

VII. APPENDICES

APPENDIX A

SALMON NATIONAL FOREST  
TIMBER RESOURCE LAND SUITABILITY

		NOT SUITED	ACRES			
-----Not Capable----->			235,000			
-----Non-Forest----->			423,000			
-----Irreversible Soil and Watershed Damage----->			3,000			
-----No Assurance of Adequate Restocking----->			47,700			
-----Withdrawn from Timber Production----->			323,000			
		<u>Subtotal of Above</u>	<u>1,032,000</u>			
F O R E S T E D  A N D  N O N  T E N T A T I V E  S U I T E D	S U I T E D	LANDS COST EFFICIENT TO MEET OBJECTIVES	TIMBER RESOURCE OPPORTUNITY			
			First Decade		LTSY	
			Acres	MMBF/Yr	MMBF/YR	
		Suited Timber Lands	407,000	40,120	21.10	29.20
		<u>Subtotal of Above</u>	<u>407,000</u>	<u>40,120</u>	<u>21.10</u>	<u>29.20</u>
	N O T  S U I T E D	S U I T E D	LANDS NOT COST EFFICIENT TO MEET OBJECTIVES	TIMBER RESOURCE OPPORTUNITY		
				First Decade		LTSY
				Acres	MMBF/Yr	MMBF/YR
		Low value species/high cost logging/ inaccessible stands	60,000			
		<b>OTHER LANDS</b>				
		Multiple-Use Objectives Preclude Timber Production	278,000			
	Other Uses (RNA)					
	Proposed Wilderness					
	<u>Subtotal of Above</u>	<u>338,000</u>				
	<b>TOTAL NATIONAL FOREST LANDS</b>	<b>1,777,000</b>				

EFFECTIVE PERIOD: From 1987 through 1996

TABLE II

Allowable Timber Sale Quantity

<u>Decade</u>	<u>Sawtimber MMCF/Year</u>	<u>Roundwood MMCF/Year</u>	<u>Allowable* Sale Quantity MMCF/Year</u>	<u>Long-Term** Sustained Yield MMCF/Year</u>
1	6.1	0.2	6.3	8.4
2	6.1	0.2	6.3	8.4
3	7.4	0.2	7.6	8.4
4	7.4	0.2	7.6	8.4
5	7.4	0.2	7.6	8.4
10	7.4	0.2	7.6	8.4
15	7.4	0.2	7.6	8.4

\* Allowable Sale Quantity - The quantity of timber that may be offered for sale from the area of suitable land covered by the Forest Plan for the time period specified in the Plan.

\*\* Long-Term Sustained Yield - The highest uniform yield, from lands being managed for timber production, that may be sustained under a specified intensity of management consistent with multiple-use objectives.

TIMBER RESOURCE OPPORTUNITY		LANDS NOT COST WEIGHTED TO MEET OBJECTIVES	
First Decade	Acres	First Decade	Acres
		Low value species/High cost logging	
		Inaccessible lands	
		OTHER LANDS	
		Multiple-Use	
		Objectives Preclude Timber Production	
		Other Uses (NNA)	
		Proposed Withdrawals	
		Subtotal of Above	
		TOTAL NATIONAL FOREST LANDS	

