harvest floor for decade one was removed. All other aspects of Alternative K such as wilderness land designations, accessibility constraints, and scheduled outputs were left intact.

This revised model was then solved using both the original and the new timber prices and trends. The solution using the 1975-1980 base price and the 1980 RPA trends is called run, "S/OLD," while the solution using the 1975-1984 prices and 1985 RPA trends is called run, "S/NEW." The results of these runs are summarized in the Table B-37 and B-38.

Table B-37.

Annual Average Harvest Volume (MMBF) Per Decade

<u>Decade</u>	<u>Run S/OLD</u>	<u>Run S/NEW</u>	<u>% Change</u>
1	163	142	-12.8%
2	212	185	-12.8%
3	276	241	-12.8%
4	359	313	-12.8%
5-15	425	407	- 4.2%

Table B-38.

Suitable Acreage, LITS', and Associated PNV

Suit. Acres	940 M	903 M	- 4.0%
LTSY (annual)	425 MMBF	407 MMBF	- 4.2%
PNV	\$852 MM	\$283 MM	-66.8%

With the new prices and trends, the timber harvest for decade one declined by 12.8 percent and the long-term sustained yield and suitable timber base declined by approximately 4 percent. The PNV in contrast declined 66.8 percent. The large decline in PNV is due to the fact that future timber prices as projected by the 1980 data are about 2.5 times larger than prices projected using the 1985 data. The relatively small decline in suitable acres means that most of the areas are still above the economic margin when new prices and trends are assumed. The sensitivity of land designation to the changes in the base timber prices and trends was thus quite small.

Table B-39 shows the suitable timber acres for each run based on roaded versus roadless, land class (breaklands and nonbreaks), and productivity group. Note that with each possible combination of road class and land class the suitable acreage change is less than 10 percent.

Table B-39. Suitable Timber Acres by Roaded vs Roadless, Land Class, and Productivity Group

<u>ROADED AREAS</u>		Suitable Acres (thousands)		
	<u>S/OLD</u>	<u>S/NEW</u>	<u>% Change</u>	
< 55% Nonbreaks				
Prod-1	317.42	310.70		
Prod-2	89.00	87.42		
Prod-3	15.98	15.98		
Riparian	<u>51.35</u>	<u>51.35</u>		
Total	473.75	465.45	- 1.8%	
> 55% Breaklands				
Prod-1	68.75	62.77		
Prod-2	17.77	16.99		
Prod-3	2.02	2.02		
Riparian	<u>15.75</u>	<u>15.75</u>		
Total	104.29	97.53	- 6.5%	

Total Roaded	578.04	562.99	- 2.6%	
.....				
<u>ROADLESS AREAS</u>		Suitable Acres (thousands)		
	<u>S/OLD</u>	<u>S/NEW</u>	<u>% Change</u>	
< 55% Nonbreaks				
Prod-1	87.79	79.30		
Prod-2	83.43	82.99		
Prod-3	50.93	46.50		
Riparian	<u>23.49</u>	<u>25.13</u>		
Total	245.64	233.92	- 4.8%	
> 55% Breaklands				
Prod-1	65.62	60.93		
Prod-2	22.98	22.83		
Prod-3	8.84	3.13		
Riparian	<u>19.02</u>	<u>18.75</u>		
Total	116.45	105.64	- 9.3%	

Total Roadless	362.09	339.56	- 6.2%	

REFERENCES FOR APPENDIX B

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Appendix C

Roadless Areas

I. INTRODUCTION

The Clearwater National Forest contains 16 roadless areas totaling 950,311 acres. Five of the roadless areas overlap into other National Forests adjacent to the Clearwater. These Forests are the Idaho Panhandle, Lolo, and Nez Perce Forests. This appendix includes an evaluation of each roadless area and supplements the descriptions in Chapter 3 and the analysis in Chapters 2 and 4 of the Environmental Impact Statement (EIS).

Each roadless area write-up addresses the following criteria: 1) the location and description of the area; 2) the area's capability for wilderness; 3) the other resource values of the area; 4) the need for the area in the National Wilderness Preservation System; and 5) the alternatives and consequences of various types of management.

Management emphasis indicates which resource activity will be highlighted. For example, if the emphasis is timber, most of the activity on those acres would intensify roading and timber management. Resource activities that are compatible with timber would continue.

Forest management areas were grouped into eight "management emphasis" groups because of similar impacts on the wilderness and roadless areas' resources. These groups are:

- 1) wilderness,
- 2) unroaded,
- 3) elk winter range,
- 4) timber/wildlife-watershed,
- 5) timber/visual-riparian,
- 6) timber/special,
- 7) special,
- 8) protection.

For a more detailed description of the management areas see Appendix B and the Forest Plan, Chapter III.

In case of areas contiguous to other National Forests, an explanation of how the management emphasis was formulated is included in the individual roadless area descriptions.

II. NEED

Approximately 20 percent (642) of the 3,300 public comments received between the draft and final documents expressed concerns about roadless areas. About half of those were form-letters which contained statements about eliminating roadless areas. Most of these respondents just signed the form without stating any personal reasons.

Those in favor of roadless areas wanted to preserve the area for elk, fish, recreation, and scenery. Some recognized the need for timber harvest in some areas, but only in the future when better technology would be available. Many

of those favoring less roadless areas objected to the lack of roads which prevents them from recreating in the area; prevents fire and insects control; and prevents multiple-use management.

General comments followed along the same lines as the "for" or "against" comments, but were not as specific. One question asked many times was: "Wouldn't it be more cost effective to leave an area roadless rather than develop it for timber harvest?"

Almost without exception, all of the comments which mentioned specific roadless areas were opposed to development. The majority of these comments were about Kelly Creek. Other areas addressed were: White Sands, Minnesaka, Mallard-Larkins, Cayuse Creek, Great Burn, Pot Mountain, North Lochsa Slope, Wier-Post Office, Lochsa Face, Eldorado Creek, Toboggan area, Meadow Creek drainage, and Fish Creek/Hungery Creek. For specific discussions of the comments, see each roadless area write-up.

Following are Tables C-1, C-2, and C-3 which provide information applicable to all the roadless areas. Tables C-1 and C-2 display the number of miles from the roadless areas to existing wilderness and to population centers in Idaho, western Montana, and eastern Washington. Table C-3, starting on page C-4, lists management areas and management emphases. This table refers to Section IV of each roadless area write-up which contains a discussion about the impacts of management activities on various resources.

 Table C-1. Regional Population Centers and Proximity to Roadless Areas
 Clearwater National Forest

Population Center	<50 Miles		51-100 Miles		101-200 Miles		201-300 Miles	
	Areas	M Acres	Areas	M Acres	Areas	M Acres	Areas	M Acres
Lewiston, ID			13	894.4	3	55.9		
Spokane, WA					16	950		
Boise, ID					6	520.6	7	329.7
Twin Falls, ID							16	950.3
Missoula, MT	6	513.6	7	436.7				
Great Falls, MT					13	898.7	3	51.6

 Table C-2. Regional Wilderness Opportunities and Proximity to Roadless Areas

<u>Wilderness Name</u>	<u>Central Location</u>	<u>Net Acres</u>	(Miles) <u>Proximity to Roadless Areas on Clearwater NF</u>
Gospel Hump	Central Idaho	205,900	40
Hells Canyon	Central Idaho	83,800	65
Hells Canyon	Eastern Oregon	108,433	65
River of No Return	Central Idaho	2,229,211	50
Sawtooth	Central Idaho	217,088	135
Selway-Bitterroot	Central Idaho	1,089,017	Contiguous
Selway-Bitterroot	Western Montana	248,893	Contiguous
Absaroka-Beartooth	South-Central Montana	920,377	195
Anaconda-Pintler	Western Montana	157,874	55
Bob Marshall	Western Montana	1,009,356	100
Cabinet Mountains	Western Montana	94,272	90
Gates of the Mountain	Western Montana	28,562	130
Great Bear	Western Montana	286,700	110
Mission Mountains	Western Montana	73,877	65
Rattlesnake	Western Montana	20,039	50
Scapegoat	Western Montana	239,296	85
Welcome Creek	Western Montana	28,135	25
Eagle Cap	Eastern Oregon	293,476	110
Strawberry Mountain	Central Oregon	33,003	210
Alpine Lakes	Central Washington	305,322	235
Glacier Peak	Central Washington	464,237	250
Pasayten	North-Central Washington	505,524	240
Wenaha-Tucannon	South-East Washington	111,052	100
Wenaha-Tucannon	North-East Oregon	66,375	100
North Absaroka	North-West Wyoming	350,564	250
Teton	Western Wyoming	557,312	250

	<u>Areas</u>	<u>Acres</u>
Total wilderness less than 100 miles from Clearwater National Forest Roadless	10	4,578,747
Total wilderness 100-200 miles from Clearwater National Forest Roadless	7	2,932,986
Total wilderness 200-300 miles from Clearwater National Forest Roadless	6	2,215,962

Table C-3. Management Emphasis and Management Prescriptions

MANAGEMENT EMPHASIS	MANAGEMENT AREAS
Wilderness	<p>B2 Recommended wilderness to protect wilderness characteristics. Two of the seven areas are adjacent to recommended wilderness on Idaho Panhandle (Mallard-Larkins) and Lolo (Hoodoo) National Forests.</p>
Unroaded	<p>A2 Elk Creek Falls, special dispersed, recreational area in the Palouse District. Will be managed for nonmotorized use, primarily, hiking, picnicking, and scenic viewing.</p> <p>A3 Dispersed areas occurring in large blocks of undeveloped land (or smaller areas adjacent to wilderness or other undeveloped lands). Will be managed for a variety of dispersed recreation. Big-game summer range management and livestock grazing will be provided when compatible with recreational and visual values.</p> <p>C1 Key big-game summer range. Habitat will be maintained through vegetative manipulation, but without roads. Livestock grazing will be provided where compatible with elk and with dispersed recreation.</p> <p>C6 Sensitive watersheds with high fishery values. Potential unstable or erosive soils preclude road construction. Other resource management activities and uses will be permitted when compatible with fishery values. Often suitable for dispersed recreation.</p>
Elk Winter	<p>C3 Big-game winter range located generally on steep breaklands on south exposures supporting browse stands. Critical soils. May be suitable for some dispersed recreation. Occurs in conjunction with C4, C1, C6, and A3 lands.</p>
Timber/Wildlife-Watershed	<p>E1 Timberland managed to optimize potential timber growth. Will be managed to be cost effective and will provide maximum protection of soil and water quality. Big</p>

(Table C-3. cont.) Management Emphasis and Management Prescriptions

MANAGEMENT
EMPHASIS

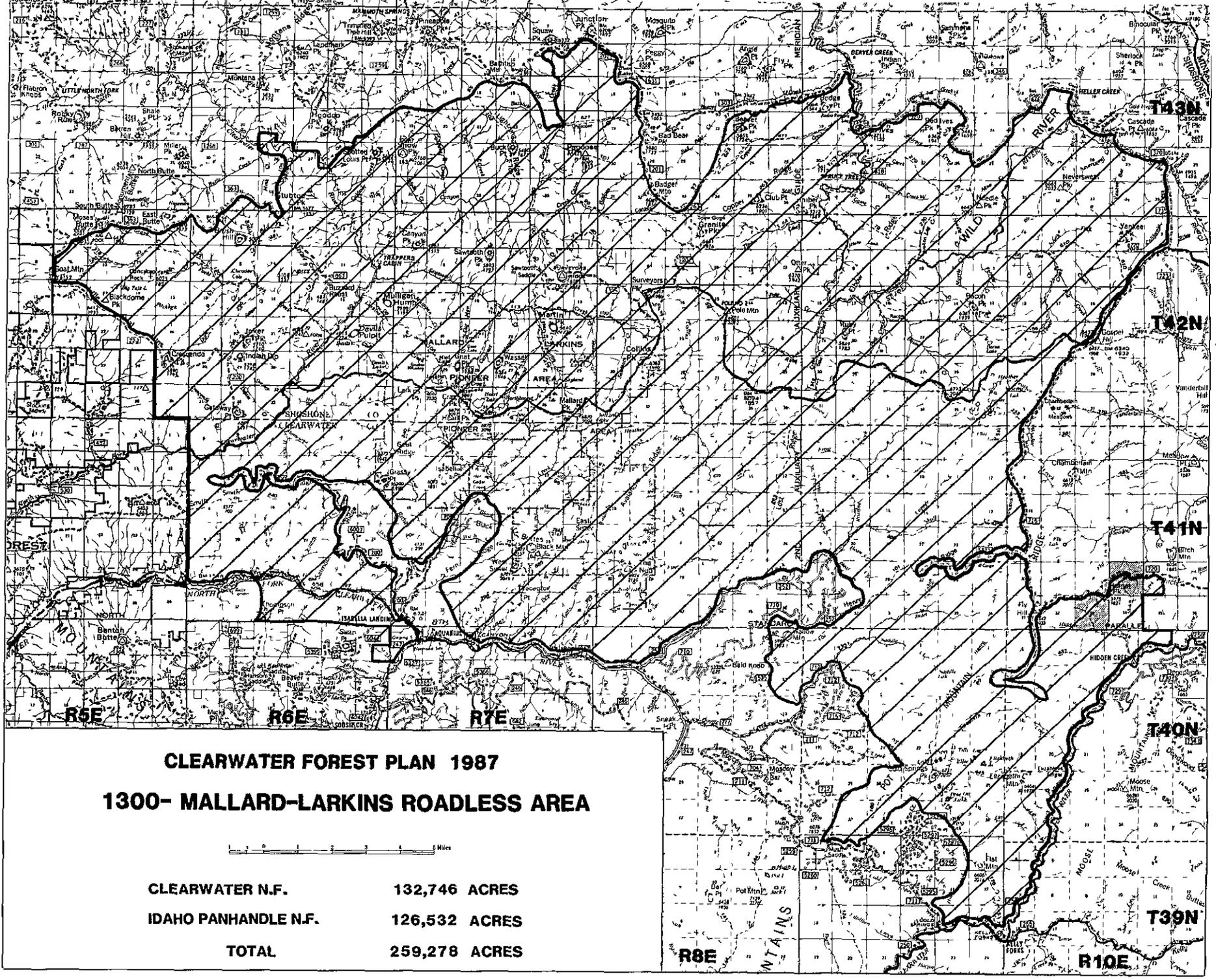
MANAGEMENT
AREAS

	<p>game, primarily elk, will be managed through limited road closures. Dispersed recreation and livestock grazing will be provided, if compatible with timber goals.</p>
	<p>C2 Big-game summer range managed for elk forage and security through modified timber and range management. Roads will be closed when needed. Provides location for dispersed recreation.</p>
	<p>C4 Big-game winter range located generally on steep breaklands on north aspects supporting mixtures of browse and trees. Browse and timber production will be managed for big-game habitat.</p>
	<p>E3 Timberland located on steep and/or unstable ground. Will be managed for timber using aerial harvest methods operating from roads on adjacent lands. Interspersed with E1 lands. Because of steep slopes, unsuitable for most other uses except some dispersed recreation.</p>
Timber/Visual-Riparian	<p>A4 Travel corridors along designated roads and trails. Natural scenic qualities and settings for dispersed recreation will be maintained or enhanced. Big-game summer range and timber management will be modified to meet key values.</p>
	<p>A6 Travel corridors along historic travel ways specifically Lolo Trail, Lewis and Clark Trail, Nee-Me-Poo Trail, and Lolo Motorway. Historic and scenic values will be maintained. Timber, range, and wildlife management will be modified to maintain key values. VIS and opportunities for dispersed recreation will be provided.</p>
	<p>M2 Riparian areas located mostly along perennial streams. Management practices such as timber harvesting, grazing, and recreation will be provided to the extent that they protect and enhance riparian values (old-growth, aquatic ecosystems,</p>

(Table C-3. cont.) Management Emphasis and Management Prescriptions

MANAGEMENT EMPHASIS	MANAGEMENT AREAS
	water quality, and fishery and wildlife habitats).
Timber/Special	C8S Key big-game summer range located adjacent to high quality, fishery streams. Areas will be managed for timber and protection of big-game habitat, primarily through road closures. Special emphasis will be on watershed protection when needed.
Special Areas	A7 Classified Middle Fork-Lochsa and St. Joe Wild and Scenic River Corridors. Will be managed for dispersed recreation and for protection and enhancement of the river environment, specifically water quality and visual values. Big-game habitat and timber management will be provided when compatible with the key values.
	M1 Proposed and existing, research natural areas, and special interest areas of botanical, geological, historical values. Will be maintained in their natural and undeveloped state.
Protection	US Although not technically a management area, each alternative contains a certain number of acres identified as being unsuitable for timber management. This includes 3 types of land: nonforest and low productive Forest land not capable of producing crops of industrial wood, and lands with apparent regeneration limitations. These lands will be managed for soil and watershed protection.

ROADLESS AREAS



CLEARWATER FOREST PLAN 1987
1300- MALLARD-LARKINS ROADLESS AREA



CLEARWATER N.F.	132,746 ACRES
IDAHO PANHANDLE N.F.	126,532 ACRES
TOTAL	259,278 ACRES

2-8

MALLARD-LARKINS ROADLESS AREA (01300)

IDAHO PANHANDLE AND CLEARWATER NATIONAL FORESTS

	Gross Acres	Net Acres
Idaho-Clearwater NF	136,361	132,746
Idaho-Idaho Panhandle NF	143,341	127,062
TOTAL	279,702	259,808

I. DESCRIPTION

The Mallard-Larkins Roadless Area extends west from the Bitterroot Mountain Range generally following the divide between the St. Joe River and the Clearwater River drainages. It is situated approximately 36 miles southeast of Avery, Idaho; 60 miles northeast of Orofino, Idaho; and 20 miles southwest of Superior, Montana. Mallard-Larkins is in Clearwater and Shoshone Counties in the Clearwater and Idaho Panhandle National Forests.

The area is generally accessible by moderate to low-standard, gravel and dirt roads. Access along the north side is provided from several dead-end roads extending south to and into the interior from the main St. Joe River road and from Red Ives work center east on Road #320. Access to the east side is possible from the Pierce-Superior Road #250, the Fly Hill Road #720, and the Pot Mountain Ridge Road #715. Access to the south side is from numerous logging roads in the Cold Springs, Quartz, and Skull Creek drainages, and the North Fork Clearwater River Road #249. The southwest corner is accessed by the Dog Ridge Road #700.

Interior access, with some exceptions, is provided over a network of approximately 280 miles of low-standard, trails constructed primarily for fire control and administrative purposes. Several trails into the more popular areas such as the original Mallard-Larkins Pioneer Area and along the upper St. Joe River have been improved to some extent in recent years.

The unit is large and complex, composed of mostly steep, rocky ridges, and deep canyons. The taller major peaks include Mallard Peak (6,870 feet); Larkins Peak (6,661 feet); Crag Peak (6,879 feet); Heart Peak (6,870 feet); Black Mountain (7,077 feet); East Sister (7,043 feet); The Nub (6,924 feet); Cold Springs Peak (6,731 feet); and Five Lakes Butte (6,713 feet).

Flowing through the area are parts of three river systems; and numerous large and small, fast moving but mostly crystal-clear streams. The three river systems include most of the headwaters of the St. Joe River, a large section of the Little North Fork of the Clearwater River, and the main North Fork of the Clearwater River. The North Fork passes through a small section above Dworshak Reservoir and borders several stretches of the area along the east and south sides. A major divide separates the Little North Fork and St. Joe Rivers from the land draining into the main North Fork of the Clearwater. Major streams

draining into the Little North Fork include Sawtooth Creek, Canyon Creek, and Foehl Creek. Major streams draining into the main North Fork of the Clearwater include Isabella Creek, Collins Creek, Skull Creek, and Quartz Creek. There are 38 mountain lakes large enough to be named. Heart Lake, containing 35 acres, is the largest Lake in the area.

This roadless area increased slightly in size in July 1986 due to the Idaho Panhandle Forest's Fiscal Year-1984 planning of road construction activities. These were Plum Creek Timber Company projects in the Buck Creek and Pole Mountain areas and have not yet occurred.

Most of the area is underlain by metamorphosed rocks of the Precambrian Belt supergroup consisting of rocks from the Wallace formation, Ravalli group, and Prichard formation. These units contain interbedded layers of quartzite, schists, and gneiss. The extreme southeastern portion contains some rocks of the Cretaceous Idaho batholith consisting mainly of a coarse-grained granite.

Although there are numerous outcroppings, talus slopes, and barren areas, a large portion is heavily vegetated ranging from mountain grasslands and meadows to dense mixtures of large varieties of trees and shrubs. Two vegetative ecosystems are present: a cedar-hemlock-pine forest at elevations generally below 6,000 feet and a western spruce-fir forest above 6,000 feet.

Approximately 80 percent of the land was burned over in 1910 and much of it again in 1919, 1920, and 1924. Where conditions are favorable, vast stands of lodgepole pine, Douglas fir, grand fir, Engelmann spruce, larch, western red cedar, western white pine, and mountain hemlock exist, some escaping the fires but most regenerating afterwards. Where the soils are thin and conditions severe, such as on the higher ridges and steep south-facing slopes, shrubs still dominate the sites. The lands above 6,000 feet support mountain hemlock, subalpine fir, and lodgepole pine.

From a recreationist's point of view, there are three major attractions: 1) The original Mallard-Larkins Pioneer Area which is a highly scenic area along the major divide between the Little North Fork and the main North Fork River systems. It contains a large concentration of high peaks and mountain lakes and is relatively accessible by a good trail system. 2) The Five Lakes Butte area along the upper northeast side of the roadless area bounded by the Fly Hill-Gospel Hill road. Its main attraction is the open mountain grasslands, barren ground and a cluster of lakes within easy walking distance of each other. 3) Elizabeth Lakes area in the southeast corner above the main North Fork of the Clearwater River, also, is composed of several mountain peaks and a cluster of eight small lakes all within two miles of each other.

In addition to the above, fishing opportunities in the Little North Fork and upper St. Joe Rivers are a major attraction. The St. Joe River is managed as a wild river under the Wild and Scenic Rivers Act. Wildlife, especially elk, deer, and mountain goats attract numerous hunters each year. Miners were and still are attracted to the area especially in the St. Joe River drainage as attested to by numerous current claims and past activity.

Historic uses included mining, logging, and Forest Service administrative activities.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Most visitors to the Mallard-Larkins area will probably not be aware of any improvements or alterations by man. Areas ranging from 5,000 to 20,000 acres exist which are undisturbed except by trails. However, the entire acreage of the area examined during RARE II does include a number of trails, roads, recreational facilities, special uses, historical sites, and mineral developments.

While there are large areas of undisturbed country, approximately 20 miles of road intrude into the area from six different locations. Except for two new timber sale roads in the Hidden-Fix Creek, Minnesaka Creek, and Selway Creek areas, these roads are relatively primitive, accessing lookouts (some of which have since been removed) and mining claims.

Timber harvesting activities past and present are found in many drainages adjacent to the area along the southern and northern boundaries.

Several developed recreational facilities and Forest Service lookouts are present. A campground located at Spruce Tree has five campsites, a well, two outhouses, an information sign, and trailhead parking. Sawtooth Saddle has trailhead parking and an outhouse. Five lookouts which are still in usable condition sit on top of Snow Peak, Mallard Peak, Surveyor's Ridge, Black Mountain, and Wallow Mountain. The Mallard Peak Lookout has been nominated to the National Register of Historic Places. The other lookouts are used by the Forest Service for fire suppression and communication purposes. In addition, abandoned lookout sites contain evidence in the form of debris or concrete footings at many of these sites.

Two base camps and several historical cabins can also be found. St. Joe Lodge and Resort is operated seasonally by an outfitter-guide under a special use permit. The lodge is on the St. Joe River, five miles above the end of the road. Facilities include a cookhouse, bunkhouse, barn, outhouses, corrals, fences, and tent pads. Use occurs from July to November. Another outfitter-guide operation has a camp at Elk Prairie near Granite Peak. The only permanent improvements are a water tank and outhouse. The camp is in operation during hunting season. Cabins and cabin-remains have been identified during archaeological examinations at Yankee Bar Creek, Neversweat Creek, California Creek, Broken Leg Creek, and Canyon Creek.

In the past, mining and mineral exploration has had some impact on the area's natural integrity. The most significant development is the garnet mine at Scat Creek Flat on the St. Joe River. Rusted mining equipment, a dredge pond, and old cabins have significantly altered the natural quality of the area. Hydraulic mining scars are found in the Mallard-Larkins area at California Creek, Yankee Bar Creek, and the North Fork of Bean Creek. Mill operations were incidental to the mining activities early in the century. A small old sawmill with some associated logging has been located near Bean Creek. Almost all the evidence of the mill's existence is gone.

A claim in Marquette Creek was worked a number of years ago with very little evidence remaining now. An open pit hardrock mine on Indian Henry Ridge is still very evident although it covers only a small area.

In the past, grazing has taken place at many locations. Very little evidence of this use is noticeable. Presently, a small number of stock are grazed by outfitters under special use permits.

Screening by vegetation and topographic features is good. Overuse by visitors is evident at a few of the more popular lakes such as Heart and Northbound Lakes.

**B. OPPORTUNITIES FOR EXPERIENCES OFTEN
UNIQUE TO WILDERNESS**

Except for light traffic on the intruding roads and moderate to heavy traffic over the major adjacent roads, the area has a high degree of solitude. The varied terrain and the vastness of it enables the visitor to experience complete solitude in many areas. Concentrations of people around the lakes and along the major trails may tend to disrupt the solitude at certain times.

Viewing of activities outside the area, such as logging and roads, is possible from numerous high ridges along the north and south boundaries. Large scale logging activity is especially evident in the middle-ground-viewing area from the Black Mountain-Nub area and the Flat Mountain area. Most views, however, are background views and not overly distractive except at isolated points.

Noise may penetrate short distances in the vicinity of the two major roads bordering parts of the area; the Pierce-Superior Road (FS Road #250) and the Cedars-Red Ives Road (FS Roads #715 and #720). Noise from road building and logging activity will also be evident near many fringe areas along most borders.

Opportunities for solitude also vary by season. The access roads are blocked by snow from November to May so use is extremely low. Hunting season brings many individuals to the area for a quality roadless hunt.

The Black Mountain Lookout is currently manned and serviced via helicopter which detracts from the solitude in a small portion of the area. The lookout is approximately eight miles from the nearest road over a very steep trail.

Hiking, primitive camping, outdoor photography, lake and stream fishing, hunting, horseback riding, and to a very limited extent, mountain climbing opportunities are available. Except for the Five Lakes Butte area, cross country travel is a definite challenge involving a certain degree of risk over the rugged terrain, steep narrow canyons and densely vegetated slopes. There are no facilities to enhance comfort or convenience.

During high water runoff in May or June, there may be limited opportunities for rafting and kayaking on the Little North Fork, although access to the river is by trail and cross country up to several miles. Also, once on the river, the user is committed for 12-15 miles until reaching the upper end of the Dworshak pool.

C. SPECIAL FEATURES

The Mallard-Larkins area supports one of the largest Rocky Mountain goat populations in Northern Idaho. Mallard, Heart, Snow, and Isabella Peaks and Black Mountain offer unique viewing and photographing opportunities of these animals during the spring and summer months. The creatures will shy away at first but their curious nature brings them to inspect one's camp at close quarters once activities have ceased. The Snow Peak and Black Mountain herds are used for transplanting by the Idaho Department of Fish and Game. A limited number of goat-hunting permits are issued each year.

The historic past of this area is interesting. While little physical evidence remains, history buffs can retrace the steps of Indians, trappers, and early Forest Service employees over Pot Mountain trail #169, along the North Fork of the Clearwater River, along the present Indian Henry Ridge trail, and along the divide between the St. Joe and Clearwater River drainages. The overgrown scars of the early mining era are a tribute to the many hours of hand labor put in by the early settlers.

Current known cultural resource sites includes 16 USFS lookout site locations, eight cabins or cabin remains, one hollowed-out cedar tree used for shelter, Pole Mountain Ranger Station location, six historic hunting/outfitter camps, two prehistoric usage areas, one mining site, and one trapping site.

The Heritage Cedar Grove, which is a large stand of very large and old western cedar located near the junction of Elmer Creek and Jug Creek, is another attraction for visitors. Access is by trail two miles up Isabella Creek.

Unconfirmed reports of threatened and endangered species, principally grizzly bears, gray wolves, and bald eagles, are recorded.

A 17-mile stretch of the St. Joe River was designated as a Wild River in 1972 under the Wild and Scenic Rivers Act of 1969.

Research natural areas have been proposed for the Five Lakes Butte area and for the Aquarius area in the North Fork of the Clearwater River.

D. EFFECTS OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

Although there are numerous intrusions mostly from dead-end logging, lookout, and mining roads, the large size of the area effectively negates most of these effects. Present and expected future use over these roads is very low, further reducing potential effects.

E. MANAGEABILITY AND BOUNDARIES

The roadless area boundaries of Mallard-Larkins varies from major Forest roads to undefinable county lines. In general, it is bounded on the north and east sides by dirt roads, the west side by Forest boundaries, parts of the south and southeast side by highly used graveled roads and the rest by timber cutting boundaries and logging roads.

Of major consideration is the 14,460 acres of land belonging to Burlington Northern which lays in a checkerboard pattern running in a band diagonally northwest-southeast from the north boundary into the head of Collins Creek. The Forest Service has entered into a cooperative agreement with the land owners to coordinate and streamline all road building activity that crosses both Forest Service and private land.

Existing special management areas have had a major influence on the protection and enhancement of this area. The Mallard-Larkins Pioneer Area which covers 30,500 acres and encompasses the Mallard-Larkins and Black Mountain-Nub Peak group of lakes and peaks was designated by the Regional Forester in 1969 as a special administrative unit. The special area was set aside for its outstanding scenic, roadless, and primitive recreational qualities.

Current management of this special area is essentially wilderness in practice in accordance with the management plan which was completed in the early 1970's. Overall, this special area receives the highest proportion of use in the entire area.

As stated previously, the St. Joe River is part of the National Wild and Scenic River system. The approximately 6,800 acres of river corridor within the Mallard-Larkins Area is designated as a wild river. Management of this area is directed by the St. Joe Wild and Scenic River Management Plan.

The 1979 RARE II evaluation resulted in a wilderness recommendation for 67,910 acres. This recommendation eliminates all private land and the majority of the roads and external intrusions into the area. It includes in its entirety the original Mallard-Larkins Pioneer Area. The boundaries vary from roads and trails to property boundaries and general cross county lines, which in the latter situations are difficult to locate on the ground.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Although there are numerous potential developed sites, the actual construction of such sites is dependent on road access, funding, and need. Current and anticipated future funding outlooks are very low in this respect. Primitive, semiprimitive, and dispersed types of recreation have been discussed under previous sections.

2. Wildlife and Fish - Elk and deer, primarily mule deer, are the most abundant big game. Other large animals include mountain goats (discussed previously), moose, black bears, and mountain lions.

Approximately 41,300 acres of key big-game (primarily elk) winter range have been identified. Many of these acres are in need of rehabilitation, i.e., timber cutting and/or browse burning to stimulate growth of existing browse and provide opportunities for regeneration of new shrubs.

Although no verified sightings or other confirmed evidence of the endangered gray wolf exists in the roadless area, habitat conditions conducive to the wolf

have resulted in 90,000 acres being designated as essential habitat. The management of an adequate prey base, which in this case is primarily elk, and restrictions of motorized use on roads are two major components for protection and enhancement of this endangered species.

Many of the 38 lakes contain fish, mostly cutthroat and rainbow trout. The rivers and larger streams support excellent trout fisheries. The upper St. Joe River has been designated as a three-limit-fishery with a minimum length of 13 inches. This has tended to increase the size of the fish and provide a higher quality fishery. The lack of easy access has tended to perpetuate this type of quality fishery.

3. Livestock Operations - With only about 3,600 acres of suitable livestock range, grazing is not a significant use. Most use is by outfitters and guides for horse and mule grazing during the summer and early fall.

4. Timber - Approximately 69 percent or 174,000 acres of the Mallard-Larkins area is capable of producing timber. The potential yield of the area varies from low to high considering the wide variety of ecological factors that affect an area this large. The standing volume of sawtimber is estimated at 2 MMBF. This is not verified, however, as very few actual inventory plots were ever taken in the area.

5. Minerals - The potential for minerals of the area ranges from low to moderate with approximately 95 percent at the low end. Although portions of the area were proposed for wilderness as a result of RARE II, no studies have been done by the U.S. Geological Survey or U.S. Bureau of Mines.

The upper St. Joe River valley was promising enough to attract many turn-of-the-century miners but no major developments resulted. Limited activity on the Clearwater-side has resulted in no current development.

Several copper occurrences are near Granite Peak, and there is a potential aluminum deposit near Goat Mountain.

Potential for oil and gas is low. Several oil and gas lease applications on both Forests are pending.

The larger lakes within the original Mallard-Larkins Pioneer Area and the St. Joe Wild and Scenic River Corridor are withdrawn from mineral entry. All oil and gas lease applications have been either rejected or withdrawn.

6. Land Uses - The area currently supports four separate outfitter and guide businesses. Most of the use is for big-game hunters in the fall. While there may be additional potential, it is limited under present Idaho outfitter and guide licensing practices.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1. Non-Federal Lands - The Burlington Northern Railroad Company owns 19,151 acres of intermingled land within the boundaries of this roadless area. Most of it occurs in a checkerboard pattern in the Canyon and Buck Creek drainages in the Idaho Panhandle Forest with only 3,600 acres in the head of Collins Creek in the Clearwater Forest.

(Table C-4 cont.)

01300 - Mallard-Larkins

<u>Description</u>		<u>Clwtr</u>	<u>IPNF</u>	<u>Total</u>
Winter Habitat	Acres	0	0	0
Elk				
Summer Habitat-Key	Acres	5,650	0	5,650
Winter Habitat-Key	Acres	27,394	13,184	41,320
Significant Fisheries				
Stream Miles	Miles	533	85	618
Stream Habitat	Acres	898	190	1,088
Lakes	No.	5	12	17
Lakes - Habitat	Acres	88	315	403
Water Developments				
Existing	No.	0	0	0
Minerals				
Potential Hardrock				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	0	5,120	5,120
Low	Acres	132,746	121,942	254,688
Claims	No.	3	14	17
Potential Oil and Gas				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	0	69,120	69,120
Low	Acres	0	126,532	126,532
Oil and Gas Leases				
Leases	No.	0	0	0
Leased Area	Acres	0	0	0

IV. NEED

A. GENERAL

Mallard-Larkins is characterized by stark, rugged subalpine country dotted with numerous glacial lakes. Scenic views are extraordinary to spectacular. Wildfire burns in 1910 and subsequent years have left the Mallard-Larkins with a mix of plant life in various stages that are ecologically diverse. The nations largest mountain hemlock was recently identified within its boundaries.

It also supports a large variety of wildlife including mountain goats and is considered key big-game summer range for elk and deer. Its high quality free-flowing waters support a cutthroat fishery. Primitive settings for recreating abound within this isolated country. Other attributes of the Mallard-Larkins include varied geology as well as cultural and historical values.

The area has a high degree of interest by local, regional, and even national conservation and wilderness groups. The area became a concern of local wilderness society and Sierra Club groups and other individuals in the mid 1960's. During that time the Forest Service, specifically personnel from the Clearwater and St. Joe National Forests, initiated a public study of about 163,000 acres, much of it covering the same area as the current roadless area. As a result of this study, the 30,500-acre Mallard-Larkins Pioneer Area was designated by the Regional Forester in 1969.

Interest was renewed again during RARE I and become especially intensified during RARE II with a significant number of people and individuals favoring some type of wilderness. As a result of this interest, 67,910 acres which includes all of the original pioneer area was recommended for wilderness in the RARE II Environmental Impact Statement. The intent of this recommendation was to preserve all of the highly scenic and usable roadless area and still exclude the most productive timber stands.

The most recent public focus has been on the Buck Creek Area where the Idaho Department of Fish and Game and Burlington Northern Railroad Company proposed a land exchange. The issue is primarily of local and regional importance, and strong public opinion was voiced for and against the exchange.

Other studies by individuals and universities that have covered the Mallard-Larkins area include the Bean-Bacon Roadless Area Study, the St. Joe Wild and Scenic River Study, and the Mallard Peak Lookout Restoration Project.

Tables C-1 and C-2 on pages C-2 and C-3 show the location and proximity of the Mallard-Larkins Roadless Area to other wilderness and population centers in Idaho, Western Montana, and Eastern Washington.

B. CLEARWATER FOREST

Ninety written comments were received on the Mallard-Larkins Roadless Area between the Draft Environmental Impact Statement (DEIS) and the Final Environmental Impact Statement (FEIS).

Sixty-one of the comments discussed the pros and cons of the wilderness proposal for the area. Most favoring wilderness wanted an even larger area; some up to the maximum amount. Some commenters wanted buffers to protect the visual quality and use within the area. People discussed the attributes at length especially the aesthetics, the fish and wildlife, the hiking and camping opportunities. Additional reasons given included poor timber and therefore poor economic values. Some wanted no more or limited wilderness because of the need for jobs and the need for multiple use.

Of the 28 comments directed primarily to the entire roadless area, all were against road construction and timber harvesting for the same reasons given to proposing all or parts of the area for wilderness: to protect aesthetics, fish and wildlife, and roadless recreation. They were opposed to "ugly" clearcuts, road scars, erosion on steep slopes, and sediment in the creeks. Several commenters were concerned with the road currently under construction (1985 and 86) in the Minnesaka drainage because of its closeness to the recommended wilderness.

There were several comments about the Elizabeth Lake/Black Canyon area and managing it for roadless recreation, but not necessarily wilderness. Commenters, in general, wanted the area to remain undeveloped and usable for dispersed recreation: hiking, fishing, hunting, and horseback riding. One commenter wanted Upper Saddle and Quartz Creek to remain roadless also. No specific reasons were given, however.

Following the analysis of public comments on the Draft, one minor boundary change was made for recommended wilderness. Approximately 3,700 acres were added to the recommended wilderness between Skull Creek and Indian Henry Ridge.

C. IDAHO PANHANDLE FOREST

Approximately 290 specific comments were received on this area. Most favored a wilderness designation to protect wildlife, recreation, and aesthetic values. More specifically cited were the quality elk hunting opportunities; large size; proximity to St. Joe Wild and Scenic River; and young timber. Mentioned less frequently were: wilderness habitat; wildlife sanctuary; poor quality timber; below-cost timber; water quality; and protection of vegetation.

This area, along with four other roadless areas, continues to receive the most support for wilderness of any areas in the Idaho Panhandle Forests.

There were no changes in designations in the Mallard-Larkins portion of the Idaho Panhandle Forest between the Draft and Final Plans.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

The management emphasis for the Mallard-Larkins Roadless Area is a combination of management prescriptions and alternatives from the two National Forests. Because resources, uses, and land conditions are somewhat different on each Forest, neither the alternatives nor the management emphasis are fully integrated. Since the Clearwater is the lead Forest, for purposes of this evaluation, the alternatives and management emphasis from the Panhandle have been integrated into the goals and objectives of the Clearwater.

Further information on the specific alternatives and management emphasis for the Idaho Panhandle National Forest can be found in the Idaho Panhandle's Final Environmental Impact Statement and Forest Plan.

The recommended wilderness/nonwilderness designation for area 01300 is made and documented in this Final Environmental Impact Statement and the Forest Plan. This recommended designation has priority over all other land designations and neither Forest can undertake any management activity other than current direction until such time that a Record of Decision is approved in conjunction with this document.

Management emphasis Table C-5 on the following page shows the acres proposed to various resource management in each alternative. Numbers in parenthesis represent the alternatives and acres in the Panhandle National Forest.

Table C-5.

Mallard-Larkins Roadless Area
Management Emphasis by Alternative

		*Alternatives (thousand acres)											
Management Clw		A	B	C	D	E	E1	F	G	H	I	J	K
Emphasis	IPNF	(8)	(2)	(4)	(5)	(11)	(12)	(1)	(6)	(10)	(3,7,9)	(5)	(13)
WILDERNESS:		67.9 (72.0)	0 (0)	21.6 (22.2)	16.5 (70.9)	63.0 (76.3)	63.0 (76.3)	65.3 (73.2)	109.3 (103.4)	109.3 (103.5)	132.7 (119.9)	63.0 (70.9)	66.7 (76.3)
NONWILDERNESS													
Unroaded		9.8 (3.0)	0 (14.0)	9.8 (0.6)	57.8 (25.3)	11.4 (5.8)	11.4 (5.8)	9.8 (21.7)	0 (0.2)	0 (0.2)	0 (0)	11.4 (25.3)	9.8 (5.8)
Elk Winter		0.6 (1.9)	2.4 (1.0)	0.6 (2.9)	4.0 (0.4)	3.1 (0)	3.1 (0)	0.6 (1.0)	0 (0.6)	0 (0.3)	0 (0)	4.0 (0.4)	3.0 (0)
Timber/Wldlfl-Wtshd		44.1 (29.1)	74.0 (69.4)	62.0 (64.8)	30.1 (14.9)	22.8 (26.1)	15.2 (26.1)	21.7 (14.7)	19.2 (10.2)	7.6 (11.5)	0 (0)	30.2 (14.9)	33.7 (26.7)
Timber/Visual-Rip		7.8 -	5.3 -	5.0 -	8.1 -	17.6 -	17.6 -	18.5 -	4.0 -	3.8 -	0 -	8.1 -	2.4 -
Timber/Special		0 -	0 -	10.3 -	6.5 -	5.6 -	13.2 -	10.7 -	0 -	8.1 -	0 -	6.5 -	0 -
Special		0 (6.6)	0 (6.6)	0.2 (6.6)	0.9 (6.6)	0.9 (6.6)	0.9 (6.6)	3.9 (6.6)	0.2 (6.6)	3.9 (6.6)	0 (6.6)	0.9 (6.6)	3.9 (6.6)
Protection		2.5 (13.9)	51.0 (35.5)	23.2 (29.4)	8.8 (8.4)	8.3 (11.7)	8.3 (11.7)	2.2 (9.3)	0 (5.5)	0 (4.4)	0 (0)	8.6 (8.4)	13.2 (11.7)
TOTAL		132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (126.5)	132.7 (127.1)

(Table C-5 cont)

Summary of Management Emphasis

Management Emphasis	A	B	C	D	E	E1	F	G	H	I	J	K
	(8)	(2)	(4)	(5)	(11)	(12)	(1)	(6)	(10)	(3,7,9)	(5)	(13)
Wilderness-Clwtr	67 9	0	21 6	16 5	63 0	63 0	65 3	109 3	109 3	132 7	63 0	66 7
-IPNF	(72 0)	(0)	(22 2)	(70.9)	(76 3)	(76 3)	(73 2)	(103 4)	(103 5)	(119 9)	(70 9)	(76 3)
-Total	139 9	0	43 8	87 4	139 3	139 3	138 5	212 7	212 8	252 6	133 9	143 0
Nonwilderness												
Developed-Clearwater												
Decade 1	39 4	47 2	46 0	41 4	41 4	41 4	40 4	23 1	23 1	0	41 4	24 4
Decade 5	48 0	75 0	63 9	48 8	48 8	48 8	47 8	23 4	23 4	0	48 8	51 6
Developed-IPNF												
Decade 1	(23 4)	(40 8)	(42 0)	(7 3)	(0)	(0)	(3 0)	(10 6)	(5 1)	(0)	(7 3)	(0)
Decade 5	(42 1)	(112 5)	(103 7)	(30 3)	(35 0)	(44 4)	(31 6)	(22 9)	(22 8)	(0)	(30 3)	(35 0)
Roadless-Clearwater												
Decade 1	25 4	85 5	65 1	74 8	28 3	28 3	27 0	0 3	0 3	0	28 3	41 7
Decade 5	16 8	57 7	47 2	67 4	20 9	20 9	19 6	0	0	0	20 9	14 5
Roadless-IPNF												
Decade 1	(31 1)	(85 7)	(62 3)	(48 3)	(50 2)	(50 2)	(50 3)	(12 5)	(17 9)	(6 6)	(48 3)	(50 2)
Decade 5	(12 4)	(14 0)	(0 6)	(25 3)	(15 2)	(5 8)	(21 7)	(0 2)	(0 2)	(6 6)	(25 3)	(15 2)
Total Acres-Clearwater	= 132 7											
-Idaho Panhandle	= 126 5 (except 127 1 for Alt K (13) - See Page C-7 for footnote explanation)											
Total Roadless Area	= 259 2											

* This roadless area is contiguous with the Idaho Panhandle National Forest (IPNF)
 Numbers in parenthesis represent the alternatives and acres on the Idaho Panhandle Forest

Alternatives K and (13) = Preferred Alternative

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

All alternatives except Alternative B recommend some portion of the Mallard-Larkins Roadless Area for wilderness. These alternatives would provide wilderness enhancement by maintaining the solitude and naturalness that is characteristic of the area.

About 97 percent of the area is recommended for wilderness classification in Alternative I, with 6,600 acres within the St. Joe River corridor excluded from wilderness. About 82 percent is recommended in Alternatives G and H. In Alternatives A (current direction), E, E1, F, J, and K (Preferred Alternative) 50 to 55 percent of the area is recommended for wilderness. Approximately 34 percent is recommended in Alternative D with only 17 percent being recommended in Alternative C.

The least amount of wilderness is recommended in Alternative C by designating the existing Mallard-Larkins Pioneer Area located on both the Clearwater and Idaho Panhandle National Forests (the Bean Peak/Bacon Creek area of the Idaho Panhandle, and the Five Lakes Butte area of the Clearwater).wilderness;.

In Alternative D, the Mallard-Larkins Pioneer Area plus a large portion of the area in the Bucks/Foel Creek drainages in the Idaho Panhandle National Forest is recommended for wilderness.

Alternatives A (current direction), E, E1, F, J and K (Preferred Alternative) add the lands in the Collins Creek and Skull Creek drainages in the Clearwater Forest to the areas described above.

Alternatives G and H add those lands on both Forests between the Mallard-Larkins Pioneer Area around the North Fork of the Clearwater River to those lands previously discussed.

Timber harvest is precluded in classified wilderness. The wilderness recommendations of the various alternatives (except Alternatives B, C, and D) would impact timber production and mining. In Alternative I, approximately 2,500 MBF of standing timber volume would not be available for harvest, and mineral exploration and development would be constrained and may be excluded. Other than Alternative B which has no wilderness, Alternatives D and C would create the least impact to timber management. Alternatives A (current direction), E, E1, F, J and K (Preferred Alternative) recommend about 40 to 50 percent of suitable timberland to wilderness. Mineral exploration and development would also be highly constrained on these same lands.

Only valid mining claims and mineral leases in effect when land is classified as wilderness or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry.

Alternatives G and H recommend wilderness for about 75 percent of the lands suitable for timber and mineral development. Alternative I would preclude timber management. Mineral exploration and development would be highly

constrained on the entire area for the same reasons discussed in the previous paragraph. In contrast to the limitations of market values in Alternatives A (current direction), C, D, E, F, G, H, I, J and K (Preferred Alternative), Alternative B designates all suitable lands to the potential development of timber and minerals.

Effects of wilderness management on nonpriced resource values are:

- The natural-appearing, high quality primitive backcountry setting would remain intact.
- Threatened and endangered species habitat and security would be protected.
- Security for the mountain goats would be maintained.
- Natural forces would continue to shape the area's ecosystem. Big-game winter range would follow natural succession. Wildfires or unplanned ignitions could enhance the big-game winter range or some of the better forage sites would eventually revert to trees.
- The high water quality of the streams would be maintained.
- Vegetative diversity would tend towards old growth, on the better sites although varied climates and soil conditions would be conducive to maintaining considerable differences in vegetative species and conditions.

Alternative I maximizes the nonpriced resource values. Alternatives C and D minimize these values.

Alternatives E, E1, F, G, H, J and K (Preferred Alternative) would provide moderate to high levels of the nonpriced resource values. These alternatives and Alternative I would provide the optimum wildlife habitat security conditions by virtue of the large contiguous areas remaining.

The social and economic effects of the wilderness recommendations of Alternatives B, C, and D would be minor. The lands recommended are largely unsuitable for market resource development, such as timber. Alternatives A (current direction), E, E1, F, G, H, I, J and K (Preferred Alternative) would have substantial social and economic impact proportional to the acres recommended. On the negative side, lands suited to economic development would remain undeveloped. On the positive side, those individuals desiring areas of solitude, scenic quality, etc., would be accommodated. Overall, the local timber industry would not be supported.

2. Designation: Nonwilderness Management Emphasis: Unroaded

All of the alternatives except Alternative I designate portions of the area to an unroaded emphasis. In Alternative D, about 32 percent of the area is designated unroaded. Approximately 12 to 14 percent is designated unroaded in Alternatives F and J. Alternatives A (current direction), B, C, E, E1, and K (Preferred Alternative) contribute about 5 percent, and Alternatives G and H contribute less than 1 percent to unroaded management.

This emphasis would, in practice, augment the wilderness resource. The lands would remain roadless and natural. They would often buffer and fill-in-between lands designated to wilderness.

The unroaded management emphasis would preclude or severely limit market resource development. Mineral development and extraction would be extremely costly because of lack of roads. Suitable timberland within the affected areas would be unregulated for timber production and only a minor amount of volume would be available on an opportunity basis. Grazing uses could continue.

Effects of unroaded management on nonpriced resource values are:

- The natural-appearing, unroaded visual setting would be maintained to provide a semiprimitive/primitive setting for recreation.
- Threatened and endangered species habitat would be protected.
- Security for the mountain goats would be maintained.
- Old-growth habitat would be maintained.
- Water quality would remain high.

The unroaded management emphasis areas of Alternatives A (current direction), C, E, E1, F, J, and K (Preferred Alternative) would have a positive social effect on recreation. It would have minor economic effect, because the designated lands would be unsuited to development.

The emphasis of Alternative D would have a positive social effect, because it would satisfy a segment of the public desiring to have roadless areas. It would have a moderately significant economic effect, because the designation would include roughly 15 percent of the lands suitable for development. The local timber industry would not be supported. Wilderness advocates would be supported while recreationists seeking roaded natural experiences would not be.

3. Designation: Nonwilderness Management Emphasis: Elk Winter Range

These areas would be managed to provide big-game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur only on an opportunity basis to maintain big-game forage. Roads needed to manage adjacent areas with different designations could be constructed through the area only if they met soil and watershed constraints. But any roads crossing these areas would preclude consideration for wilderness designation.

All alternatives except G, H, and I designate a small portion of the area to big-game winter range. Alternatives A (current direction), B, C, D, E, E1, F, J, and K (Preferred Alternative) each designate less than 3 percent.

Prescribed fire and/or mechanical treatments would interrupt natural succession. All elk winter range designations located in the Salmon Creek drainage and North Canyon face of the Clearwater National Forest have had little support for wilderness designation.

Timber would be available only on an opportunity basis. Road access for mineral development would be constrained to maintain soil and watershed values.

Effects of elk winter range management on nonpriced resource values are:

- The natural visual quality would be altered by permitting some timber harvest and roads, but would satisfy pre-established visual quality objectives (VQO), usually partial retention. Prescribed burning would disturb the landscape for a short time.
- A shift from a semiprimitive to a roaded natural recreational setting could occur if roads were built through these areas.
- Essential gray wolf security habitat could be disturbed if roads were built. Road closures could mitigate this impact.
- Mountain goat populations and habitat would not be impacted.
- Big-game security habitat would be maintained through winter road closures.
- A high standard of water quality would be maintained through appropriate riparian protection measures.

Social and economic effects relate to timber, wildlife, and wilderness values. The local timber industry would be only supported on an opportunity basis. Wilderness advocates would be partially supported. Elk numbers would be anticipated to increase as winter range improves. Better hunting would be an indirect benefit. However, the overall effect would be viewed as insignificant in the context of the roadless area because it represents less than 3 percent of the available acreage.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated under this management emphasis would be managed for timber production at varying investment levels. Minimum constraints relating to protection of big-game habitat and water quality would be met.

All alternatives except Alternative I contain portions of the area designated to this emphasis. In Alternative B, approximately 50 percent of the area is designated to timber production. Alternative A (current direction) designates 28 percent. The Preferred Alternative (Alternative K) designates 23 percent. Alternatives D, E, E1, F, and J designate 14 to 19 percent to such use. In Alternative H only 7 percent of the area is designated.

The lands on which the timber/wildlife-watershed management emphasis is placed would be disqualified for wilderness classification. The natural landscape would be changed to a landscape with roads and artificial openings. The solitude of the existing large roadless area would be lost.

Minerals exploration and development would be allowed. The costs of such activities would be lower due to increased access into the area.

This management emphasis supports market resource development of which Alternatives B and C would offer the maximum opportunity. Proposed development under the high market alternatives, B and C, varies from 34 percent by the end of the first decade to 72-65 percent respectively by the end of the fifth decade. Alternatives D, E, E1, and F vary from 16-19 percent by the end of the first decade to 31-36 percent for Alternatives D, E, and E1. Alternative F with more environmental protection emphasis will be approximately 20 percent developed by the end of the 15th decade. Alternatives G and H develop 9-13 percent by the end of the first decade and approximately 18 percent by the end of the 5th decade. Alternative K (Preferred Alternative) develops 9 percent by the end of the first decade and then only in the Clearwater Forest. Approximately 33 percent will be developed by the end of the second decade.

Specifically, Alternatives A (current direction), B, C, D, E, E1, F, and J would disqualify Upper Quartz Creek for wilderness classification. Alternatives B and C would also disqualify most of the Skull Creek drainage.

Alternatives F, G, H, and I would cause the greatest impact on the market values, because less than one-fifth of the suitable timberlands would be developed. Alternatives G and H would have a major impact, because they preclude long-term development of Upper Quartz Creek, an area recognized as having good potential for timber management.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- The natural appearing environment would be modified.
- The existing semiprimitive/primitive setting for recreation would be modified to a roaded natural setting. More motorized recreation would occur.
- Essential gray wolf security habitat would decrease, especially in those areas designated to intensive timber management. On those areas having elk summer range emphasis, much of this impact would be mitigated with road closures.
- Big-game habitat would be maintained at a minimum of 25 percent of potential elk use, but impacts to mountain goats would not be significant.
- Water quality could be reduced to minimum management requirement levels in some cases.
- Vegetative diversity would tend toward seral successional stages and species.
- All the land along the North Fork of the Clearwater River in the vicinity of Aquarius would be precluded from consideration as a Research Natural Area under all alternatives except F, H, and K (Preferred Alternative). The timber/wildlife-watershed management emphasis would have mixed social and economic effects. In general, it would have positive social and economic effects on the timber industry, but it would also have negative social effects on amenity values. Alternatives G and H would have the least economic benefit, because they would develop only a fraction of the suitable timberland. Alternatives A (current direction), B, and C would have greater economic

impact, because most of the lands known to have potential market resource would be ultimately developed. Those individuals favoring wilderness would not be accommodated.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

The Idaho Panhandle does not have management prescriptions comparable to this category, so the acres and percentages given are for the Clearwater only.

Because these largely narrow and linear shaped areas would be contiguous to, and in most cases included within, larger areas with timber production emphasis, the effects would essentially mirror those of the timber/wildlife-watershed management emphasis.

All alternatives except Alternative I contain areas that have a goal of timber production within areas that fall into retention or partial retention visual quality objectives and that have ecologically important riparian vegetation and features located along stream courses.

In Alternatives E, E1, and F, approximately 13 percent of the area is assigned to this emphasis. Alternatives A (current direction), B, C, D, and J designate 2 to 3 percent and Alternatives G and H designate less than 1 percent. All other alternatives range from 2 to 6 percent for this designation.

Mineral exploration and development costs would be reduced because of improved access.

Wilderness qualities would be foregone. The reduction in potential wilderness would be as much as 14 percent in Alternative F to as little as 3 percent in Alternative H. The natural landscape would be changed to a landscape with roads and artificial openings.

This management emphasis would support market resource development, although at considerably less intensity than the timber/wildlife-watershed emphasis. Because of extended rotations, visual quality management, and riparian management constraints, the "flow" of timber from designated lands would be significantly reduced. However, the overall effects on market values would be insignificant because of the small amount of area affected.

Effects of timber/visual-riparian management on nonpriced resource values are:

- Visual quality objectives would be met in visual corridors. In those areas outside established corridors, visual settings would vary from retention to maximum modification.
- Essential security habitat for the gray wolf could be impacted depending on the size of the affected area and available mitigation measures, such as road closures. A formal consultation with the Fish and Wildlife Service would be held in conjunction with proposed projects.
- Mountain goat habitat would not be impacted.

- Riparian-dependent-wildlife species would be favored as would old-growth dependent species.
- Established water quality standards would be met.

The timber/visual-riparian management emphasis would provide the economic benefits of timber harvest and management while maintaining visual and riparian values. Wilderness advocates would not be supported.

6. Designation: Nonwilderness
Management: Timber/Special

Seven of the twelve alternatives designate portions of the area to protection of key big-game summer range with a secondary goal of timber production. In Alternatives C, F, and H, about 4 percent is designated in the Bear and Minnesaka Creek drainages. In Alternatives D, E, E1, and J about 2 percent is designated in the Minnesaka Creek, Goat Creek, and Smith Point.

These lands would lose their wilderness qualities. The natural landscape would be changed to a landscape with roads and artificial openings. The solitude would be lost. The potential wilderness resource would be reduced in proportion to the designation, i.e., as little as 5 percent in Alternatives D, E, E1, and J to as much as 8 percent in Alternatives C and F. However, for the Mallard-Larkins Roadless Area this emphasis would really have little impact on the wilderness resource except in Alternatives C and F. With the exception of Bear Creek (a tributary of the Little North Fork of the Clearwater River) in Alternatives C and F, the areas designated with this emphasis are noncontroversial. There is generally minor interest in incorporating the timber/special prescription lands in wilderness.

In future years the timber/special management emphasis would affect the scheduling of management activities but not the market values. These lands would generally be roaded. The use of the roads would be limited to administrative use so that big-game habitat security could be protected.

Mineral exploration and development costs would be reduced because of improved access.

Effects of timber/special management on nonpriced resource values are:

- The natural landscape would be altered.
- The existing primitive setting would be modified to a roaded natural setting which would increase those types of activities significantly.
- Portions of essential gray wolf security habitat would temporarily be disturbed through roading. Road closures would mitigate such impacts.
- The mountain goat population would not be impacted.
- Seventy-five percent or better of the potential big-game habitat would be maintained.

- Water quality would be maintained to achieve 80 percent or better of potential fish habitat.

The timber/special management emphasis would be socially and economically positive. It would support employment through timber harvest and hunting through a stable or improved big-game population. It would have comparatively smaller economic returns than some of the less constrained timber prescriptions, e.g., timber/wildlife-watershed management emphasis. However, individuals supporting wilderness would not be accommodated.

7. Designation: Nonwilderness
Management Emphasis: Special

The "wild" portion of the classified St. Joe Wild and Scenic River Corridor and the Five Lakes Butte Research Natural Area (RNA) are included in all alternatives. This amounts to about 3 percent of the total area.

On the Clearwater-side the acreage of the proposed Aquarius Research Natural Area varies by alternative. Alternatives F, G, and K (Preferred Alternative) designate 3,900 acres for RNA management which is less than 2 percent of the area. Alternatives D, E, E1, and J designate 900 acres. Alternatives C and G designate 235 acres. Alternatives A, B, and I do not designate any acres to RNA status, but in Alternative I it is recommended for wilderness.

Under Wild and Scenic River and RNA Management, timber management is prohibited.

Mineral exploration and development could take place, but such activities would have higher costs due to limited access.

Effects of special management on nonpriced resource values are:

- The natural appearing environment would not be disturbed.
- Big-game habitat, water quality, and fish habitat would be protected.
- Existing settings for recreation would be maintained.

8. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions or economic constraints.

The size of protection areas vary from a few acres to several thousand acres and are scattered throughout both Forests. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment would occur.

Eleven of the twelve alternatives contain lands designated to this category. In Alternative B, 33 percent of the area would be designated to protection management; in Alternative C, 20 percent; in Alternatives A (current

direction), D, E, E1, F and J, about 4 to 7 percent; in Alternative K (Preferred Alternative) and in Alternatives G and H, only 2 percent.

Alternative B designates the most acres that would preserve roadless qualities, and, in some cases, potential wilderness recommendations. In the remaining alternatives, lands in this category would lose most of their roadless/wilderness characteristics because of surrounding activities.

All areas are open for mineral exploration, but such activities would have higher costs due to limited access.

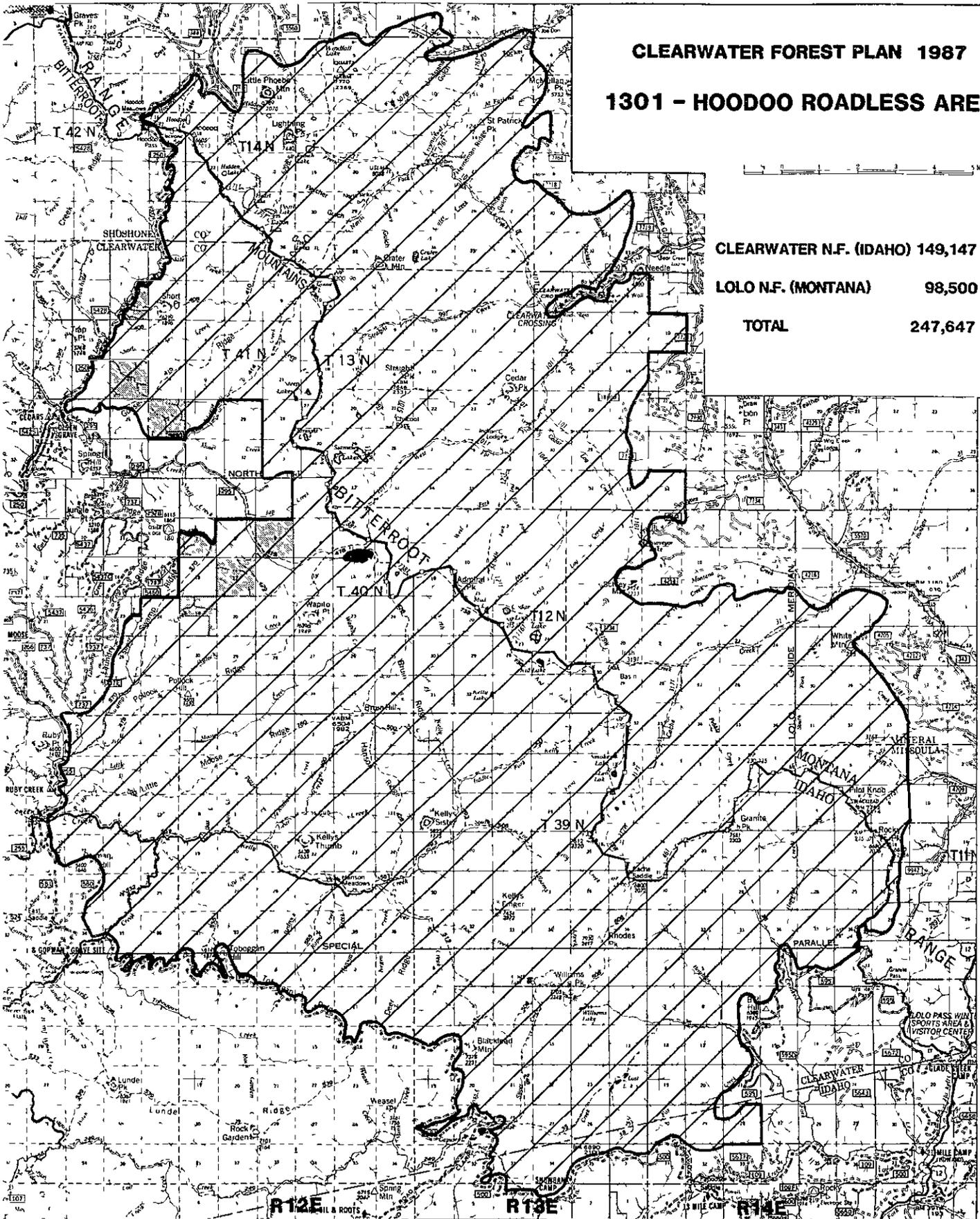
Nonpriced impacts would mirror those of surrounding areas.

HOODOO ROADLESS AREA

CLEARWATER FOREST PLAN 1987
1301 - HOODOO ROADLESS AREA



CLEARWATER N.F. (IDAHO) 149,147 ACRES
LOLO N.F. (MONTANA) 98,500 ACRES
TOTAL 247,647 ACRES



HOODOO ROADLESS AREA (01301)

LOLO AND CLEARWATER NATIONAL FORESTS

	Gross Acres	Net Acres
Idaho-Clearwater NF	153,312	149,147
Montana-Lolo NF	98,580	98,500
Total	251,892	247,647

I. DESCRIPTION

The Hoodoo Roadless Area is located on the Idaho-Montana border, about 30 air miles west of Missoula, Montana. The Idaho portion is in parts of Clearwater, Idaho, and Shoshone Counties in the Clearwater National Forest. In Montana, the area is in the Lolo National Forest within portions of Missoula and Mineral Counties.

The area may be accessed by vehicle from numerous Forest roads paralleling the boundaries or from dead-end roads. The northeast corner-boundary is within four miles of a major Federal highway, Interstate 90. The graveled Pierce-Superior road #250 forms a boundary along the northwest side which also joins with the main divide trail at Hoodoo Pass. The Toboggan Ridge road #581, a dirt road, is also a thruway and is the southwest boundary providing numerous access points to the area. The Granite Creek, White Mountain, Schlez Mountain, Quartz Creek, Clearwater Crossing, Lake Creek, and Goose Creek roads, and Kelly Creek Work Center all provide trail heads for interior trail access.

Over 200 miles of trails are within the area. The main creek and ridge trails are maintained. Because of inadequate funding, many of the other side trails are not maintained on a regular basis and are difficult to use at times.

From an aerial perspective, the Hoodoo area is viewed as a long, high mountainous hydrologic divide running north-south about 40 miles. From the divide on both sides emanate large and small fast-moving streams draining into the Clearwater River system in Idaho and into the Clark Fork River system in Montana.

Topography is varied with elevations as low as 3,200 feet at the mouth of Moose Creek to 7,930 feet at the top of Rhodes Peak. Except for the saddles (where two drainages start), much of the divide is above 6,500 feet with the prominent peaks especially in the southern half, ranging from 7,300 to 7,400 feet.

Although little detailed geologic mapping has been done, extrapolation from other studies and field reconnaissance indicate that most of the area is underlain by the Wallace formation, a unit in the Precambrian Belt supergroup. The major lithologies associated with the Wallace formation include limestones, dolomites, and carbonaceous argillites. The extreme southeastern portion contains granite rocks of the Cretaceous Age, Idaho Batholith, and volcanic rhyolites.

While this "high divide country" portion of the area is not considered true alpine, it exhibits relatively few trees, grassy mountain meadows, considerable barren land with numerous rocky outcrops, cliffs, and jagged peaks. Mountain heather and other alpine-type species are found intermingled where the thin soils have enough moisture to support plant growth.

Annual precipitation ranges from 30 inches near the eastern border to near 100 inches along the Idaho-Montana divide. Snow depths of 10 to 14 feet are not uncommon in the higher country lasting well into the summer and providing water to the Clearwater and Clark Fork River systems.

The name "Great Burn" attached to the area by several groups during the RARE II process, stems from the large and devastating wildfires which denuded much of the area during the early 1900's, primarily on the Idaho-side. Except for upper Moose, Pollack, and Swamp Creeks, much of the area north of Kelly Creek is still primarily covered with shrubs with scattered individual and small groups of trees. The area south of Kelly Creek has regenerated largely to lodgepole pine. Most of the drainages in Montana capable of supporting vegetation are tree covered.

Three ecosystems are found within the area, 1) cedar-hemlock-pine, 2) western spruce-fir, and 3) alpine meadows and barren. The cedar-hemlock-pine group represents the lower elevations. Where trees are found, it is represented primarily by western redcedar, grand fir, Douglas fir, and larch with very small amounts of western white pine on the Idaho-side. Ponderosa pine is found at the lower and drier elevations. The spruce-fir system is represented on the Montana-side by Engelmann spruce, subalpine fir, mountain hemlock, and the seral lodgepole pine on the burned over areas. Very small amounts of whitebark pine are found above 6,500 feet.

The outstanding scenery, the variety and abundance of wildlife species (elk, black bears, mountain goats and moose), and the high quality westslope cutthroat trout fishery in Idaho are major attractions. Although slim, there is a chance of seeing an endangered wildlife species, the gray wolf.

The 33 mountain lakes, most of which are located near the Idaho-Montana divide, and the variety of vegetative types interspersed with the numerous streams and barren, subalpine rocky peaks contribute to the visitor's enjoyment. As the area becomes known, more people visit it every year.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

With exceptions, the area retains a high degree of natural integrity and appearance. Human activities have resulted in relatively minor and isolated impacts from several minor hardrock mining sites, pack trails, stock driveways, and fire control trails during the early 1900's. Most of these impacts have rehabilitated naturally as the activities ceased.

Concentrated use around some of the larger, more popular lakes, such as Fish Lake and Heart Lake, and overuse on several of the main trails are the only real detractions from the natural integrity and appearance of the area.

About 114 acres of actual mining sites exist. At Greenwood Cabins are 40 acres of fixed sites of mostly patented mining claims. About 3 miles of a very primitive, closed mining road as well as the hardrock mining site is noticeable near Kid Lake. Evidence of other early mining is very minor.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

The vastness of the area, covering over 247,000 acres along with its rectangular shape extending approximately 40 miles north-south provides excellent opportunity for solitude. The 40-plus streams dissect the area, effectively isolating visitors from each other. The trees and shrubs plus the varied mountainous terrain further screen visitors from each other.

External influences of sight and sound are minimal. The only regular motorized use adjacent to the area is over the Pierce-Superior Road (FS #250). Sounds from logging activity and other occasional motorized, public use near the periphery can be heard up to a mile inside the roadless area in only a few places.

Hunters, fishermen, horseback riders, and hikers congregating at the larger lakes such as Fish, Heart, Pearl, Goat, Williams, and Siamese Lakes would tend to reduce opportunities for solitude at certain times. However, groups using the area have not generally been very large. An exception to this is at Fish Lake on opening day of fishing season when up to 100 people have been known to congregate.

Solitude may be somewhat affected from certain viewpoints along the divide or on steep slopes above developments. Timber harvest units and associated roads on both the Idaho and Montana sides may be viewed in several areas although usually these detractions are in the far distant or background viewing area.

The size and diversity of the area, the variety of vegetative types and land forms, the abundance of wildlife, streams and lakes all contribute to virtually unlimited primitive setting for recreation. Primary activities are hiking, backpacking, horseback riding, lake fishing, big-game hunting, primitive camping, outdoor photography and sightseeing.

Some excellent opportunities exist for fishing in the major streams of Kelly, Fish, and Cache Creeks. Some limited mountain climbing opportunities are available along the divide.

C. SPECIAL FEATURES

The Hoodoo contains several features which set it apart from other roadless lands. Foremost is the name coined during RARE II, the "Great Burn", which denotes the catastrophic fire in 1910. The sheer force of the fire is evidenced by the long span of time to restore tree cover.

Many pointed rocky formations are located along the higher ridges, especially in the vicinity from William's Peak to Shale Mountain. The rocky formations are thin and irregular. Local people often refer to these formations as "dinosaur rocks" because they resemble the back of some prehistoric animals. Rocky pinnacles are also in abundance along these ridges.

The area is used extensively by commercial outfitters primarily for elk hunting. Six outfitters currently operate in the Idaho portion.

A study done several years ago indicated that prior to the arrival of the white man, Indians used various natural animal crossings on the divide to wait for animals to migrate or be driven. To date, over 40 of these sites have been recorded within the area.

Kelly Creek (including all its tributaries) has been a catch-and-release-stream since 1970. The purpose of this Department of Idaho Fish and Game regulation was to enhance the westslope cutthroat trout fishery since the completion of Dworshak Dam in 1970 blocked migration of steelhead trout. This fishery has improved to the point that the stream is nationally known. Fishermen from all over the country come to catch and release 12 to 15 inch or larger trout.

The proposed Steep Lakes Research Natural Area encompasses one of the only two lakes in the Clearwater Forest that support a viable, although limited, population of California golden trout. This brightly colored trout normally found above 7,000 feet in the mountain lakes in California was stocked here in 1962. A limited fishing season has been allowed for many years providing a unique attraction for fishermen each summer.

Based on numerous reports over the years, along with two verified sightings (with photographs) in recent years, the Kelly Creek drainage is regarded as important habitat for the endangered gray wolf. These sightings, along with suitable habitat requirements, has prompted the Forest Service to designate over 110,000 acres within the Clearwater Forest as essential habitat. The management of an adequate prey base, mainly elk, and restrictions on motorized road use are two major components of protecting and enhancing this species.

D. EFFECTS OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

At its narrowest point, the Hoodoo is nine air miles across; otherwise, the area averages between 15 and 20 air miles wide and over 40 air miles long. Except for some background viewing of several timber harvest and road activities, the potential wilderness values and attributes of the area are virtually unaffected by external influences.

E. MANAGEABILITY AND BOUNDARIES

The Hoodoo area is a compact unit. Most of the boundaries are fairly well defined on major terrain or other recognized features. In a few locations however, terrain features are less prominent, and boundaries are difficult to locate on the ground.

It is fairly remote and free of external influences. In Montana, small portions of mostly undeveloped private land exist within the boundaries in the northeast corner.

During the RARE II process in 1979, 178,000 acres were recommended for wilderness. That boundary excluded all the private land, but in places the boundaries was still difficult to locate on the ground.

Recreation and other resource uses not requiring surface disturbance can be managed while protecting the wilderness character. Mineral exploration can be controlled with present federal regulations, although some impacts can be expected.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Although there are numerous potential developed recreational sites, the actual construction of such sites is dependent on road access, funding, and need. Current funding is very low. Primitive, semiprimitive, and dispersed recreation have been discussed previously.

2. Wildlife and Fish - Although population numbers are not known, elk, mule deer, and black bears are considered to be the most abundant. It is estimated that 20 to 50 mountain goats inhabit the high country along the divide. Mountain lions and moose, along with many species of furbearers and small game are also found here.

Summer range is a key feature. With most elevations above 4,000 feet, only 4,150 acres of key big-game winter range exist within the area.

More than ten unconfirmed sightings of the threatened grizzly bear have been made over the past thirty years. Additional studies are planned to determine whether, in fact, all or part of this area could qualify as essential habitat.

Most of the larger streams and lakes support fishable cutthroat and rainbow trout populations.

3. Livestock Operations - No cattle or sheep allotment have been used since the 1960's. One active horse and mule allotment is on the Idaho-side for 24 animal unit months.

4. Timber - The Hoodoo has 153,000 acres of land suitable for timber production. Potential yields vary greatly because of the wide range of elevations and climatic and soil conditions. Standing volumes of sawtimber total 1.6 MMBF. Large stands of young unmerchantable and merchantable lodgepole pine currently are of relatively low market value because of remoteness and substandard travel routes.

5. Minerals - Overall, potential for minerals ranges from low to medium. A total of 13,387 acres of high potential has been identified in the Montana section. A total of 296 mining claims are located within the area. A great majority of them are concentrated in Irish Basin, an area recommended for nonwilderness during the RARE II study. Other mining claims are clustered in the northern portion in Montana. Most of the production associated with these claims has come from placer gold and fluorite; although iron, molybdenum, and barite have also been found.

Although potential for oil and gas is low, there are currently three oil and gas leases comprising about five percent of the area in Montana. One lease has been applied for in Idaho. Virtually all of the area in Montana was once under lease application. However, all but the fringe area was recommended for wilderness designation during the RARE II process. As a result of this proposal, processing of these oil and gas lease was suspended pending the final land designation by Congress. In the meantime, most of the applicants withdrew their applications. There still remains a great deal of speculative interest for oil and gas.

6. Cultural Resources - The current known cultural resources located within the Hoodoo roadless area includes five USFS lookout sites; 14 cabins or cabin remains; five USFS Ranger Station locations; 24 Native American sites including camp areas, a vision quest site, lithic workshops, and game traps; two mining sites; one Lewis and Clark expedition campsite; and two Euro-American grave locations. In addition, at least four Indian trails existed including the Lolo Trail along the southern boundary; the current state-line trail; and a possible trail through Hanson Meadows. Another trail, the historic "Tin Can Trail," was an important early access route to the Moose City gold mining area from Superior, Montana.

7. Land Uses - Commercial outfitters and guides using pack and riding stock are the single largest land users. Six outfitters are currently licensed to operate in Idaho.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1. Non-Federal Lands - Roughly 2 percent or 4,315 acres is within private ownership. Most of this is within a checkerboard pattern in Idaho and is part of a larger Burlington Northern ownership contiguous to the area. A smaller acreage in Montana is the result of patented mining claims in the North Fork Greenwood Creek.

2. Fire - As stated previously, large fires occurred during the early 1900's up through 1934. Since these large burns, the size of fires has decreased. Records dating back to the 1950's indicate a moderate occurrence of fires every year; most of which were 1/4 acre or less. Most of these occur where the dense stands of timber are older.

3. Insects and Disease - Current insect and disease occurrence is low. As the lodgepole pine starts maturing, a potential increase in mountain pine beetle has been predicted.

C. RESOURCE SUMMARY

Table C-6.

01301 - Hoodoo

<u>Description</u>		<u>Clwtr</u>	<u>Lolo</u>	<u>Total</u>
Gross Acres	Acres	153,312	98,680	251,992
Net Acres	Acres	149,147	98,500	247,647
Recreation				
Primitive	RVD's	8,324	0	8,324
Semiprim Nonmotor.	RVD's	6,023	68,950	74,973
Semiprim Motor.	RVD's	11,399	98,500	109,899
Roaded Natural	RVD's	5,888	98,500	104,388
Range				
Existing Obligated				
Suitable	Acres	671	0	671
Allotments	No.	1	0	1
AUM's	AUM's	24	0	24
Existing Vacant				
Suitable	Acres	0	0	0
Allotments	No.	0	0	0
AUM's	AUM's	0	0	0
Proposed				
Suitable	Acres	0	0	0
AUM's	AUM's	0	0	0
Timber				
Tentative Suitable	Acres	89,308	54,283	143,591
Standing Volume	MMBF	1,068,000	408,700	1,476,700
Corridors				
Exist. and Potential	No.	1	0	1
Wildlife - T & E				
Grizzly Bear				
Habitat - Sit. 1	Acres	0	0	0
Habitat - Sit. 2	Acres	0	0	0
Habitat - Sit. 3	Acres	0	0	0
Bald Eagle Hab.	Acres	0	0	0
Gray Wolf Hab.	Acres	111,000	0	111,000
Peregrine Fal. Hab.	Acres	0	0	0
Wildlife-Big Game				
Big-Game				
Summer Habitat	Acres	0	0	0
Winter Habitat	Acres	0	0	0
Elk				
Summer Habitat-Key	Acres	16,993	0	16,993

(Table C-6 cont.)

01301 - Hoodoo

<u>Description</u>		<u>Clwtr</u>	<u>Lolo</u>	<u>Total</u>
Winter Habitat-Key	Acres	1,450	1,813	4,150
Significant Fisheries				
Stream Miles	Miles	277	0	277
Stream Habitat	Acres	345	0	345
Lakes	No.	13	0	13
Lakes - Habitat	Acres	389	0	389
Water Developments				
Existing	No.	0	0	0
Minerals				
Potential Hardrock				
Very High	Acres	0	0	0
High	Acres	0	13,387	13,387
Moderate	Acres	8,320	21,388	29,708
Low	Acres	140,827	63,725	204,552
Claims	No.	4	296	300
Potential Oil and Gas				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	0	0	0
Low	Acres	149,147	98,500	247,647
Oil and Gas Leases				
Leases	No.	0	3	3
Leased Area	Acres	0	9,925	9,925

IV. NEED

A. GENERAL

A key attribute and contribution for wilderness classification is the display of successional vegetative changes resulting from the early 1900 fires. The quality and variety of primitive recreation along with the varied outstanding scenic values are also a significant contribution. The area would add to the ecosystem acres of 1) cedar-hemlock-pine, 2) western spruce-fir, and 3) alpine meadows and barren.

A high amount of interest in wilderness has been shown dating back to the early 1970's (RARE I process). The area has been endorsed by the Wilderness Society and Sierra Club along with numerous other local and regional groups and organizations. A group based in Missoula called the Great Burn Study Group consolidated much of the wilderness interest from the Montana side.

The RARE II study of 1979 recommended 165,197 acres for wilderness (Idaho - 100,000 / Montana - 65,097). Attempts were made with this recommendation to

consider the high quality wilderness values as well as the timber and mining values.

Tables C-1 and C-2 show the location and proximity of the Hoodoo Roadless Area to other wilderness and population centers in Idaho, western Montana and eastern Washington.

B. CLEARWATER FOREST

Three hundred twenty-six comments were received between the DEIS and this EIS on the Hoodoo Roadless Area. This is more than double the number received about any other roadless area on the Forest. All respondents except one favored either some type of wilderness designation or leaving all or part of the area undeveloped. The one comment against wilderness expressed concern about locking up the area from a large percentage of people and from mineral development.

Some of the main reasons given for wilderness or roadless designations include the desire to:

1. preserve and protect the westslope cutthroat trout;
2. protect the area from the adverse effects of logging and road building (resources needing protection are visuals, primitive recreation, soil, fishing, and hunting opportunities);
3. manage all streams for 100 percent potential, because twenty-percent reduction in fishery potential is too great;
4. protect what little wilderness is left; and
5. protect the elk habitat.

Largely, as a result of the public interest and concerns received on the Draft, the recommended wilderness in the Clearwater Forest-portion was enlarged by 12,900 acres primarily in the main Kelly Creek drainage above the Kelly Creek Work Center.

In addition, approximately 7,600 acres were added to the Montana side, along both sides of the road between Schley Mountain and Kid Lake.

C. LOLO FOREST

During public review of the Lolo Forest DEIS, many comments were received in favor of including this area in wilderness. Many respondents indicated support for the Irish Basin/Cache Creek addition to the proposed area. The Irish Basin/Cache Creek portion of Management Area 11 in the Lolo Forest Plan is now recommended for wilderness. Few comments were received that opposed any additional wilderness.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

The management emphasis for the Hoodoo is a combination of prescriptions and alternatives from the two National Forests, Clearwater and Lolo. Because resources, uses, and land conditions are somewhat different on each Forest, neither the alternatives nor the management emphasis are fully integrated. Since the Clearwater is the lead Forest, for purposes of this evaluation, the alternatives and management emphasis from the Lolo Forest has been integrated into those of the Clearwater on the basis of goals and objectives common to each Forest.

Further information on the specific alternatives and management emphasis for the Lolo National Forest can be found in the Lolo Forest's Environmental Impact Statement and Forest Plan.

The recommended wilderness/nonwilderness designation for area 1301 is documented in the Forest Plan. This recommended designation has priority over all other land designations and both the Lolo and Clearwater Forests will adhere to the applicable direction contained in the Forest Plan and approved in the Record of Decision accompanying this document.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

Table C-7

Hoodoo Roadless Area
Management Emphasis by Alternative

		*Alternatives (thousand acres)											
Management	Clw	A	B	C	D	E	E1	F	G	H	I	J	K
Emphasis	Lolo	(a)	(e)	(e)	(c)	(d)	(d)	(b)	(b)	(f)	(g)	(c)	(d)
WILDERNESS		100 1 (81 9)	0 (0)	19 9 (0)	63 9 (81 9)	100 1 (89 5)	100 1 (89 5)	137 6 (81 9)	137 6 (81 9)	131 8 (81 9)	149 2 (98 5)	119 5 (81.9)	113 0 (89 5)
NONWILDERNESS													
Unroaded		0 (4 3)	0 (39 6)	0 (39 6)	54 8 (3 5)	8 9 (6 2)	8 9 (6 2)	0 (10 0)	0 (10 0)	0 (3 5)	0 (0)	0 (3 5)	3 0 (0)
Elk Winter		0 (1 9)	0 (2 1)	0 (2 1)	0 (0 5)	0 4 (1 5)	0 4 (1 5)	0 (0 2)	0 (0.2)	0 (0.5)	0 (0)	0 (0 5)	0 1 (1 5)
Timber/Wldlf-Wtshd		37 6 (2 5)	65 9 (46 6)	72 0 (46 6)	15 9 (12 4)	4 4 (5 9)	4 4 (5 9)	2 2 (3 1)	8 7 (3 1)	2 8 (12 3)	0 (0)	7 6 (12 4)	9 9 (5 9)
Timber/Visual-Rip		8 9 (6 3)	6 1 (0 7)	7 0 (0 7)	11 3 (0)	9 1 (0 7)	9 1 (0 7)	8 3 (2 7)	2 9 (2.7)	3 3 (0)	0 (0)	6 5 (0)	1 8 (0 7)
Timber/Special		0 -	0 -	0 -	0 -	16 8 -	16 8 -	0 -	0 -	0 -	0 -	15 1 -	6 5 -
Special		0 (0)	0 (0)	0 2 (0)	0 8 (0)	0 (0)							
Protection		2 6 (1 6)	77 3 (9 5)	50 2 (9 5)	2 5 (0 2)	9 5 (2 3)	9 5 (2 3)	1 1 (0 6)	0 (0 6)	11 3 (0 3)	0 (0)	0 5 (0 2)	14 9 (2 8)
TOTAL		149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)	149 2 (98 5)

(Table C-7 cont)

Summary of Management Emphasis

Management Emphasis	A	B	C	D	E	E1	F	G	H	I	J	K
	(a)	(e)	(e)	(c)	(d)	(d)	(b)	(b)	(f)	(g)	(c)	(d)
Wilderness-Clwtr	100.1	0	19.9	63.9	100.1	100.1	137.6	137.6	131.8	149.2	119.5	113.0
-Lolo	(81.9)	(0)	(0)	(81.9)	(81.9)	(81.9)	(81.9)	(81.9)	(81.9)	(98.5)	(81.9)	(89.5)
-Total	182.0	0	19.9	145.8	189.6	189.6	219.5	219.5	213.7	247.7	201.4	202.5
Nonwilderness												
Developed-Clearwater												
Decade 1	7.1	7.1	7.1	7.1	7.1	7.1	1.3	1.3	7.1	0	7.1	4.0
Decade 5	44.2	58.8	55.3	22.1	40.2	40.2	3.3	3.3	10.6	0	22.1	28.0
Developed-Lolo												
Decade 1	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(5.8)	(0)	(5.8)	(5.8)
Decade 5	(12.4)	(58.9)	(58.9)	(13.1)	(10.5)	(10.5)	(6.7)	(6.7)	(58.9)	(0)	(13.1)	(10.5)
Roadless-Clearwater												
Decade 1	42.0	142.1	122.2	78.2	42.0	42.0	10.3	10.3	10.3	0	22.6	32.1
Decade 5	4.9	90.4	74.0	63.2	8.9	8.9	8.3	8.3	6.8	0	7.6	8.1
Roadless-Lolo												
Decade 1	(10.9)	(92.7)	(92.7)	(10.9)	(10.9)	(10.9)	(10.9)	(10.9)	(92.7)	(0)	(10.9)	(10.9)
Decade 5	(4.3)	(39.6)	(39.6)	(3.6)	(6.2)	(6.2)	(10.0)	(10.0)	(39.6)	(0)	(3.6)	(6.2)
Total Acres-Clearwater	= 149.2											
-Lolo	= 98.5											
Total Acres Roadless Area	= 247.7											

* This roadless area is contiguous with the Lolo National Forest. Numbers in parenthesis represent the alternatives and acres on the Lolo Forest.