TABLE III  
Ten-year Timber Action Plan

Yr	Dis	Sale Name	Location	Acres	Roads		Timber Type Volume				Management Area Acres									
					C	R	DF	PPM	PPX	LP	Total	3A-4A	3A-5A	3A-5B	3A-5C	4A	5A	5B	5C	
86	2	Upper Swamp	T23&24N, R17E	288			0.2	0.5	0.5		1.5				288					
	2	Ebenezer Salv.&Helo	T23N, R17E	196			0.1	0.5	0.4		1.0				196					
	2	Fried Snake	T23N, R16E	335				1.0	0.9		1.9				335					
	2	Knot-SO-EZ Helo	T23&24N, R17&18E	500				1.4	1.4		2.8							500		
	2	E-Z Helo	T23N, R17E	199				0.8	0.8		1.6			199						
	2	Fly Up Helo	T23&24N, R17E	268				0.9	0.9		1.8			268						
	2	Swamp Fly	T23&24N, R17E	175				0.5	0.5		1.0			175						
	2	Owl Creek Park	T23&24N, R17&18E	615				1.6	1.6		3.2							615		
	2	Hot Rats	T24N, R17E	780						4.3	4.3			780						
	2	Tincup	T25N, R17E	360						2.0	2.0			360						
	5	So.Fk. Williams	T20N, R20E	100			0.4				0.4							100		
		<u>Small Sales</u>																		
	1			150			0.5			0.2	0.7		15			5	30	75	25	
	2			50			0.2				0.2		25	25						
	4			100			0.1				0.1					100				
	5			400			0.8			0.3	1.1			20				380		
				4516			2.3	7.2	7.0	6.8	23.3		40	2646		5	30	1770	25	
87	1	Mink Creek	T18 & 19N, R18E	300	3.5	3.9	1.3			0.3	1.6		50		250					
	1	Musgrove	T20&21N, R17&18E	724	10.0		3.1			3.0	6.1					85		429	210	
	1	Deep Creek Point	T20&21N, R19E	245	4.0		0.9			0.2	1.1					45	200			
	2	Sawlog China	T24N, R19E	575	4.0		1.2	0.8		1.5	3.5							575		
	2	Freidorf	T26N, R21E	104			0.4	0.5	0.1		1.0	104								
	2	Lower Sheep	T25N, R21E	115			0.1	0.4		0.1	0.6	45	30					40		
	2	Ditch Creek	T25N, R21E	399			0.1	0.5			0.6		399							
	4	East Kenney	T20N, R25E	202			0.9			0.1	1.0							202		
	5	Perreau Creek	T21N, R20E	370	9.0		1.8			0.6	2.4							370		
	5	Lake Mtn.	T19N, R20&21E	174	0.1	2.0	0.4			0.2	0.6							174		
		<u>Small Sales</u>																		
	1			200			0.1			0.9	1.0			20		10	40	100	30	
	2			100			0.5			0.6	1.1		50	50						
	4			100			0.1				0.1							100		
	5			400			0.7			0.2	0.9			20				380		
				4008			11.6	2.2	0.1	7.7	21.6	199	479	340		140	240	2370	240	

NOTE: Probable harvest methods are discussed in management area prescriptions.





TABLE III (cont.)

Yr	Dis	Sale Name	Location	Acres	Roads		Timber Type Volume				Total	Management Area Acres							
					C	R	DF	PPM	PPX	LP		3A-5A	3A-5B	3A-5C	4A	5A	5B	5C	
90	1	Woodswan	T19&20N, R19&20E	400			0.1			2.7	2.8	1/						280	120
	1	Beagle	T19&20N, R17E	500	6.1	8.3	1.7			0.2	1.9			500					
	1	Beaver Creek	T22&23N, R18&19E	628	13.0	3.6	1.5			0.5	2.0				128			200	300
	1	Trail Creek	T21&22N, R18&19E	1005	20.0		4.5			1.5	6.0	3/						1005	
	2	Pierce Creek	T27N, R21E	472	6.0		2.3			0.7	3.0		472						
	2	Sage Whiskey	T24N, R20E	198	1.0	0.2	0.4		0.7	0.1	1.2		158				40		
	2	Spring Cr. Ridge	T24N, R16E	250	1.0		1.2	0.2			1.4							250	
	4	Grizzly Hill	T17N, R26E	282						1.5	1.5							282	
	5	Lake Cutover	T19N, R20E	500			0.5			0.2	0.7							500	
<u>Small Sales</u>																			
	1			200			0.4			0.6	1.0		20			10	40	100	30
	2			100			0.2	0.1		0.7	1.0		50	50					
	4			100			0.1				0.1							100	
	5			400			1.2			0.3	1.5			20				380	
				5035	47.1	12.1	14.1	0.3	0.7	9.0	24.1		700	570		138	80	3097	450