Alternatives K and (d) = Preferred Alternative

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

Alternative I recommends the entire area for wilderness. Alternatives A (current direction), D, E, E1, F, G, H, J, and K (Preferred Alternative) recommend a range of 73 to 93 percent. Alternative C has the least amount of wilderness designation (8 percent), and then only in the Clearwater Forest. Alternative B has no wilderness.

About 144,000 acres of tentatively suitable timberland are within the area. In Alternative I, the entire area would be unavailable for harvest. Alternatives A (current direction), D, E, E1, G, H, and J would reduce the suitable acreage by 80 percent. In Alternatives B and C approximately 50 percent of the suitable acreage would be reduced.

Alternatives with substantial wilderness would preclude harvesting up to 1.6 MMBF of timber on both Forests. Extensive stands of lodgepole pine in the Lolo, which may become infested by mountain pine beetle, would become unavailable in all alternatives except B and C. Commercial timber in the Pollock and Little Moose Creek drainages would be unavailable in Alternatives F, H, and I.

Only valid mining claims and mineral leases in effect either at the time of designation or as stated in designation legislation could be developed. All other lands would be withdrawn from mineral entry. Alternatives B and C would have the least impact on access for development of minerals. In the other alternatives, access and methods of mining would be constrained in varying amounts.

Grazing would be reduced in all alternatives except B and C, depending on future conflicts between range and wildlife needs, and other recreational uses.

Effects of wilderness management on nonpriced resource values are:

- Visual quality would be preserved.
- Threatened and endangered species habitat, specifically that of the gray wolf, would be protected.
- Natural forces would continue to shape the area's ecosystem.
- Big-game winter range would follow natural succession. Some of the better forage sites would revert to trees.
- Wildfires or unplanned ignitions would enhance the big-game winter range.
- Water quality and fisheries would be maintained at their present natural levels in all streams.
- Old growth would exist if there were no wildfires. This is especially true in the Lolo with the present extensive tree cover (primarily lodgepole). The

Clearwater has wide diversity already with open grass and forb areas and vast shrub fields interspersed with timber stands.

- The existing type of recreation could continue.

Economic and social effects vary depending on the amount of tentatively suitable timberland and acres of potential mineral that are recommended for wilderness. Wilderness emphasis in Alternatives F, G, H, I, and K would have the greatest adverse impacts on the economy. In all alternatives, except B and C, the wilderness emphasis would create an adverse social impact on those recreationists who ride motorcycles, because many areas now accessible by motorcycles would be closed to motor vehicles. Wilderness would enhance dispersed recreation in primitive and semiprimitive settings.

2. Designation: Nonwilderness
Management Emphasis: Unroaded

In Alternative D about 23 percent of the area is designated to unroaded management with most of it in the Clearwater Forest. Alternatives B and C contribute about 16 percent of the area to unroaded, all of it in the Lolo Forest. The other alternatives have minor amounts mostly in the Lolo Forest.

Unroaded management would enhance dispersed recreation of all types. Areas suitable for motorized vehicles would be left open for that use. Most of the areas, however, are physically inaccessible for motor bikes etc.

Timber management activities would be excluded. The effects would be similar to the effects of wilderness, as discussed in the previous section, since with most cases the same areas are involved, varying by alternative. Alternatives A (current direction), B, and C would have the least effect on timber harvesting.

Potential mining operations, specifically prospecting and development, would be constrained because of the absence of roads.

Grazing would not be affected unless conflicts would develop with recreation or wildlife.

Most of the areas affected by this management emphasis in any alternative are located in areas of low timber and range values; actual effects would probably be insignificant.

Effects of unroaded management on nonpriced resource values are:

- Visual quality would be maintained at high levels of either retention or partial retention.
- Threatened and endangered species habitat, especially that of the gray wolf, would be protected.
- Big-game summer habitat would be enhanced. Big-game winter range would be relatively unaffected because of small acreage involved.
- Water quality and fishery habitat would be fully protected in those areas designated unroaded management emphasis.

- Vegetative diversity would be maintained and even enhanced because of wildlife habitat management in the Clearwater portion.

- The primitive/semiprimitive setting for recreation would be retained.

Economic and social effects are related to recreation, timber, and wilderness values. Outfitters and guides would benefit from unroaded management, whereas timber interests would be adversely affected to some degree, depending on the alternative. Most of the unroaded designations occur in areas of lower timber values. Hikers, hunters, and fishermen would benefit the most. Wilderness advocates would be partially supported.

3. Designation: Nonwilderness Management Emphasis: Elk Winter Range

These areas would provide big-game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur but only on an opportunity basis to maintain big-game forage. Roads needed to manage adjacent areas with different designations could be constructed through the area only if they met soil and watershed constraints. But any roads crossing these areas would preclude wilderness designation.

All alternatives except Alternative I include a small amount of area managed exclusively for elk winter range (100 acres). This emphasis would include primarily prescribed burning on brush fields or southern exposed land.

Because winter range under this emphasis is in brush fields, short-term effects on timber are minor. By restricting tree growth, lasting effects would be more significant, except that less than 5 percent of the area is involved.

Minerals exploration and development could take place, but such activities would cost more since access would be limited.

Effects on the grazing would be insignificant.

Effects of elk winter range management on nonpriced resource values are:

- Visual quality may be affected in the short term (1 year or less) because of prescribed burning.

- Threatened and endangered species, especially the gray wolf, would be enhanced because of the emphasis on producing their prey base (elk). Any disturbance of gray wolf security habitat created by roading could be mitigated through road closures.

- Big-game habitat, especially those of elk, would be enhanced.

- Natural forces shaping the ecosystem would be disrupted by prescribed burning.

- Water quality and fish habitat would generally not be affected. Prescribed burning could cause some temporary effects.

- Vegetative diversity would not be maintained on the small acreage involved, but diversity could be enhanced on larger adjacent areas.

Economic and social impacts are related to timber, wildlife, recreation, and wilderness. The enhancement of winter range produces elk which in turn benefits hunters, outfitters and guides, and recreationists in general. Lasting effect on timber production and the local timber industry could be harmful. Wilderness advocates would not be supported.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated under this management emphasis would be managed for timber production at varying investment levels. Minimum constraints relating to protection of big-game habitat and water quality would be met.

Ten of the twelve alternatives contain this emphasis. Approximately 45 to 48 percent of the area is designated in Alternatives B and C. In Alternatives A (current direction) and D, 11 to 16 percent is designated and Alternatives G, H, J, and K (Preferred Alternative) contribute about 7 percent. Alternatives E, E1, and F contain only 2 to 3 percent.

Most of the big-game summer range in the area would be managed primarily through timber harvest methods.

In all alternatives an average of 95 percent of the area would remain unroaded through the end of the first decade. In Alternatives B and C about 53 percent would still remain unroaded after the end of the fifth decade. In the other alternatives, 80 to 95 percent of the area would still be unroaded after the fifth decade.

This timber/wildlife-water emphasis would increase the utilization of market values in the short-term in all alternatives except in Alternative I. The greatest positive effect would occur in later decades in Alternatives B and C and to a lesser extent in Alternative A (current direction), because timber stands that are presently immature would be maturing in the third and fourth decades.

Mineral exploration and development costs would increase because of limited access.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- The naturally appearing environment would be altered.
- The recreational opportunities would shift from primitive to roaded natural.
- Gray wolf security habitat would be disturbed by roading activity. On those areas having elk summer range emphasis, much of this impact would be mitigated with road closures.

-Elk summer and security habitat would be reduced to a minimum of 25 percent of potential elk use.

- Water quality would meet minimum management constraints.

- Vegetative diversity would tend toward seral successional stages favoring wildlife species not dependent on old growth.

Economic and social effects would center on timber, recreation, and wilderness. This management emphasis would have a measurably positive effect on the economics of Clearwater and Mineral Counties which are dependent on the timber industry. However, this area receives moderately heavy use from others who live outside the counties. They visit the area because of the attributes associated with a roadless environment. These changes could be disruptive to them. This would be most noticeable in Alternatives B and C. Wilderness advocates would not be supported.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

All alternatives except Alternative I contain areas that have a goal of timber production within areas that fall into retention or partial retention visual quality objectives (VQO's) and that have ecologically important riparian vegetation and features located along stream courses.

In all alternatives except Alternative I, total acreages with this management are small with 6 percent or less of the total area designated. Because these largely narrow and linear shaped areas would be directly related to larger areas with timber production emphasis, the effects would essentially mirror those of the timber/wildlife-watershed management emphasis.

Wilderness characteristics would be adversely modified. Timber harvest would occur on an extended rotation basis.

Mineral exploration and development costs would increase because of constraints needed to protect key riparian-visual values.

Some transitory range for livestock would be created.

Effects of timber/visual-riparian management on nonpriced resource values are:

- Visual quality would be maintained within designated visual corridors. Visual quality within riparian areas but outside visual corridors may be reduced to levels compatible to adjacent or surrounding lands.

- The existing primitive/semiprimitive recreational setting would be changed to a roaded natural setting. Roaded natural recreation would increase.

- Essential security habitat for the gray wolf could be impacted depending on the size of the area affected and available mitigation measures such as road closures. A formal consultation with Fish and Wildlife Service would be held in conjunction with proposed projects.

- Big-game habitat, especially moose, would benefit.
- Water quality and fish habitat would be maintained and enhanced.
- Vegetative diversity including riparian vegetation and old growth would be protected and enhanced.

Social and economic effects relate to timber, recreation, watershed, and wilderness. Although timber harvest would be reduced, the relatively low percentage of land in this category in any alternative would minimize actual monetary losses in any one economic area. Social effects would be generally beneficial to individuals who enjoy high quality water, fishing, wildlife, and the aesthetics of well-managed and diverse stands of timber including old growth.

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

The lands designated under this management emphasis would manage elk summer range and watershed/fishery stream protection in about 10 percent of certain areas in the Clearwater Forest only. High quality areas designated to this emphasis include the north side of lower Kelly Creek, Little Moose Creek, and lower Pollock Creek, in Alternatives E, E1, J, and K (Preferred Alternative).

These lands would lose their wilderness qualities.

Although there would be no reduction of timber under this emphasis, scheduling to meet elk and fishery values could create some adverse effects in later decades. In earlier decades accessing the timber would be a problem.

Effects on grazing would be minimal mainly because of very low values in these areas.

Minerals exploration and development would be dependent upon road access which in time would benefit miners.

Effects of timber/special management on nonpriced resource values are:

- The environment would be modified because of timber harvest and roads. Forestwide visual quality objectives would still be met.
- The existing primitive setting would shift to roaded natural.
- Gray wolf essential security habitat would be protected with road closures for all alternatives that have this designation except Alternative K (Preferred Alternative).
- Big-game habitat values, especially those of elk, would be maintained at 75 percent of potential use mainly through road closures and timber scheduling. Alternative K (Preferred Alternative) which requires yearlong road closures for all public motorized use, will actually provide a higher degree of protection of potential elk use, perhaps in the neighborhood of 80-90 percent.

- Water quality and potential fishery habitat would be maintained at 80 percent levels through road design, timber scheduling, and road closures.

- Vegetative diversity would be maintained with all stages of vegetative growth encouraged. Some stands of old-growth timber would also be maintained.

Economic and social effects relate to timber, wildlife, fishery, wilderness, and recreation. Any adverse impact on timber management resulting from this emphasis would be minimal. This emphasis would have a positive effect on Mineral County's economy.

7. Designation: Nonwilderness
Management Emphasis: Special

Lands designated to this emphasis would not be developed, but would be permitted to run their natural course for research study. They are not adjacent to wilderness but would mirror wilderness qualities within a very small area.

This management is applicable only to the Clearwater and only includes one special area, the proposed 784 acre Steep Lakes Research Natural Area (RNA). Although the RNA is included in all alternatives except A (current direction) and B, it falls within recommended wilderness in all remaining alternatives except C and D.

The proposed RNA would be located on unsuitable timberland.

Grazing and mineral development would be incompatible. The RNA would be withdrawn from mineral entry along with the wilderness once it was classified.

Effects of special management on nonpriced resource values are:

- The natural appearing environment would not be disturbed.
- Essential gray wolf habitat would be protected.
- Big-game habitat, water quality, and fish habitat would be maintained.
- Vegetative diversity would be maintained not because of management but because of the natural diversity of the area which includes grass-forb areas, high mountain shrubs, and some stand of subalpine trees.

There are no known economic values in the area. The social benefit is the opportunity to study an unaltered high mountain lake and associated aquatic ecosystem.

8. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints.

Generally, these areas are small and scattered throughout management areas. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment activities would occur.

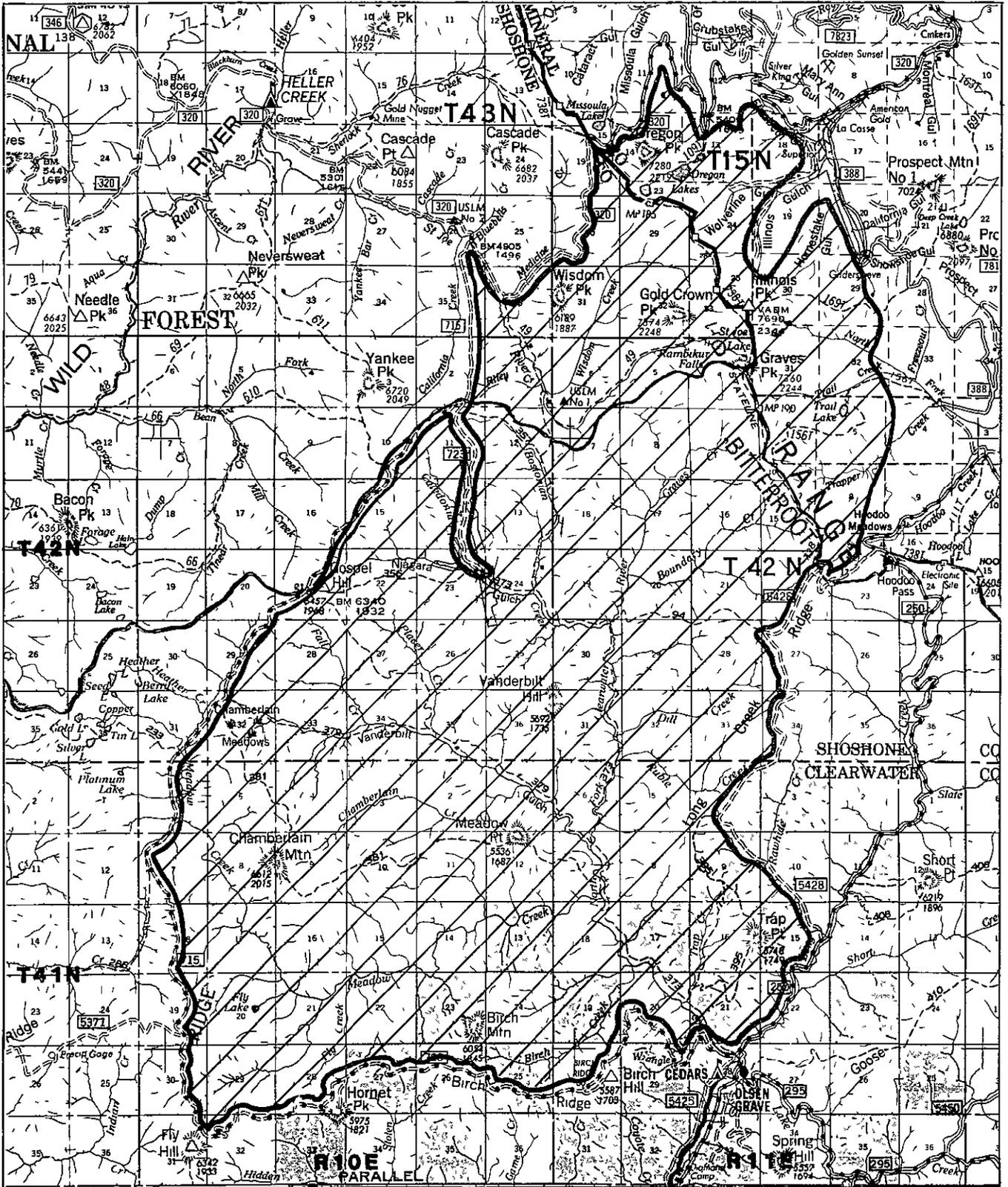
Ten of the twelve alternatives contain lands with this emphasis. In Alternatives B and C, 25 to 35 percent of the area would be managed for soil and watershed protection. Alternative A (current direction), D, E, E1, F, and J contain from 2 to 5 percent, and Alternative K (Preferred Alternative) contains about 10 percent.

Alternatives B and C contribute the most acres to preserve wilderness qualities. In the remaining alternatives, lands in this category would lose their wilderness characteristics because of surrounding development activities.

These areas are not included in the Forest's tentatively suitable timberland.

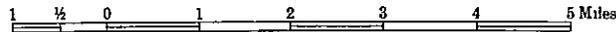
Nonpriced values would mirror surrounding management areas.

MEADOW CREEK-UPPER NORTH FORK ROADLESS AREA

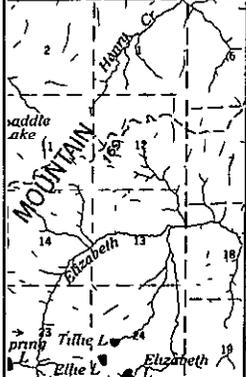


CLEARWATER FOREST PLAN 1987
1302 MEADOW CREEK-UPPER NORTH FORK
ROADLESS AREA

Scale 1/4" = 1 Mile



CLEARWATER NF	40,702 ACRES
IDAHO PANHANDLE NF	6,100 ACRES
LOLO NF	7,200 ACRES
TOTAL	54,002 ACRES



MEADOW CREEK-UPPER NORTH FORK ROADLESS AREA (01302)

LOLO, IDAHO PANHANDLE, AND CLEARWATER NATIONAL FORESTS

	Gross Acres	Net Acres
Idaho-Clearwater NF	45,440	40,702
Idaho-Idaho Panhandle NF	6,100	6,100
Montana-Lolo NF	7,200	7,200
Total	58,740	54,002

I. DESCRIPTION

The Meadow Creek-Upper North Fork Roadless Area is on the Idaho-Montana border, approximately 40 air miles west of Missoula, Montana. The Idaho portion is located in parts of Clearwater and Shoshone Counties within the Clearwater and Idaho Panhandle National Forests. The Montana portion is in Mineral County within the Lolo National Forest.

Access is provided from several directions. From the east, it is 16 miles from Superior, Montana via the Cedar Creek road #320 or 24 miles via the Pierce-Superior road #250. From the northwest, it is 35 miles from Avery, Idaho via the St. Joe River road #320. From the south, it is 100 miles from Orofino, Idaho via the Fly Hill road #715, and the Pot Mountain Ridge road #720.

Interior access is provided by 54 miles of relatively low-standard, fire control and administrative trails. Because of funding and need, many trails are maintained intermittently just to keep them open. Cross-country travel is very difficult over most of the area due to rugged terrain and dense, low vegetation. Access along the state line divide is easier over barren and sparse vegetative areas.

Topography changes from narrow flat valley bottoms to very narrow flat and U-shaped valleys at higher elevations. Sharp, rugged relief above 7,000 feet occurs along the Bitterroot Divide which separates Idaho from Montana. Several cirque basins containing four small lakes are also found near the divide. Two other small lakes are found at lower elevations. Topography becomes less steep in the North Fork of the Clearwater River drainage dropping down to 3,800 feet where the river exits the area.

Most of the area is underlain by Precambrian Belt rocks of the Wallace and Burke formations. The major lithologies associated with the Wallace formation are limestones, quartzites, dolomites, and argillites. The major lithology associated with the Burke formation is a gray to white quartzite. The southwestern corner of the area contains Cretaceous age quartz monzonite associated with the Idaho batholith.

Two major river systems, the St. Joe and the North Fork of the Clearwater, start within the area. The streams in Montana drain into the Clark Fork River.

The area provides three major vegetative ecosystems: a) cedar-hemlock-pine forest encompassing the lower elevations in the North Fork of the Clearwater River and Meadow and Chamberlain Creeks, b) western spruce-fir forest at the higher elevations up to 6,000 feet, and c) alpine meadows and barren land in a band along the Bitterroot Divide above 6,000 feet.

Vegetation varies from carex and beargrass on south slopes in the high elevations to grand fir and western redcedar types at lower elevations. Large forest fires in the late 1800's and early 1900's had a major influence on the present vegetation with much of the area being covered with even-aged stands of lodgepole pine averaging six to ten inches in diameter. Most of the area is reforested except on the south slopes that have thin soils. Other species present include subalpine fir, western larch, mountain hemlock, grand fir, and some white bark pine.

Big-game hunting, stream and lake fishing, hiking, backpacking, photography, scenic viewings, camping, prospecting, and horseback riding, all in primitive or undeveloped settings, are the primary attractions. Except in places along the Bitterroot Divide, cross-country travel is difficult due to dense vegetation.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Human activities have had a moderate impact primarily in the St. Joe drainage, Upper Cedar Creek, and the head of the North Fork of the Clearwater River. Evidence remains of turn-of-the-century gold and silver placer and dredge mining activities. Rock tailing piles along streams, diversion ditches, cabins and remains of cabins, and access roads are the principal detractors, but these have softened over the years through natural vegetation and erosion. Present day mining activities are more localized.

A metal lookout tower is located on Illinois Peak.

The majority of the rest of the area is relatively free of human impacts; even the trails appear natural. Some past minor grazing may be evident in the meadows around Chamberlain Basin.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

The Meadow Creek-Upper North Fork provides good opportunities for solitude because of the rectangular shape and large size encompassing over 54,000 acres. The area runs 14 miles north-south and 7 miles east-west. Screening, because of broken and varied topography and dense vegetation, is a big factor in reducing visual contact with others as well as minimizing noise levels and possibilities to observe discordant features outside the area. Encounters with visitors are most likely at the several larger, accessible fishing lakes, the

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National Recreation Trail along the Bitterroot Divide, and within the St. Joe Wild River corridor.

The boundary is nine miles from a major highway on the east side and is adjacent to the Pierce-Superior road on the south side. Sounds from logging activity near the periphery of the area have the potential of penetrating upwards to a mile into the roadless area. Sounds from mining activity inside the area also have the potential to be heard for a mile or so. Some very distant roads and timber harvest areas are visible in Montana and Idaho from the highest points along the Idaho-Montana Divide.

The opportunity for solitude also varies by season. Except for lower elevations in the North Fork, most land is inaccessible due to snow from November until July. Moderate to high use is experienced during elk hunting season in October.

Because of the high degree of solitude, dispersed recreation occurring in primitive and semiprimitive settings is excellent. The only improvements are the access trails which provide opportunities for hiking and horseback riding.

The major lakes, the St. Joe River, the North Fork of the Clearwater River, and other large streams provide excellent fishing opportunities. Big-game hunting, scenic viewing, and photography are other major recreation.

C. SPECIAL FEATURES

The evidence of early day mining activities and Native American use can be found.

About four miles of the headwaters of the St. Joe River have been classified a Wild River under the National Wild and Scenic Rivers Act. Management of this corridor is directed by the St. Joe Wild and Scenic River Management Plan.

Stateline Trail #730, which extends north from Hoodoo Pass along the Bitterroot Divide, has been designated as a National Recreation Trail. Because of the publicity these types of trails receive, visitors are increasing.

D. EFFECTS OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

External adverse effects are minimal because of the relative uniform rectangular shape of the area. The isolated nature as well as the relatively low standard roads and short season also contribute to very low use resulting in even less effect on the wilderness attributes.

E. MANAGEABILITY AND BOUNDARIES

Existing roadless area boundaries follow low standard roads along the southern, western and northwestern sides and well defined ridges and creeks along most of the east side. Most of the boundary along the northeast boundary in Montana is poorly defined, following timber sale and other management activities.

Along the southern edge, a checkerboard pattern of Diamond International land occurs. Other ownerships are the result of patented mining claims in Caledonia

and Niagara Creeks. To maintain a well defined wilderness boundary, land exchange or purchase of most of the private lands would be desirable. To exclude the private land from a recommended wilderness and still retain identifiable boundaries would result in a reduction of approximately 20,000 acres. Although the boundaries on the Montana-side are irregular, it would be important to retain them as is, if possible, so as to keep the high divide country intact.

The Rawhide Roadless Area (RARE II 01313), an area of 4400 acres, is for all practical purposes contiguous to this area. The boundary between these two areas was established on the basis of the abandoned Rawhide road which provided the first road access to the Clearwater Forest over Hoodoo Pass. This road was replaced with the Pierce-Superior road #250 in the early 1950's. Although evidence of the road remains in places, it is unusable except for a short stretch near the Pass.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - The potential for developed recreational sites is generally dependent upon road access, demand, and funding. Current and near future outlooks for funding and a perceived low demand severely limits the likelihood of developing additional sites.

2. Wildlife and Fish - Wildlife species include elk, moose, black bear, white-tailed and mule deer, grouse, and numerous species of nongame birds and animals common to coniferous-covered-mountains in north central Idaho. Most of the streams and lakes have a catchable size fish population, predominantly cutthroat and rainbow trout with some mountain whitefish and brook trout.

Only a small percentage of the area is suitable for big game winter range because of the elevations and heavy snowpacks over much of the area during the winter.

Although no verified sightings or other confirmed evidence of the endangered gray wolf exists in the Meadow Creek-Upper North Fork Roadless Area, habitat conditions conducive to the wolf have resulted in designation of the area as essential habitat. The management of an adequate prey base, which in this case is primarily elk, and restrictions on motorized road use are two major components for protection and enhancement of the species.

Although sightings of the threatened grizzly bear have been reported a number of times over the years, no confirmed evidence has been presented.

3. Livestock Operations - Potential livestock grazing is moderate and limited primarily to small, open, mountain grasslands and meadows along some of the major creeks. Cattle were grazed commercially in the early 1970's. Some commercial horse and mule grazing is permitted in conjunction with the one outfitter and guide operating in the area.

4. Timber - About 36,000 acres or 67 percent of the total net acreage is considered suitable for the production of timber. The standing volume of sawtimber has been estimated at 410.9 MMBF. Much of the timber is immature, although there are pockets of larger old growth, especially in the North Fork Clearwater drainage.

5. Minerals - Mining (placer and hardrock) has been an important use in the past, and the area continues to attract prospectors. The potential mineral, especially silver and gold, is moderate in a large area encompassing Niagara, Vanderbilt, Chamberlain, and Meadow Creeks in the North Fork drainage and extending north into the upper St. Joe River basin and the Cedar Creek drainage in Montana. The remainder of the area has low potential for minerals.

Potential for oil and gas is considered low, although there are five oil and gas lease applications still pending within the area encompassing about 17,300 acres.

6. Cultural Resources - Known cultural resources include three USFS lookout sites, five cabins or cabin remains, one USFS Ranger Station, eight historic hunter or outfitter camps, one prehistoric camp and fishing site, three mining sites, and one Euro-American grave site. Indian trails existed along the present Pot Mountain trail and several other areas. Historic evidence also indicates early Native Americans used selected sites along the Bitterroot Divide for killing game that crossed or were driven from one side to the other.

As noted previously, considerable early day mining has resulted in numerous sites and other evidence of these activities.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1. Non-Federal Lands - With the exception of about 400 acres of patented mining claims in Niagara and Caledonia Creeks, approximately 4,300 acres of land in the lower North Fork is owned by Burlington Northern Company. Some logging has taken place within two of the sections in recent years, and plans are to access and harvest timber in other sections. There is currently very little mining activity within the mining claims.

2. Fire - Fire history includes the large burns of 1889 and 1910. Advanced fire suppression has contributed to a low number of small fires in recent years. Correspondingly, the volume of fuels is increasing in areas where insect and disease-killed timber is found.

C. RESOURCE SUMMARY

Table C-8. 01302 - Meadow Creek-Upper North Fork

<u>Description</u>		<u>Clwtr</u>	<u>IPNF</u>	<u>Lolo</u>	<u>Total</u>
Gross Acres	Acres	45,440	6,100	7,200	58,740
Net Acres	Acres	40,702	6,100	7,200	54,002
Recreation					
Primitive	RVD's	1,721	0	0	1,721
Semiprim Nonmoto.	RVD's	1,188	0	6,840	7,668
Semiprim Motor.	RVD's	8,996	365	0	9,361
Roaded Natural	RVD's	4,159	140	7,200	11,499
Range					
Existing Obligated					
Suitable	Acres	1,000	0	0	1,000
Allotments	No.	1	0	0	1
AUM's	AUM's	118	0	0	118
Existing Vacant					
Suitable	Acres	1,628	0	0	1,628
Allotments	No.	1	0	0	1
AUM's	AUM's	150	0	0	150
Proposed					
Suitable	Acres	0	0	0	0
AUM's	AUM's	0	0	0	0
Timber					
Tentative Suitable	Acres	33,089	1,615	1,513	36,217
Standing Volume	MBF	376,000	23,000	11,900	410,900
Corridors					
Exist. and Potential	No.	0	0	0	0
Wildlife - T & E					
Grizzly Bear					
Habitat - Sit. 1	Acres	0	0	0	0
Habitat - Sit. 2	Acres	0	0	0	0
Habitat - Sit. 3	Acres	0	0	0	0
Bald Eagle Hab.	Acres	0	0	0	0
Gray Wolf Hab.	Acres	40,702	0	0	40,702
Peregrine Fal. Hab.	Acres	0	0	0	0
Wildlife - Big Game					
Big Game					
Summer Habitat	Acres	0	0	0	0
Winter Habitat	Acres	0	0	0	0
Elk					
Summer Habitat-Key	Acres	0	179	0	179

 (Table C-8 cont.) 01302 - Meadow Creek-Upper North Fork

<u>Description</u>		<u>Clwtr</u>	<u>IPNF</u>	<u>Lolo</u>	<u>Total</u>
Winter Habitat-Key	Acres	0	0	0	0
Significant Fisheries					
Stream Miles	Miles	179	0	0	179
Stream Habitat	Acres	215	0	0	215
Lakes	No.	4	0	0	4
Lakes - Habitat	Acres	68	0	0	68
Water Developments					
Existing	No.	0	0	0	0
Minerals					
Potential Hardrock					
Very High	Acres	0	0	0	0
High	Acres	0	0	0	0
Moderate	Acres	27,520	0	7,200	34,720
Low	Acres	13,182	0	0	13,182
Claims	No.	25	16	11	52
Potential Oil and Gas					
Very High	Acres	0	0	0	0
High	Acres	0	0	0	0
Moderate	Acres	0	0	0	0
Low	Acres	40,702	0	7,200	47,902
Oil and Gas Leases					
Leases	No.	0	0	0	0
Leased Area	Acres	0	0	0	0

IV. NEED

A. GENERAL

The area represents high alpine vegetation and lakes in a largely unaltered condition. Management of St. Joe Lake and the surrounding area as wilderness would be more consistent with the Wild River designation of the upper St. Joe River and would aid in maintaining the integrity of the entire system.

Another main attribute is the display of successful vegetative changes resulting from the 1910 fires.

Considerable interest locally and regionally for wilderness classification has been shown. Before and during the RARE I and II studies, the idea was promoted of having a continuous wilderness starting with the Mallard-Larkins, continuing across Meadow Creek-Upper North Fork and connecting up with the Hoodoo area extending south all the way to near Lolo Pass. These efforts were promoted primarily by residents in Lewiston-Moscow, Idaho.

The results of public input received on the RARE II Draft Environmental Statement recorded 1,787 favorable responses for wilderness, and 2,981 responses or 63 percent of the responses for development. Interest since that time (1979) has been minimal with some exceptions.

Tables C-1 and C-2 on pages C-2 and C-3 show the location and proximity to other wilderness and population centers in Idaho, Western Montana and Eastern Washington.

B. CLEARWATER FOREST

All of the 37 comments received between the draft and final documents favored either wilderness or leaving the area undeveloped. The major reasons given include the desire to:

1. protect gray wolf habitat;
2. maintain spawning habitat for the Dolly Varden trout and keep sediment from logging and road building out of the spawning beds;
3. maintain important elk summer range;
4. preserve recreational opportunities for fisherman, hunters, and horsebackers;
5. exclude timber harvest because of poor timber, terrain, and distance to mills;
6. preserve this area adjacent to the Mallard-Larkins Roadless Area which has important roadless/wilderness values also.

In the Forest Plan, the major portion of the Meadow Creek-Upper North Fork area, exclusive of the intermingled ownership, is changed from Management Area E1 to Management Area C8S. This will provide more protection for elk and gray wolf habitat with complete road closures following timber harvest.

C. IDAHO PANHANDLE FOREST

In 1974, public input was solicited on the closure of the St. Joe road #49 to use by motorized vehicles. Interest in the area was considerable and overwhelmingly in favor of closure. It has remained closed since that time.

During public review of the Idaho Panhandle Forest Plan DEIS, approximately 80 specific comments were received about keeping this area roadless. Most commenters wanted this designation to protect wildlife, recreation, and aesthetic values. Mentioned less frequently as reasons to support a roadless designation were: wilderness habitat, wildlife sanctuary, poor quality timber, below-cost timber, water quality, and protection of vegetation. A few favored wilderness. Proximity to the St. Joe Wild River (headwaters) and other large roadless areas was also cited.

No changes were made on the Idaho Panhandle portion of the roadless area between the Draft and the Final.

D. LOLO FOREST

During public review of the Lolo Forest Plan DEIS, many comments were received which supported wilderness designation for this area. The Montana portion of this area is attached to a larger portion in Idaho which is in close proximity to the Hoodoo area to the south and east, and to the Mallard-Larkin area to the west. All of these areas were recommended for wilderness by the Great Burn Study Group prior to NFMA. A large number of comments were in favor of this Great Burn Wilderness. Few comments were received that opposed any additional wilderness.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

The management emphasis for the Meadow Creek-Upper North Fork Roadless Area is a combination of management prescriptions and alternatives from three National Forests, the Clearwater, Lolo, and Idaho Panhandle. Because resources, uses, and land conditions are somewhat different on each Forest, neither the alternatives nor the management emphasis are fully integrated. The Clearwater is the lead Forest for this roadless area, so for this evaluation, the alternatives and management emphasis from the other two Forests have been integrated into those goals and objectives of the Clearwater.

Further information on the specific alternatives and management emphasis for Idaho Panhandle and Lolo National Forest's areas can be found in these Forest's Draft Environmental Impact Statements.

The recommended wilderness/nonwilderness designation for area 1302 is documented in the Forest Plan. This recommended designation has priority over all other land designations and none of the three Forests can undertake any management activity other than current direction until such time that a Record of Decision is issued in conjunction with this document.

Management emphasis Table C-9 on the following page shows the acres proposed to various resource management in each alternative.

Table C-9

Meadow Creek-Upper North Fork Roadless Area
Management Emphasis by Alternative

		*Alternatives (thousand acres)											
Management	Clw-	A	B	C	D	E	E1	F	G	H	I	J	K
Emphasis	IPNF-	(8)	(2)	(4)	(5,7)	(11)	(12)	(7)	(1)	(10)	(3,7,9)	(5)	(13)
	Lolo-	(a)	(c)	(c)	(d,e,f)	(d,e,f)	(d,e,f)	(b)	(a)	(d,e,f)	(g)	(d)	(d)
WILDERNESS		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (7 2)	0 (6 1)	40 7 (13 3)	0 (0)	0 (0)
NONWILDERNESS													
Unroaded		0 (0 7)	0 (4 8)	0 (4.8)	0 (8 9)	0 (8.9)	0 (9 2)	0 (10 2)	0 (4 0)	0 (5 0)	0 (0)	0 (8 9)	0 (8 9)
Elk Winter		0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -	0 -
Timber/Wldlf-Wtshd		29 4 (1.7)	27 0 (3 4)	28.5 (3 4)	22 7 (1 2)	16 3 (1 5)	16 3 (1 2)	2 9 (0 7)	29 4 (0 1)	0 (0 7)	0 (0)	20 3 (1 2)	2 6 (1 5)
Timber/Visual-Rip		6 5 (1 3)	2 5 (0)	2 7 (0)	16 4 (0 7)	15 1 (0 7)	15 1 (0 7)	14 9 (0 8)	10 2 (0)	9 4 (0 7)	0 (0)	19 4 (0 7)	1 2 (0 7)
Timber/Special		0 (0 3)	0 (0 3)	0 (0 3)	0 (0 2)	0 (0 2)	0 (0 2)	20 6 (0)	0 (0)	30 4 (0 2)	0 (0)	0 (0 2)	31 8 (0 2)
Special		0 (1 3)	0 (1 3)	0 (1 3)	0 (1.3)	0 (1 3)	0 (1 3)	0 (1 3)	0 (1 3)	0 (0)	0 (0)	0 (1 3)	0 (1 3)
Protection		4 8 (8 0)	11 2 (3 5)	9 5 (3 5)	1 6 (1 0)	9 3 (0 7)	9 3 (0 7)	2 3 (0 3)	1 1 (0 7)	0 9 (0 6)	0 (0)	1 0 (1 0)	5 1 (0 7)
TOTAL		40 7 (13 3)	40 7 (13 3)	40 7 (13 3)	40.7 (13.3)	40 7 (13 3)							

* This roadless area is contiguous with the Idaho Panhandle (IPNF) and Lolo National Forests
Letters and numbers in parenthesis represent the alternatives and acres on these Forests

(Table C-9 cont)

Summary of Management Emphasis

Management Emphasis	A	B	C	D	E	E1	F	G	H	I	J	K
	(8)	(2)	(4)	(5,7)	(11)	(12)	(7)	(1)	(10)	(3,7,9)	(5)	(13)
	(a)	(c)	(c)	(d,e,f)	(d,e,f)	(d,e,f)	(b)	(a)	(d,e,f)	(g)	(d)	(d)
Wilderness-Clwtr	0	0	0	0	0	0	0	0	0	40 7	0	0
-IPNF	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6 1)	(6 1)	(0)	(0)
-Lolo	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7 2)	(0)	(7 2)	(0)	(0)
-Total	0	0	0	0	0	0	0	7 2	6 1	54 0	0	0
Nonwilderness												
Developed-Clearwater												
Decade 1	36 7	36 7	36 7	36 7	36 7	36 7	36 7	36 7	36 7	0	36 7	20 3
Decade 5	40 7	40 7	40 7	40 7	40 7	40 7	40 7	40 7	40 7	0	40 7	40 7
Developed-Lolo												
Decade 1	(1 8)	(1 9)	(1 9)	(1 4)	(1 4)	(1 4)	(1 0)	(0)	(1 4)	(0)	(1 4)	(1 4)
Decade 5	(7 2)	(2 4)	(2 4)	(2 2)	(2 2)	(2 2)	(1 0)	(0)	(2 2)	(0)	(2 2)	(2 2)
Developed-IPNF												
Decade 1	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Decade 5	(1 8)	(1 8)	(1 8)	(0)	(1 0)	(0)	(0)	(0)	(0)	(0)	(0)	(1 0)
Roadless-Clearwater												
Decade 1	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	0	4 0	20 4
Decade 5	0	0	0	0	0	0	0	0	0	0	0	0
Roadless-Lolo												
Decade 1	(5 4)	(5 3)	(5 3)	(5 8)	(5 8)	(5 8)	(6 2)	(0)	(5 8)	(0)	(5 8)	(5 8)
Decade 5	(0)	(4 8)	(4 8)	(5 0)	(5 0)	(5 0)	(6 2)	(0)	(5 0)	(0)	(5 0)	(5 0)
Roadless-IPNF												
Decade 1	(6 1)	(6 1)	(6 1)	(6 1)	(6 1)	(6 1)	(6 1)	(6 1)	(0)	(0)	(6 1)	(6 1)
Decade 5	(4 3)	(4 3)	(4 3)	(6 1)	(5 1)	(6 1)	(6 1)	(6 1)	(0)	(0)	(6 1)	(5 1)
Total Acres-Clearwater	=40 7											
-Idaho Panhandle	= 6 1											
-Lolo	= 7 2											
Total Acres Roadless Area	=54 0											

Alternative K, (13), (b) = Preferred Alternative

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

The entire area is designated to wilderness in Alternative I. Alternative G designates approximately 13 percent to wilderness, and Alternative H designates 11 percent. This emphasis will enhance the wilderness qualities of the area. The acquisition of the private lands around Birch Mountain and in Niagara Gulch, 4,738 acres, would maintain the entire area as essentially roadless.

Approximately 579.9 MMBF of standing timber on the 36,000 acres of tentatively suitable timberland would not be available for timber harvest.

Only valid mining claims and mineral leases in effect when designated to wilderness or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry. Mineral exploration and development costs of valid claims and leases would be extremely high, because of access and other operational constraints needed to protect the areas' wilderness characteristics.

Existing livestock grazing would be compatible with wilderness policy.

Effects of wilderness management on nonpriced resource values are:

- The visual quality would be maintained in a natural landscape.
- The present primitive and semiprimitive setting would remain to provide big-game hunting, hiking, camping, photography, fishing, and horseback riding.
- The essential gray wolf habitat would be maintained.
- Elk habitat would eventually decline due to the natural succession of the forest and the inability to modify it by prescribed burning. Openings in the forest stands would occur through fire or insect and disease. The lodgepole pine stands would become increasingly subject to attack by the mountain pine beetle within twenty to forty years.
- The water quality would be maintained to the highest fishable level.
- Vegetative diversity would tend towards old-growth. Old-growth dependent wildlife species would be favored.

The social and economic effects center around timber, minerals, wildlife, and recreation. The local timber and mineral industries would not be supported. Individuals favoring wilderness designation would be supported. Recreationists favoring roaded natural recreation would not be accommodated.

2. Designation: Nonwilderness Management Emphasis: Unroaded

Portions of Idaho Panhandle and Lolo National Forests are designated to unroaded management emphasis in 11 of the 12 alternatives. In Alternatives D,

E, E1, F, J, and K (Preferred Alternative) about 16 to 18 percent of the area is designated to this emphasis. Alternatives B, C, G, and H designate approximately 8 percent, and Alternative A (current direction) contributes only 1 percent. In all the alternatives, the wilderness attributes of the affected portions of the area would be maintained.

The suitable timberland within this emphasis would not be available for harvest or other investment purposes.

Mineral, oil, gas exploration, and development could continue. However, extraction costs would be high due to lack of access and other operational constraints required to maintain roadless values.

This emphasis would have no impact on the existing livestock grazing activities.

Effects of unroaded management on nonpriced resource values are:

- The natural-appearing, unroaded visual setting would be maintained.
- The present primitive/semiprimitive setting would remain to provide big-game hunting, fishing, hiking, photography, ski-touring, and horseback riding.
- Essential gray wolf habitat would be maintained.
- Elk habitat would be modified by natural forces including fire. Elk populations could fluctuate depending on forage ratios.
- Water quality would remain high.
- Vegetative diversity would tend to move towards climax successional stages and species. Old-growth dependent wildlife species would be favored. The lodgepole pine stands would become more susceptible to insect and disease attack in future years.

Social and economic effects are related to timber, recreation, and wilderness. The local timber industry would not be supported. Those individuals advocating wilderness values would be largely supported as would those individuals favoring recreation in a primitive/semiprimitive setting. Recreationists desiring roaded natural settings would not be supported.

3. Designation: Nonwilderness Management Emphasis: Timber/Wildlife-Watershed

The lands designated to timber/wildlife and watershed would be managed for timber production at varying investment levels. Minimum constraints relating to protection of big-game habitat and water quality would be met.

Eleven of the twelve alternatives designate portions of the area to this emphasis. About 55 to 60 percent is designated to timber production in Alternatives A (current direction), B, C, and G. About 40 to 45 percent is designated in Alternatives D, E, E1, and J. Alternatives F and K (Preferred Alternative) designates 7 percent, with Alternative H only designating 1 percent.

In all alternatives except I and K (Preferred Alternative), approximately 70 percent of the area would be roaded by the end of the first decade, significantly affecting the area's potential wilderness characteristics. Approximately 40 percent of the area would be roaded by the end of the first decade in Alternative K (Preferred Alternative). In all alternatives, except A (current direction), about 80 percent of the area would be roaded. Alternative A would road 92 percent.

Lodgepole pine, the major species on a third of the suitable timberland, and other timber would be available for harvest and other long-term investments.

Any discovered mineral, oil or gas would be made easier to develop due to improved access.

This emphasis would not significantly impact the livestock grazing. Areas cleared by timber harvest would provide transitory range.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- Visual quality would be affected by road access and timber harvest. The natural landscape in visual sensitive portions would be retained or partially retained.
- The semiprimitive setting would be changed to roaded natural as development progresses. Hunting, fishing, camping, and motorized recreation would dominate.
- The essential gray wolf security habitat could be maintained by controlling road access.
- A minimum of 25 percent of the potential for elk habitat would be maintained by controlling road access and by scheduling timber harvests. Harvesting in the continuous lodgepole pine stands would improve the forage for elk cover.
- The water quality would be maintained at a high fishable level by controlling road access and by scheduling road construction and timber harvests.
- Existing vegetative diversity would tend towards seral successional stages and species.

Social and economic effects center around timber, wildlife, wilderness, and recreation. Timber and mineral resources would be available, supporting the local timber and mineral industries. The change could be disruptive to those using the area for primitive and semiprimitive recreation or to those who favor wilderness. Those recreationists desiring roaded natural recreation would be supported.

4. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

All alternatives except Alternative J contain areas that have a goal of timber production within areas that fall into retention or partial retention VQO's and

that have ecologically important riparian vegetation and features located along stream courses.

Eleven of the twelve alternatives designate lands to this emphasis. Alternative D designates about 40 percent. Alternatives E, E1, and F designate about 35 percent; Alternatives A (current direction), G, H, and I designate 15 to 20 percent; and Alternatives B, C, and K (Preferred Alternative), designate 2 - 5 percent of the area to timber/visual-riparian emphasis.

Because these largely narrow and linear shaped areas would be directly related to larger areas with timber production emphasis, the effects would essentially mirror those of the timber/wildlife-watershed management emphasis.

Wilderness characteristics would be foregone. Timber harvest would occur on an extended rotation basis.

Mineral exploration and development would have high costs due to constraints needed to protect key riparian/visual values.

Some transitory range for livestock would be created.

The primary effects on nonpriced resources would mirror those of the timber/wildlife-watershed management emphasis. However, vegetative diversity would tend towards climax successional stages because of extended timber rotations. Overall vegetative diversity would tend toward old growth. In addition, essential security habitat for the gray wolf could be impacted depending on the size of the affected area and available mitigation measures.

Social and economic effects are related to watershed, timber, recreation, and wilderness. Water quality values would be supported. Individuals seeking roaded natural recreation would be supported as hunting, fishing, driving, and/or hiking would be the dominate activities. Wilderness advocates would not be supported.

5. Designation: Nonwilderness
Management Emphasis: Timber/Special

Eleven of the twelve alternatives contain lands designated to protecting the watershed and fisheries with a secondary goal of timber production.

Alternatives H and K (Preferred Alternative) designate 57-60 percent of the area located in the Meadow Creek and Upper North Fork of the Clearwater drainages to a primary goal of maintaining existing resident cutthroat, Dolly Varden, and rainbow trout fishery. In Alternative F about 38 percent located in the Meadow Creek drainages is designated. In the eight other alternatives, less than 1 percent of the area in the Lolo Forest is designated.

Wilderness qualities would be lost under this management.

Any change in the suitable timberland would be the same as those discussed under the timber/wildlife-watershed emphasis. The greatest change for timber harvesting would be in the scheduling of road construction and timber harvest to be compatible with the fish habitat productivity and water quality

objectives. There will be a greater cost for mitigation measures in timber management activities from road closures and smaller harvest unit size.

Mineral exploration and development could take place, but such activities would have slightly lower cost due to better access.

Grazing would not be encouraged in the elk calving areas in the spring.

Effects of timber/special management on nonpriced resource values are:

- Visual quality would be affected by road access and timber harvest. There would be a higher visual quality from the timber/wildlife-watershed management emphasis due to the smaller size and irregular shaped timber harvest units. The roads could be constructed to minimize obstruction of views by taking advantage of natural screening. Established Forest VQO's would be met.

- The scenic, primitive setting would change to a roaded natural setting. The increased use of road closures would maintain more of a semiprimitive environment from management emphasis E1.

- Essential gray wolf security habitat would be disturbed by roading activities. Such impacts would be mitigated with road closures.

- The summer range productivity would be maintained at a minimum of 75 percent of maximum potential elk use. Roads would be closed to protect the elk. Alternative K (Preferred Alternative) requires complete road closure to all public motorized vehicles, thereby assuring an even higher level of protection for elk.

- The water quality would be maintained at a high fishable level since the main river and its tributaries are major spawning waters for the Dolly Varden. Scheduling timber harvest and road construction along with riparian protection measures would be utilized to meet the established water quality standards.

Social and economic effects center around wildlife, recreation, wilderness, and timber. Timber and mineral resources would be available supporting the timber and mineral industries. The recreational experience provided by commercial outfitters would be reduced from the present unroaded condition. The public would have limited motorized access on the new roads constructed in the area. Individuals advocating wilderness would not be supported.

6. Designation: Nonwilderness
Management Emphasis: Special

Lands designated to this emphasis would not be developed, but would be permitted to run their natural course for research study. They are not adjacent to wilderness but would mirror wilderness qualities within a very small area.

In all alternatives except Alternatives H and I, about 1,300 acres would protect the outstanding scenic, wildlife, fisheries, and ecological values of the St. Joe Wild and Scenic corridor. In Alternatives H and I, those portions of the river corridor within the area would be designated to wilderness.

A road currently parallels much of the river corridor detracting from the wilderness characteristics of the corridor. In all alternatives, the wilderness character of the corridor would remain essentially at existing levels. Timber on suitable timberland within the corridor would not be available for harvest other than on an opportunity basis to enhance or protect corridor values.

Effects of special management on nonpriced resource values are:

- Visual quality of retention or partial retention would be maintained.
- Mineral exploration and development would have higher costs due to constraints from restrictive management emphasis.
- Existing roaded natural and semiprimitive settings for recreation would remain essentially unchanged.
- Essential gray wolf habitat would be protected.
- Water quality levels would remain high.

Economic and social effects relate to timber, recreation, and wilderness. Overall, the emphasis would not support the local timber products or minerals industries. Recreationists favoring roaded natural and semiprimitive settings would be supported. Wilderness supporters would not be accommodated.

7. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints. Management would be minimal with no investments occurring.

Generally, these areas are small and scattered throughout surrounding management areas. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment activities would occur.

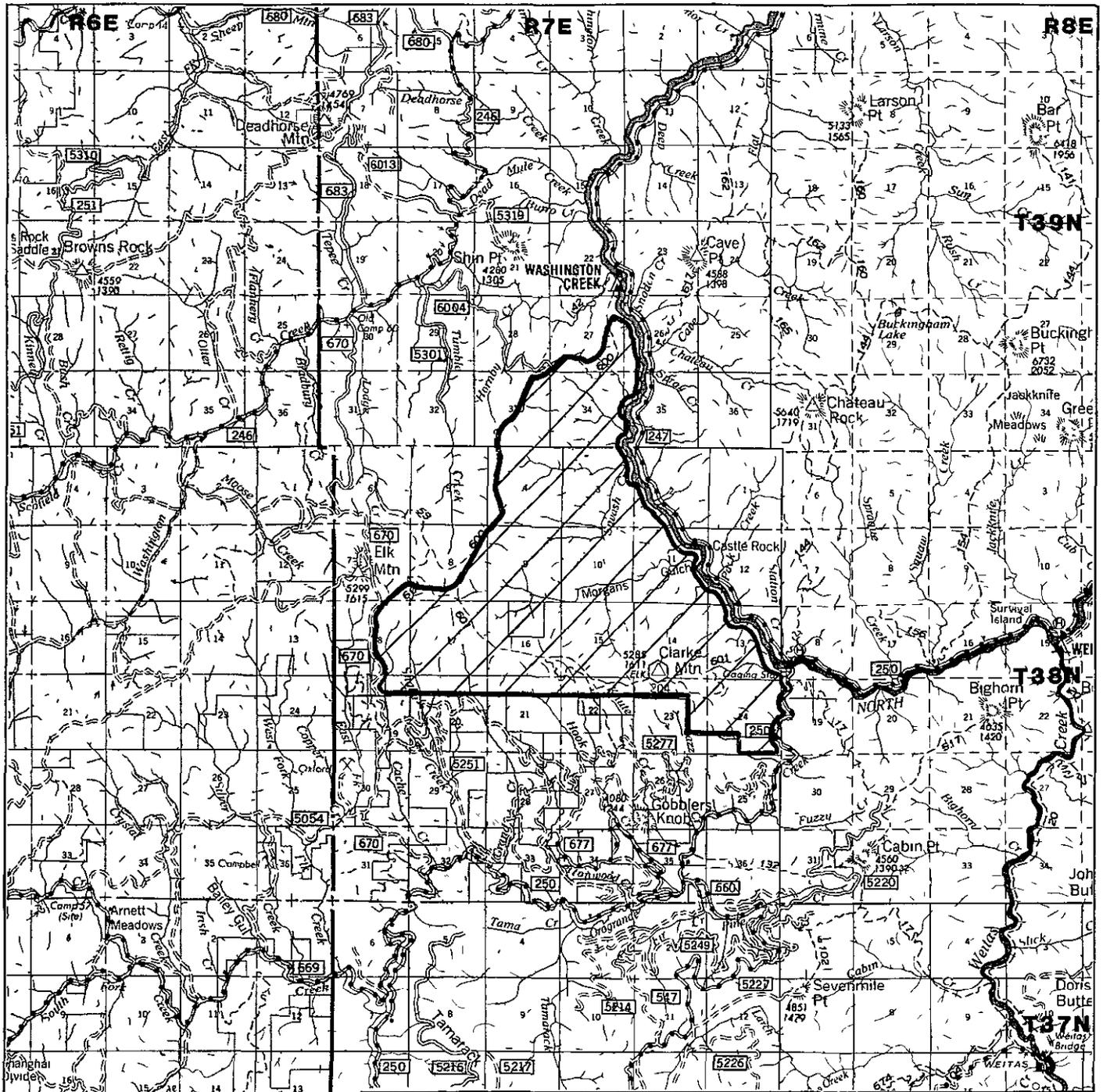
All of the alternatives, except Alternative I, contain lands managed for soil and watershed protection. About 20 to 25 percent of the area is designated in Alternatives A (current direction), B, and C and contribute more acres retaining wilderness characteristics. In the remaining alternatives, 4 to 5 percent is designated and would lose much of their wilderness qualities because of surrounding development activities.

Such areas are not included in the Forest's tentatively suitable timberland and would not be available for harvest.

Mineral exploration and development could take place, but costs of such activities would be higher due to limited access.

Nonpriced values would mirror those of surrounding management areas.

SIWASH ROADLESS AREA



CLEARWATER FOREST PLAN 1987

1303 - SIWASH ROADLESS AREA

Scale 1/2" = 1 Mile



TOTAL ACRES 8,851

SIWASH ROADLESS AREA-(01303)

Gross Acres	Net Acres
9,011	8,851

I. DESCRIPTION

The Siwash Roadless Area is located approximately 60 road miles northeast of Orofino, Idaho in the drainage of the North Fork of the Clearwater River.

It is easily accessible by roads #249, #640, and #677, although one must cross the North Fork of the Clearwater River to gain access to the east side of the unit. A foot trail crosses the southwest portion of the unit, extending from the site of the old Bungalow Ranger Station to Clarke Mountain and on through to Elk Mountain just outside the area. A jeep road accesses the Clarke Mountain Lookout near the edge of the area. A trail from Elk Mountain to the river follows the ridge along the northwest boundary.

Siwash is a typical Clearwater Forest steep, streambank landscape. There are two second-and third-order streams, all others are first-order draining directly into the river or other larger streams to the south and eventually into Orogrande Creek.

The area is underlain by coarse-grained to porphyritic light gray granite of the Cretaceous Bungalow pluton associated with the Idaho batholith.

Elevations vary from 2,200 feet along the North Fork of the Clearwater River rising rapidly to 5,285 feet on Clarke Mountain.

Because of the relatively low elevations, only one vegetative ecosystem is found, the cedar-hemlock-pine forest. Western redcedar, western white pine, grand fir, Douglas fir, Englemann spruce, subalpine fir, and lodgepole pine are the most common tree species.

Except for scenic values associated with the North Fork River and the river face, elk hunting is the major use. All other uses are minimal or absent.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Other than the jeep trail to Clarke Mountain and the lookout itself, which is currently inactive, the area has no unnatural or adverse impacts to integrity or appearance.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

Solitude is at a minimum, because of the small size of Siwash, traffic on the

main river road, and logging activity on two sides. Views of activity outside the area also detracts from opportunities for solitude.

Big-game hunting is not considered unique to wilderness nor are the limited hiking opportunities.

C. SPECIAL FEATURES

There are no known special features.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

The small size of the area surrounded by roads and timber management activities significantly affects the wilderness attributes.

E. MANAGEABILITY AND BOUNDARIES

Two sides of this triangular-shaped roadless area are well defined by a river and a main ridge. The south side following property lines is undefinable. Moving the boundary north to follow the Clarke Mountain trail #601 would be more logical. It would also reduce the size of the area to about 7,000 acres. A 160-acre block of private land would have to be acquired, or the Forest would have to allow access if desired by the owner.

III. AVAILABILITY

A. OTHER RESOURCES

1. Wildlife - Elk, mule deer, and black bears are the most common big game species. The area contains 3,348 acres of key elk winter range, most of it in need of rehabilitation through tree removal and browse burning.
2. Timber - The Siwash area has 7,549 acres of land tentatively suitable for timber production. Current sawtimber volumes average about 31 MBF per acre for a total of 148 MMBF. Except for the ridges along the higher boundaries, road access would be very difficult.
3. Minerals - Potential for minerals is low to moderate. Some future prospecting and exploration is likely near some known mineral occurrences in the southern part of the area.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1. Non-Federal Lands - A 160-acre block of private land lies near the southern boundary.
2. Fire - Although there were numerous and large scale fires during the early part of the century, current occurrence is low. As mature timber stands die and build up debris, hazards could again increase.

C. RESOURCE SUMMARY

Table C-10.

01303-Siwash

<u>Description</u>		<u>Description</u>			
Gross Acres	Acres	9,011	Gray Wolf Hab.	Acres	0
Net Acres	Acres	8,851	Peregrine Fal. Hab.	Acres	0
Recreation		Wildlife - Big Game			
Primitive	RVD's	0	Big Game		
Semiprim Nonmotor	RVD's	0	Summer Habitat	Acres	0
SPM	RVD's	0	Winter Habitat	Acres	0
Roaded Natural	RVD's	3,921	Elk		
Range			Summer Habitat-Key	Acres	0
Existing Obligated			Winter Habitat-Key	Acres	2,480
Suitable	Acres	0	Significant Fisheries		
Allotments	No.	0	Stream Miles	Miles	30
AUM's	AUM's	0	Stream Habitat	Acres	36
Existing Vacant			Lakes	No.	0
Suitable	Acres	0	Lakes - Habitat	Acres	0
Allotments	No.	0			
AUM's	AUM's	0	Water Developments		
Proposed			Existing	No.	0
Suitable	Acres	0			
AUM's	AUM's	0	Minerals		
Timber			Potential Hardrock		
Tentative Suitable	Acres	7,549	Very High	Acres	0
Standing Volume	MMBF	148	High	Acres	2,071
Corridors			Moderate	Acres	0
Exist. and Potential		No.	Low	Acres	6,780
		0	Claims	No.	0
Wildlife - T & E			Potential Oil and Gas		
Grizzly Bear			Very High	Acres	0
Habitat - Sit. 1		Acres	High	Acres	0
Habitat - Sit. 2		Acres	Moderate	Acres	0
Habitat - Sit. 3		Acres	Low	Acres	8,851
Bald Eagle Hab.		Acres	Oil and Gas Leases		
		0	Leases	No.	0
		0	Leased Area	Acres	0

IV. NEED

No public interest for wilderness has been expressed. The vegetative ecosystems and variety are common and would not add anything of significance to the national Wilderness Preservation System. Siwash was recommended for nonwilderness as a result of the RARE II study.

Tables C-1 and C-2 shows the location and proximity of the Siwash Roadless Area to other wilderness and population centers in Idaho, western Montana and eastern Washington.

No comments were received between the Draft and Final regarding this roadless area. No changes were made for management of the area from that in the Draft.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-11

Siwash Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)											
	A	B	C	D	E	E1	F	G	H	I	J	K
WILDERNESS	0	0	0	0	0	0	0	0	0	8.9	0	0
NONWILDERNESS												
Unroaded	0	0	0	0	0	0	0	0	0	0	0	0
Elk Winter	0	0.9	0.9	1.2	0.6	0.6	1.4	1.2	1.7	0	1.2	0.4
Timber/Wldlf-Wtshd	3.9	6.1	6.1	4.0	4.3	4.3	5.0	5.9	3.7	0	5.4	5.1
Timber/Visual-Rip	4.7	0.6	0.6	2.6	2.5	2.5	1.9	1.2	3.4	0	1.7	1.1
Timber/Special	0	0	0	0	0	0	0	0	0	0	0	0
Special	0	0	0	0	0	0	0	0	0	0	0	0
Protection	0.3	1.3	1.3	1.1	1.5	1.5	0.6	0.6	0.1	0	0.6	2.3
TOTAL	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9

Summary of Management Emphasis

Wilderness	0	0	0	0	0	0	0	0	0	8.9	0	0
Nonwilderness												
Developed												
Decade 1	0	0	0	0	0	0	0	0	0	0	0	0
Decade 5	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	0	8.9	8.9
Roadless												
Decade 1	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	0	8.9	8.9
Decade 5	0	0	0	0	0	0	0	0	0	0	0	0

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

The entire area is designated to wilderness in Alternative I.

This emphasis would enhance the wilderness qualities if the patented private land in Section 16 could be acquired. The naturalness of the area would remain, and opportunities for solitude would be available. Although this designation would preserve the natural landscape, noises from outside its boundaries could be heard due to the small size of the area.

The 148 MMBF of standing timber volume within the area would not be available for harvest. This would represent approximately 0.5 percent of the tentatively suitable timberland on the forest.

Only valid mining claims and mineral leases in effect when designated to wilderness or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry. Development of discovered or leasable minerals could occur after this date on valid claims or leases. Extraction costs would be extremely high due to operational/access restrictions needed to protect wilderness values.

Effects of wilderness management on nonpriced resource values are:

- Pileated woodpecker and other wildlife species favoring old-growth habitat would be maintained.
- The natural ecosystem would be protected. Water quality, scenic views, and primitive recreation would be unchanged.
- Elk security cover would be maintained and could increase. Big game hunting would remain the same although elk winter forage areas would probably decline. They would probably remain for a long time on the poorer sites (if not overbrowsed) but the better sites would be expected to grow up into timber stands shading out the forage. The maintenance of winter browse areas by periodic wildfires would probably not be possible due to the small size of the area. Under present wilderness policy person-caused prescribed fire would not be permitted.

Social and economic effects center around timber, minerals, wildlife, recreation, and wilderness. Since wilderness would preclude timber harvest and could preclude mineral development, the related industries would not be supported. From a social aspect, the individuals valuing wilderness would be supported as well as those people recreating along the river who desire a natural landscape. Those individuals favoring roaded natural recreation would not be accommodated.

2. Designation: Nonwilderness
Management Emphasis: Elk Winter Range

These areas would provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur only on an opportunity basis to maintain big-game forage.

Roads needed to manage adjacent areas with different designations could be constructed through such areas only if they met soil and watershed constraints. Any road crossing the affected areas would preclude future wilderness designation. Some roads would be built. Wilderness options would be foregone by the end of the fifth decade for all alternatives except Alternative I.

About 17 percent of the area is designated to this management emphasis in Alternative H; about 4 to 10 percent is designated in Alternatives B, C, E, E1 and K (Preferred Alternative); and about 13 percent in Alternatives D, F, G and J. No area is designated to this emphasis in Alternatives A (current direction) or I.

A small amount of timber volume would be available on an opportunity basis. It would most likely be hard to access. Certain areas could require expensive sophisticated logging systems to remove it.

Mineral exploration and development could take place, but access would be difficult for much of this emphasis area making such activities very costly.

Effects of elk winter range management on nonpriced resource values are:

- Visual quality would be affected when logging does take place. The natural landscape that can be seen from the North Fork road would be retained or partially retained meeting established VQO's.
- The semiprimitive setting would change to roaded natural but the few roads constructed would be closed to motorized vehicle traffic.
- Most stands of timber would not be logged until they began to deteriorate. This would provide adequate old-growth timber for old-growth dependent species.
- Natural vegetative successional forces would be interrupted by prescribed burning or mechanical elk winter range treatment methods.
- Decadent brush fields would be rehabilitated. Methods such as prescribed burning, seeding, planting, and fertilizing brush fields would be possible.

Social and economic effects center around wildlife, recreation, minerals, and wilderness. Timber would be available to support the timber industry on an irregular basis. Minerals would be accessible. The change in landscape could be disruptive to those individuals using the area for primitive or semiprimitive recreation as well as individuals viewing the area from the North Fork road. Individuals favoring wilderness would not be supported.

3. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated to timber/wildlife and watershed would be managed for timber production at varying investment levels. Minimum constraints relating to protection of big game and water quality would be met.

About 70 percent of the area would be managed under this emphasis in Alternatives B, C, and G, D, E, E1, F, H, J, and K (Preferred Alternative).

This emphasis would preclude future wilderness designation. Wilderness options would be foregone in all alternatives (except I) by the end of the fifth decade. Since the area is most visually sensitive, the natural landscape would be retained to the extent possible.

A range of 100 to 148 MMBF of standing timber would be available for harvest in all the alternatives except Alternative I. Much of this volume is on steep and/or unstable terrain requiring the use of expensive and sophisticated logging systems to remove it.

Mineral exploration and development could take place, but road access to much of the emphasis area would be difficult, making these resources costly to extract.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- Visual quality would be affected by road access and timber harvest. The natural landscape in visually sensitive portions would be retained or partially retained.
- The semiprimitive setting would change to roaded natural.
- Elk security would be impacted by timber harvest and road access. This could be partially mitigated by road closures. The guideline of 25 percent of potential elk use has been established.
- Elk winter range would be created when timber is logged from the lower elevations. This winter range would be available until a new crop of trees shades the forage.
- Long term vegetative successional trends would be towards seral stages with a variety of age classes.

Social and economic effects center around timber, minerals, wildlife, recreation, and wilderness. Timber and mineral would support the timber and minerals industries. The change could be disruptive to those individuals using the area for primitive or semiprimitive recreation or viewing the area from the North Fork road. Wilderness advocates would not be supported.

4. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

This management emphasis has a goal of timber production within areas that fall into retention or partial retention VQO's and that have ecologically important riparian vegetation and features located along stream courses.

Approximately 50 percent of the area is managed for such emphasis in Alternative A (current direction). Alternative H includes about 40 percent with Alternatives D, E, and E1 having 30 percent. In Alternatives F and J, about 20 percent is managed under this emphasis and Alternatives B, C, J, and K (Preferred Alternative) contain about 10-13 percent.

Because these largely narrow and linear shaped areas would be directly related to larger areas with timber production emphasis, the effects would essentially mirror those of the timber/wildlife-watershed management emphasis.

This emphasis would preclude future wilderness designation. Wilderness options would be foregone in all alternatives by the end of the fifth decade. Where the area is most visually sensitive, the natural landscape would be managed to meet retention or partial retention VQO's.

A range of 16 to 123 MMBF of standing timber would be available for harvest over the full range of alternatives. Extended rotation would be practiced; however, the yield would be less because of the visual and riparian constraints. Clearcuts would be very small and/or partial cuts would be the main harvest method.

Mineral exploration and development could take place, but constraints because of riparian and visual concerns could result in higher operating costs for both timber harvest and mineral development.

Effects of timber/visual-riparian management on nonpriced resource values are:

- Visual quality would be affected by roads and timber harvest. The natural landscape in the North Fork corridor and other visually sensitive portions would be retained or partially retained.
- The semiprimitive recreational setting would change to roaded natural. Big game hunting would remain the predominant activity.
- The reduced cutting in the corridor and riparian areas would result in more old-growth timber. This would help old-growth dependent wildlife species.
- Water and fish habitat quality would be maintained.
- Naturally occurring vegetative growth would be interrupted by timber harvest.

Social and economic effects center around watershed, fisheries, recreation, timber, and wilderness. Timber would be available at reduced yields, and mineral resources would be available at increased operating costs. The change in landscape would be disruptive to those individuals using the area for primitive and semiprimitive recreation as well as people viewing the area from the North Fork road. Those individuals favoring roaded natural recreation would be supported. Those advocating wilderness designation would not be supported.

5. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints.

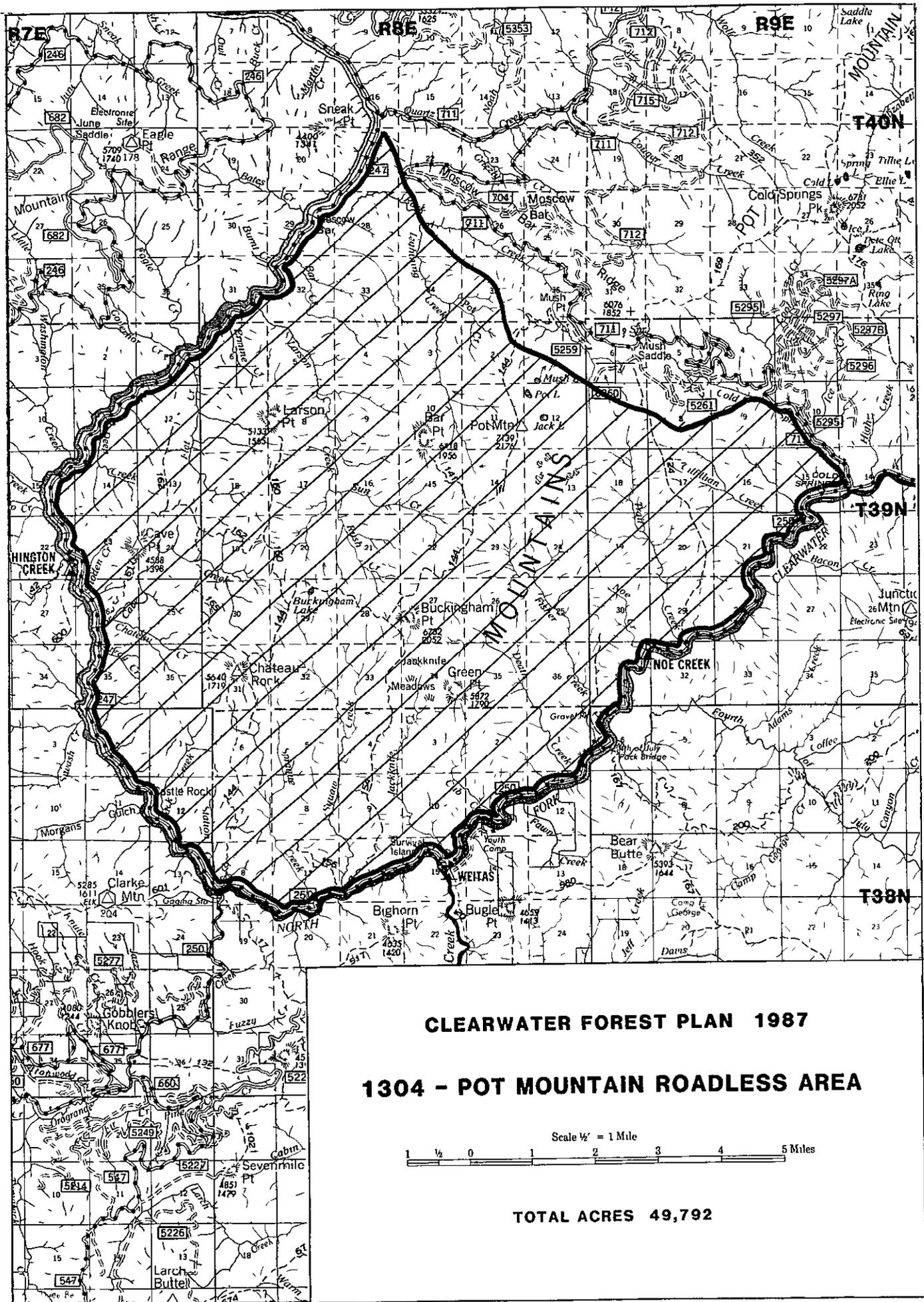
These areas are small and scattered throughout surrounding management areas within the Siwash Roadless Area. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation.

Less than 10 percent of the area is designated to protection in Alternatives A (current direction), E, E1, F, G, H, and J. About 13 percent is designated to protection in Alternatives B, C, and D. Alternative K (Preferred Alternative) has the most acres in this designation (26 percent).

In the Siwash Roadless Area, the protection emphasis would be impacted by road access for the timber/wildlife-watershed emphasis. Therefore, the indirect consequences would be similar to those described in that management emphasis.

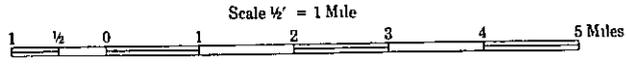
Mineral exploration and development could take place, but operating costs would be higher due to limited access and other constraints.

POT MOUNTAIN ROADLESS AREA



CLEARWATER FOREST PLAN 1987

1304 - POT MOUNTAIN ROADLESS AREA



TOTAL ACRES 49,792

POT MOUNTAIN ROADLESS AREA (01304)

Gross Acres	Net Acres
49,792	49,792

I. DESCRIPTION

The Pot Mountain Roadless Area is located about 36 air miles northeast of Orofino, Idaho along the North Fork of the Clearwater River. Graveled roads bordering the area include Beaver-North Fork road #247 and the Pierce-Superior road #250 along the North Fork of the Clearwater River connected by the Mush Saddle road #711. Interior access is by trail. About 40 miles of Pot Mountain trail #144 along Pot Mountain ridge bisect the area from north to south.

Pot Mountain is a very compact, almost round-shaped unit of land laying like a huge inverted bowl on the landscape with the North Fork of the Clearwater River at the bottom edge of the bowl. Numerous first-and second-order streams starting at the higher ridges and dropping very rapidly into the river give the "bowl" a fluted effect.

The most prominent topographic feature is Pot Mountain ridge angling southwest-northwest across the area. Seven major peaks dot the center of the area ranging from Cave Point at 5,600 feet to Pot Mountain at 7,139. The river elevation along the boundary drops down to 1,830 at the mouth of Quartz Creek. The four mountain lakes found are all less than 10 acres.

The area is underlain by coarse-grained to porphyritic light gray granite of the Cretaceous Bungalow pluton associated with the Idaho batholith.

The major ecosystems are two-thirds, cedar-hemlock-pine forest and one-third, western spruce-fir mainly along Pot Mountain ridge. Where trees are found, a wide variety of species exists typical of much of the Forest. The higher elevations support dense stands of mountain hemlock as well as the subalpine fir and Englemann spruce. The lower elevations are western redcedar, Douglas fir, and grand fir habitat types. Most of the timber is young.

Large forest fires in the early 1900's had a major influence on the area burning large stands of timber. As a result, vast brush fields with scattered tree seedlings and saplings are found on the steep mostly southern-facing slopes from Bar Creek to past Cave Creek.

The high mountain scenery, along with relatively easy access from the northeast side, and the system of interior trails make this a locally popular area for hiking, hunting, some lake fishing, primitive camping, and sightseeing in general.

The area is also well known locally for spring black bear hunting.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Except for several old lookout sites and minor trail and campsite use, there is very minor disturbance to the natural integrity and appearance of the area.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

The shape of the area along with the size (50,000 acres) and the dissected topography and vegetation contribute to a relatively high degree of solitude. Users are well screened from each other except at campsites and along main trails. Sights and especially motorized sounds within one mile of the boundaries are evident to a moderate degree. The sight of logging and road building activity especially to the north and west as viewed from the higher ridges and trails tends to affect the solitude, although most views are middle and background landscapes.

Hunting (mainly elk, deer, and bear), hiking, backpacking, photography, primitive camping, lake fishing, and horseback riding are the key recreation available. Cross-country travel by foot is extremely difficult because of the steep terrain and dense undergrowth.

C. SPECIAL FEATURES

Although no verified sightings or other confirmed evidence of the endangered gray wolf exists, habitat conditions conducive to the wolf have resulted in designation of the area as essential habitat. The management of an adequate prey base (primarily elk) and restrictions on motorized road use are two major components for protection and enhancement of this endangered species.

A potential research natural area for a waterfall and the related aquatic ecosystem exists near the mouth of Chateau Creek. This 60 foot waterfall is easily accessible by trail from the river and provides a popular viewing attraction for many visitors.

A number of cultural resource sites are located along the North Fork of the Clearwater River.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

The relatively large size of the area buffers many external distractions. However, the shape of the area, such as the high mountainous ridges dropping off rapidly on three sides to the Clearwater River, provides the visitor with numerous views of logging and other motorized activities on adjacent landscapes.

E. MANAGEABILITY AND BOUNDARIES

Except for some possible minor adjustments along the northeast side to provide a more identifiable boundary, the 50,000-acre size and compact shape are very manageable. The main #250 road along the North Fork bordering almost

three-fourths of the area provides a natural boundary. The small section of private land adjacent to the main #250 road would provide no management problems whether it was excluded or developed.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Because of current lack of need for developed recreation as well as limited funding, it is unlikely that potential sites would even be accessed unless it was through timber harvest activities. Chateau Rock, Buckingham Lake, and Jackknife Meadows are the most promising potential sites if access were to be provided.

2. Wildlife and Fish - The area supports a good population of elk, mule deer, black bears, and a small herd of Rocky Mountain goats as well as other species of wildlife common to the rest of the Forest.

The Pot Mountain area contains 16,000 acres of key big game winter range. On the portions currently timbered, removal of trees is needed to set back the vegetation to a seral shrub stage. The existing shrub areas would also need rehabilitation through prescribed burning or other means to restore vigorous, usable and palatable forage. The effects of timber harvesting would be longer lasting than prescribed burning of the shrub areas.

Several of the larger lakes support a moderate cutthroat trout population.

There has been six recorded but unconfirmed sightings of the endangered grizzly bear. Additional studies are planned to determine whether the area or parts of it might be essential habitat.

3. Timber - The Pot Mountain area has 47,116 acres suitable for timber production. Most of the existing merchantable sawtimber amounting to 638 MMBF is found from Pot Mountain ridge north and west.

In the near future, road access for timber harvest would likely occur along the northeast side and around the fringes of the southeast and northwest boundaries. Studies are currently being conducted to consider major road systems across Pot Mountain ridge, which in the long-term would access most of the productive timberland in the area.

4. Minerals - The potential for mineral and oil and gas development is low.

5. Cultural Resources - Current cultural resource sites include six USFS lookout sites, four cabins or cabin remains, two USFS Ranger Station locations, five hunter or outfitter camps, one C.C.C. campsite, one W.P.A. campsite, one Economic Recovery Act (E.R.A.) campsite, three Native American campsites, one vision quest site, one mining site, two old bridge sites, one Euro-American grave site, one chinese inscribed directional tree location, and one trapping site. In addition, a major Native American trail and early day miner's trail existed along the current Pot Mountain trail location.

A total of 14 of the above sites lie within the interior of the Pot Mountain Roadless Area. Seven of the sites are along or close to the present roadway paralleling the North Fork of the Clearwater River.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

No important management considerations pertain to this roadless area.

C. RESOURCE SUMMARY

Description		Description	
Gross Acres		Acres	49,792
Net Acres		Acres	49,792
Recreation		Wildlife - Big Game	
Primitive	RVD's	1,239	Big Game
Semiprim Nonmotor.	RVD's	3,048	Summer Habitat
Semprim Motor.	RVD's	0	Winter Habitat
Roaded Natural	RVD's	8,422	Elk
Range		Summer Habitat-Key	
Existing Obligated			Acres
Suitable	Acres	0	12,049
Allotments	No.	0	Winter Habitat-Key
AUM's	AUM's	0	Acres
Existing Vacant			14,720
Suitable	Acres	0	Significant Fisheries
Allotments	No.	0	Stream Miles
AUM's	AUM's	0	Miles
Proposed			167
Suitable	Acres	0	Stream Habitat
AUM's	AUM's	0	Acres
Timber		Lakes	
Tentative Suitable	Acres	47,116	No.
Standing Volume	MMBF	638	0
Corridors		Lakes - Habitat	
Exist. and Potential	No.	0	Acres
Wildlife - T&E		Water Developments	
Grizzly Bear			Existing
Habitat - Sit. 1	Acres	0	No.
Habitat - Sit. 2	Acres	0	0
Habitat - Sit. 3	Acres	0	Minerals
Bald Eagle Hab.	Acres	0	Potential Hardrock
		Very High	
		Acres	
		0	
		High	
		Acres	
		0	
		Moderate	
		Acres	
		0	
		Low	
		Acres	
		49,792	
		Claims	
		No.	
		0	
		Potential Oil and Gas	
		Very High	
		Acres	
		0	
		High	
		Acres	
		0	
		Moderate	
		Acres	
		0	
		Low	
		Acres	
		49,792	
		Oil and Gas Leases	
		Leases	
		No.	
		0	
		Leased Area	
		Acres	
		0	

IV. NEED

The varied habitat types and stages of succession, primitive hiking opportunities, and scenic mountainous terrain are the key potential wilderness features of the Pot Mountain area.

Intensive land use planning was initiated as early as 1969. A series of public involvement efforts during this initial phase of planning, up through the RARE II planning process in 1979, did not surface any concerted public interest for wilderness designation. RARE II selected the area for nonwilderness. Those interested in hunting and hiking have shown interest in leaving the area roadless, especially the higher elevations.

Tables C-1 and C-2 show the location and proximity of the Pot Mountain Roadless Area to other wilderness and population centers in Idaho, western Montana, and eastern Washington.

A total of 8 comments were received on this area between the draft and final documents. All 8 comments favored leaving the area as is. Two respondents requested that the area not be logged. Otherwise, there were no reasons given for leaving the area roadless.

Because hunting big game has always been considered one of the major uses, Management Area C8S was selected for the area in the Preferred Alternative. This would permit timber management, minimum harassment of big game, and provide for near unroaded type of hunting opportunities. No public motorized use would be permitted on any new road construction.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-13

Pot Mountain Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)											
	A	B	C	D	E	E1	F	G	H	I	J	K
WILDERNESS	0	0	0	0	0	0	0	0	49.8	49.8	0	0
NONWILDERNESS												
Unroaded	0	0	0	0	0	0	20.9	0	0	0	0	0
Elk Winter	9.2	6.9	5.4	8.1	3.6	3.6	4.6	8.0	0	0	8.1	4.1
Timber/Wldlf-Wtshd	27.4	30.4	37.1	27.4	6.1	6.1	9.6	30.4	0	0	20.6	3.1
Timber/Visual-Rip	8.8	2.9	2.8	11.3	7.2	7.2	4.4	9.9	0	0	9.9	9.9
Timber/Special	0	0	0	0	22.4	22.4	6.2	0	0	0	8.5	14.0
Special	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0.2	0.2
Protection	4.4	9.6	4.3	2.8	10.3	10.3	3.9	1.3	0	0	2.5	18.5
TOTAL	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8

Summary of Management Emphasis

Wilderness	0	0	0	0	0	0	0	0	49.8	49.8	0	0
Nonwilderness												
Developed												
Decade 1	34.8	34.8	34.8	34.8	34.8	34.8	13.9	34.8	0	0	34.8	2.3
Decade 5	49.8	49.8	49.8	49.8	49.8	49.8	28.9	49.8	0	0	49.8	49.8
Roadless												
Decade 1	15.0	15.0	15.0	15.0	15.0	15.0	35.9	15.0	0	0	15.0	47.5
Decade 5	0	0	0	0	0	0	20.9	0	0	0	0	0

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

The entire area is designated to wilderness in Alternatives H and I.