3/ Sale not on current Five Year Plan. Sale is dependent on Leesburg Road

91	1	Opal	T18N, R18E	165	2.0	2.0	0.8			0.2	1.0				165				
	1	Deer-Lea-Quartz	T21N, R18&19E	530	12.0		2.5			0.5	3.0					130		400	
	1	Slaughter-House	T20&21N, R16&17E	300	10.0		1.7			0.3	2.0		300						
	1	Missouri	T21N, R19E	455	7.5		1.0			1.6	2.6	3/						455	
	2	Anderson-3 Mile	T26N, R21&22E	480	6.0	1.0	1.9	1.3	0.4	0.4	4.0		480						
	2	Thompson Gulch	T26N, R22E	354	2.0		1.3	0.2		0.5	2.0		354						
	2	Grindstone	T25&26N, R20E	254	2.0		0.8			0.7	1.5		200	54					
	4	Hayden Cutover	T16&17N, R23E	400			0.4			0.1	0.5			400					
	5	East Boulder	T23N, R20E	134	5.0		0.8			0.7	1.5							134	
	5	Baldy Mountain	T21N, R20E	286	3.8		0.8			0.9	1.7							286	
<u>Small Sales</u>																			
	1			100			0.2			0.3	0.5				10	20		50	20
	2			100			0.4				0.4		50	50					
	4			100			0.1				0.1							100	
	5			400			0.7			0.8	1.5			20				380	
				4058	50.3	3.0	13.4	1.5	0.4	7.0	22.3		1084	824	165	140	20	1805	20

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TABLE III (cont.)

Yr	Dis	Sale Name	Location	Acres	Roads		Timber Type Volume				Management Area Acres					5A	5B	5C	
					C	R	DF	PPM	PPX	LP	Total	3A-4A	3A-5A	3A-5B	3A-5C				4A
92	1	Moccasin	T20&21N, R19E	359	6.0		0.6			1.4	2.0					359			
	1	Leesburg (East)	T21&22N, R19&20E	788	14.0	2.0	0.1			4.4	4.5						788		
	2	Oreana	T25N, R17E	833	10.0	2.0	2.8			2.4	5.2		833						
	2	Pine Creek	T23N, R19E	145		2.0	0.4	0.3			0.7							145	
	2	C.J.	T26N, R21E	153		2.0	0.8			0.1	0.9		153						
	2	Statevine II	T27N, R21E	191	1.0	0.5	0.8			0.3	1.1		191						
	4	Deer Creek	T13N, R26E	390	6.8	3.0	2.1				2.1							390	
	4	Basin Creek	T17&18N, R22E	268	7.8	2.1	0.6			0.7	1.3							268	
		<u>Small Sales</u>																	
	1			200			0.4			0.6	1.0				20	10	40	100	30
	2			100						0.3	0.3		50	50					
	4			100			0.1				0.1							100	
	5			400			0.8			0.1	0.9			20				380	
				3927	45.6	13.6	9.5	0.3		10.3	20.1		394	903	20	10	399	1781	420
93	1	Fourth of July	T19N, R17&18E	306	6.5		1.4	0.2		1.8	1.7	120		186					
	1	Hot Springs	T23N, R18E	90	1.5			0.1	0.2		0.3								90
	1	Yellowjacket	T19N, R18E	111	2.0		0.6			0.1	0.7			61	50				
	1	Black Pepper	T20N, R19E	414	8.0		0.7			1.6	2.3						160	200	54
	2	Dutchler Basin	T24N, R19E	600			0.8		1.2		2.0							600	
	2	Horse Creek	T25N, R17E	257	3.0		1.6				1.6			257					
	5	Degan II	T19N, R20E	243	1.5	4.1	0.3			1.2	1.5			243					
	5	Lone Pine	T23N, R21E	121	1.0	0.5	0.4			0.3	0.7								121
	5	Park Creek	T17N, R19E	280	3.0	15.0	1.0				1.0								280
		<u>Small Sales</u>																	
	1			200			0.4			6	1.0		20		10	40	100	30	
	2			300			0.4	0.1		1.0	1.5		100	100				100	
	4			100			0.1				0.1							100	
	5			400			0.8			1.0	0.9		20					380	
				3422			8.5	0.4	1.4	5.1	15.4	120	140	847	50	10	200	1971	84

TABLE III (cont.)