This emphasis would enhance the wilderness qualities of the area.

The 638 MMBF of standing timber volume would not be available under this emphasis.

Exploration and development of any discovered minerals would be extremely costly because of access and other operational constraints needed to protect wilderness values.

Only valid mining claims and mineral leases in effect when classified as wilderness, or as stated in the legislation, could be developed. All other lands would be withdrawn from mineral entry.

Effects of wilderness management on nonpriced resource values are:

- The natural ecosystem would be protected.
- Water quality, scenic views, and primitive recreation would be unchanged. Except for one exception, established use of motorbikes would be curtailed.
- Elk security would be maintained; however, without the ability to increase forage through prescribed fire and mechanical methods, the elk population is expected to decline.
- Essential gray wolf habitat would be maintained.
- Mountain goat habitat would be maintained.
- Vegetative diversity would tend toward old growth. Diversity of wildlife species could be expected to decrease in the future.

Social and economic effects center around timber, wildlife, and recreation. Since wilderness would preclude timber harvest and could preclude mineral development, the related industries would not be supported. Visitors valuing wilderness would be supported as well as those who use the area for semiprimitive recreation. Those individuals favoring more opportunities for roaded natural recreation would not be supported.

2. Designation: Nonwilderness Management Emphasis: Unroaded

In Alternative F about 42 percent of the area is designated to unroaded management. This emphasis would not preclude future wilderness designation. Mineral exploration and development could occur, but development and extraction costs would be extremely high due to access limitations. Aerial timber harvesting to improve wildlife habitat and/or burning of winter range could change the natural appearing landscape.

The suitable timberland would be classified as unregulated for timber production, and very little timber could be expected to be harvested under this emphasis. The area would be unavailable for long-term timber management investments.

Effects of unroaded management on nonpriced resource values are:

- The natural ecosystem would be protected.
- Water quality, scenic views, and primitive recreation would be maintained. Recreation would be limited to nonmotorized uses.
- Big-game summer range would be managed for 100 percent of potential elk in a roadless setting. Harvesting of trees would be permissible to enhance wildlife as long as no roads are constructed.
- Essential gray wolf habitat would remain.
- Mountain goat habitat would not be impacted.

Social and economic effects center around timber, recreation, and wilderness. The timber industry would not be supported. Individuals favoring primitive/semiprimitive recreation would be served and those advocating wilderness would be partially served, in that significant wilderness characteristics would be maintained. Those individuals desiring more roaded natural recreation would not be served.

3. Designation: Nonwilderness
Management Emphasis: Elk Winter Range

These areas would be managed to provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur only on an opportunity basis to maintain big-game forage values. Roads needed to manage adjacent areas with different designations could be constructed through these areas only if they met soil and watershed constraints. Any roads crossing these areas would preclude their consideration for wilderness designation.

Nine of the twelve alternatives contain areas with this emphasis. In Alternative A (current direction), about 18 percent of the area would be managed for elk winter range. Alternatives B, D, G and J designate about 15 percent with Alternatives C and F designating about 10 percent. In Alternatives E, E1, and K (Preferred Alternative) an average of 7 percent is designated.

Even though much of the winter range is nonproductive timberland, there are a few productive areas. These productive timberlands would be managed as unregulated, and harvested on strictly an opportunity basis.

Mineral exploration and development would be costly because of difficulty of access.

Effects of winter range management on nonpriced resource values are:

- A good portion of this area is visible from the existing main travel routes (Rd. # 247 and 250) along the North Fork of the Clearwater River. Prescribed burning would disturb the landscape for a short time, and timber harvest and roads could have long-term effects. Established VQO's would be met.
- Recreation would remain essentially the same. A small portion of the area could be modified to a roaded natural setting from the existing semiprimitive setting.
- Elk herds would be enhanced by creating and increasing winter browse production.
- Essential gray wolf security habitat would be disturbed if the areas were roaded. Road closures could mitigate this impact.
- Vegetative diversity would tend towards the seral stage of succession.
- Due to steep side-slopes and erodable soils, an increase in stream sediment could be expected, especially if roading should occur. Established minimum water quality standards would be met.

Social and economic values are related to timber, wildlife, and wilderness. Social and economic effects of this emphasis would vary, based on the amount of productive land removed from timber production to meet this objective. The local timber industry would be only partially supported as would the wilderness advocates. The production of elk would be enhanced through this emphasis.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated to timber/wildlife and watershed would be managed for timber production at varying investment levels. Minimum constraints relating to protection of big-game habitat and water quality would be met.

Nine of the twelve alternatives contain areas with this management emphasis. In Alternative C, 75 percent of the area is designated to this emphasis. Alternatives B and G designate about 60 percent to such use with Alternatives A (current direction) and C about 55 percent and Alternative J about 40 percent. In Alternative F about 20 percent is designated, and Alternatives E and E1 designate only 12 percent. Alternative K (Preferred Alternative) designates even less, 6 percent with all of it for winter range.

In Alternatives A (current direction), B, C, D, E, G and J about 70 percent of the area could be roaded by the end of the first decade leaving about 15,000 unroaded acres. In the same alternatives, the entire area could be roaded by the end of the fifth decade. In Alternative F about 30 percent of the area could be roaded by the end of the first decade, with almost 42 percent of the area remaining in an unroaded status through the end of the fifth decade. In Alternative H the entire area would remain roadless through the end of the fifth decade. In Alternative K (Preferred Alternative) about 5 percent of the area would be accessed by the end of the first decade, and essentially 100 percent of it by the end of the fifth decade.

Roading, associated with timber and harvest activities, would significantly alter the wilderness characteristics. Tentatively suitable timberland in the affected portions would be available for varying levels of long-term timber production.

Mineral exploration and development could take place, but road access to much of the area would be difficult making these resources costly to extract.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- Visual quality would be affected by roads and timber harvest. The natural landscape in visually sensitive portions would be retained or partially retained.
- The primitive/semiprimitive setting would be changed to roaded natural.
- Elk and essential gray wolf security habitat would be impacted by timber harvest and roads. This could be partially mitigated by road closures. A minimum 25 percent potential elk use guideline has been established for this emphasis.
- Sediment would increase by road construction and harvesting, resulting in a reduction in water quality.
- Overall vegetative diversity would tend toward seral successional stages with a variety of age classes.

Social and economic effects center around timber, wildlife, recreation and wilderness. Timber harvesting would support the local timber industry. The change in landscape would be disruptive to those individuals using the area for primitive or semiprimitive recreation, but those desiring roaded natural settings would be supported. Those publics favoring wilderness designation would not be supported.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

This emphasis has a primary goal of timber production within areas that fall into retention or partial retention VQO's and that have ecologically important riparian vegetation and features along stream courses.

Nine of the twelve alternatives contain areas designated to such management. In Alternative A (current direction), D, G, J, and K (Preferred Alternative), 20 to 23 percent of the area is assigned these values. Alternatives E and E1 designate about 14 percent. Alternatives B, C, and F about 6 to 9 percent is designated.

Because these largely narrow and linear shaped areas would be directly related to larger areas with timber production emphasis, the effects would essentially mirror those of the timber/wildlife-watershed emphasis.

The lands with the timber/visual-riparian emphasis would be disqualified for wilderness consideration because the landscape would be changed to roads and artificial openings. Timber harvests would be permitted at a reduced level to maintain visuals and riparian quality with Alternative C generating the largest timber harvest. Timber rotations would be extended.

Minerals exploration and development could take place, but constraints due to visual and riparian values could result in high operating costs.

Effects of timber/visual-riparian management on nonpriced resource values are:

- Visual quality would be maintained at a retention or partial retention level in visually sensitive areas.
- Recreationists who prefer roads would benefit because of the maintenance of a natural landscape along major roadways (# 147 and 250), trail (#144), and lakes. The setting would be modified from semiprimitive to roaded natural.
- Potential elk forage areas along the North Fork of the Clearwater would be foregone because of visual/riparian constraints.
- Essential gray wolf security habitat would be impacted depending on the size of the affected areas and available mitigation measures such as road closures. A formal consultation with the Fish and Wildlife Service will be held in conjunction with proposed projects.
- Water quality would be maintained by requiring riparian protection along perennial streams and lakes on Pot Mountain.
- Anadromous fish would benefit from riparian vegetation along protected perennial streams and lakes.

The overall vegetative diversity would tend towards old growth because of extended rotations. However, there would be a wide variety of age classes.

Social and economic effects are related to timber, recreation, anadromous fishery, and wilderness. Some timber harvesting would be foregone, to what extent depends on the alternative selected. The individuals desiring roaded natural landscapes, clean water, anadromous fish, and parcels of undisturbed scenery would be supported. Wilderness values would not be supported.

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

Lands designated to timber/special emphasis would be managed for protection of key summer-range with a secondary goal of timber production.

In Alternatives E and E1, nearly 50 percent of the area is designated to this management. This would include nearly all the land within the unit outside of big game winter range. Alternative J and Alternative F designate about 17 percent and 12 percent, respectively, located in the upper Larsen, Rush, Bar, and Pot Creek drainages. Alternative K (Preferred Alternative) designates about 29 percent of the area as special.

This emphasis would allow for road construction and timber harvesting which would preclude future consideration for wilderness.

All of the tentatively suitable timberland would be available for harvesting. For Alternatives E, E1, J, and F, elk summer habitat would be maintained near 75 percent of potential elk use through prescribed road closures. This would provide a measure of security for the gray wolf also. In Alternative K (Preferred Alternative) a higher percent of potential elk use would be maintained, because Management Area C8S is designated to essentially the entire area. This management area provides for year long closure to all public motorized use.

Mineral exploration and development would be easier because of improved access.

Effects of timber/special management on nonpriced resource values are:

- Except for those areas sensitive to the visual resource, (Pot Mountain trail and lakes) visual quality would be affected by timber harvest. Retention or partial retention VQO's would be met in sensitive areas.

- With roading, the chance for human/gray wolf contact would increase along with the probability of wolf killings. Gray wolf security would be mitigated with road closures.

Social and economic effects center around wildlife, timber, and wilderness. Timber harvests would support the local timber industry. Recreationists could be limited to walking on trails even though roads would exist because roads could be closed to maintain high quality elk habitat.

7. Designation: Nonwilderness
Management Emphasis: Special

Alternatives C, D, E, E1, F, G, J, and K (Preferred Alternative) would designate 0.4 percent of the area to a research natural area. This would preserve a natural waterfall and associated ecological features for research study.

The area would retain its natural state. The recommended area is unsuitable for timber production consisting mostly of rocky bluffs and shallow soils.

The RNA would be withdrawn from mineral entry.

This emphasis would maintain a waterfall in its natural setting. Vegetative diversity would tend towards climax successional stages.

There would be no impact from an economic standpoint. Those individuals supporting ecological research would be supported.

8. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints.

The Preferred Alternative K designates 37 percent of the area to soil and watershed protection. About 20 percent of the area is designated to this category in Alternatives B and E1. Alternatives A (current direction), C, D, E, and F designate 7 to 9 percent with Alternatives G and J designating 3 and 5 percent respectively.

Generally, these areas are small and scattered throughout surrounding management areas and would likely remain in a natural undisturbed state. All the areas are rocky or would have little value for timber production. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless areas. Such an area would be Pot Mountain Peak which has the largest acreage with this emphasis.

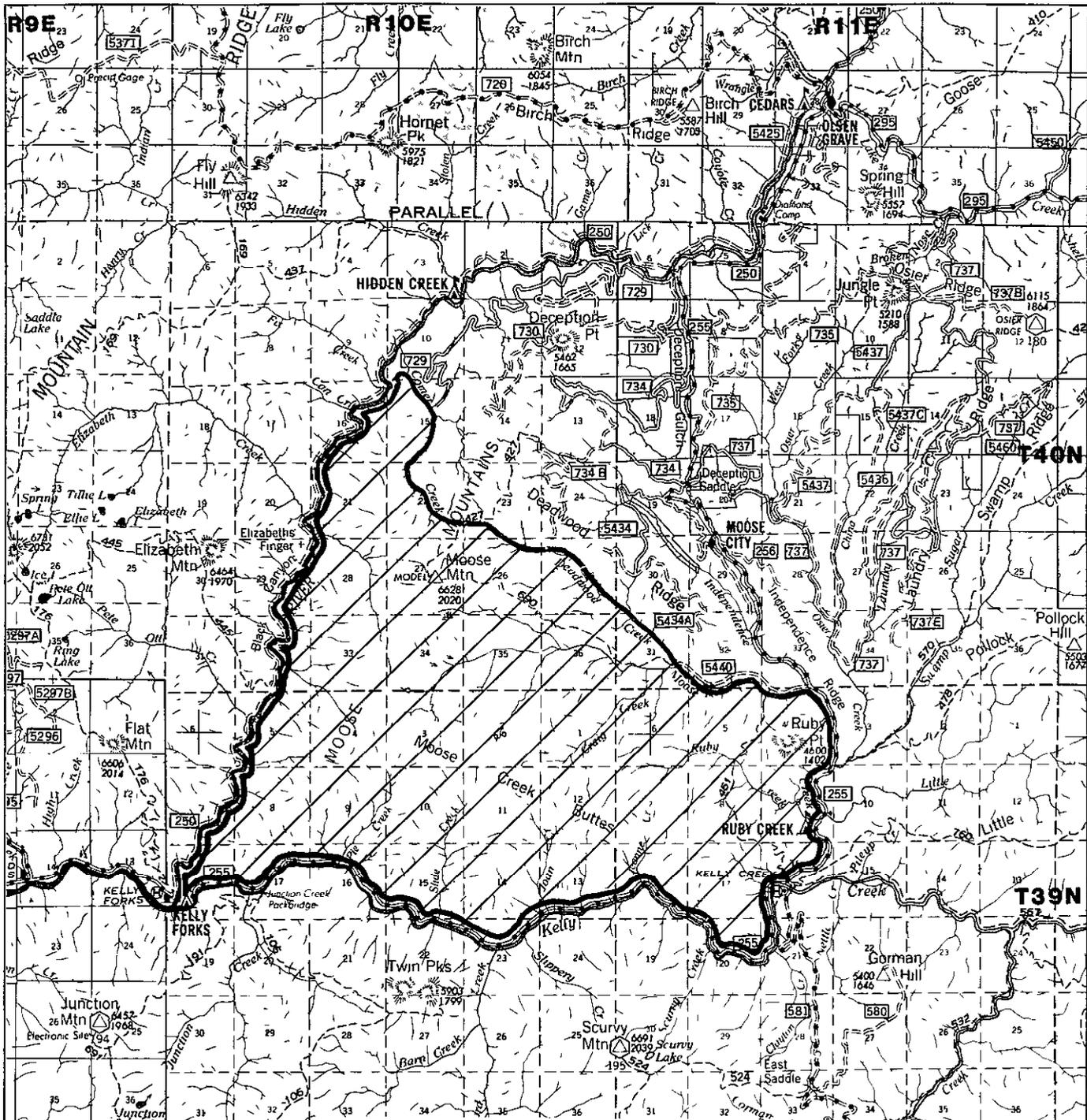
Roads or trails could be constructed across such areas to access surrounding management areas. However, no direct investment would occur.

Effects of protection management on nonpriced resource values are:

- The affected areas would probably maintain their visual attractiveness.
- The Pot Mountain Peak area would remain a highly attractive area for short trail walks, scenic recreation, and mountain goat viewing. This emphasis favors the mountain goat population by maintaining their habitat.

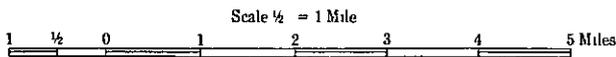
Mineral exploration and development could take place, but costs would be higher due to limited and difficult access.

MOOSE MOUNTAIN ROADLESS AREA



CLEARWATER FOREST PLAN 1987

1305 - MOOSE MOUNTAIN ROADLESS AREA



TOTAL ACRES 21,393

MOOSE MOUNTAIN ROADLESS AREA (01305)

Gross Acres	Net Acres
21,393	21,393

I. DESCRIPTION

The Moose Mountain Roadless Area is in the northeast quadrant of the Clearwater Forest within Clearwater County. It lies between Kelly Creek and the North Fork of the Clearwater River and is readily accessed from either the Pierce-Superior Road #250 or the Kelly Creek-Deception Road #255. The unit is a very compact shaped triangle.

As the name implies, it is comprised of mountains. Moose Mountains (a series of peaks and ridges about 4 miles long) extends north-south across the west side of the area, and Moose Creek Buttes extends south-east from Moose Mountains. Elevations drop rapidly from the peaks of up to 6,700 feet to the North Fork and Kelly Creek averaging 2,800 feet within a horizontal distance of 1 to 2 miles.

The area is underlain by the metasediments of the Wallace and Revett formations. The dominant lithologies of the Belt Supergroup rocks are quartzites, argillites, dolomites, and limestones. These metamorphosed rocks have been sheared and faulted making them very susceptible to weathering.

Although the entire area falls within the cedar-hemlock-pine ecosystem, most of the land above 6,000 feet is barren rock or very sparsely covered with low vegetation, mostly shrubs and perennials. Most all of the southerly facing slopes, all the way to Kelly Creek, are covered with shrubs. Trees, many of them lodgepole pine, are found on the northeast side and on north-facing slopes in the Black Canyon area along the North Fork River. Here, also, are found Douglas fir, grand fir, western redcedar, western white pine, larch and some Englemann spruce.

Wildlife, along with the rugged glaciated mountainous terrain, are the principal features which attract users. Most current users are big-game hunters, although there are some hikers that go into the area for one to two day hikes.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Other than early day mineral prospecting which is largely unnoticed and some recent active mining near the boundary in Moose Creek, Moose Mountain has retained its natural integrity and appearance. The two fire control trails are low standard and access only a small portion.

**B. OPPORTUNITIES FOR EXPERIENCES OFTEN
UNIQUE TO WILDERNESS**

The opportunity for solitude is fairly low because of the small size and the fact that it is surrounded on two sides by a road and on one side by extensive timber harvesting. Viewing of these developments, as well as the sounds of vehicles and timber harvesting activities, is possible throughout much of the area.

Elk hunting, scenic viewing, and photography are major recreational activities. A one or two-day trip would enable a hiker to cover most of the area. However, hiking is for those who are in good physical condition, because of the rugged terrain and lack of trails.

C. SPECIAL FEATURES

One can view some outstanding mountainous scenery especially along the major ridges.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

Solitude is limited. Viewing detractions are numerous due to the small size of the area and elevations generally higher than adjacent lands.

E. MANAGEABILITY AND BOUNDARIES

The area can easily be managed for wilderness with very little modification of existing boundaries. It is already well defined by the Pierce-Superior and Kelly Creek Deception roads along the south and east boundary. A ridgetop boundary along the northeast side would be easy to locate, and this would also exclude much of the suitable timberland in the area.

The existing and past mining activities could also be excluded without any effect on the wilderness.

III. AVAILABILITY

A. OTHER RESOURCES

1. Wildlife - Elk, mule deer, black bears, and a small number of Rocky Mountain goats are the principal large wildlife species. The area contains 2,576 acres of key big game winter range, primarily in shrub fields on the south facing slopes above Kelly Creek and #255 road. Rehabilitation through prescribed burning is necessary as many of the shrubs have grown out of reach of animals or have become decayed.

Unconfirmed sightings have been made of the endangered gray wolf and of the threatened grizzly bear. Although no verified sightings or other confirmed evidence of the endangered gray wolf exists, habitat conditions conducive to the wolf have resulted in designation of the area as essential habitat. The management of an adequate prey base (primarily elk) and restrictions on motorized road use are two major components for protection and enhancement of this endangered species.

2. Timber - Only 29 percent or 6,731 acres is considered suitable for timber production. The suitable land currently supports an estimated 133 MMBF of sawtimber in the mature and immature classes. Much of the larger timber is located on the steep slopes draining into the North Fork of the Clearwater River while the younger timber, especially lodgepole pine, is located along the east side of the area.

3. Minerals - Potential for gold is high in the northeast corner, mostly within the Moose Creek drainage. The remaining area has low potential for all known minerals. Upper Moose Creek has several active mining claims.

4. Cultural Resources - Current cultural resource sites include seven cabins or cabin remains, one historic hunter camp, one prehistoric campsite, and four mining sites, most of which are near the periphery of the area.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

No important management considerations pertain to this roadless area.

C. RESOURCE SUMMARY

Table C-14.			01305-Moose Mountain		
<u>Description</u>			<u>Description</u>		
Gross Acres	Acres	21,393	Gray Wolf Hab.	Acres	21,393
Net Acres	Acres	21,393	Peregrine Fal. Hab.	Acres	0
Recreation			Wildlife - Big Game		
Primitive	RVD's	0	Big Game		
Semiprim Nonmotor.	RVD's	887	Summer Habitat	Acres	0
Semiprim Motor.	RVD's	0	Winter Habitat	Acres	0
Roaded Natural	RVD's	6,731	Elk		
			Summer Habitat-Key	Acres	3,880
			Winter Habitat-Key	Acres	490
Range			Significant Fisheries		
Existing Obligated			Stream Miles	Miles	67
Suitable	Acres	0	Stream Habitat	Acres	93
Allotments	No.	0	Lakes	No.	0
AUM's	AUM's	0	Lakes - Habitat	Acres	0
Existing Vacant			Water Developments		
Suitable	Acres	0	Existing	No.	0
Allotments	No.	0	Minerals		
AUM's	AUM's	0	Potential Hardrock		
Proposed			Very High	Acres	0
Suitable	Acres	0	High	Acres	5,760
AUM's	AUM's	0	Moderate	Acres	0
Timber			Low	Acres	15,663
Tentative Suitable	Acres	6,236	Claims	No.	25
Standing Volume	MMBF	133	Potential Oil and Gas		
Corridors			Very High	Acres	0
Exist. and Potential			High	Acres	0
			Moderate	Acres	0
Wildlife - T&E			Low	Acres	21,393
Grizzly Bear			Oil and Gas Leases		
Habitat - Sit. 1	Acres	0	Leases	No.	0
Habitat - Sit. 2	Acres	0	Leased Area	Acres	0
Habitat - Sit. 3	Acres	0			
Bald Eagle Hab.	Acres	0			

IV. NEED

The key wilderness features are the variety of habitat types and stages of succession due to the large fires of the early 1900's which create a challenge to hikers and hunters.

Although 18,373 acres were recommended for wilderness during the RARE II process, there has never been a strong wilderness interest by local or regional individuals. On the other hand, there has not been a strong interest or concern from development and timber-oriented individuals either.

With the large amount of barren land and extremely difficult road construction, it appears that regardless of any land designation most of the area would remain undeveloped.

Tables C-1 and C-2 show the location and proximity of the Moose Mountain Roadless Area to other wilderness and population centers in Idaho, western Montana, and eastern Washington.

Seventeen comments were received on this area between the draft and final documents. Most respondents favored wilderness designation for the area mainly to protect the adjacent Kelly Creek watershed fishery values and elk habitat. One respondent recognized the low timber productivity of the area, i.e., the small amount of suitable land. One respondent who favored wilderness believes the proposed roadless designation (A3) has too many loopholes to allow logging.

The designation of A3 for most of the area was not changed between the Draft and the final Plan.

The management table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-15

Moose Mountain Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)												
	A	B	C	D	E	E1	F	G	H	I	J	K	
WILDERNESS	18 4	0	0	0	0	0	16 1	16 1	21 4	21 4	0	0	
NONWILDERNESS													
Unroaded	0	0	13 9	13 9	13 9	13 9	0	0	0	0	13 9	16 2	
Elk Winter	0	0 3	2 2	2 2	0 1	0 1	0	0	0	0	2 2	0 4	
Timber/Wldlf-Wtshd	2 1	5 3	4 0	1 5	1 5	1 5	1 1	3 8	0	0	1 4	3 3	
Timber/Visual-Rip	0 6	0 5	0 4	1 3	2 1	2 1	3 9	1 5	0	0	1 5	0 1	
Timber/Special	0	0	0	0	0	0	0	0	0	0	0	0	
Special	0	0	0	0	0	0	0	0	0	0	0	0	
Protection	0 3	15 3	0 9	2 5	3 8	3 8	0 3	0	0	0	2 4	1 4	
TOTAL	21 4	21 4	21 4	21 4	21 4	21 4	21 4	21 4	21 4	21 4	21 4	21 4	

Summary of Management Emphasis

Wilderness	18 4	0	0	0	0	0	16 1	16 1	21 4	21 4	0	0
Nonwilderness												
Developed												
Decade 1	0	0	0	0	0	0	0	0	0	0	0	0
Decade 5	3 0	7 0	5 1	5 1	5 1	5 1	5 1	5 1	0	0	5 1	4 7
Roadless												
Decade 1	21 4	21 4	21 4	21 4	21 4	21 4	5 3	5 3	0	0	21 4	21 4
Decade 5	18 4	14 4	16 3	16 3	16 3	16 3	0 2	0 2	0	0	16 3	16 7

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

Five of the twelve alternatives contain areas designated to wilderness. In Alternatives H and I the entire area is designated wilderness. Alternative A designates 86 percent of the area with Alternatives F and G designating 75 percent.

Past activities have not affected the natural integrity and appearance of this area, and they would be retained.

In Alternatives H and I an estimated 133 MMBF of standing timber located on about 0.5 percent of the Forests tentatively suitable timberland would not be available.

Only valid mining claims and mineral leases in effect either at the time of designation or as stated in designation legislation could be developed. All other lands would be withdrawn from mineral entry. Any discovered minerals would be extremely expensive to extract because of access and other operational constraints needed to protect wilderness characteristics.

Effects of wilderness management on nonpriced resource values are:

- Visual quality would be retained.
- The natural ecosystem would be protected. The natural landscape would remain unchanged. Elk hunting, scenic viewing, and photography would remain the dominant activities.
- Gray wolf security habitat values would be maintained.
- The quantity and quality of big-game habitat would be determined by natural events such as lightning-caused fire. Prescribed fire and/or mechanical treatments could not be utilized to improve big game or fisheries habitat.
- Water quality would remain high.

Social and economic effects are related to timber, wilderness, wildlife, and recreation. The timber resources would not be available to the local economy. This impact would be maximized in Alternatives H and I. From the social aspect, those of the public valuing wilderness would be supported. Those individuals favoring additional roaded natural recreation would not be served.

2. Designation: Nonwilderness Management Emphasis: Unroaded

Nearly 65 percent of the area is designated to this management emphasis in Alternatives C, D, E, E1, and J. Approximately 76 percent of the area is designated unroaded in Alternative K (Preferred Alternative). The other six alternatives do not designate any area for unroaded management.

This emphasis would have no effect on the wilderness characteristics of the area. The natural integrity and appearance would remain as it is. Timber could only be salvaged to maintain recreation, wildlife, and fisheries within the affected areas or to protect resource values that are endangered outside the area. No new permanent road building would be permitted. This emphasis would limit special land use permits to those activities that would serve the general public and would be compatible with a primitive setting.

No tentatively suitable timberland is designated to unroaded management.

Minerals would be available for the market economy, but extraction costs would be high due to lack of access and other operational constraints required.

Effects of unroaded management on nonpriced resource values are:

- Visual quality would be maintained.
- The semiprimitive recreational setting of the affected areas would be maintained. Opportunities for recreation would remain unchanged.
- Gray wolf security habitat would be retained.
- Elk winter range, summer range, and security cover would be maintained.
- Water quality and fisheries would be maintained at the present level.

Social and economic effects would center around minerals, wildlife, recreation, and wilderness. Mineral exploration and development could occur, but development and extraction costs would be high due to access limitations. There would be no effect on the timber industry. From the social aspect, the people valuing a roadless area, big-game hunting, backpacking, and outdoor photography would be supported. Those individuals favoring roaded natural recreation would not be supported.

3. Designation: Nonwilderness Management Emphasis: Elk Winter Range

These areas would provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest would occur only on an opportunity basis to maintain big-game forage. Roads needed to manage adjacent areas with different designations could be constructed through the area only if they met soil and watershed constraints. Any roads crossing these areas would preclude consideration for wilderness designation.

Seven of the ten alternatives designate acreage to elk winter range. Alternatives C, D, and J all designate approximately ten percent of the area to winter range, and Alternatives B, E, E1 and K (Preferred Alternative) designate 1 percent or less.

Prescribed burning and/or mechanical treatments would interrupt natural succession. These treatments would be only visible for a short time.

There are no special restrictions on mining with this emphasis, making minerals available to the market economy. Mineral exploration and development costs would vary depending on accessibility.

Of the timber harvesting allowed, helicopter logging systems would be required due to the steep, broken, unstable ground.

Effects of elk winter range management on nonpriced resource values are:

- Visual quality would be affected by the browse burning, but only for a short time. Such burned openings would be similar in appearance to ones created by wildfires.
- Recreation in the form of hunting and hiking could be enhanced with the increase in big game populations due to winter range management. A small portion of the area could have settings modified to roaded natural from their existing semiprimitive setting.
- This emphasis would maintain essential gray wolf security habitat. If roading occurred, road closures could mitigate this impact.
- Big game would benefit from the increased winter browse available.
- Increased sedimentation of water would follow the browse burning for a short period of time. This would still meet established water quality objectives.

Economic and social effects would vary depending on the amount of area managed for elk winter range. The timber industry would be partially served. The mining industry would benefit in areas with roads. Wilderness advocates would not be supported. Hunters would benefit from the increased elk herds.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated to timber/wildlife and watershed would be managed for timber production at varying investment levels. Minimum management constraints relating to elk security needs and water quality would be met.

Nine of the twelve alternatives contain lands designated to this emphasis. In Alternative B, 25 percent of the area is designated with about 16 to 19 percent designated in Alternatives C, G, and K (Preferred Alternative). Alternative A designates 10 percent. Alternatives C, F, E, E1, and J contain 5 to 7 percent.

In all the alternatives designated to this management, the entire area would remain unroaded at the end of the first decade. In Alternative B, 33 percent of the area would be roaded by the end of the fifth decade. Only 22 to 24 percent of the area would be roaded by the end of the fifth decade in Alternatives C, D, E, E1, F, G, J and K (Preferred Alternative).

At least 66 percent of the area would retain a significant portion of its wilderness characteristics through the end of the fifth decade in all alternatives.

Nearly 16 to 18 percent of the suitable timberland would be available for timber production.

Exploration and extraction of minerals would be made easier due to the roads built for timber harvesting.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- Visual quality would be affected by road construction and timber harvest.
- The semiprimitive/primitive setting which some recreationist enjoy, would be modified to a roaded natural setting. Big game hunting would still be the dominant activity.
- Essential gray wolf security habitat would decrease because of roading disturbances.
- Elk winter range, summer range, and security cover would be reduced. Displacement would occur because of new roads.
- Although established minimum water quality standards would be met, water quality and fisheries would decrease due to increased sedimentation from roads and cutting units.

Social and economic effects would center around timber, mineral, recreation, wildlife, and wilderness. The timber and mineral industries would be supported. From the social aspect, it could be disruptive to those people favoring the primitive setting and related recreation. However, this would affect at the most 25 percent of the total area. Individuals favoring roaded natural experiences would be supported. Wilderness advocates would not be supported.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

This management emphasis has a primary management goal of timber production on an extended rotation basis, while protecting sensitive visual areas that have retention/partial retention VQO's and streams courses and riparian areas that contain ecologically important features and vegetation.

This management emphasis pertains to narrow corridors (1/2 mile or less in width) along both sides of designated visually sensitive roads, trails, or bodies of water and streams. It applies to the Kelly Creek road #255, North Fork of the Clearwater River road #250, and most second-and third-order streams.

Total acreage designated for these prescriptions are relatively small, ranging from less than 1 percent for the Preferred Alternative K to 18 percent for Alternative F. All other alternatives vary from 3 to 10 percent.

Road building would be allowed, so wilderness values would be foregone.

Timber would be harvested on a limited basis.

Minerals exploration and development could occur, but costs of such activities would be slightly lower due to better access.

Effects of timber/visual-riparian management on nonpriced resource values are:

- VQO's of retention and partial retention in visually sensitive areas would be met.
- The existing semiprimitive setting, which recreationists enjoy, would be modified to a roaded natural setting. Big game hunting, camping, and fishing would still remain the dominant activities.
- Essential gray wolf security habitat could be impacted depending on the size of the affected area and available mitigation measures. A formal consultation with the Fish and Wildlife Service will be held in conjunction with proposed projects.
- Elk security could be reduced.
- Water quality and fisheries could be reduced slightly because of road construction. Established water quality standards would be met through scheduling of activities and other erosion prevention practices.

Social and economic effects are related to timber, mineral, recreation, and wilderness. Timber and mineral would be available on a limited basis to support the timber and minerals industries. Those individuals who enjoy camping and fishing along the North Fork and Kelly Creek would be supported. Those individuals favoring wilderness would not be supported.

6. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints.

Generally, these areas are small and scattered throughout surrounding management areas. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment activities would occur.

Nine of the twelve alternatives contain areas designated to this emphasis. In Alternative B, 72 percent of the area is designated. Alternatives E and E1 contain 18 percent, while Alternatives D and J contain 11 percent. Alternatives A (current direction), C, and F designate 1 to 4 percent. The Preferred Alternative K designates 6 percent.

Lands in this category would lose most of their wilderness qualities because of surrounding activities.

Such areas are not included in the Forest's tentatively suitable timberland and would not be available for harvest.

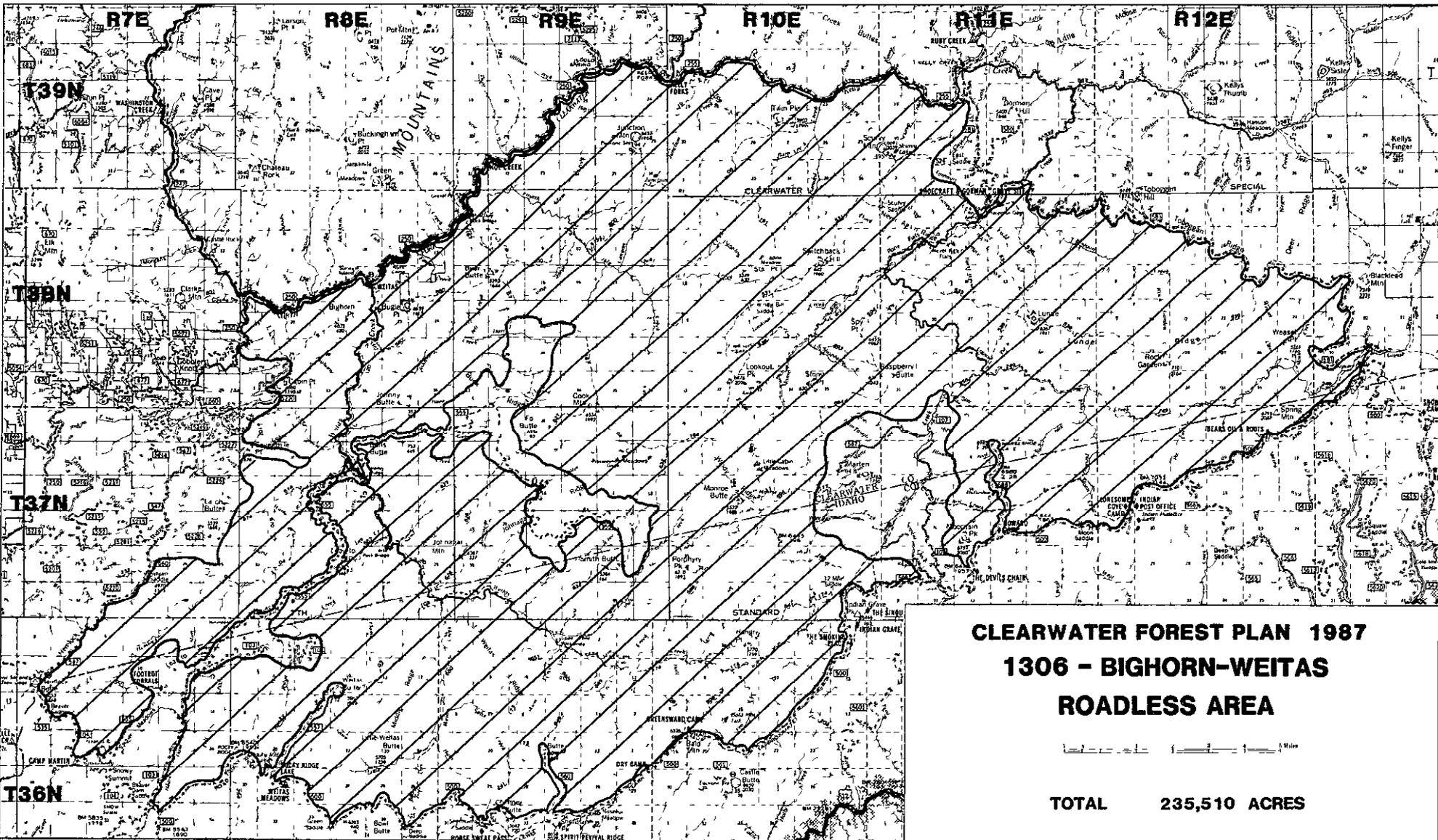
Mineral exploration and development could occur, but costs of such activities would be higher due to limited access.

Effects of soil and watershed protection on nonpriced resource values are:

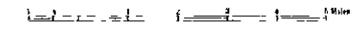
- Visual quality would be adversely affected by mining access roads and prescribed burns.
- Essential gray wolf security habitat would be either maintained or disturbed depending on the size and spatial distribution of the affected areas and the availability of mitigation measures. Impacts would be assessed on a project by project basis through a formal consultation with Fish and Wildlife Service.
- Elk security could be reduced because of the roads.
- Water quality may decrease because of increased sedimentation from road building and mining activities. Established water quality standards would be met.

Social and economic effects are related to timber, mineral and wilderness. The timber industry would not be affected by this emphasis. The mining industry would benefit. Those people favoring wilderness settings, unroaded areas, and primitive recreation would not benefit from this emphasis.

BIGHORN-WEITAS ROADLESS AREA



CLEARWATER FOREST PLAN 1987
1306 - BIGHORN-WEITAS
ROADLESS AREA



TOTAL 235,510 ACRES

BIGHORN-WEITAS ROADLESS AREA (01306)

Gross Acres	Net Acres
236,270	235,510

I. DESCRIPTION

The Bighorn-Weitas Roadless Area is the largest roadless area lying entirely within the boundary of the Clearwater Forest. It is located approximately in the middle of the Forest. The west boundary is about 70 air miles east of Lewiston, Idaho, and the east boundary is approximately 50 air miles west of Missoula, Montana. Except for two major intrusions of roads and timber sales, the unit is relatively compact extending about 35 miles east-west and averaging about 14 miles wide.

Access is good. Along the north side, access is via the graveled Pierce-Superior road #250 and the Kelly Creek road #255. Access along the northeast and south side is from the low-standard, Toboggan Ridge road #581 and the Lolo Motorway #500. These roads are open generally from July to early October. The Lean-to Ridge/Cook Mountain road #555 is also a very low-standard, dirt road accessible only during good weather July through September.

Interior access is via upwards of 300 miles of low-standard, fire control and administrative trails. Many of these trails, because of low use and limited funding, receive only light, intermittent maintenance.

The area lies within two major drainages, Weitas Creek and Cayuse Creek, as well as a number of streams draining into the North Fork of the Clearwater River and Kelly Creek. Both major drainages have some sections of narrow but flat stream bottoms with some meandering sections in Cayuse Creek. Many of the smaller streams have steeper gradients, V bottoms, and extremely steep side slopes. The Cook Mountain area, lying between Weitas and Cayuse Creek consists of generally rolling upland landforms with wide ridges.

Elevations are midrange varying from 7,100 feet at Rock Garden to an average of 5,500 feet for most other peaks. Stream bottom elevations range from 2,400 feet at the mouth of Weitas, but generally average about 3,200 to 4,000 feet in elevation.

The area is underlain by a coarse-grained quartz monzonite of the Cretaceous Idaho batholith. Included in the area are small isolated blocks of gneiss belonging to the Precambrian Wallace formation and smaller blocks of rhyolite and border zone gneiss. Mountain tops are rounded and deeply weathered with few exceptions such as Lunde Ridge. There are relatively few, large areas of exposed rocky and barren ground. Highly erosive soils are found in this area.

For the most part, adjacent areas along the north, east and south boundaries are also inventoried roadless area. The only extensive development of timber harvesting is found adjacent to the west side.

From an ecosystem standpoint the area is dominantly cedar-hemlock-pine forest with a small interior section of western spruce-fir between Cook Mountain and Raspberry Butte.

Vegetation varies from carex and beargrass on high elevation, south slopes to grand fir and western redcedar types at lower elevations. Large forest fires in the early 1900's had a major influence on the present vegetation with much of the area being covered with even-aged stands of lodgepole pine at higher elevations and mixed stands of other conifers at lower elevations. Large areas of brush fields and grass meadows still exist within the conifer stands. Many of the brush fields are below 4,000 feet elevation where they are used by big game as winter forage.

The area, in general, is thought of and used by people for dispersed recreation, primarily hunting and fishing. Elk is the predominant big game species. Fishing, especially for westslope cutthroat trout in the Cayuse drainage under a-catch-and-release regulation, is another major attraction.

A verified sighting of the endangered gray wolf has attracted considerable attention in recent years.

Scenic views, while not necessarily outstanding, are pleasing.

The cultural history of the Lolo Trail, Lewis and Clark route and Lolo Motorway forming the southern boundary is a key attraction for history buffs.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

With a few exceptions, the natural integrity and appearance of the Bighorn-Weitas areas have not been altered. The Lean-to-Ridge road separates the Hemlock Creek drainage from the rest of the area. The Cook Mountain reforestation area creates a major intrusion into the area. The Horseshoe Lake fire in 1961 and subsequent timber salvage activity in 8,000 acres of Gravey Creek is the only other major intrusion.

Three, short, low-standard fire lookout roads penetrate the area from the Lolo Motorway. Of the five former lookout towers only three remain and only one of these is used on an intermittent basis. A second one, Weitas Butte, is rented to the public during the summer months.

Although there are hundreds of miles of trails in the area, most are such low standard that they are hardly noticeable. The impact of livestock grazing, past and present, is likewise virtually unnoticeable.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

The size and rectangular shape of the area, tends to promote solitude. The two major drainages and six tributary systems and generally wide and rounded ridges isolates users effectively. Noise and detraction from logging activity is found only along the west boundary and then only for a short distance. There are numerous trails in creek bottoms and on ridges which tends to disperse people. Additional dispersion is gained because access to these trails is good from the many miles of road surrounding the area.

The great diversity of topography and extensive areas of dense vegetation of trees and shrubs further isolates visitors from each other. There are no lakes or single major attractions which tend to concentrate people. Once the visitor is a short distance from a heavily-used trail or an adjacent or intruding road, there is a definite feeling of being in a natural area.

Because of the moderate elevations in comparison to higher surrounding areas, outside viewing opportunities are very limited thereby minimizing visual disturbances from adjacent activities.

The Cayuse airstrip (officially a backcountry emergency field) near the boundary accommodates fly-in fishermen and hunters during the summer and early fall resulting in noise and visual distraction up to a mile away.

Hiking, backpacking, primitive camping, photography, horseback riding, hunting, and stream fishing are the key dispersed recreation. Trails, even though many are low standard, provide the major means of access since cross-country travel is very difficult due to dense vegetation and rugged terrain. Several outfitters pack big-game hunters into the area each fall to hunt elk, deer, and bears.

C. SPECIAL FEATURES

The Lolo Trail which is a registered National Historic Landmark and National Historic Trail is one of the most significant features. This trail was a major travel route between the Columbia Basin and the Montana country prehistorically and was heavily used. Lewis and Clark traveled over sections of the trail in journeys of 1805-06. They did, however, deviate from the traditional ridge trail with nearly ten miles of their route dipping into the vicinity of Gravey Creek and Moon Creek. Another famous traveler over the trail was Chief Joseph, a Nez Perce Indian Chief, who helped lead the nontreaty Nez Perce during the Nez Perce war of 1877. The trail was used to such an extent over the years that it was finally made into a road in the early 1930's. It remains as a very low-standard route used today by hunters, Forest Service employees, and others.

The Cayuse Creek drainage is part of a-catch-and-release fishery area of the Kelly Creek drainage. This regulation, established in 1970 to protect and enhance the westslope cutthroat trout, has resulted in a local and regional reputation for a quality fishery. Twelve-to-sixteen-inch trout are not uncommon in the major streams.

Based on numerous reports in recent years, followed by a verified sighting in 1978 (with photographs), the Bighorn-Weitas is regarded as important for the endangered gray wolf. These sightings along with suitable habitat requirements has prompted the Forest Service to designate the area as essential habitat. The management of an adequate prey base which on the Clearwater Forest is elk, and restrictions on motorized road use are two major components of protecting and enhancing this endangered species.

D. EFFECT OF THE SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

Except for the narrow Hemlock Creek area, the large size and rectangular shape contribute significantly to the wilderness qualities. The area is large enough to be virtually unaffected by exterior sights and sounds.

E. MANAGEABILITY AND BOUNDARIES

The Pierce-Superior road, Kelly Creek road, Toboggan Ridge road and Lolo Motorway would be logical wilderness boundaries. The Gravey Creek timber management area could easily be excluded with some minor adjustments along several major ridges.

The Cook Mountain road and reforestation area could either be excluded which would pose boundary-location problems or included and the road closed. Because it is a low-standard, dirt road, it and the Cook Mountain area would revert back to a natural condition within five to ten years.

Moving the boundary to Weitas Creek from its mouth to the Weitas Work Center would eliminate several short creeks draining into Weitas Creek and the larger Hemlock Creek drainage and make a more logical wilderness boundary. Other possible adjustments to exclude moderate timber values would put the boundary along Weitas Creek from the Work Center upstream to Windy Creek, up Windy Creek to Young Creek, up Young Creek to Monroe Butte, along Windy Ridge to Lookout Peak, down trail #638 across Monroe Creek, up trail #593 to Raspberry Butte then east to Gravey Creek.

The 760 acres of private land could also be excluded easily without detracting from the wilderness values.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Although there are numerous potential developed sites, the actual construction of such sites is dependent upon needs, funding, and road access. Current need is low and funding levels are almost nonexistent.

2. Wildlife - Elk, mule deer, and black bears are the most common large game animals found. Moose, mountain lions and other small game and nongame birds and animals common to the rest of the Forest are also found here. Approximately 8 percent of the area or 18,700 acres is within key big game

winter range. The remainder is key summer range. Maintaining usable and viable forage would require some timber removal, but mostly would require prescribed burning of existing brush fields.

3. Livestock Operations - The area has eight designated grazing allotments: three cattle and five horse and mule. The cattle allotments are on transitory range averaging 190 head for approximately 475 animal unit months. Although there is considerably more potential, most of it would be transitory.

4. Timber - Approximately 92 percent or 216,800 acres is considered suitable for timber production. An estimated 2,546 MMBF of sawtimber is found. Timber stands are not uniformly distributed. Mainly because of the large wildfires during the early 1900's, entire drainages, such as Fourth of July Creek, have few, if any trees. Because of the widespread destruction of timber during these fires, adequate seed sources are few-and-far-between. Loss of topsoil on many of these areas may also inhibit regeneration from taking place.

5. Minerals - Potential for mineral, oil and gas is low. A small amount of prospecting and exploration can be expected in the extreme western section.

6. Cultural Resources - In addition to the previously mentioned Lolo Trail and Lewis and Clark routes, the area has a rich heritage of other cultural resources. Nine prehistoric sites have been located. As mentioned earlier, an extensive portion of the Lolo Trail forms the southern boundary.

Trappers and the Forest Service personnel became users of the area by the late 1890's. During the 20th century many peaks, meadows and creek bottoms have served as lookouts, ranger stations or crew camps. A total of 57 historic sites are recorded. Included among these sites are 13 Forest Service lookout sites, 18 cabins or cabin remains, four USFS Ranger Stations locations, four hunter camps, one ERA camp, two BRC Camps, four Lewis and Clark Expedition camp sites, one Euro-American grave site, and evidence of a sheep driveway.

7. Land Use - Each fall several commercial outfitters take hunters to hunt big game, primarily elk.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1. Nonfederal Lands - Potlatch Corporation owns three parcels of land consisting of 760 acres near the mouth of Weitas Creek and Bugle Point.

2. Fire - Although large fires occurred in the past, the current number of fires is low. The Horseshoe Lake fire in 1961 was the most recent fire of any size.

C. RESOURCE SUMMARY

Table C-16.

01306-Bighorn-Weitas

<u>Description</u>			<u>Description</u>		
Gross Acres	Acres	236,270	Gray Wolf Hab.	Acres	235,510
Net Acres	Acres	235,510	Peregrine Fal. Hab.	Acres	0
Recreation			Wildlife - Big Game		
Primitive	RVD's	10,751	Big Game		
Semiprim Nonmotor.	RVD's	9,857	Summer Habitat	Acres	0
Semiprim Motor.	RVD's	5,088	Winter Habitat	Acres	0
Roaded Natural	RVD's	40,373	Elk		
			Summer Habitat-Key	Acres	147,826
			Winter Habitat-Key	Acres	18,052
Range			Significant Fisheries		
Existing Obligated			Stream Miles	Miles	834
Suitable	Acres	5,470	Stream Habitat	Acres	1,027
Allotments	No.	5	Lakes	No.	0
AUM's	AUM's	475	Lakes - Habitat	Acres	0
Existing Vacant			Water Developments		
Suitable	Acres	0	Existing	No.	0
Allotments	No.	0	Minerals		
AUM's	AUM's	0	Potential Hardrock		
Proposed			Very High	Acres	0
Suitable	Acres	0	High	Acres	0
AUM's	AUM's	0	Moderate	Acres	0
Timber			Low	Acres	235,510
Tentative Suitable	Acres	216,795	Claims	No.	14
Standing Volume	MMBF	2,564	Potential Oil and Gas		
Corridors			Very High	Acres	0
Exist. and Potential	No.	1	High	Acres	0
Wildlife - T&E			Moderate	Acres	0
Grizzly Bear			Low	Acres	235,510
Habitat - Sit. 1	Acres	0	Oil and Gas Leases		
Habitat - Sit. 2	Acres	0	Leases	No.	0
Habitat - Sit. 3	Acres	0	Leased Area	Acres	0
Bald Eagle Hab.	Acres	0			

IV. **NEED**

The main values and contributions are: 1) the display of successional vegetative changes resulting from the 1910 fires, 2) the westslope cutthroat trout fishery, and 3) the essential habitat for the threatened and endangered gray wolf. While neither the westslope cutthroat trout nor the gray wolf are dependent upon wilderness for their survival, both species would benefit from wilderness in that they would become less vulnerable to man's activities.

The area would add two broad ecosystems: 1) cedar-hemlock-pine, and 2) western spruce-fir.

Although the area was not recommended for wilderness during the RARE II process in 1979, there was considerable local and regional interest for wilderness during the public involvement period. Most concerns during that time and since RARE II have centered around the need for wilderness to protect the elk, gray wolf, and fisheries (in Weitas and Cayuse Creek). The Idaho Fish and Game Department has favored wilderness for a large portion of the area.

Proposed timber development plans in Toboggan Creek (1982-84) resulted in considerable public controversy primarily from fishing interests and the concern with the future of the westslope cutthroat fishery. Probably largely as a result of this interest, a wilderness bill introduced in Congress in March 1984 proposed a 51,000 acre area encompassing Toboggan Creek and a large portion of Cayuse Creek for wilderness. The bill was not acted upon, however, because of the controversy, members of the Idaho Congressional delegation decided to hold off until the Idaho Forest Plans were finalized.

Tables C-1 and C-2 show the location and proximity of the Bighorn-Weitas Roadless Area to other wilderness and population centers in Idaho, western Montana, and eastern Washington.

Sixty-five percent of the 153 comments received on the Bighorn-Weitas Roadless Area between the draft and final documents mentioned wilderness, i.e., they favored wilderness designation for all or part of the area. The remaining 35 percent wanted to leave all or most of the area in an undeveloped state. The reasons for both positions were essentially the same.

The Cayuse and Toboggan Creek drainages were mentioned the most frequently. Other areas mentioned less frequently were Weitas, Fourth of July, Monroe, and Lunde Ridge. The protection of these watersheds and westslope cutthroat trout spawning beds from adverse effects of timber harvesting and road building were major reasons given to support not only wilderness, but roadless status as well. Other reasons given for maintaining the area or portions as roadless or wilderness were:

- High quality roadless type elk hunting.
- Very important elk summer and winter habitat.
- Scenic beauty of the area.
- Fly fishing opportunities.
- Low value timber especially the lodgepole pine in Toboggan Creek.
- Lessening disturbance of sensitive soils from erosion.

Some people felt that the 80 percent watershed standard was too low, that it should be 100 percent. Others were concerned about improvement of the roads to the area which would attract more people and therefore destroy what they enjoyed: the fish, wildlife, and solitude.

As a result of public comments and meetings with interested groups and individuals, the following changes were made in the Forest Plan. The Monroe Creek and Toboggan Creek drainages were changed to Management Area C6 designation which would leave the areas undeveloped (primarily for watershed and fishery protection). In addition, a new Management Area, C8S, was proposed that replaces the C2S in the Proposed Plan. It states that all new roads constructed for timber harvest will be closed to all motorized traffic immediately following timber harvest activities.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-17.

Bighorn-Weitas Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)												
	A	B	C	D	E	E1	F	G	H	I	J	K	
WILDERNESS	0	0	0	50 0	0	0	74 2	71 2	207 3	235 5	50 0	0	
NONWILDERNESS													
Unroaded	0	0	0	61 6	75.5	75.5	121.7	0	0	0	61.6	101 9	
Elk Winter	2.0	0	0	4.3	4 5	4 5	15 1	0	0	0	4 3	7 3	
Timber/Wildif-Wtshd	153 4	171 0	170 5	28.6	10 8	10 8	2 8	115 4	0 6	0	32 5	10 6	
Timber/Visual-Rip	39 0	17 3	17 7	18 0	23 7	23 7	7 2	36 6	3 0	0	18 0	12 6	
Timber/Special	0	0	0	57 9	110 1	110 1	13 5	0	24 6	0	57 9	62 0	
Special	0	0	0	0	0	0	0	0	0	0	0	0 1	
Protection	41 1	47 2	47 3	15 1	10 9	10.9	1 0	12 3	0	0	11 2	41 0	
TOTAL	235 5	235 5	235 5	235 5	235 5	235.5	235.5	235 5	235 5	235 5	235 5	235 5	
Summary of Management Emphasis													
Wilderness	0	0	0	50 0	0	0	74 2	71 2	207 3	235.5	50 0	0	
Nonwilderness													
Developed													
Decade 1	9 0	9 0	9 0	1 3	5 8	5 8	0	0	1 3	0	1 3	22 6	
Decade 5	166 1	166 1	166 1	109 5	146 4	146 4	25 6	118 1	28 0	0	109 5	113 9	
Roadless													
Decade 1	226 5	226 5	226 5	184 2	229 7	229 7	161 3	164 3	26 9	0	184 2	212 9	
Decade 5	69 4	69 4	69 4	76 0	89 1	89 1	135 7	46 2	0 2	0	76 0	121 6	

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

Six of the twelve alternatives designate portions of the Bighorn-Weitas area to wilderness. In Alternative I the entire area is designated to wilderness; Alternative H designates nearly 88 percent east of Weitas Butte and lower Weitas Creek. In Alternatives F and G about 30 percent of the area, including the entire Cayuse Creek drainage, is designated. Alternatives D and J designate about 20 percent located within portions of Cayuse Creek drainage east of Raspberry Butte.

Approximately 3,352 MMBF of standing timber volume on 16 percent of the Forest's tentatively suitable timberland would become unavailable for harvest in Alternative I.

Only valid mining claims and mineral leases in effect when designated wilderness or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry. Mineral development could occur. Extraction costs would be extremely high due to operations/access restrictions needed to protect wilderness values.

This designation retains a primitive setting for recreation. Recreation would continue to be dominated by hunting, fishing and camping. Motorized activities such as trail bike, snowmobile and use of chain saws would be prohibited.

Livestock range allotment could continue under a wilderness designation.

Effects of wilderness management on nonpriced resource values are:

- The natural ecosystem would be protected.
- The primitive/semiprimitive setting of most of the area would remain unchanged. Big game hunting, fishing, horseback riding, and hiking would remain the predominant recreation.
- The quantity and quality of big-game habitat would be determined by natural events such as lightning-caused fires. Prescribed fire and/or mechanical treatments could not be utilized to improve big game or fisheries habitat.
- Essential gray wolf habitat would be maintained.
- Vegetative diversity would tend towards old-growth and other climax successional plant species.

Economic and social effects would vary depending on the amount of tentatively suitable timberland recommended for wilderness. The timber industry would not be supported by this emphasis. Industries related to tourism and recreation would benefit. Individuals advocating wilderness would be supported. Those individuals desiring roaded natural recreation would not be supported.

2. Designation: Nonwilderness
Management Emphasis: Unroaded

Wildlife, fisheries, and a semiprimitive setting for recreation would be enhanced under unroaded management.

Six of the twelve alternatives contain areas that are designated to this emphasis. In Alternative F nearly 52 percent of the Bighorn-Weitas area, located in much of the Weitas Creek drainage, would be managed to meet 100 percent of potential elk use on key summer range. The Preferred Alternative K retains 43 percent of the area in a roadless category previously in the Weitas, Toboggan, Monroe, and Fourth of July drainages. In Alternatives E and E1 about 12 percent is designated to the fishery resource in the upper Cayuse drainage and about 20 percent is designated to key elk summer range in the Fourth of July Creek drainage and Scurvy Mountain area. In Alternatives D and J about 25 percent is designated to key elk summer range in the vicinity of Lookout Peak, Junction Mountain, and Scurvy Mountain.

Mineral exploration and development could take place, but the cost of such activities would be higher due to limited access and environmental constraints.

Suitable timberland within the affected land would not be available for timber harvest.

In the future, livestock grazing allotments would be phased out.

Effects of unroaded management on nonpriced resource values are:

- The naturally appearing visual setting would not be affected.
- The primitive/semiprimitive landscape would be maintained. Hunting, fishing, hiking and horseback riding would continue to be the dominant recreation.
- Fish and wildlife habitat would be maintained or improved. The use of prescribed fire or mechanical treatments on big game range portions of the area would interrupt the natural vegetative successional forces operating within the affected areas.
- Approximately 25 to 50 percent of the essential gray wolf habitat would be undisturbed.
- Water quality would not be adversely affected.

Social and economic effects center around timber, minerals, wildlife, range, and recreation. Mineral resources would be available. However, mitigation measures required to protect wildlife and fishery values would significantly affect mineral extraction costs. Revenues generated from wildlife and recreation would be maintained or increased. Since timber harvesting is not available, raw materials to the timber industry would be reduced. Outfitting businesses would be supported. Livestock grazing operations would not be supported.

3. Designation: Nonwilderness
Management Emphasis: Elk Winter Range

These areas would provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest would occur only on an opportunity basis to maintain big-game forage. Roads needed to manage adjacent areas with different designations could be constructed through the area only if they met soil and watershed constraints. Any roads crossing these areas would preclude consideration for wilderness designation.

Seven of the twelve alternatives designate portions of the Bighorn-Weitas area to elk winter range management. In Alternative F about 6 percent of the area representing 84 percent of the available key winter range is designated. Alternatives A (current direction), D, E, E1 and J designate 1 to 2 percent representing 10 to 20 percent of the available key winter range. The Preferred Alternative K designates about 3 percent.

Although much of the areas wilderness character would be maintained, prescribed burning and/or mechanical treatments of winter range would disrupt the natural vegetation succession.

Lands that are suitable for timber growth would not be available for harvest.

Mineral resources would be available. Mineral exploration and development costs could be significantly higher because of access limitations.

Effects of elk winter range on nonpriced resource values are:

- The natural setting would be largely maintained. Prescribed burning would create disruptions but only for a short time.
- The primitive/semiprimitive recreational setting would be maintained. Hunting, hiking, camping, and horseback riding would remain the dominant recreation.
- Essential wolf security habitat would be disturbed if roads were built. Road closures would mitigate this impact.
- Big-game winter habitat would be improved.
- Water quality would not be adversely affected.
- Vegetative diversity would tend toward seral succession.

Social and economic effects center around timber, minerals, wildlife, and recreation. Timber would not be available to the timber industry. The availability of mineral resources would not be affected, but the cost of mineral extraction would be high. Industries associated with wildlife and recreation would benefit. Wilderness advocates would be partially supported while individuals seeking roaded natural settings would not be served.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

The lands designated to timber/wildlife and watershed would be managed for timber production at varying investment levels. Minimum management constraints relating to elk security needs and water quality would be met.

All alternatives except Alternative H designate portions of the Bighorn-Weitas area to this management emphasis. In Alternatives B and C nearly 70 percent of the area is designated. Alternative A (current direction) designates 65 percent for such use while Alternative G designates 50 percent. Alternatives D and J contain about 14 percent. Alternatives E, E1 and K (Preferred Alternative) designate about 5 percent. Alternatives F and H contain less than 1 percent.

Approximately 90 percent of the wilderness characteristics would remain by the end of the first decade in the Preferred Alternative K. Between 96 and 100 percent of the area would remain undeveloped under all other alternatives during the first period. Most development during the first decade would be confined west of Weitas Creek. From 60 to 70 percent of the area would be developed by the end of the fifth decade in Alternatives A, B, C, E, and E1. Alternatives D, G, J., and K (Preferred Alternative) would develop 46 to 50 percent of the area by the end of the fifth decade. Approximately 90 percent of the area would still retain its wilderness characteristics by the end of the fifth decade in Alternatives F and H.

Access for mineral exploration and development would be enhanced as the road system expanded.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- The visual quality objectives of retention in the foreground viewing area of the Lolo Trail would be met. The natural landscape of middle/background viewing areas of the Trail would be disrupted in Alternatives A (current direction), B, C, D, E, G, J, and K (Preferred Alternative). There would be minor background disruptions in Alternatives F and J. Other areas would change to a modification VQO.
- The primitive recreational setting would be modified to a roaded natural setting. Big game hunting, fishing, camping, and wildlife viewing would be the dominant activities. Gathering firewood would increase in this area.
- Elk habitat would be reduced to a protection of 25 percent of elk potential.
- Essential gray wolf habitat for much of the area would be maintained in Alternatives D, E, E1, F, H, I, J, and K (Preferred Alternative). It would be reduced in Alternatives A (current direction), B, C, and G. Road closures could mitigate some of the impacts.
- Water quality would be reduced, but minimum fishable standards would be met.

Social and economics effects center around timber, minerals, wildlife, and recreation. Timber and mineral industries would benefit. The outfitting and guides associations would not be supported nor would wilderness users.

Individuals favoring roaded natural activities would be supported. Those who enjoy fishing would be partially served.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

Eleven of the twelve alternatives contain areas that have a goal of timber production within areas that fall into retention/partial retention VQO's and areas of ecologically important riparian vegetation and features located along stream courses.

Fifteen percent of the area is designated to this emphasis in Alternatives A (current direction) and G. Five to ten percent in Alternatives B, C, D, E, E1, J, and K (Preferred Alternative) is designated with 1 to 3 percent in Alternatives F and H.

This management would preclude future wilderness designation because of the area's proximity to other larger areas with timber production as a primary management goal and their associated road development.

Essential gray wolf security habitat could be impacted depending on the size of the affected area and available mitigation measures. The formal consultation process would be utilized to evaluate impacts.

Timber harvest would be under an extended rotation system.

Minerals exploration and development would benefit by increased access due to timber harvest.

Other nonpriced resource impacts would mirror those of surrounding management areas.

Economic and social effects vary depending upon the amount of land that is suitable for timber production and the degree of constraints imposed to recognize visual and watershed values. Local timber and mining industries would benefit. Opportunities for recreation would shift from primitive to natural roaded. Individuals advocating wilderness would not be supported nor would outfitters and guides.

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

In Alternatives E and E1 about 6 percent of the area located in Toboggan Creek would be managed for fishery values and another 41 percent would be managed for elk summer range with timber production as the secondary goal. In Alternatives D, J, and K (Preferred Alternative) about 25 percent is designated to elk summer range/timber management, while Alternatives F and I, respectively, contain 6 and 10 percent.

Activities under these management activities would foreclose future options for wilderness designation. The roadless character of the Bighorn-Weitas area would be altered somewhat but not entirely eliminated. A semiprimitive to primitive motorized setting would be the overall goal. Some timber harvest would occur but associated roading would be managed to maintain the highest quality outputs in fishery and wildlife values.

Minerals exploration and development could occur and would benefit somewhat by increase access.

Effects of timber/special management on nonpriced resource values are:

- Visual quality would be reduced to a modification VQO.
- Seventy-five percent of potential elk use would be maintained in Alternatives D, E, E1, F, H, and J, through seasonal road closures. In Alternative K (Preferred Alternative) complete closure for all public motorized use during non-snow periods should insure a much higher degree of protection for elk potential use.
- Essential gray wolf security habitat would be disturbed with roading activities. Road closures would mitigate this impact.
- Water quality and fishery values would remain at high levels. Timber harvest, road scheduling, and riparian area-protection-measures would be utilized to maintain established water quality standards.
- The existing primitive setting would be modified towards the semiprimitive motorized/roaded natural setting. Hunting, fishing, and camping would be the dominant uses. Trail bike and snowmobiling activities would increase.
- Vegetative diversity would move towards seral successional stages.

Economic effects vary depending on acres treated and scheduling. Timber and mineral industries would benefit. However, to maintain the highest possible wildlife, fisheries and recreational outputs, certain mitigation measures would be imposed that would increase the costs of obtaining timber or mineral. Some adjustments may be necessary in the recreational businesses, such as outfitting, but for the most part a primitive/semiprimitive motorized setting should be maintained. Individuals supporting wilderness would not be supported. Consumptive and aesthetic supporters of wildlife and fisheries would be supported.

7. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment purposes because of biophysical conditions. Acre variances between alternatives are created by other resource constraints.

Generally, these areas are small and scattered throughout surrounding management areas. In some cases, their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas. No direct investment activities would occur.

In Alternatives A (current direction), B, C, and K (Preferred Alternative) 17 to 20 percent of the Bighorn-Weitas area would be managed in this category. Alternatives D, E, E1, F, G, and J designates 4 to 6 percent. Less than 1 percent is designated in Alternative F.

Impacts to the wilderness values would vary depending on the size of the affected areas and their spatial relationship with other management areas. If affected unroaded areas were large enough to meet the minimum roadless area acreage criterion, their wilderness qualities would be largely retained. Small areas surrounded by roads would lose their wilderness characteristics.

The impacts to the timber market would be minor since such lands are classified as unsuitable for timber production.

Minerals exploration and development could take place, but costs of such activities would be higher due to limited access.

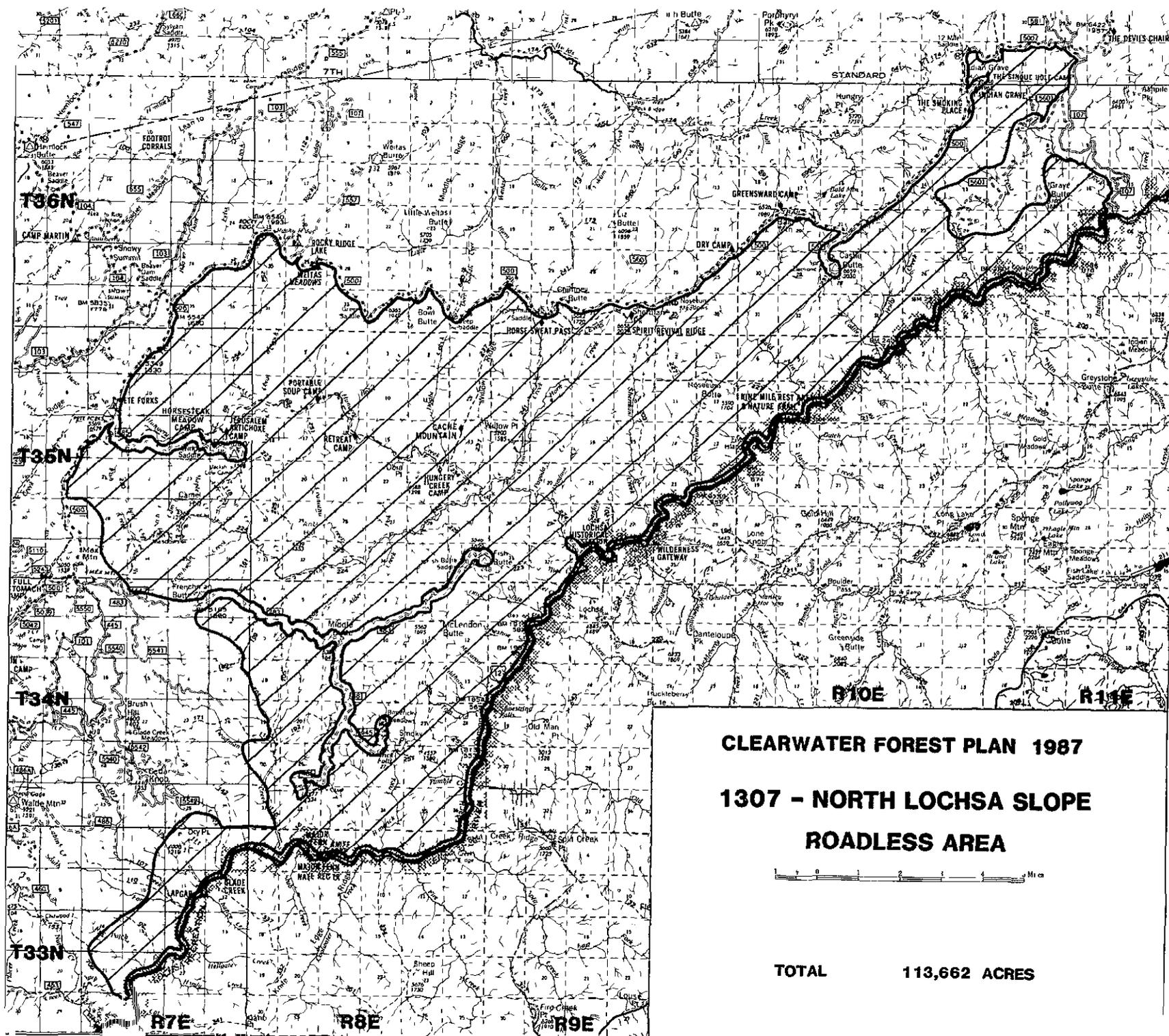
Essential gray wolf security habitat could be disturbed by roads crossing these areas. Road closures could mitigate such actions. Impacts would be evaluated on a case-by-case basis, utilizing a formal consultation process with the Fish and Wildlife Service.

Other nonpriced costs and benefits would mirror those of surrounding management areas.

Economic and social effects relate to timber, mineral, recreation, and wilderness. The timber industry would not be supported. The mineral industry would be partially supported. Primitive settings would be maintained within the affected areas, but those seeking wilderness experiences would not be supported.

NORTH LOCHSA SLOPE ROADLESS AREA

C-134



CLEARWATER FOREST PLAN 1987
1307 - NORTH LOCHSA SLOPE
ROADLESS AREA

TOTAL 113,662 ACRES

NORTH LOCHSA SLOPE ROADLESS AREA (01307)

Gross Acres	Net Acres
113,662	113,662

I. DESCRIPTION

The North Lochsa Slope Roadless Area is located in the Lochsa River drainage approximately 70 air miles east of Lewiston, Idaho. It is located entirely within the boundary of the Clearwater National Forest in Idaho County.

Access is provided by U.S. Highway 12, an all-weather highway on the south. The Lolo Motorway and two other low-standard, dirt surfaced roads provide access on the northwest sides of the unit. The Indian Graves Road #107, a low-standard, graveled road parallels the area near its eastern boundary and provides a north-south connection with the Lolo Motorway. A sparse network of trails maintained at minimal standards crosses the unit. Most trails are suitable for both foot/stock use. Some are suitable for foot traffic only.

Two major types of drainages flow through this area: the large (53,864 acre) Fish Creek drainage, and a series of relatively short (1 to 6 mile-long) streams draining directly into the Lochsa River.

The southwest and northeast portions are characterized by steep, stream breaklands dissected by steep side drainages. The central portion in the Upper Bimerick and Fish Creek drainages have a more broken topography consisting of moderate relief uplands and low relief hills dissected by meandering streams with relatively low gradients and flat bottoms. The southern portions of these drainages are also located on steeper breaklands.

Almost all the area is underlain by a gray, coarse-grained quartz monzonite of the Cretaceous Idaho batholith. Isolated blocks of rhyolite, border zone gneiss and schist, and gneiss of the Wallace formation of the Belt series also occur in the area.

Elevations range from near 1,500 feet along the Lochsa River to 6,600 feet at Castle Butte.

Large areas of bare rocky outcroppings are visible from U.S. Highway 12 in those portions of the steep breaklands located east of Sherman Creek.

Vegetation ranges from western redcedar and grand fir on north slopes, and large brush fields on south and west slopes, to lodgepole pine, subalpine fir, and bear grass at higher elevations. Other tree species include western white pine, Douglas-fir, Englemann spruce, larch, ponderosa pine, and mountain hemlock.

Daubenmire habitat types represented include Douglas-fir/Ninebark, western redcedar/Lady Fern, western redcedar/pachistima, grand fir/pachistima, subalpine fir/pachistima, subalpine fir/menziesia, and subalpine fir/beargrass.

Large forest fires in the early 1900's had a major influence on the existing vegetation creating a mosaic of large brush fields with scattered concentrations of various sizes of trees. Trees are beginning to re-establish themselves in brush fields, especially on north slopes.

Although generally surrounded by roads, the adjacent areas to the south and north are also roadless. Areas to the west and east are developed for timber harvest.

Key attractions within the area includes the anadromous fishery (steelhead trout and chinook salmon) in the Fish Creek drainage and elk. Big game hunting for elk, deer, and bears is probably the most popular current use. Most of the use from the south side off of U.S. Highway 12 is day use while many of those hunting from the Lolo Motorway or the roads around the Fish Creek drainage prefer to use stock or off-road vehicles to get further away from the roads.

Stream fishing, hiking, backpacking, and horseback riding in the main Fish Creek and Hungery Creek drainages are becoming more popular each year. The natural beauty of Fish Creek is a key attraction with a parallel trail alongside it.

The cultural history of the Lolo Trail and the Lolo Motorway forming the northern boundary, as well as a roadless portion of the Lewis and Clark route, appeals to history buffs.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Even though physical evidences of man's activities are obvious, their impacts are considered relatively minor to the overall natural integrity of the area.

Most of the land as viewed from both within and from the boundary and intruding roads offers a diversity of vegetative types and openings that appear natural.

The majority of the trails were constructed in the early 1900's by the Forest Service to provide access for wildfire control. Two currently unoccupied, fire lookouts are at Castle Butte and Fish Butte; both were built during this period.

Roads from Frenchman Butte to Fish Butte Lookout and from Middle Butte to Bimerick Meadows and Van Camp Lookout Site were constructed in the 1930's by the Forest Service. They were built primarily for wildfire control and reforestation work on areas burned by the large fires of this period. These reforestation efforts were centered in McLendon Butte, Bimerick Meadows, and Boundary Peak. Success was limited.

The Van Camp road which originally provided access from U.S. Highway 12 was closed and restored to a trail-status in the 1970's.

Timber harvest activities have been confined to three areas adjacent to existing roads: the extreme northwest part of the Fish Creek drainage, the Pete Forks area along the Boundary Peak Road, and the East Deadman Creek area along the Bimerick Meadows Road. The first area was logged during the 1960's.

Still evident is a road built into Fish Creek from Fish Butte Saddle in the 1960's to access some cedar products burned during a fire in 1959.

Large areas of the brush fields located within big game winter range have been broadcast burned to improve both forage quantity and quality. Evidence of these burns is only minor.

Several fish habitat improvement projects to remove debris utilized chain saws and chain saw winches in the Fish Creek and Sherman Creek drainages in the late 1970's. Cut ends of logs are about the only remaining evidence.

One cattle grazing allotment is active although there are no improvements which detract from the naturalness of the area.

A hardrock, underground, exploratory mine is operating in the extreme southwest corner of the area. It is located near the mouth of Canyon Creek and is accessible via a short existing road from U.S. Highway 12.

A small Forest Service structure called Obia cabin is located at the mouth of Hungery Creek.

B. OPPORTUNITIES FOR EXPERIENCES
OFTEN UNIQUE TO WILDERNESS

Solitude varies within the North Lochsa Slope Roadless Area.

The 60,000 acre Fish Creek drainage provides the best opportunity for solitude. Its broken topography, relatively flat-bottomed streams, and diverse vegetation effectively screens out the sights and sounds of man's activities. Within 1/2-mile of the existing access roads, a person has a feeling of being in a relatively large area that has had very little development. It also provides excellent opportunities for visitor dispersion. Concentrations of people currently occur along existing access roads to the north and western portions of the area primarily during the fall big-game hunting season. Timber harvest areas to the west are not visible. Looking out of the drainage to the east and southeast, the higher ridges of the Selway-Bitterroot Wilderness are visible.

The southwest portion centered in the McLendon Butte/Bimerick area does not offer high solitude. Large timber clearcuts to the southwest are clearly visible, and some timber harvest noise is noticeable during most of the year.

The steep breaklands on the southern portion of the unit do offer views of the undeveloped Selway-Bitterroot Wilderness and other roadless areas to the southwest. However, U.S. Highway 12 is a major visual focal point from these areas, and traffic noise from the highway also detracts from giving one a feeling of solitude.

Trails are the only recreation-related facilities in the interior of the area.

C. SPECIAL FEATURES

The Lolo Trail, which is a registered National Historic Landmark and National Historic Trail, is one of the most significant features. This trail was a major travel route between the Columbia Basin and the Montana country prehistorically. Lewis and Clark traveled over sections of the trail in journeys of 1805-06. The area has the unique distinction of possessing the longest remaining undisturbed section of the Lewis and Clark Trail in the country. Some 17 miles of trail in the Hungery Creek drainage remain much as Lewis and Clark found them. Another famous traveler over the Lolo Trail was Chief Joseph a Nez Perce Indian Chief who helped lead the non-treaty Nez Perce during the Nez Perce War of 1877. The trail was used to such an extent over the years that it was finally made into a road in the early 1930's. It remains as a very low-standard route used today by hunters, Forest Service employees, and others.

The area also contains the 1,281 acre Lochsa Research Natural Area (RNA) established by the Chief of the Forest Service in 1977. The RNA was established to protect and study the unique Pacific coast vegetation (coastal disjunct species) that occur within its boundaries. Flowering Dogwood and 14 other plant species that are not normally found west of the Cascades Mountains or further east in the Continental U.S. grow in the RNA.

Although no verified sightings or other confirmed evidence exists, habitat conditions conducive to the wolf have resulted in designation of 108,000 acres as essential wolf habitat. This area is adjacent to the Bighorn-Weitas Roadless Area which has had a confirmed gray wolf sighting. The management of an adequate prey base (primarily elk) and restrictions on motorized road use are two major components for protection and enhancement of the wolf.

An approximated 1/4 mile wide corridor within the Middle Fork-Lochsa Recreation River established under the National Wild and Scenic Rivers Act of 1969 runs the full length of the roadless area north of Highway 12. This corridor is managed under a Special River Management plan which emphasizes the scenic values of the river environment.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

Although the area is large (113,662 acres), the narrow and irregular shape of all lands draining directly into the Lochsa River severely detracts from many wilderness attributes, principally solitude (sight and sound). The Fish Creek drainage on the other hand, is an enclosed landscape where most wilderness attributes are unaffected.

E. MANAGEABILITY AND BOUNDARIES

Because of the irregular shape and narrow stringers of roadless land along the Lochsa River from Rye Patch Creek to the mouth of Fish Creek, a more logical boundary would exclude that area from wilderness. The same would be true from Skookum Creek northeast. The boundaries of the remaining area, ie., Fish Creek and the Lochsa Face from Fish Creek to Skookum Creek, would result in a manageable wilderness, although the wilderness qualities on the face are questionable, as noted previously.

The Boundary Peak road #485 could be left as a road or closed. Either way would have little effect on wilderness values.

Because of the Lowell Unit Plan, which was approved in 1977, all of the roadless area in Fish Creek and along the Lochsa River from the mouth of Fish Creek downstream was excluded from the RARE II process. It was contiguous to the RARE II area called Upper Lochsa Slope of which it is now a part.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Most developed recreation is in conjunction with the existing roads and boundaries. Most future needs could be easily supplied with additional developments in these areas. Current and anticipated funding for developments is low, so no construction projects are planned for the foreseeable future. Over 90 percent of developed recreation is concentrated along the U.S. Highway 12.

2. Wildlife and Fish - Big game wildlife species found are elk, mule deer, white-tailed deer, moose, mountain goats, mountain lions, and black bears. The area provides large areas of high quality summer and winter range for big game animals. Nongame wildlife species such as fisher, pine marten, and lynx also are found.

The area contains nearly 18,700 acres of big game winter range. Because of vegetative successional changes, a certain number of acres of winter range would require some form of vegetative manipulation annually to maintain adequate forage for the number of elk currently utilizing the range. The remaining area, especially in the Fish Creek drainage, is key elk summer range.

The Fish Creek drainage and several of the other drainages contain some of the best spawning and rearing habitat in the Lochsa River drainage for steelhead trout and chinook salmon. A limited amount of habitat improvement may be needed to fully utilize anadromous fish spawning and rearing habitat in the future. The streams within the unit also contain stable resident cutthroat and rainbow trout populations.

3. Livestock Operations - A cattle grazing allotment is located in Bimerick Meadows. It consists of primarily transitory range and provides 50 head of cattle with 2.5 months of grazing (125 animal-unit-months). No physical range improvements are located on the allotment.

4. Timber - A total of 111,756 acres are suitable for timber production. The estimated volume of standing sawtimber is 1,256 MMBF of timber. It is located generally in three areas: steep breaklands in the southwestern corner of the area, Deadman Creek drainage, and upper end of Fish and Hungery Creek.

5. Minerals - Minerals exploration has been limited to the extreme southwest corner of the unit in the Rye Patch and Canyon Creek drainages. There are mining claims in this area with one active exploratory operation in Canyon Creek. As such, potential minerals in these areas would be rated as moderate.

Minerals include gold, silver, antimony, and mercury. There are no known mining claims in the remainder of the unit. The mineral potential in the majority of the area is rated low with a small area in the southwestern corner rated moderate.

Potential for oil and gas is rated low.

6. Cultural Resources - As mentioned previously, the Lolo Trail, Lewis and Clark route, and Lolo Motorway are all significant cultural resources recognized regionally and even nationally.

In addition to these features, a total of 45 cultural sites have been inventoried. The majority of these are connected with Forest Service fire control activities of the early 1900's. Nine of the sites are associated with the Lewis and Clark Expedition; four are prehistoric sites. An exceptional site is a World War II Japanese/American Internment Camp near U.S. Highway 12 in the southern portion of the unit. A number of Nez Perce Native American trails also existed.

7. Land Use - Outfitter/guides currently run a spring and fall big-game hunting operation. One has an assigned campsite in the Willow Creek drainage; the other has an assigned campsite in the Holly Creek drainage.

A radio relay station on Castle Butte Lookout is under permit to the State of Idaho and Idaho County.

A highway maintenance station near Bald Mountain Creek, located adjacent to U.S. Highway 12, is also under permit to the State of Idaho. The Federal Energy Commission recently granted a license to a private corporation to analyze the possibility of developing a low head hydro power plant with associated diversion and powerline facilities.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

1) Fire - Although large fires occurred during the early 1900's, the current fire occurrence is low. Lightning ignitions are the dominant form of unplanned ignition. As previously discussed, large brush field areas have been subjected to prescribed fire to maintain and improve big game winter range forage.

C. RESOURCE SUMMARY

Table C-18.