Yr	Dis	Sale Name	Location	Acres	Roads		Timber Type Volume				Management Area Acres								
					C	R	DF	PPM	PPX	LP	Total	3A-5A	3A-5B	3A-5C	4A	5A	5B	5C	8A
94	1	McStrander	T20N, R18E	216	4.0		1.0	0.1		0.1	1.2					150		66	
	1	Sharkpit	T22N, R20&21E	660	7.0		0.7			3.1	3.8							660	
	1	Little Jureano	T21&22N, R18&19E	242	4.0		1.3			0.1	1.4				42		200		
	1	Deep Creek Ridge	T21N, R19E	89	1.0		0.3			0.2	0.5					89			
	1	Northwest Trail	T22N, R18E	103	1.5		0.4			0.2	0.6							103	
	1	Fritzer	T22N, R18E	119	2.0		0.6			0.1	0.7				19		100		
	2	Crone Gulch	T26N, R21E	500			0.7	0.8			1.5	500							
	2	Humbug	T25N, R21E	400			0.5	0.5			1.0	400							
	5	Lake Williams	T20N, R20E	408	4.0	0.5	0.6			1.5	2.1							408	
	5	Peel Tree	T18N, R20E	27						0.2	0.2		27						
	5	Cougar Point	T20N, R20E	133	1.3		0.6				0.6							133	
		<u>Small Sales</u>																	
	1			200			0.4			0.6	1.0	20			10	40	100	30	
	2			200			0.3	0.1		0.6	1.0	100	100						
	4			100			0.1				1.0							100	
	5			400			0.8			0.1	0.9		20					380	
				3797	24.8	0.5	8.3	1.5		6.8	16.6	1020	147		221	129	2250	30	
95	1	Northeast Trail	T22N, R19E	420	8.0		2.4				2.4							400	20
	1	North Side Big Deer	T21&22N, R17&18E	1251	22.0		3.3	3.9		0.8	8.0							1251	
	1	Woodswan II	T20N, R20E	358	6.0		0.7			1.3	2.0				98	160	100		
	2	Trapped Elk	T26N, R21E	617	5.0	1.5	2.7			0.9	3.6	617							
	2	East Fork Owl Creek	T24N, R17&18E	481	5.0		0.5			2.5	3.0		481						
	4	Kennedy Creek	T20N, R25E	210	2.5					1.0	1.0							210	
	5	North Fork Iron Cr.	T19N, R20E	389	3.5	1.5	1.7				1.7		389						
	5	Lake-Closeout	T19N, R20E	278		2.5	1.0			0.2	1.2							278	
		<u>Small Sales</u>																	
	1			200			0.4			0.6	1.0	20			10	40	100	30	
	2			100			0.2			0.3	0.5	50	50						
	4			100			0.1				0.1							100	
	5			400			0.8			0.1	0.9		20					380	
				4804	52.0	5.5	13.8	3.9		7.7	25.4	687	940		10	138	2879	150	

TABLE IV

Harvest Methods and Allowable Sale Quantity  
(Annual average for first decade)

<u>Practice</u>	<u>Allowable Sale Quantity</u>			<u>Acres</u>
	<u>Sawtimber</u> <u>(MMCF)</u>	<u>Roundwood</u> <u>(MMCF)</u>	<u>Firewood</u> <u>(MMCF)</u>	
Clearcut	3.3	0.2	---	2069
Shelterwood Seed Cut	2.2	---	---	1378
Shelterwood Removal Cut	0.5	---	---	344
Selection Cut	<u>0.1</u>	<u>---</u>	<u>0.8</u>	<u>204</u>
Totals	<u>6.1</u>	<u>0.2</u>	<u>0.8</u>	<u>3995</u>

Allowable Sale Quantity - 6.3 MMCF  
Timber Sale Program Quantity - 7.1 MMCF

\* Only sales that are expected to sell will be offered. Actual timber sale quantity will vary with the market.

TABLE V

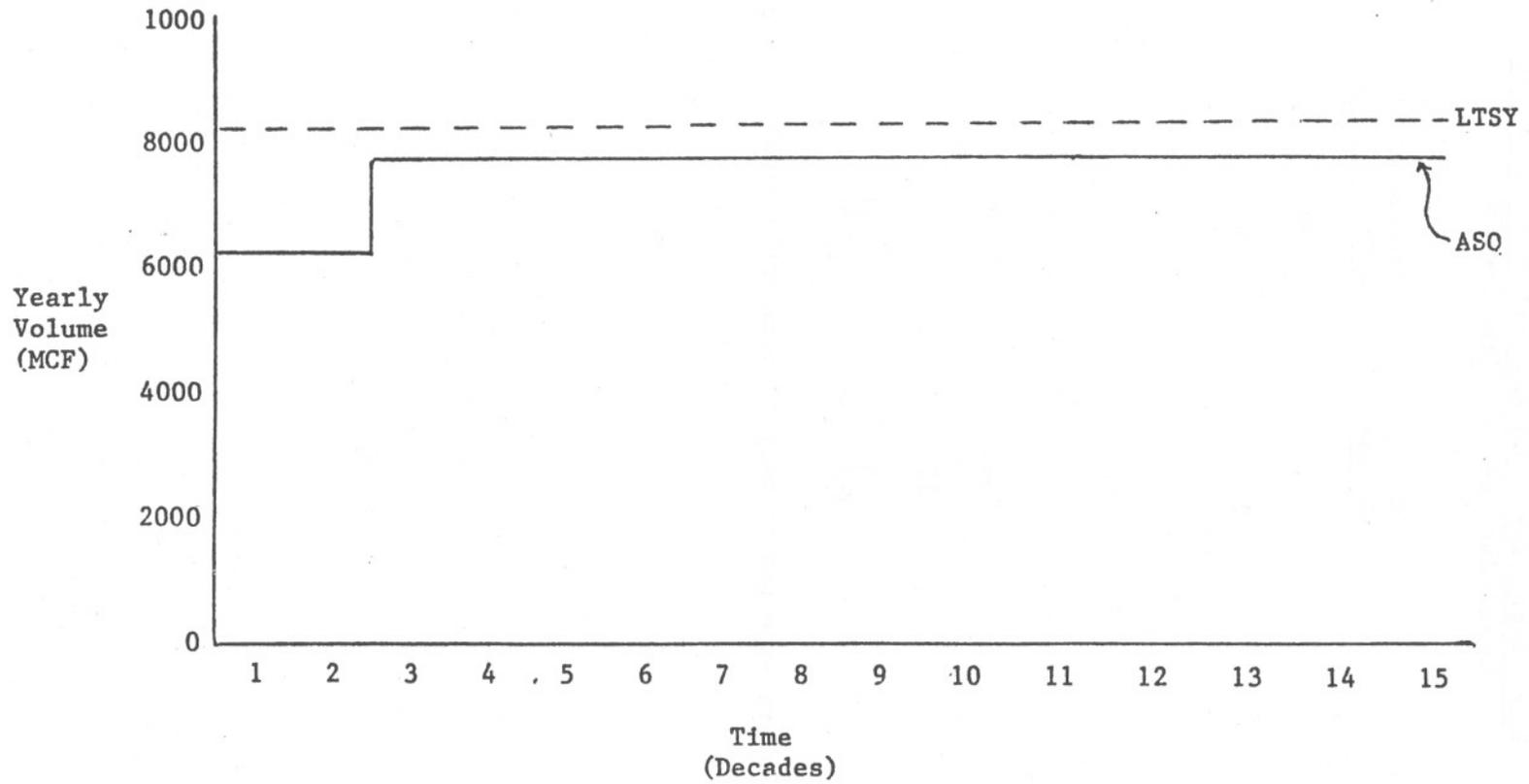
Timber Stand Improvement and Reforestation Activities  
(Annual Average for First Decade)

<u>Management Area</u>	<u>TSI Acres*</u>	<u>Reforestation Acres*</u>
3A-5A	122	240
3A-5B	153	301
3A-5C	4	8
4A	28	55
5A	37	73
5B	559	1,100
5C	38	75
8A	<u>9</u>	<u>18</u>
	950	1,870

\* Acreage estimates are expected to vary significantly based on project level analysis.

TABLE VI

Long-term Sustained Yield and Allowable Sale Quantity



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APPENDIX B

TABLE I

MINIMUM SPECIAL STIPULATIONS AS A CONDITION OF MINERAL LEASES

NO.	AREA/ENVIRONMENTAL CONDITION STIPULATION	Prim	Reten	Devel	High	Steep	Ripar	Season		Admin	Resrch	Signi	Munic	All
		Rec. Areas	& Part Reten	Rec Sites	Mass Fail Hzrd			Wldife Hbtat	T&E Hbtat		Area (RNA)			
2.	Visual - road, structure, etc.		X	X										
3.	No surface occupancy - (may replace #4).	X		X	X	X	X			X	X		X	
4.	No surface occupancy adjacent to road, river, trail, etc.		X	X			X							
5.	No drilling or storage near reservoirs, archeological sites, etc.		X	X			X					X		
6.	No surface occupancy - steep slopes.					X								
7.	No surface occupancy - seasonal.	X						X	X					
8.	Prohibit activity - muddy or wet periods.													X
9.	Restricted trail/road.								X					X
15.	Activity coordination.								X					
16.	Protection of T&E species.								X					

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### Special Stipulations for Leasing

All of the special stipulations were designed for oil and gas leases. However, they can be made applicable to other leasables subject to revisions to adapt them to a specific leasable mineral. All revisions will be subject to approval of BLM before attachment to a lease.

2. No access or work trail or road, earth cut or fill, structure or other improvement, other than an active drilling rig, will be permitted if it can be viewed from the \_\_\_\_\_ (road, lake, river, etc.) \_\_\_\_\_.

Description: (Identify those sections in lease offer where road, lake, river, etc., is located.)

3. No occupancy or other activity on the surface of ( legal subdivision ) is allowed under this lease.

or

No occupancy or other activity is allowed under this lease.

4. No occupancy or other surface disturbance will be allowed within \_\_\_\_\_ feet of the \_\_\_\_\_ (road, trail, river, creek, canal, etc.) \_\_\_\_\_. This distance may be modified when specifically approved in writing by the authorized officer, Bureau of Land Management, with the concurrence of the authorized officer of the Federal surface management agency.

Description: (Identify those sections in lease offer where road, trail, river, creek canal, etc., is located.)

5. No drilling or storage facilities will be allowed within \_\_\_\_\_ feet of \_\_\_\_\_ (live water, the reservoir, the archeological site, etc.) \_\_\_\_\_ located in \_\_\_\_\_ (legal subdivision) \_\_\_\_\_. This distance may be modified when specifically approved in writing by the authorized officer of the Bureau of Land Management, with the concurrence of the authorized officer of the Federal surface management agency.

6. No occupancy or other surface disturbance will be allowed on slopes in excess of \_\_\_\_\_ percent, without written permission from the authorized officer of the Bureau of Land Management, with the concurrence of the authorized officer of the Federal surface management agency.

7. In order to \_\_\_\_\_ (minimize watershed damage, protect important seasonal wildlife habitat, etc.) \_\_\_\_\_, exploration, drilling, and other development activity will be allowed only (during the period from \_\_\_\_\_ to \_\_\_\_\_, during dry soil periods, over snow cover, on frozen ground). This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any year may be specifically authorized in writing by the authorized officer of the Bureau of land Management, with the concurrence of the authorized officer of the Federal surface management agency.

8. In order to minimize watershed damage, during muddy and/or wet periods, the authorized officer of the Federal surface management agency, through the authorized officer of the Bureau of Land Management, may prohibit exploration, drilling, or other development. This limitation does not apply to maintenance and operation of producing wells.
9. The \_\_\_\_\_ (trail/road) will not be used as an access road for activities on this lease, except as follows: (No exceptions, weekdays during recreation season, etc.)
15. Activity Coordination Stipulation - This lease includes lands within \_\_\_\_\_ which has resource values sensitive to high levels of activity. In order to minimize impacts to these resources, special conditions, such as unitization prior to approval of operations, and/or other limitations to spread surface disturbance activities over time and space may be required prior to approval and commencement of any operations on this lease.
16. Protection of Endangered or Threatened Species. (This stipulation is being modified and will be sent out to the Forests soon.)



## APPENDIX C

### Locatable Minerals Standards and Guidelines

The following measures were designed to help guide the evaluation and approval of Notice of Intent and Plans of Operation which are processed under the authority of the Forest Service Mining Regulations, 36 CFR 228. They are not meant to be site specific measures, but rather can be used as standards and guidelines which should be addressed in all plans where they are applicable.

Bonding - A bond or other form of surety will be required for operations which are expected to result in significant resource disturbance. The amount of the bond will be sufficient to allow the Forest Service to reclaim all areas disturbed by the exploration/mining activity. Reclamation includes concurrent, seasonal, and final activities which are required to minimize surface disturbance, enhance stability, prevent erosion, and return disturbed land to a productive pre-mining condition. The standards which will guide the use and release of the reclamation bond are contained in 36 CFR 228, and are those modifications which are part of the