01307-North Lochsa Slope

<u>Description</u>			<u>Description</u>		
Gross Acres	Acres	113,662	Gray Wolf Hab.	Acres	108,186
Net Acres	Acres	113,662	Peregrine Fal. Hab.	Acres	0
Recreation			Wildlife - Big Game		
Primitive	RVD's	6	Big Game		
Semiprim Nonmotor.	RVD's	8,172	Summer Habitat	Acres	0
Semiprim Motor.	RVD's	43	Winter Habitat	Acres	0
Roaded Natural	RVD's	33,801	Elk		
Range			Summer Habitat-Key	Acres	113,662
Existing Obligated			Winter Habitat-Key	Acres	18,446
Suitable	Acres	2,500	Significant Fisheries		
Allotments	No.	1	Stream Miles	Miles	600
AUM's	AUM's	100	Stream Habitat	Acres	720
Existing Vacant			Lakes	No.	0
Suitable	Acres	7,700	Lakes - Habitat	Acres	0
Allotments	No.	2	Water Developments		
AUM's	AUM's	210	Existing	No.	0
Proposed			Minerals		
Suitable	Acres	0	Potential Hardrock		
AUM's	AUM's	0	Very High	Acres	0
Timber			High	Acres	0
Tentative Suitable	Acres	111,756	Moderate	Acres	1,400
Standing Volume	MMBF	1,256	Low	Acres	112,262
Corridors			Claims	No.	4
Exist. and Potential	No.	1	Potential Oil and Gas		
Wildlife - T&E			Very High	Acres	0
Grizzly Bear			High	Acres	0
Habitat - Sit. 1	Acres	0	Moderate	Acres	0
Habitat - Sit. 2	Acres	0	Low	Acres	113,662
Habitat - Sit. 3	Acres	0	Oil and Gas Leases		
Bald Eagle Hab.	Acres	0	Leases	No.	0
			Leased Area	Acres	0

IV. NEED

The primary contribution to the National Wilderness System that the North Lochsa Slope Area would provide is opportunities for studying ecological effects on the described habitat types by repeated wildfires in the early 1900's and the successional stages resulting from these fires.

Much public interest, both on a local and regional level, has been shown especially in the 60,000-acre Fish Creek drainage where interest has centered on the management of big game and fish habitat.

The westernmost two-thirds of the area was subjected to the unit planning process during the 1970's and is located within the Lowell Planning Unit. A Unit Plan and Environmental Impact Statement for the unit was approved by the Regional Forester in 1977.

The Lowell Plan emphasized roadless management direction for the Fish Creek drainage to protect the roadless portion of the Lewis and Clark route, to protect stream values, and to preserve some excellent key roadless elk summer and winter habitat. Timber could be harvested but without roads. The remainder of the area was designated to timber harvest but with consideration for elk and protection of streams draining into the Lochsa River.

While wilderness was a consideration in the Fish Creek drainage during the unit planning process, it was not selected because of the previously mentioned resource values and because wilderness classification was never actually supported by the public.

Tables C-1 and C-2 show the location and proximity of the North Lochsa Slope Roadless Area to other wilderness and population centers in Idaho, western Montana, and eastern Washington.

A total of thirty-seven comments were received on this area between the Draft and Final EIS, and most were concerned with the Hungery-Fish Creek drainage. All respondents wanted to either leave the area roadless (30 percent) or recommended the area for wilderness (60 percent).

The pristine characteristics of the area, the degradation to the wildlife and water quality (specifically the effect on the trout streams), the high cost of removing what trees are there versus the cash value of them, and the important elk habitat, were all given as reasons for leaving the area undeveloped.

Following public involvement between the Draft and Final, the upper end of Hungery Creek was changed to a roadless designation (C6) in the Preferred Alternative K. The upper end of Fish Creek remains available for timber production, but under a C8S designation which will require that all new roads be closed to motorized traffic following timber harvest. This will improve protection of potential elk use above the 75 percent level.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-19

North Lochsa Slope Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)											
	A	B	C	D	E	E1	F	G	H	I	J	K
WILDERNESS	0	0	0	0	0	0	0	53.8	78.4	113.7	0	0
NONWILDERNESS												
Unroaded	46.6	0	0	48.9	49.0	49.0	65.1	0	0	0	48.9	56.5
Elk Winter	12.4	9.7	12.4	10.3	4.6	4.6	11.4	4.3	12.3	0	10.3	6.9
Timber/Wldlf-Wtshd	26.8	67.3	67.7	11.1	9.5	9.5	9.2	36.4	2.8	0	11.0	9.3
Timber/Visual-Rip	13.9	7.4	8.9	12.9	11.4	11.4	13.0	13.3	8.3	0	13.2	2.0
Timber/Special	0	0	0	16.2	24.8	24.8	3.0	0	8.8	0	16.2	20.4
Special	5.9	5.9	5.9	5.9	6.2	6.2	5.9	5.9	3.1	0	5.9	6.2
Protection	8.1	23.4	18.8	8.4	8.2	8.2	6.1	0	0	0	8.2	12.4
TOTAL	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7

Summary of Management Emphasis

Wilderness	0	0	0	0	0	0	0	53.8	78.4	113.7	0	0
Nonwilderness												
Developed												
Decade 1	9.1	16.1	16.1	16.1	16.1	16.1	9.1	9.1	9.1	0	16.1	17.7
Decade 5	25.1	54.3	54.3	40.4	40.4	40.4	25.1	25.1	25.1	0	40.4	49.3
Roadless												
Decade 1	104.6	97.6	97.6	97.6	97.6	97.6	104.6	50.8	26.2	0	97.6	95.9
Decade 5	88.6	59.4	59.4	73.3	73.3	73.3	88.6	34.8	10.2	0	73.3	64.4

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

The entire area is recommended for wilderness in Alternative I. In Alternative G, the entire 53,800 acre Fish Creek drainage is designated to wilderness. Alternative H includes the Fish Creek drainage plus an additional 24,600 acres east of the Fish Creek drainage and west of Skookum Creek. Alternative G contains 47 percent of the area, and Alternative H contains 69 percent.

Of the three alternatives proposing wilderness designation, Alternative G preserves those lands with the highest wilderness qualities. The roadless character of the area would remain. Also, the opportunities for solitude, big-game hunting, hiking, fishing, camping, and horseback riding would remain.

The entire 111,756 acres of tentatively suitable timberland with a standing volume of 1,256 MMBF of timber would not be available for timber production in Alternative I. This represents approximately 8 percent of the tentatively suitable timberland on the Forest. Approximately 50 percent and 70 percent of the tentatively suitable timberland within the area would be unavailable for production in Alternatives G and H respectively.

Wilderness precludes consideration of natural roaded and semiprimitive settings for recreation in Alternative I and reduces the acreage available in Alternatives G and H. The quality, primitive big-game hunting experiences provided by outfitters would continue. Motorized use such as trail bike, snowmobile, all terrain bicycles, and chain saws would be prohibited.

The current grazing allotment would not be affected under wilderness management.

Only valid mining claims and mineral leases in effect when designated as wilderness or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry. In all wilderness alternatives the cost of exploring and extracting minerals would significantly increase because of access and other operational limitations required to protect wilderness values. Alternative I would cause the most impact since it would contain about 1,400 acres of moderate minerals potential. The wilderness proposals of Alternatives G and H would cause less impact since the moderate area is omitted.

Effects of wilderness management on nonpriced resource values are:

- Visual quality within the recommended wilderness would be maintained in all alternatives at existing natural levels. Alternatives I and G would provide more comprehensive visual quality maintenance for the steep stream breaklands visible from the Lochsa Wild and Scenic River corridor. The Lolo Trail VQO of retention in the foreground would be achieved.

- Long-term maintenance of a natural unroaded landscape surrounding that portion of the Lolo Trail that traverses the unit would be more favored in Alternatives H and I. In Alternative G there could be road developments in the eastern one-third of the area. This could detract from such values.

- The primitive setting for recreation would be maintained. The existing type of recreation would continue.

- Gray wolf habitat would remain undisturbed. Alternative I would offer the highest undisturbed acreage, H the next highest, and Alternative G the least. However, the elk prey base could be expected to decline somewhat without the capability to manage big game winter habitat within the areas.

- Elk security would be maintained with Alternative I again providing the most security area and Alternative G the least. The use of prescribed fire and other vegetative manipulation techniques would not be permitted on elk winter range. Alternative I would have the greatest impact with 100 percent of the winter range; Alternative H would be next with 60 percent; and Alternative G would be least with 35 percent.

- Anadromous fishery spawning and rearing habitat would remain undisturbed. However, person-caused habitat enhancement or timely recovery efforts from any major fires could not occur under existing wilderness policy.

- Water quality would remain high.

- Vegetative diversity and successional patterns would tend toward old growth.

Social and economic effects would primarily relate to timber, anadromous fishery, wildlife, recreation, and wilderness. The loss of tentatively suitable timberland would not support the timber industry. Existing anadromous fishery spawning and rearing habitat could be maintained barring any major fires. Big game hunting in a primitive setting would be maintained. This would support hunters and outfitters while it would not support those hunters favoring roaded natural or motorized semiprimitive type of settings. Big game harvest rates could fluctuate depending on natural occurring habitat factors. Those individuals favoring wilderness would be accommodated while those favoring roaded natural settings for recreation would not.

2. Designation: Nonwilderness
Management Emphasis: Unroaded

Portions of the area would be managed as unroaded in Alternatives A (current direction), D, E, E1, F, J, and K (Preferred Alternative). In Alternative A (current direction), almost all of the area located in the Fish Creek drainage would be managed as roadless with management goals of maintaining and enhancing anadromous fish, wildlife, and semiprimitive recreation. In Alternatives D, E, E1, and J, approximately 30,000 acres of the middle and lower Fish Creek drainage plus 19,000 acres east of the Fish Creek drainage and west the Skookum Creek drainage would have the same management goals as Alternative A (current direction). In Alternative F, the entire Fish Creek drainage plus the

additions described in Alternatives D, E, E1, and J would be managed with the same resource goals. In all of these alternatives, the areas described would retain their wilderness character. The Preferred Alternative K is similar to F for the Fish/Hungry Creek drainages except Upper Fish Creek remains available for timber management.

In Alternatives A (current direction), D, E, E1, and J, about 40 percent of the total 111,756 acres of tentatively suitable timberland would not be available for timber production. Nearly 57 percent of the tentatively suitable timberland would not be available for production in Alternative F, while the Preferred Alternative K reduces suitable timber to 50 percent.

Livestock range would not be affected.

The potential for mineral is considered low, but if minerals were found, exploration and development costs would be high because of access and other constraints required to protect other resources.

Effects of unroaded management on nonpriced resource values are:

- Areas would remain in a natural setting, but Alternatives D, E, E1, F, and J would provide a more undisturbed (natural) view of the steep, stream breaklands visible from Highway 12 than Alternative A.

- In Alternative F the distant viewed from the Lolo Trail would be undisturbed. In Alternatives A (current direction), D, E, E1, and J, there could be road development both on the extreme eastern and western portions of the area. This would detract from the view. In all alternatives the view immediate to the Trail would remain as is.

- Roaded natural recreation would be precluded. Both motorized and nonmotorized semiprimitive recreation would continue to be available. Big game hunting, hiking, horseback riding, camping, and fishing in a natural landscape would continue to be the dominant recreation. Big game hunting-outfitter services would be compatible under this management goal.

- A large portion of the essential gray wolf habitat would remain undisturbed. Unroaded management in Alternative F would offer the most security, with Alternative K (Preferred Alternative) next. Alternatives A (current direction), D, E, E1, and J would offer about equal security. The elk prey base could be maintained at more constant levels than in wilderness because of manipulation of the forage.

- Elk security would best be served in Alternatives F and K. Alternative A (current direction) would provide the least amount of security acreage. Alternatives D, E, and J would provide approximately equal acreage of elk security area. The amount of elk winter range available for use and improvement would be equal in all alternatives. Mechanized and prescribed fire vegetative treatments could be utilized.

- Anadromous fishery spawning and rearing habitat would remain undisturbed. Habitat maintenance and improvement activities could be carried out.

- Water quality would remain high.
- Vegetative diversity would tend towards old growth.

Social and economic effects are related to timber, anadromous fishery, wildlife, recreation, and wilderness values. The loss of tentatively suitable timberland would not support the timber industry. Fishing and hunting opportunities would be maintained and enhanced. Individuals favoring wilderness would be partially supported in that wilderness characteristics would remain largely intact. Those individuals favoring roaded natural setting for recreating would not be supported.

3. Designation: Nonwilderness Management Emphasis: Elk Winter Range

These areas would provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur only on an opportunity basis to maintain big-game forage. Roads needed to manage adjacent areas with different designations could be constructed through the area only if they met soil and watershed constraints. But any roads crossing these areas would preclude consideration for wilderness designation.

A portion of the area would be managed for big game winter range in all alternatives except I. Approximately 10 percent of the area would be managed for elk winter range in Alternatives A (current direction), B, C, D, F, H, and J, and about 4 percent of the area would be managed this way in Alternatives E, E1, G, and K (Preferred Alternative).

Winter range-cover could be maintained and enhanced without roads and mechanized equipment. This would preserve the roadless characteristics. Prescribed fire and other vegetative treatments needed to meet management goals would interrupt natural succession.

In Alternatives E, E1, G, and K (Preferred Alternative) about 4 to 6 percent of the 111,756 acres of tentatively suitable timberland would not be available for long-term timber production. In Alternatives A (current direction), B, C, D, F, H, and J about 10 percent of the area's tentatively suitable timberland would not be available.

This management emphasis would not change existing range allotments.

The cost of exploring for and extracting any discovered minerals would be high because of access constraints and potentially limited operating seasonal requirements.

Effects on elk winter range management on nonpriced resource values are:

- Visual quality may be affected in the short-term (1 year or less) because of prescribed burning.
- The immediate view from the Lolo Trail would remain as is. There could be short-term visual disruptions in the distant viewing area created by prescribed burning.

- The primitive setting would be maintained. Opportunities for solitude for big-game hunting, hiking, camping, horseback riding, and fishing would be available.

- Essential gray wolf security habitat would be disturbed if roads crossed such areas. Road closures could mitigate such impacts. Alternative F would provide the least security acreage, with Alternatives A (current direction), B, C, D, E, E1, G, H, and J providing approximately equal security areas. The elk prey base population would remain more constant than in a wilderness situation.

- Anadromous fishery habitat would not be changed from existing levels.

- Vegetative patterns and diversity would tend toward the seral stages of vegetation succession.

Social and economic impacts are related to timber, wildlife, recreation and wilderness. Loss of the tentatively suitable timberland to long-term timber production would not support the timber industry. The enhancement of winter range would produce more elk which in turn would benefit hunters, outfitters and guides, and recreationists. Wilderness advocates would be only partially supported.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

Emphasizing timber/wildlife and watershed requires managing timber production at varying investment levels while providing elk security and water quality.

All alternatives except Alternative I would contain areas with this emphasis. In Alternatives B and C about 60 percent of the North Lochsa Slope would be managed for timber production. Alternative G designates 32 percent and Alternative A (current direction), 23 percent. Alternatives D, E, E1, F, J, and K (Preferred Alternative) contain about 8 percent with Alternative H only 3 percent. Alternative I does not contain this management emphasis.

Higher value old-growth stands in the southwest and northwest portions of the area would be scheduled for early harvest in those alternatives permitting development in those areas.

Fifteen to nineteen percent of the area would be developed by the end of the first decade in Alternatives A, F, G, and K (Preferred Alternative). Development would increase 25 to 34 percent by the fifth decade for these same alternatives. Alternatives B, C, D, E, E1, and J would develop approximately 24 percent of the area by the end of the first decade. Alternatives B and C would have the greatest number of acres developed by the end of the fifth decade (56 percent), while Alternatives D, E, E1 and J would be 39 percent developed by this time.

Alternative H and K (Preferred Alternative) would develop about 11 percent of the area by the end of the first decade, while Alternative H would increase this to 22 percent and Alternative K would increase to 36 percent by the end of the fifth decade. The developed areas would be modified to a roaded natural setting reducing the areas naturalness and solitude characteristics.

Access for mineral exploration and development would be enhanced and associated costs reduced.

Transitory forage for both livestock and big game would be created by timber harvest.

Effects on timber/wildlife and watershed management on nonpriced resource values are:

- The immediate viewing area of the Lolo Trail and within the Lochsa Wild and Scenic River zone would be the same. Alternatives B and C would generate the largest acreage of modification in the middle ground viewing areas of both the trail and river corridor. Because of spatial relationships, Alternatives D, E, E1, F, and J would have the least visual impacts as viewed from the river corridor.

- The roadless characteristics of approximately 50 percent of the area would be lost by the fifth decade for all alternatives except F and H.

- The existing primitive and semiprimitive settings for recreation would change to roaded natural. Existing big-game hunting, camping, and fishing activities would remain. Activities associated with gathering forest products would increase.

- Gray wolf security habitat areas would be disturbed by roads and human activity. The elk prey base population could fluctuate because of reduced elk security created by road development and timber harvest.

- Elk security habitat would be reduced to a protection of 25 percent of potential elk use with Alternatives B and C having the largest negative acreage impacts. Alternatives F, G, and H would maintain significant portions of the existing key elk summer range.

- Transitory winter range forage would be created by timber harvests which met the elevation and aspect criteria for winter range.

- Anadromous fishery values would be maintained at viable fishable population levels.

- Vegetative diversity would tend toward younger age classes. The overall trend would be towards the scenic successional stage.

Social and economic effects relate to timber, wilderness, recreation, big game, and anadromous fishery. The suitable timberland available would support the timber industry. Those individuals favoring wilderness would not be supported. Big game hunters and other recreationists favoring a roaded natural setting would be supported. Big game populations could fluctuate because of decreased security. There could be short-term impacts on anadromous fishery spawning and rearing habitat which would not support sport or commercial anglers.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

All alternatives except I contain areas that have a goal of timber production within areas that fall into the retention or partial retention VQO's and that have ecologically important riparian vegetation and features located along stream courses.

In Alternatives A (current direction), D, E, E1, F, G, and J about 11 percent of the North Lochsa Slope is designated to this emphasis. Alternatives B, C, and H designates about 7 percent. The Preferred Alternative K designates about 2 percent.

Timber harvest would occur on an extended rotation basis.

The naturalness and roadless character of these areas would be lost within five decades because of their location to larger suitable timberland available for harvest and associated road development.

Mineral development would be less costly because of access.

A small amount of transitory range for both livestock and big game would be created by timber harvest.

Effects of timber/visual-riparian management on nonpriced resource values are:

- Visually sensitive areas would not be disturbed.
- The roadless characteristics of these small, mostly linear oriented areas would be lost by the end of the fifth decade.
- The existing primitive and semiprimitive settings for recreation would become roaded natural by the end of the fifth decade. Big game hunting, fishing, and hiking would continue to be the dominant activities.
- Essential gray wolf security habitat could be impacted depending on the size of areas and available mitigation measures. The Forest would consult with the Fish and Wildlife Service in conjunction with proposed projects.
- Elk security would not be directly impacted by activity. The activity in the higher investment suitable timberlands immediately adjacent would have the same effects as discussed under the timber/wildlife/watershed management emphasis section. Timber harvest in these areas would create a small amount of transitory forage for big game on both summer and winter range.
- Anadromous fishery spawning and rearing habitat would be maintained to meet the needs of viable fish population.
- Vegetative diversity would tend towards old growth and a wide distribution of age classes because of extended timber rotations.

The social and economic effects relate to timber, anadromous fishery, and wilderness. The timber industry and commercial and sport fishers would be supported. Those favoring wilderness would not be supported

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

Alternatives D, E, E1, F, H, and J designate portions of the North Lochsa Slope to a timber/special management. In Alternatives D, E, E1, and K (Preferred Alternative) about 14 to 18 percent of the area in upper Fish and Hungry Creek drainages would be managed to emphasize the maintenance of high water quality and anadromous fishery habitat with timber harvest as a secondary goal. In these same alternatives, another 8 percent located in upper Deadman and Bimerick Creeks and McLendon Butte would be managed to emphasize big-game summer range with timber production as a secondary goal.

In Alternative F, about 3 percent in the East Deadman Creek drainage would be managed to emphasize big-game summer range while managing the suitable timberland for timber production. In Alternative H about 8 percent of McLendon Butte-Bimerick Meadows would be managed similarly.

Both the big game and anadromous fishery management goals would require road closures and limited numbers of timber entries to protect elk security and water quality. Scheduling entry sequences and age class distribution would preclude accessing all of the area until the fifth decade.

In the Preferred Alternative K the upper end of Fish Creek and the entire Deadman/Bimerick Creek area would be managed C8S. This management area is different from C2S and C6S in that all new road construction would be closed to public motorized use. This would enhance the big-game summer range much more than C2 and C2S or C6S which requires only partial closures. Future roadless and wilderness options would still be lost. Because all new road construction would be closed to public use of motorized vehicles, a sort of modified roaded natural setting would occur.

Access for exploration minerals would be slightly enhanced. Legitimate extraction of discovered minerals could be facilitated easier. Associated costs would be significantly lower than such activities in an unroaded area.

Additional transitory forage for livestock would be created by timber harvest and associated activities.

Effects of timber/special management on nonpriced resource values are:

- The immediate viewing area of the Lolo Trail would be maintained. The landscape in upper Fish Creek would be modified by the end of the first decade in Alternatives D, E, E1 and J. The landscape in upper Hungry Creek drainage would remain in a natural state until the third or fourth decade. By the end of the fifth decade, it would have the same visual characteristics as upper Fish Creek at the end of the first decade. In Alternatives F and G, the landscape within the affected areas would not be changed from a natural setting to a partial retention/modification VQO until the end of the fifth decade.

- The wilderness characteristics would be significantly impacted by the end of the fifth decade. The existing primitive and semiprimitive nonmotorized setting for recreation would be modified to a semiprimitive motorized/roaded natural setting by the end of the fifth decade. Big game hunting, trail biking, camping, fishing, and gathering of Forest products would be the dominant activities.

- Essential gray wolf security habitat would be impacted by human activity in conjunction with timber development. Complete road closures would minimize such impacts however, except during actual timber harvest operations.

- Elk habitat and security would be maintained at as close to 100 percent of potential mainly through road closures and timber scheduling. Short-term displacement would occur in areas of activity. Timber harvest would create additional transitory forage on both summer and winter range.

- In Alternatives D, E, E1, J, and K (Preferred Alternative), the anadromous fishery spawning and rearing habitat of Fish and Hungry Creeks would be maintained at high fishable level. In Alternatives F, G, and K (Preferred Alternative), fishery values of Deadman Creek, and Bimerick Creek would be maintained.

- Vegetative diversity would tend towards a wide variety of age classes because of existing diversity and harvest scheduling. The long-term overall trend would be towards the seral successional stage.

Social and economic effects relate to timber, wilderness, recreation, anadromous fishery, and big game. The timber industry would be supported as would those recreationists favoring semiprimitive motorized and roaded natural settings. Both sport and commercial anglers of anadromous fish would be supported. Big game populations would be expected to fluctuate and hunters favoring primitive and semiprimitive nonmotorized hunting would not be served nor would be those individuals favoring wilderness.

7. Designation: Nonwilderness
Management Emphasis: Special

In Alternatives A (current direction), B, C, D, E, E1, F, G, J, and K (Preferred Alternative), about 1 percent of the North Lochsa Slope would be managed as a Research Natural Area (RNA), and about 4 percent of the area would be managed within the Wild and Scenic River management goals. In Alternative H, the same area would be managed as an RNA but 1 percent of the area would be under Wild and Scenic River management.

Management goals for the Lochsa RNA are to protect the unique coastal disjunctive plant ecosystem for research and viewing. Wild and Scenic River management goals are to protect the scenic, wildlife and water of the river corridor.

The public utilizing the developed campgrounds located along the Wild and Scenic River are also lightly using the southern fringe of the roadless area for hiking, viewing, big-game hunting and other dispersed recreation. Future use from this source would not be expected to significantly alter the wilderness characteristics or attributes of the area unless additional trails were constructed to improve access.

Tentatively suitable timberland within the river boundary and RNA would not be available for long-term investments.

RNA's would be withdrawn from mineral entry.

Effects of special management on nonpriced resource values are:

- The scenic view would be maintained.
- Adjoining wilderness would not be altered. Opportunities for recreation within the RNA would continue in a semiprimitive setting with the dominant activities being big-game hunting and hiking. Recreation in the wild and scenic river corridor would continue to be dominated by the existing activities originating from the corridor area, such as camping, hiking, viewing scenery, and big-game hunting.
- Human activity would be highest within the Wild and Scenic River corridor increasing the opportunity for human/wolf contacts and potential mortality. The elk and gray wolf habitat in the RNA would remain undisturbed. The elk prey base would not change from existing levels.
- Big-game winter range would be improved on an opportunity basis within the Wild and Scenic River corridor where long-term visual and water quality objectives could be met. In the RNA, prescribed burning of elk winter range could occur if ecologically and scientifically justified.
- Water quality would be maintained.
- Vegetative diversity would tend towards old growth.

Social and economic effects relate to recreational, wilderness, fishery, wildlife, timber, and scientific values. The individuals who desire motorized activities or fishing would be supported. Wilderness advocates and the timber industry would not be supported. Those individuals interested in ecological research would be supported.

8. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category are unavailable for timber or other resource investment because of biophysical conditions. Acre variances between alternatives are created by other resource constraints. Management would be minimal with no direct investments occurring.

Generally, these areas are small and scattered throughout surrounding management areas. In some cases, their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting or recreation.

Approximately 7 percent of the area would be managed under this emphasis in Alternatives A (current direction), D, E, E1, F, and J. In Alternative B, about 20 percent is designated, Alternative C, 16 percent, and Alternative K (Preferred Alternative), 11 percent. Alternatives G, H, and I have no lands in this category.

Wilderness values would be lost if roads are constructed, but if the area is large enough to meet the roadless acreage criterion and were left unroaded, their wilderness characteristics would be retained.

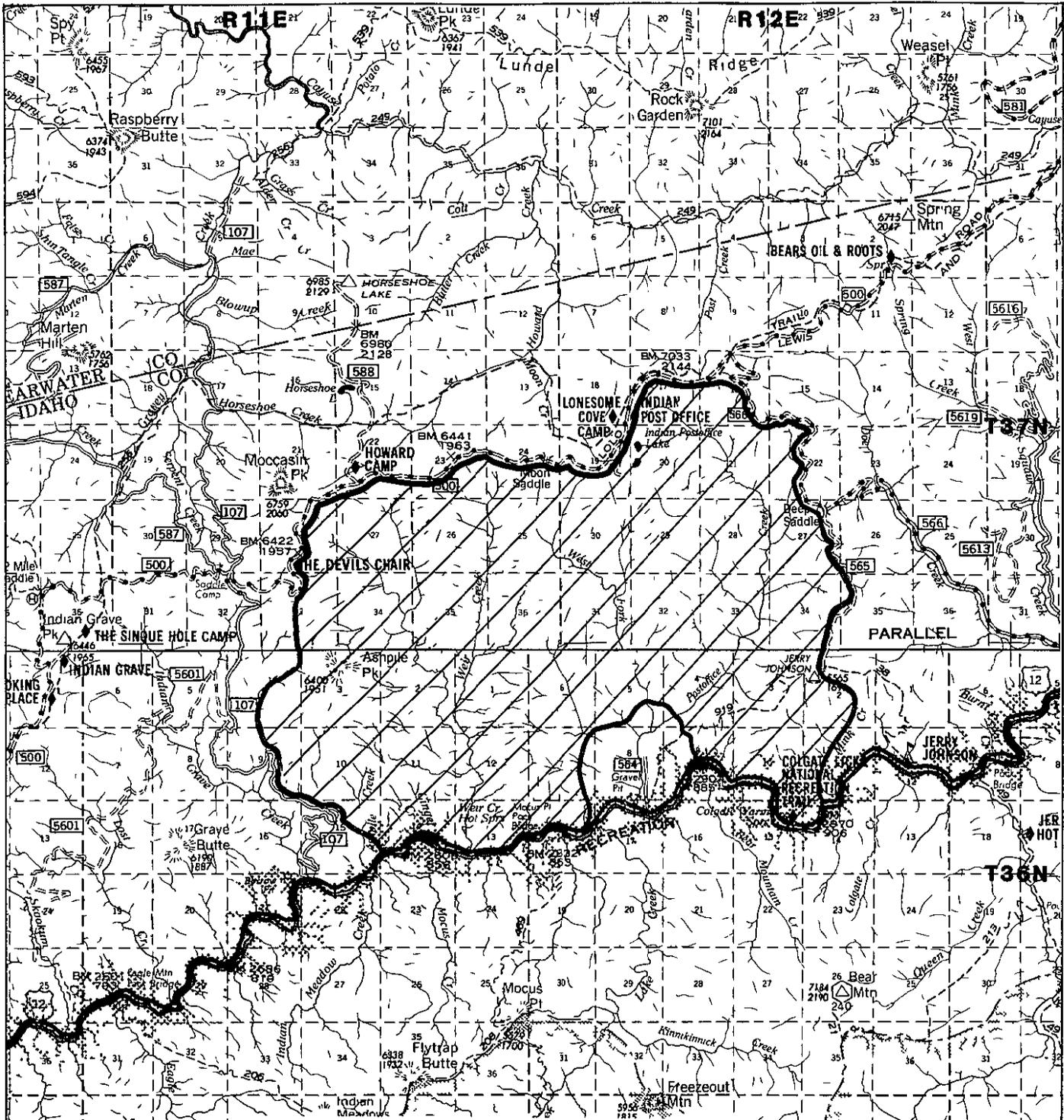
By definition, lands in this category would not affect the suitable timberland base.

Minerals exploration and development could occur, but would be costly due to difficulty of access.

Nonpriced values would mirror surrounding management areas.

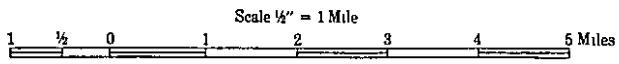
The social and economic effects relate to recreation, wildlife, and wilderness. Recreationist favoring a semiprimitive or primitive setting would be supported depending on the size and spatial of the area in relationship to developed areas. Those individuals favoring roadless or wilderness would also be supported. Wildlife enthusiasts would be supported.

WEIR POST OFFICE ROADLESS AREA



CLEARWATER FOREST PLAN 1987

1308 - WEIR-POST OFFICE CREEK ROADLESS AREA



TOTAL ACRES 22,605

WEIR-POST OFFICE ROADLESS AREA (01308)

Gross Acres	Net Acres
22,605	22,605

I. DESCRIPTION

The Weir-Post Office Roadless Area is located in the south central part of the Clearwater Forest in Idaho County. It can be accessed from the east via U.S. Highway 12 and is approximately 78 air miles from Missoula, Montana. It also can be accessed from the west via the same highway from Orofino, Idaho, about 100 miles away.

The area is bounded on the south by U.S. Highway 12, the only paved road near the unit. Gravel roads border the rest of the area. The Lolo Motorway, which generally parallels the Lolo Trail, is the northern boundary. Access to the Lolo Motorway is provided by the Saddle Camp Road on the west side of the unit and the Squaw/Doe Creeks road to the east. For all practical purposes, interior access is nonexistent with only two low standard, short trails.

The area consists of steep river breaklands extending from 2,800-3,000 feet along U.S. Highway 12 up to 7,000 feet along the Lolo Motorway. In addition to the two major streams, Weir Creek and Post Office Creek, numerous other smaller first- and second-order streams drain directly into the Lochsa River. A large cirque basin containing two lakes is located at the head of Post Office Creek.

Almost all the area is underlain by a gray, coarse-grained quartz monzonite of the Cretaceous Idaho batholith. Isolated blocks of border zone gneiss and schist, gneiss and schists of the Wallace formation, and outcrops of quartz diorite and granite occur in the area.

The lower half of the area, generally below 5,000 feet, is made up of the cedar-hemlock-pine ecosystem while the higher elevations are principally western spruce-fir forest.

Large forest fires in the early 1900's had a major influence on the present vegetation. Much of the area, especially on south and west aspects, still consists of brush fields. Unburned areas and land that has regenerated are comprised of a wide variety of western redcedar and grand fir habitat types at the lower elevations and subalpine fir types at the higher elevations.

Wildlife, principally elk, are the primary attractions for big-game hunters. Limited fishing occurs at Indian Post Office Lake. Weir Creek Hot Springs near the mouth of Weir Creek is used by bathers on a limited basis.

Most other use is associated with the historic Lolo Motorway and Lolo Trail, and sites within the Lochsa Recreation River such as Colgate Hot Springs and Jerry Johnson Campground. An unusual rock formation known as the Devils Chair (located along the Lolo Motorway) is an attraction of local interest.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

There are few physical detractions from natural integrity and appearance. Some minor evidence of dozer use on a 1000-acre fire near Ashpile Creek in 1960, is evident but in general, most of the burn has revegetated.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

With limited access, use is minor except for a few anglers at Indian Post Office Lake; solitude within the area is high. Because of the rugged terrain and tree and shrub canopy over much of the area, viewing opportunities outside the area are very limited. Noise from vehicle use on U.S. 12 and logging activity along the east and west boundaries may be more evident than actual visual detractions. The relatively small size of the unit may be the most limiting factor from a solitude standpoint.

Cross-country foot travel, big-game hunting, and lake fishing are the primary dispersed recreation available.

C. SPECIAL FEATURES

The Lolo trail, which is a registered National Historic Landmark and National Historic trail, is one of the most significant features. This trail was a major travel route between the Columbia Basin and the Montana country prehistorically. Lewis and Clark traveled over sections of the trail in journeys of 1805-06. Another famous traveler over the trail was Chief Joseph a Nez Perce Indian Chief who helped the Nez Perce during the Nez Perce War of 1877. The Trail was used to such an extent over the years that it was finally made into a road in the early 1930's. It remains as a very low-standard route used today by hunters, Forest Service employees, and others.

Although no verified sightings or other confirmed evidence of the endangered gray wolf exists in this unit, habitat conditions conducive to the wolf have resulted in designation of the area as essential habitat. The management of an adequate prey base (primarily elk) and restrictions on motorized traffic are two major components for protection and enhancement of the wolf.

An approximate 1/4-mile wide corridor within an unmarked boundary of the Middle Fork-Lochsa Recreation River established under the National Wild and Scenic Rivers Act of 1969 runs the full length of the roadless area north of Highway 12. This corridor is managed under a Special River Management plan which emphasizes the scenic values of the river environment.

A national recreation trail is also located within the corridor at Colgate Warm Springs salt lick.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

The relatively small size of the Weir-Post Office Roadless Area would have some effect on wilderness attributes. Disturbance from the noise of traffic on Highway 12 and from logging activity along the east and west boundaries could interfere with the feeling of solitude.

Shape is not a factor since the area is almost square.

E. MANAGEABILITY AND BOUNDARIES

Except for some deviations, the roads surrounding 90 percent of the area serve as logical boundaries of any recommended wilderness. The area is compact, extending about eight miles east to west and four and one-half miles north to south. There is no private land.

Boundary modifications to exclude the high to moderate timber values would leave the remainder unsuitable for wilderness.

III. AVAILABILITY

A. OTHER RESOURCES

1. Wildlife - Elk, deer, bears, and moose are the most common big game animals. Rocky Mountain goats were mentioned by Lewis and Clark in their journals, and some still exist in the area near the upper end of the drainages.

Management of the approximately 5,000 acres of key big game winter range would involve timber cutting and prescribed burning of brush fields on mostly south facing slopes.

2. Timber - The Weir-Post Office area has 19,929 acres of land suitable for timber production. An estimated 298 MMBF of timber is distributed throughout the area but is denser at the lower elevations.

3. Minerals - Overall potential for minerals is low, and known mineral resources are limited. Columbium is found in the eastern portion. The several small hot springs located there are not extensive enough to provide geothermal power generation.

4. Cultural Resources - In addition to the historic trails and associated sites, eight historic sites have been located. They include three Forest Service lookouts, two trapper cabins, an old road crew camp, a Euro-American grave, and a hunter camp. Given the rugged terrain and the lack of exploitable resources, the area has experienced only limited historic use.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

No important management considerations pertain to this roadless area.

C. RESOURCE SUMMARY

Table C-20.

01308-Weir-Post Office

<u>Description</u>			<u>Description</u>		
Gross Acres	Acres	22,605	Gray Wolf Hab.	Acres	22,605
Net Acres	Acres	22,605	Peregrine Fal. Hab.	Acres	0
Recreation			Wildlife - Big Game		
Primitive	RVD's	0	Big Game		
Semiprim Nonmotor.	RVD's	1,301	Summer Habitat	Acres	0
Semiprim Motor.	RVD's	0	Winter Habitat	Acres	0
Roaded Natural	RVD's	10,668	Elk		
Range			Summer Habitat-Key	Acres	3,302
Existing Obligated			Winter Habitat-Key	Acres	2,034
Suitable	Acres	0	Significant Fisheries		
Allotments	No.	0	Stream Miles	Miles	44
AUM's	AUM's	0	Stream Habitat	Acres	89
Existing Vacant			Lakes	No.	0
Suitable	Acres	0	Lakes - Habitat	Acres	0
Allotments	No.	0	Water Developments		
AUM's	AUM's	0	Existing	No.	0
Proposed			Minerals		
Suitable	Acres	0	Potential Hardrock		
AUM's	AUM's	0	Very High	Acres	0
Timber			High	Acres	0
Tentative Suitable	Acres	19,929	Moderate	Acres	0
Standing Volume	MMBF	298	Low	Acres	22,605
Corridors			Claims	No.	0
Exist. and Potential	No.	1	Potential Oil and Gas		
Wildlife - T&E			Very High	Acres	0
Grizzly Bear			High	Acres	0
Habitat - Sit. 1	Acres	0	Moderate	Acres	0
Habitat - Sit. 2	Acres	0	Low	Acres	22,605
Habitat - Sit. 3	Acres	0	Oil and Gas Leases		
Bald Eagle Hab.	Acres	0	Leases	No.	0
			Leased Area	Acres	0

IV. NEED

The area provides good representation of two major ecosystems: western spruce-fir and cedar-hemlock-pine. It also shows good examples of successional stages in vegetative growth following the large fires of the early 1900's.

No public interest has been shown in classifying this area as wilderness. The RARE II process recommended nonwilderness.

Tables C-1 and C-2 show the location and proximity of the Weir-Post Office roadless area to other wilderness and population centers in Idaho, western Montana, and eastern Washington.

Two comments were received on this area between the Draft and the Final EIS. One comment advocated leaving the area entirely roadless, the other recommended that the area be managed similar to Alternative H which left the east half of the area roadless and the west half C2S which under the Draft Plan was timber/elk summer range. No specific reasons were given for the proposals.

The designation of Management Area E1 for the area was not changed between the Draft and the Final for the Preferred Alternative.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-21

Weir-Post Office Roadless Areas
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)											
	A	B	C	D	E	E1	F	G	H	I	J	K
WILDERNESS	0	0	0	0	0	0	0	0	0	22.6	0	0
NONWILDERNESS:												
Unroaded	0	0	0	0	0	0	1.0	0	12.0	0	0	0
Elk Winter	0	0	0	0	0.4	0.4	0	0	0.6	0	0	0.5
Timber/Wldlf-Wtshd	15.0	15.1	13.9	11.7	9.3	9.3	6.1	14.1	0.7	0	12.0	2.9
Timber/Visual-Rip	4.0	1.2	4.4	6.6	7.5	7.5	12.4	5.2	2.1	0	7.0	0.5
Timber/Special	0	0	0	0	0	0	0	0	6.5	0	0	7.8
Special	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0.7	0.7
Protection	2.9	5.6	3.6	3.6	4.7	4.7	3.4	2.6	0	0	2.9	10.2
TOTAL	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6

Summary of Management Emphasis

Wilderness	0	0	0	0	0	0	0	0	0	22.6	0	0
Nonwilderness												
Developed												
Decade 1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	0	0	8.0	9.7
Decade 5	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	10.6	0	22.6	22.6
Roadless												
Decade 1	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	22.6	0	14.6	12.9
Decade 5	0	0	0	0	0	0	0	0	12.0	0	0	0

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

The only alternative in which Weir-Post Office Roadless Area is considered for wilderness is Alternative I. In this Alternative opportunities for current recreation would continue.

Nearly 298 MMBF of standing timber volume located on the 20,000 acres of tentatively suitable timberland would not be available. This represents about 0.2 percent of the tentatively suitable acres on the Forest.

Only valid mining claims and mineral leases in effect either at the time of designation or as stated in legislation could be developed. All other lands would be withdrawn from mineral entry. The cost of extracting any minerals discovered in the area would significantly increase because of access and other limitations needed to protect wilderness values.

Effects of wilderness management on nonpriced resource values are:

- Visual qualities within the area would be maintained. The unroaded visual setting adjacent to the Lolo Trail and Lochsa Wild and Scenic River would be undisturbed except by natural forces.

- Essential gray wolf habitat would remain undisturbed by road access or increased human activity. Their prey base, elk, could be affected because managing big game winter range with prescribed fire and/or mechanical treatments would not be permitted.

- Elk security would be maintained although the winter range would not be maintained or enhanced through management such as burning.

- Water quality would be maintained at existing levels.

Social and economic effects are primarily related to timber, wildlife, local recreation, and wilderness. The loss of timberland would not support the timber industry. Big game hunting in a roadless setting would be maintained. However, big-game harvest rates could fluctuate depending on the size of the herds. Those individuals favoring wilderness or using the area for primitive recreation would be supported.

2. Designation: Nonwilderness Management Emphasis: Unroaded

Nearly 53 percent (12,318 acres) of the area would be managed as unroaded with a resource emphasis on big-game summer range in Alternative H. This would include the entire Post Office Creek drainage.

The wilderness resource and natural roadless conditions would be maintained. Opportunities for solitude and activities such as hiking, lake fishing, and big-game hunting in a semiprimitive setting would continue.

Approximately half of the tentatively suitable timberland within the roadless area would not be available. This would affect the tentatively suitable timberland located in the Post Office Creek drainage.

Minerals would be available. However, activities would be managed to meet the objective of maintaining a roadless setting. Mineral exploration and development costs would be expected to be high because of difficulty of access.

Effects of unroaded management on nonpriced resource values are:

- Visual qualities within the area would be maintained.
- The unroaded visual setting adjacent to approximately one-half of the Lolo Trail that traverses the unit would remain to be shaped by natural forces.
- Essential gray wolf security habitat would remain undisturbed on a large portion of the area.
- Elk range and security would be maintained or enhanced.
- Water quality would be maintained.

Social and economic effects would be related to timber, wildlife, recreation, and wilderness. The loss of tentatively suitable timberland would not support the timber industry. Big game hunting in a roadless setting and other semiprimitive recreation would continue. Those individuals supporting wilderness would be partially served, because significant wilderness characteristics would be preserved.

3. Designation: Nonwilderness Management Emphasis: Elk Winter Range

These areas would be managed to provide big game winter forage and thermal cover. Lands designated elk winter range would be classified as unsuitable for timber production. Timber harvest could occur only on an opportunity basis to maintain big-game forage values. Roads needed to manage adjacent areas with different designations could be constructed through such areas only if they met soil and watershed constraints.

In Alternative H approximately 600 acres is designated to elk winter range. In Alternatives E, and E1 400 acres is designated, while 500 acres is designated in the Preferred Alternative K.

Winter range forage and thermal cover values could be maintained and enhanced without roads and mechanized equipment. This would preserve the roadless character of the area. However, prescribed fire and other vegetative manipulative treatments needed to meet management goals would interrupt natural vegetative succession.

Approximately 600 acres of tentatively suitable timberland would not be available for long-term timber management investment purposes in Alternative H, and 400 acres in Alternatives E, E1, and 500 acres in Alternative K (Preferred Alternative). Timber harvesting would be permitted only if it enhanced winter range values.

The cost of exploring for and extracting any of the minerals discovered in this portion of the area would be high because of difficult access and potentially limited operational seasons.

Effects of elk winter management on nonpriced resource values are:

- Opportunities for solitude and semiprimitive recreation, such as, big-game hunting and hiking would continue to be available.
- Long-term visual quality of this portion of the area would be maintained. There would be short-term visual disruptions created by prescribed burning.
- Essential gray wolf security habitat values in the area could decrease if roads crossed such areas. Road closures could mitigate such impacts.
- Elk winter range forage and thermal cover would be enhanced, and since elk security habitat would be maintained, elk herds would be expected to slightly increase.
- Water quality values would be maintained to meet established standards.
- Vegetation would remain in seral successional stages on much of the area.

The primary economic and social effects relate to timber, wildlife, recreation, and wilderness. The loss of tentatively suitable timberland on other than an opportunity basis would not support the local timber products industry. Big game hunting would slightly increase. Those individuals advocating wilderness would not be supported. Those seeking semiprimitive hiking and big-game hunting opportunities would continue to be supported.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

Timber production at varying investment levels would be the primary management goal. Minimum management constraints relating to elk security needs and water quality would be met.

All alternatives, except I, contain areas with this management emphasis. In Alternatives A (current direction) and B nearly 66 percent of the Weir-Post Office area would be managed for timber production. Approximately 60 percent of the area is designated to timber production in Alternatives C and G. About 52 percent is designated in Alternatives D and J. In Alternatives E and E1, about 40 percent is designated with approximately 30 percent being managed for such use in Alternative F. The Preferred Alternative K designates approximately 13 percent. In Alternative H only 3 percent of the area would have such a management goal.

Concentrations of old-growth timber would be scheduled for early harvest.

Approximately 40 percent (9,700 acres) of the area could be developed by the first decade. Under this management emphasis the entire area could be developed by the end of the fifth decade creating a roaded natural setting for recreation. Big game hunting, lake fishing, and forest products gathering would be the dominant recreation.

Access for mineral exploration and development would be significantly improved and associated costs reduced from those incurred in a roadless setting.

Effects of timber/wildlife-watershed management on nonpriced resource values are:

- The visual quality objectives of retention in the vicinity of the Lolo Trail and the Lochsa River would be maintained. Alternatives A and B would generate the largest acreage with a modified scenery in the middle ground viewing area of the river. Alternative H would have the least visual impact from the river corridor viewing area.

- The wilderness characteristics of 35 percent of the area would be compromised by the end of the first decade. The entire area would be roaded by the end of the fifth decade.

- The existing primitive and semiprimitive settings for recreation for approximately 35 percent of the area could be changed to a roaded natural setting by the end of the first decade; the entire area would be changed by the end of the fifth decade. Big game hunting, camping and lake fishing would still remain the dominant activities. The activity of gathering forest products would increase.

- Essential gray wolf security habitat in the roaded areas would be impacted by disturbance and an increased probability of human/wolf contact and subsequent wolf mortality risk. The elk prey base population could fluctuate because of reduced elk security factors.

- Elk security would be reduced from existing levels under all alternatives. A minimum of 25 percent of potential elk use would be established. Alternatives A and B would have the largest overall security impacts with Alternative A less than Alternative B.

- Water quality levels would meet the Lochsa River water standard.

- Vegetative diversity would consist of a wide variety of age classes because of existing scattered spatial distribution of mature timber and the past fire history of the area.

Social and economic effects are related to timber, wilderness, recreation, and big game. Availability of suitable timberland would support the timber industry. Recreationist who favor a roaded natural setting would be supported. Those individuals favoring consumptive and aesthetic big game uses would be partially supported.

5. Designation: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

Under this management emphasis, the goal is to manage suitable timberland for timber production while meeting visual quality objectives for sensitive viewing areas and protecting ecologically important streamside riparian areas.

All alternatives with the exception of Alternative I contain portions of the Weir-Post Office area in this management emphasis. In Alternative F, nearly 55 percent of the area is designated to this emphasis. Alternatives D, E, E1, and J designate 30 percent. Alternative A (current direction), C, and G, all designate about 20 percent while Alternative B only designates 5 percent. The Preferred Alternative K only designates a small amount of land.

Old-growth timber would be harvested from suitable timberland early in the planning period on an extended rotation basis, since this activity would be spatially associated with harvest areas in timber/wildlife-watershed management emphasis. The impacts on the wilderness resource would mirror that emphasis.

Access for mineral exploration and development would significantly improve, and associated costs would be reduced from those incurred in a roadless situation.

Effects of timber/visual-riparian management on nonpriced resource values are:

- The visual quality objectives established for both the Lolo Trail and Lochsa Wild and Scenic river corridor would be met.

- The wilderness characteristics for 60 percent of the area would be maintained until the fourth and fifth decade; 40 percent of the area could be roaded by the end of the first decade.

- Big game hunting, lake fishing, and camping would continue to be the dominant activities in the area. However, the landscape would gradually change from semiprimitive to roaded natural. The activity of gathering forest products would increase.

- Essential gray wolf security habitat qualities in the areas would be reduced because of increased human disturbance and increased risk of wolf mortality created by human/wolf contact. The impacts would vary depending on size of affected areas and available mitigation measures such as road closures. The formal consultation process would be utilized with the U.S. Wildlife Service to evaluate specific impacts. The elk prey base could fluctuate.

- Elk security would be reduced in proportion to the amount of acreage designated to this emphasis in each alternative. A minimum guideline of 25 percent of potential elk use would be followed.

- Water quality levels would meet the Lochsa River water standards.

- Vegetative diversity would tend to a wide variety of age classes due to extended timber rotational requirements.

Social and economic effects created under this management emphasis relate to timber, wilderness, recreation, and big game. Availability of suitable timberland would support the local wood products industry. Individuals favoring wilderness would not be served, but those favoring a roaded natural setting would. Those individuals favoring consumptive and aesthetic big game uses would be partially supported.

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

This management emphasis only occurs in Alternative H (29 percent) and in the Preferred Alternative K (35 percent). Under these alternatives approximately 5,141 and 7,777 acres, respectively, encompassing the Weir and Aspile Creek drainages would be managed to maintain or enhance big-game summer range while also managing the tentatively suitable timberland for timber production.

The tentatively available timberland within the area would be available for harvest. This activity would remove this portion of the area from its current roadless status by the end of the fifth decade.

The cost of exploring and extracting any minerals discovered in the area would be significantly lowered because of improved access.

Present semiprimitive settings would be disrupted in some locations as the recreational setting shifted to roaded natural.

Effects of timber/special management on nonpriced resource values are:

- Visuals from within this portion of the area would be modified. Visuals in the foreground viewing area of the Lolo Trail would meet retention standards; some portions of the middle ground viewing area of the trail would be modified towards the Partial Retention/Modification visual category.
- The roadless character of approximately 25 percent of the roadless area could be lost by the fifth decade.
- Increased human activity during timber management activities could displace the gray wolf into the adjacent unroaded Post Office Creek drainage. Essential gray wolf security habitat impacts after harvest would be mitigated by road closures.
- A little over 90 percent of maximum potential elk use would be managed in Alternative K because of the revised C8S Management Area which closes all new roads to all use of public motorized vehicles.
- Water quality would be maintained at established standards.

Social and economic effects are related to timber, wildlife, recreation and wilderness. The ability to harvest timber would support the local woods products industry. The opportunities for big-game hunting in a roaded natural setting would increase. However, the quality of the hunting experience could decline as more area becomes roaded. Big game in the harvest area would be expected to increase slightly. Those individuals favoring wilderness designation for the entire area would not be supported.

7. Designation: Nonwilderness
Management Emphasis: Special

Approximately 650 acres or 3 percent of the roadless area is to be managed as part of the Lochsa Wild & Scenic River under all alternatives. Management goals would be to protect and enhance the scenic, recreation, wildlife, and water quality values of the Wild and Scenic River corridor.

The public is utilizing the developed recreational sites located along the river and is also lightly using the southern fringe of the roadless area for hiking, viewing, big-game hunting, and other dispersed recreation. Future use from this source would not be expected to significantly alter the wilderness characteristics or attributes of the area unless additional trails from the river corridor surrounding the area were constructed to improve access. There is a risk that a person-caused fire could modify natural ecological forces.

Tentatively suitable timberland within the river boundary would not be available for long-term investments in timber management.

Mineral exploration and development could take place, but costs would be higher due to limited access and environmental constraints.

Effects of special management on nonpriced resource values are:

- A visual quality of retention would be maintained.
- Adjoining wilderness values would not be altered significantly to preclude future consideration.
- Recreation in the corridor would continue in a roaded natural setting and would continue to be dominated by the existing activities.
- Human activity would be the highest in the entire area, increasing the opportunity for human/wolf contacts and potential mortality. The elk prey base would not be anticipated to change from existing levels.
- Big-game winter range would be improved on an opportunity basis where long-term visual and water quality objectives could be met.
- Water quality would be maintained to meet the highest level of beneficial use of the Lochsa River (anadromous fish/water contact sports).
- Vegetative diversity would tend toward old growth.

Social and economic effects are related to recreation, fishery, wildlife and timber values. The recreationists who utilize roaded natural settings for recreation would be supported. Wilderness advocates would not be supported. Fishers and water recreationists would be supported. The loss of tentatively suitable timberland within the corridor would not support the local wood products industry.

8. Designation: Nonwilderness
Management Emphasis: Protection

Portions of the area are included in this management emphasis for all alternatives except H and I.

Lands in this category are unavailable for timber or other resource investment purposes because of existing biophysical conditions. Acre variances between alternatives are created by other resource constraints.

Generally, these areas are small and scattered throughout management areas. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless areas. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment activities would occur.

In Preferred Alternative K, approximately 45 percent of the area is designated to soil and watershed protection while 25 percent is designated in Alternative B. Alternatives A, C, D, E, F, G, H, and J contain approximately 15 percent and Alternative E1 contains only 5 percent.

Such management emphasis could have impact on the existing wilderness characteristics of the area depending on the spatial relationships of these areas with developed areas.

By definition, lands in this category would not affect the suitable timber base of the area. Discovered minerals may be costly to extract because of the lack of roads.

Effects of protection management on nonpriced resource values are:

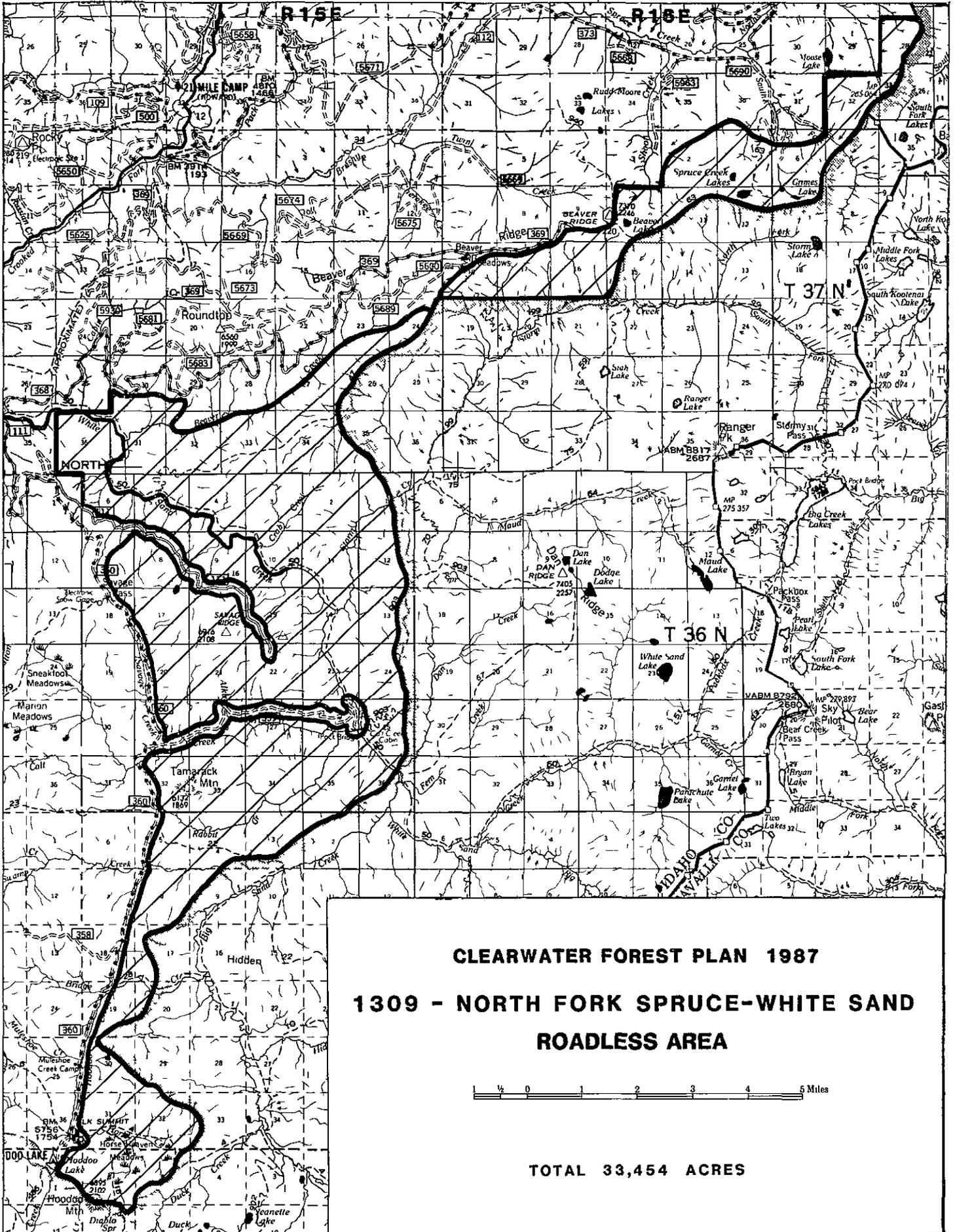
- The visual quality of the entire area would be maintained.
- The wilderness quality of the affected portion of the area could be changed depending on the area's spatial relationships with other resource designation areas.
- The semiprimitive setting for recreation could be maintained if the area adjoined undeveloped areas. Otherwise the setting would be modified to roaded natural.
- Depending on the size of the affected area and if roading occurred, essential gray wolf security habitat values could be impacted. Impacts would be evaluated on a case by case basis utilizing the formal consultation process.

- The affected area would provide a portion of elk security needs within the area.

- Water quality would be maintained to established standards.

The social and economic effects would mirror those of the surrounding areas.

NORTH FORK SPRUCE-WHITE SAND ROADLESS AREA



CLEARWATER FOREST PLAN 1987
1309 - NORTH FORK SPRUCE-WHITE SAND
ROADLESS AREA



TOTAL 33,454 ACRES

NORTH FORK SPRUCE-WHITE SAND ROADLESS AREA (01309)

Gross Acres	Net Acres
33,454	33,454

I. DESCRIPTION

The North Fork Spruce-White Sand Roadless Area is located in the Bitterroot Mountain range adjacent to the Selway-Bitterroot Wilderness in Idaho County. The nearest access point is via the Beaver Meadows road #368 which is approximately 60 miles southwest of Missoula, Montana, and approximately 130 miles east of Orofino, Idaho, via U.S. Highway 12.

In addition to the Beaver Meadows road, the area is also accessed by the Elk Summit and Colt Creek roads #360 and #359, part of which are old dirt Civilian Conservation Corps (CCC) roads. A portion of the Elk Summit road and a six-mile section of a newly constructed dead-end road have been graveled. Interior access is by a well-dispersed trail system of approximately 30 miles.

The unit is a band of land approximately 14 miles long varying from 1/4 mile to 5 1/2 miles in width, and bounded on the east side by the Selway-Bitterroot Wilderness. It encompasses highly diverse land types ranging from colluvial and frost churned uplands to steep rocky stream breaklands and alpine glacial cirque basins. The main drainage is White Sand Creek which has its source in the Selway-Bitterroot Wilderness.

Elevations range from 3,500 feet in White Sand Creek to 7,370 feet at Beaver Ridge Lookout on the boundary. Except for the stream bottoms, most lands are above 5,500 feet.

The area is mostly underlain by a coarse-grained quartz monzonite of the Cretaceous Idaho batholith. Other rock types found in the area as localized blocks include a calc-silicate gneiss belonging to the Wallace formation and outliers of granite and granodiorite. Weathered rock and soil in this area is highly erosive, and much of the land is unstable and located on steep slopes.

Vegetatively, the unit is entirely within the western spruce-fir forest ecosystem except for a small section of cedar-hemlock-pine forest in the lower White Sand Creek. Englemann spruce, subalpine fir, western larch, and lodgepole pine are the most common tree types, although grand fir and western redcedar habitats occur at elevations generally below 5,000 feet. Most of the area supports a mixed stand of trees and shrubs. Menzeisia (false huckleberry) and beargrass are common shrubs.

Because of the configuration of the area, recreation patterns vary greatly. A few hikers and some fishermen fish the five small lakes in the Beaver Ridge area while stream fishermen are attracted to White Sand Creek. The remainder of the area is used primarily by hunters. The areas immediately adjacent to the roads are probably used the most by campers and people just traveling the roads.

The Selway-Bitterroot Wilderness is contiguous to the east boundary, and the Sneakfoot Meadows roadless area is adjacent on the west side of Elk Summit road. Except for the Beaver Ridge section, this area was once part of the Elk Summit Roadless Area.

A key attraction to visitors especially in conjunction with the access roads is the concentration of moose. The other major attraction is the Selway-Bitterroot Wilderness. Visitors pass over the trails in this area to reach portions of the Wilderness.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The new Elk Summit road #111 and the Colt Creek road #359 are the two major intrusions affecting the natural integrity. The constructed trails are less distracting although they are evident and do create unnatural disturbances in some cases. Minor evidence of an old lookout at Savage Ridge may still be seen if one passes the site, otherwise the overall natural integrity and appearance are well intact.

B. OPPORTUNITIES FOR EXPERIENCES OFTEN UNIQUE TO WILDERNESS

Disruption of solitude within the area is minimal, generally confined to concentrations of people near the major lakes and streams that are accessible by trails.

Logging activities in the Beaver Creek drainage are the major current disturbance to solitude. Vehicles traveling over the Elk Summit and Colt Creek roads and the associated recreation result in some minor noise and visual disturbance. It is minimal because of heavy vegetative screening near the roads and the fact that use is relatively light except for a few weeks during the fall hunting season.

Big game hunting, hiking, backpacking, horseback riding, fishing (lake and stream), scenic viewing, and photography (especially in the vicinity from Beaver Ridge Lookout) are the major dispersed activities available. Except in the vicinity of the lakes east of Beaver Ridge Lookout, cross-country travel by foot is very difficult because of dense vegetation and many steep stream breaklands.

C. SPECIAL FEATURES

The moose population is well known throughout the State of Idaho and is considered to be one of the largest concentrations in the state. They are easily viewed by visitors traveling the access roads or using the trails during the summer months. Special studies have been and are still in progress to determine behavior patterns and habitat needs.

Although no verified sightings or other confirmed evidence of the endangered gray wolf exists, habitat conditions conducive to the wolf have resulted in designation of 74 percent of the unit as essential habitat. The management of an adequate prey base (elk) and restrictions on motorized road use are two major components for protection and enhancement of the wolf.

D. EFFECT OF SIZE AND SHAPE ON WILDERNESS ATTRIBUTES

Being contiguous to the Selway-Bitterroot Wilderness negates any effect of size and shape on wilderness attributes with two exceptions: the extension of the new Elk Summit road #111 has created an isolated unit of land of about 3,500 acres that does not lend itself to wilderness. And the other exception is the narrow stringer of land that extends north of the Selway-Bitterroot Wilderness and lies between private land and developed land on the Lolo National Forest.

E. MANAGEABILITY AND BOUNDARIES

With some adjustments, much of the existing area would be easily managed as wilderness. The east boundary contiguous to the Selway-Bitterroot Wilderness would, of course, be no longer valid since the area would just become a part of the existing wilderness.

The existing low-standard, Elk Summit road from Hoodoo Lake north to Colt Creek campground would be a logical boundary. The south side of the Colt Creek road would also be a logical boundary up to the Colt Creek cabin. The semi-enclosed area created by the new dead-end Elk Summit road #111 could easily be excluded. A feasible and identifiable boundary from Colt Creek cabin north would be White Sand Creek, to its junction with trail #47. Trail #47, which follows the ridge between White Sand Creek and Beaver Creek would also make a logical and identifiable boundary.

This type of boundary would actually separate the area into two units with the northeast unit being the same unit that was recommended for wilderness in the RARE II process. The boundaries of this unit, except for a section along the Beaver Ridge road, are undefinable since they are located either along private land lines or timber sale activity.

III. AVAILABILITY

A. OTHER RESOURCES

1. Recreation - Future need and potential for developed recreational sites could easily be met in conjunction with the existing roads and would not require sites within the area. Existing facilities would supply current and anticipated need for a number of years.

2. Wildlife and Fish - In addition to the moose, moderate numbers of elk, black bears, and deer inhabit the area. Because most of the area is timbered in elevations above 5,000 feet, key winter range is limited to 267 acres. Key moose and elk summer range are the main features.

The streams are highly valuable, not only for the production of a resident trout fishery, but as a spawning and rearing habitat for anadromous fish and their contribution to the Lochsa-Middle Fork system.

3. Timber - The North Fork Spruce-White Sand area has 32,082 acres of land suitable for the production of timber. An estimated 330 MMBF of sawtimber has been inventoried.

4. Minerals - With one exception, the area is rated low for potential minerals. The exception is in the vicinity of Hoodoo Lake and Elk Summit where a titanium-find has raised the potential for that mineral, as well as gold, to a moderate rating. The titanium prospect has not been activated.

5. Cultural Resources - Current known sites include two lookout sites, five cabins or cabin remains, one Ranger Station, one hunter camp and one CCC camp.

Early day trappers frequented this area, and it is possible that the area was utilized by Native Americans.

B. IMPORTANT MANAGEMENT CONSIDERATIONS

No important management considerations pertain to this roadless area.

C. RESOURCE SUMMARY

Table C-22. 01309-North Fork Spruce-White Sand

<u>Description</u>			<u>Description</u>		
Gross Acres	Acres	33,454	Gray Wolf Hab.	Acres	24,646
Net Acres	Acres	33,454	Peregrine Fal. Hab.	Acres	0
Recreation			Wildlife - Big Game		
Primitive	RVD's	180	Big Game		
Semiprim Nonmoto.	RVD's	2,684	Summer Habitat	Acres	0
Semiprim Motor.	RVD's	0	Winter Habitat	Acres	0
Roaded Natural	RVD's	3,117	Elk		
Range			Summer Habitat-Key	Acres	24,900
Existing Obligated			Winter Habitat-Key	Acres	267
Suitable	Acres	0	Significant Fisheries		
Allotments	No.	0	Stream Miles	Miles	98
AUM's	AUM's	0	Stream Habitat	Acres	164
Existing Vacant			Lakes	No.	1
Suitable	Acres	0	Lakes - Habitat	Acres	12
Allotments	No.	0	Water Developments		
AUM's	AUM's	0	Existing	No.	0
Proposed			Minerals		
Suitable	Acres	0	Potential Hardrock		
AUM's	AUM's	0	Very High	Acres	0
Timber			High	Acres	0
Tentative Suitable	Acres	32,082	Moderate	Acres	1,280
Standing Volume	MMBF	330	Low	Acres	32,174
Corridors			Claims	No.	0
Exist. and Potential	No.	0	Potential Oil and Gas		
Wildlife - T&E			Very High	Acres	0
Grizzly Bear			High	Acres	0
Habitat - Sit. 1	Acres	0	Moderate	Acres	0
Habitat - Sit. 2	Acres	0	Low	Acres	33,454
Habitat - Sit. 3	Acres	0	Oil and Gas Leases		
Bald Eagle Hab.	Acres	0	Leases	No.	0
			Leased Area	Acres	0

IV. NEED

Establishing a wilderness in the area would add to the Selway-Bitterroot Wilderness.

Parts of the area, especially the original RARE II area of 3,971 acres, (generally east of the Beaver Ridge road and lookout) received a 2 to 1 support

for wilderness during the RARE II process. The remainder of the area was part of a larger, mostly roadless area called Elk Summit which was withdrawn from RARE II consideration but was considered for wilderness in a Forest planning unit process. This process which was originally initiated in 1971 resulted in an environmental statement and supplement both of which were appealed. Part of the reason given for the appeals was a concern for the adverse effects on water, fisheries, wildlife (specifically moose) and aesthetics.

Wilderness for all or part of the area was a element of these concerns off-and-on-again during the many years of planning. The area was originally a portion of the Bitterroot Primitive Area but was withdrawn when wilderness was Congressionally established in 1964.

Current support for wilderness comes from a state coalition of wilderness and conservation organizations and individuals. This area is just part of the larger Elk Summit area being proposed for wilderness.

Tables C-1 and C-2 show the location and proximity of the North Fork Spruce-White Sand roadless area to other wilderness and population centers in Idaho, western Montana and eastern Washington.

A total of 51 comments were received on the Elk Summit area between the Draft EIS and the Final EIS. Most of the comments were not specific to any one roadless area, but the White Sand Creek drainage was mentioned 19 times. Concerns expressed for this drainage centered around the anadromous fishery of the stream, the need to protect it from siltation, from operations on adjacent private lands, and from National Forest road construction and logging. Most respondents favored leaving the area as is.

The Forest Plan leaves the area as designated in the Proposed Forest Plan, to Management Area E1.

The management emphasis table on the following page shows the acres proposed to various resource management in each alternative.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. MANAGEMENT EMPHASIS BY ALTERNATIVE

Table C-23

North Fork Spruce-White Sand Roadless Area
Management Emphasis by Alternative

Management Emphasis	Alternatives (thousand acres)											
	A	B	C	D	E	E1	F	G	H	I	J	K
WILDERNESS	4.0	0	4.0	0	9.8	9.8	4.0	20.9	23.3	33.4	9.8	9.8
NONWILDERNESS												
Unroaded	0	0	3.7	10.2	0	0	12.8	0	0	0	0	6.0
Elk Winter	0	0	0	0	0.1	0.1	0	0	0	0	0	0
Timber/Wldlf-Wtshd	21.3	19.6	18.7	3.9	1.7	1.7	0.8	8.7	0.1	0	4.6	7.1
Timber/Visual-Rip	5.1	1.7	1.7	2.4	4.1	4.1	2.3	3.2	2.0	0	3.0	2.4
Timber/Special	0	0	4.2	15.6	13.5	13.5	12.4	0	6.7	0	15.7	3.4
Special	0	0	0	0	0	0	0	0	0	0	0	0
Protection	3.0	12.1	1.1	1.3	4.2	4.2	1.1	0.6	1.3	0	0.3	4.7
TOTAL	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4

Summary of Management Emphasis

Wilderness	4.0	0	4.0	0	10.2	10.2	4.0	20.9	23.3	33.4	10.2	9.8
Nonwilderness												
Developed												
Decade 1	26.6	26.6	25.7	23.2	23.2	23.2	16.6	12.5	10.1	0	23.2	0
Decade 5	28.5	28.5	25.7	23.2	23.2	23.2	16.6	12.5	10.1	0	23.2	15.6
Roadless												
Decade 1	2.8	6.8	3.7	10.2	0	0	12.8	0	0	0	0	23.6
Decade 5	0.9	4.9	3.7	10.2	0	0	12.8	0	0	0	0	8.0

B. IMPACTS

1. Designation: Wilderness Management Emphasis: Wilderness

Nine of the twelve alternatives designate some portion or all of the North Fork Spruce-White Sand area to wilderness. Alternatives G, H, and I contain 62 to 100 percent; Alternatives E, E1, J and K (Preferred Alternative) contain 29 percent; and Alternatives A (current direction), C, and F contain 12 percent. The natural condition of the area would be maintained. Hunting, fishing, hiking, and camping would remain the dominant activities.

No timber would be harvested. Nearly 330 MMBF of standing timber volume located on approximately 2 percent of the Forest's tentatively suitable timberland would not be available in Alternative I.

Only valid mining claims and mineral leases in effect either at the time of designation or as stated in designation legislation could be developed. All other lands would be withdrawn from mineral entry. Development of discoverable mineral deposits would be significantly more costly because of the lack of roads.

Adverse impacts would be least in those alternatives that designate the lesser amounts of land to wilderness. The alternatives range in the amount of land where timber harvest would be restricted as follows: Alternatives A (current direction), C, and F, 12 percent; Alternatives E, E1, J, and K (Preferred Alternative), 9 percent; Alternative G, 62 percent; Alternative H, 70 percent; and Alternative I, 100 percent or 32,082 acres of tentatively suitable timberland.

Effects of wilderness management on nonpriced resource values are:

- The natural appearing scenery would not be disturbed by man's activities.
- The existing primitive setting for recreation would be maintained.
- Water quality and anadromous fish would be maintained at natural levels.
- Essential security habitat values for the gray wolf would be retained but the prey base might not increase to its full potential because of restricted management of winter range, which is probably the limiting factor on the elk populations in this area.
- The numbers of elk available for harvest would probably be less under those alternatives that designate 62 to 100 percent of the area to wilderness (Alternatives G, H, and I). Forage and cover ratios would be dependent on natural forces such as the lightning fires originating in the area. Prescribed fire would not be permitted under existing wilderness policy.
- Vegetative diversity would tend toward old growth.

Social and economic effects center around timber, minerals, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported. The individuals valuing wilderness would be supported as well as those people who desire to view and visit the area in its unaltered state. Outfitter/guide businesses would benefit. Individuals favoring roaded natural recreational experiences would not be supported.

2. Designation: Nonwilderness
Management Emphasis: Unroaded

Three of the twelve alternatives designate some portion of the North Fork Spruce-White Sand area to unroaded management. Alternative F designates about 38 percent; Alternative D, 30 percent; Alternative K (Preferred Alternative), 18 percent; and Alternative C, 11 percent.

The wilderness resource is largely protected under this management emphasis with the following exceptions. Past trail maintenance, reconstruction, and fisheries habitat projects would be visible but would not preclude a later designation as wilderness.

The primary market values are timber and outfitter/guide businesses. The overall market resource would probably benefit in Alternative C because timber values would be outweighed by benefits to the local outfitter (11 percent of the area). Alternative D, which designates 30 percent of the area as unroaded, would also have counter balancing market effects due to the relatively low value of timber. Alternative F would designate 38 percent of the area as roadless but would exclude timber harvest on approximately 6,000 acres of tentatively suitable timberland. Effects on the timber market would be substantial and little counter balancing effects with outfitter/guides would exist due to heavy existing timber downfall in the area that precludes much use by the outfitter/guide businesses.

Mineral exploration and development could take place, but costs of such activities would be high due to the lack of roads. Removal of common variety minerals would not be permitted.

Effects of unroaded management on nonpriced resource values are:

- The natural scenery would be maintained.
- Recreationists who prefer primitive and semiprimitive activities would benefit from the natural setting.
- Big game cover/forage relationships would basically be determined by natural events such as wildfire but also could be modified by prescribed fire.
- Essential gray wolf security habitat values would remain in a near natural condition with the exception of possible disturbance by snowmobilers in the Horse Heaven Meadows area. Such impacts could be mitigated by travel closures.

- Water quality and anadromous fish habitat would benefit because projects could improve upon natural conditions.

- Benefits to nonpriced resources would be greatest in Alternatives D and F and considerably less under Alternative C.

Social and economic effects vary depending on the amount of tentatively suitable timberland available. The economic effect of Alternative F is greatest because it would exclude timber harvest on about 6,000 acres of the most productive timberland in the North Fork Spruce-White Sand area located south of Colt Creek and north of Bridge Creek. Alternatives C and D would be more supportive of wood products industries. Backpackers and stock users recreating in the area as well as those who desire to keep the area in a natural condition would be supported by the unroaded emphasis. People desiring more area for roaded natural recreation would not be supported.

3. Designation: Nonwilderness
Management Emphasis: Elk Winter Range

The 100 acres of C3 located along White Sand Creek are available only in Alternatives E and E1 is so "insignificant" that further discussion is not warranted.

4. Designation: Nonwilderness
Management Emphasis: Timber/Wildlife-Watershed

Under this management emphasis, the primary goal is timber production at varying investment levels. Minimum management constraints relating to elk security needs and water quality would be met.

All of the alternatives except Alternative I contain this emphasis to varying degrees. In Alternatives A, B, and C, approximately 60 percent is designated; Alternatives G and K (Preferred Alternative) designates 21 to 26 percent. In Alternatives D and J, 12 to 14 percent is designated. Alternatives E and E1 contain 5 percent, and less than 2 percent of the area are designated in Alternatives F and H.

As this management emphasis is applied, the affected areas are roaded, and timber within them harvested, the areas will no longer retain the characteristics of wilderness. Approximately 80 percent (26,000 acres) of the area could be roaded by the end of the first decade in Alternatives A (current direction), B, C, D, E, E1, and J. Approximately 82 percent of the area's roadless character could be modified to a roaded natural setting by the end of the fifth decade. This would leave approximately 5,800 acres unroaded.

Approximately 44 percent of the area would be roaded by the end of the first decade in the Preferred Alternative K and 47 percent by the end of the fifth decade.

The alternatives that designate the most to this emphasis would impact the wilderness characteristics the most.

The timber market resource is supported by this management emphasis. The timber market is strongly supported by the North Fork Spruce-White Sand area designated to this emphasis in Alternatives A (current direction), B, and C, and marginally supported by Alternative G. Other alternatives would support timber market values proportionate to the amount of acreage of suitable timberland suitable for harvest.

Mineral exploration and development would be facilitated because of improved access.

Effects of timber/wildlife-watershed management on nonpriced resources are:

- This management emphasis could have adverse impacts on visual quality. These impacts would be especially apparent to viewers looking into the area from within the existing Selway-Bitterroot Wilderness and roads and trails within the area serving as access to the Selway-Bitterroot. Alternatives A (current direction), B, and C would have the most impact with D, E, E1, F, H, J, and K (Preferred Alternative) having the least.

- Adverse impacts to essential gray wolf security habitat would occur due to increased ease of access in proportion to the amount of acreage developed. Positive impacts on the prey base could be expected through improved cover/forage ratios and the ability to improve winter range on an opportunity basis through timber harvest.

- The most critical factors limiting big-game habitat in this area are winter range, and cover/forage ratio to a considerably lesser degree. Winter range would remain the dominant factor in all alternatives with security areas becoming more important in those alternatives that would greatly improve the cover/forage ratio. Road management to control open road density as well as considerable emphasis to improve winter range would be key to actually increasing big game populations. Alternatives that allow little or no development have the least potential for increasing big game populations above the present levels but have the greatest likelihood of maintaining the status quo winter range conditions with gradual losses.

- Water quality and anadromous fish would be adversely affected by this management emphasis. Siltation of streams would be greatest for those alternatives (A [current direction], B, C, and G) allowing the most road building. Minimum viable fishery populations would be maintained.

- Recreation would shift from primitive and semiprimitive to roaded natural as additional roads were constructed. Big game hunting, fishing, and camping would be the dominant activities. The activity of gathering forest products would increase.

Social and economic effects relate to timber, wilderness, big game, and recreation. The timber industry would be supported by this emphasis. Wilderness advocates and recreationists desiring a primitive or semiprimitive experience would not be supported. Individuals and groups devoted to restoring anadromous fish because of mitigation measures contained in this management emphasis. Outfitter/guide businesses would be adversely impacted as new roads are built.

5. Designations: Nonwilderness
Management Emphasis: Timber/Visual-Riparian

All alternatives except J contain some land designated to this management emphasis. This emphasis has a goal of timber production on areas that fall into the retention/partial retention VQO's and areas of ecologically important riparian vegetation and features located along stream courses.

Alternative A contains 15 percent of the North Fork Spruce-White Sand area, and the other alternatives designate 5 to 12 percent to this emphasis.

The narrow corridor along travel systems and streams would preclude the solitude necessary for a wilderness experience. This emphasis is primarily mitigation within larger areas where the wilderness resource would be foregone. Also, the narrow range in acreages designated between alternatives makes this management emphasis a poor yardstick for evaluation.

The timber market resource is moderately supported, because it allows some timber harvest while making this activity more acceptable to portions of the general public from a visual standpoint and by protecting riparian ecological values. Mineral extraction would be costly in these sensitive areas because of operating plan restrictions needed to protect riparian and visual values.

Effects of timber/visual-riparian management on nonpriced resources are:

- Visual quality is moderately supported by this emphasis. There would be situations where visual quality is actually improved as well as situations where adverse impacts from adjacent areas are mitigated to varying degrees.
- Roaded natural recreation would be supported. Hiking, fishing, and hunting would be the predominant recreational activities.
- Essential gray wolf security values could be impacted by roading. Impacts would depend on size of affected areas and availability of mitigation measures such as road closures. Impacts would be evaluated utilizing the formal consultation process with the Fish and Wildlife Service.
- Impacts to big-game habitat are minimal.
- Water quality and anadromous fish values would be supported.

Social and economic effects relate to timber, riparian, visual, and wilderness values. While little difference is apparent between alternatives, this management emphasis is an appealing compromise between timber interests and other users. Timber harvest would be allowed with considerable effort and cost expended to offset negative impacts on visual quality and riparian values. Wilderness advocates would not be supported. Recreationists who favor a roaded natural setting and associated activities would be accommodated

6. Designation: Nonwilderness
Management Emphasis: Timber/Special

Eight of the twelve alternatives contain this emphasis. Approximately 18 percent of the North Fork Spruce-White Sand area located in the Colt, Rabbit, and Swamp Creek drainages are designated in Alternatives D, E, E1, and J. In Alternatives D and J an additional 28 percent located within the lower White Sands and Savage Creek drainages are designated to emphasize moose habitat values, while permitting timber harvesting on suitable timberland. In Alternatives E and E1 a 20 percent portion in the lower White Sand and Savage Creek area would be managed to emphasize moose habitat values. High water quality and anadromous fishery spawning and rearing areas would be maintained.

In Alternative C, approximately 12 percent located in the Colt and Rabbit Creek drainages would have anadromous fishery/timber emphasis. In Alternative F, approximately 37 percent located in the White Sands Creek drainage is designated to the moose/timber emphasis, with an additional 4 percent in Savage Creek and lower White Sands.

The Preferred Alternative K designates approximately 3 percent mostly in the Crab Creek and Savage Ridge area.

This management emphasis would not support the wilderness resource because the natural condition of the area would be changed through roading and timber harvest. The timber market is moderately supported by this management emphasis in that timber harvest is allowed, but high standards must be met for water quality and big-game summer range.

Roading and timber harvest would proceed but at a slower rate and at greater expense than under options driven solely by silvicultural needs. Significant amounts of old growth timber would deteriorate to the point of being nonmarketable by the time access and harvest could be accomplished while maintaining the high standard for water quality and big-game summer range. This effect would be greater for alternatives allocating more land to this emphasis and less for alternatives that allocate low to moderate amounts.

The cost of exploring and extracting any minerals discovered in the area would be significantly lowered because of improved access over the existing situation.

Effects of timber/special management on nonpriced resource values are:

- Visual quality would be adversely impacted. Impacts would be lessened due to the requirements that regeneration harvest units would generally be 25 acres or less in size. Where terrain and logging systems would permit, cutting unit boundaries would be irregular in shape and adverse impacts would be short-term, diminishing as cutover areas "green up" and tree and shrub cover is established.

- Recreational opportunities would shift from a primitive or semiprimitive setting to roaded natural setting. Hunting, fishing, and camping opportunities would remain.

- Essential gray wolf security habitat values would be impacted. Road closures would mitigate these impacts.

- Big game security areas would diminish from the present excess and forage habitat would increase. The resultant cover/forage ratio would be near optimum for summer range. Elk winter range management would become the critical factor if advantage of improved summer range is to be realized. Identified moose habitat would be maintained.

With seasonal road closures, 75 percent of potential elk use would be maintained under all alternatives except K. The Preferred Alternative K would provide a somewhat higher degree of protection because all new road construction would be closed to all public motorized traffic.

- Water quality would remain at or near natural conditions and anadromous fish habitat could benefit from timber sale financed habitat improvements.

- Lands suitable for addition to the wilderness system would be reduced.

Social and economic effects relate to wildlife, fishery, timber, recreation, and wilderness. Hunters and others desiring a primitive experience would not be supported. Hunters that measure the success of the hunt by whether or not they take game would be supported, because success ratios for hunters without stock are higher under closed road conditions than in unroaded areas. Both sport and commercial users of the anadromous fishery resource would be supported.

Timber related industries are moderately supported but at a cost. Timber removal would be more expensive than under purely silvicultural options, and considerable volumes would be lost due to delay in removal of over-mature stands. Wilderness advocates would not be supported.

7. Designation: Nonwilderness
Management Emphasis: Protection

Lands in this category have been defined as being unavailable for timber or other resource investment purposes because of biophysical conditions.

Acre variances between alternatives are created by other resource constraints. Generally, these areas are small and scattered throughout surrounding management areas. In some cases their size may be large enough to meet the minimum acreage criterion established for roadless area. Roads or trails could be constructed across such areas to access surrounding areas which allow timber harvesting and/or recreation. However, no direct investment activities would occur.

All alternatives with the exception of I contain lands with this management emphasis. In Alternative B, 36 percent is designated, and Alternatives E, E1, and K (Preferred Alternative) designate 13 percent. Alternative A designates approximately 10 percent. The remaining alternatives designate 1 to 3 percent of the North Fork Spruce-White Sand area to protective management.

Presently inaccessible areas that are adjacent to the Selway-Bitterroot Wilderness would continue to retain their wilderness character. Isolated portions surrounded by lands with other management emphasis would tend to mirror those of the surrounding area. As such, this management emphasis is not a good tool for evaluating differences in alternatives relating to the wilderness resource.

Mineral exploration and development could take place, but costs of such activities would be high due to access constraints. Removal of common variety minerals would not be permitted.

Assignment of this management emphasis to lands meeting the criteria for unsuitable or marginal timberlands would have little effect on timber production. These lands are either not capable of significant timber production or not manageable with current knowledge and access/logging systems. Depending on their size and spatial distribution, these lands could either support primitive or roaded natural recreational activities.

Road construction through unsuitable timberland to reach tentatively suitable timberlands could adversely affect nonpriced resources.

Effects of protection management on nonpriced resource values are:

- Essential gray wolf security habitat would be impacted if the affected areas were roaded. Road closures could mitigate such impacts. It is estimated that less than 1 percent of the area would be thus affected in any of the alternatives using this management emphasis.

Social and economic effects would mirror those of the surrounding areas. The wood products industries would not be supported by this management emphasis because timber management is not possible. People desiring to retain these areas in their natural state would be supported because little or no development would occur.

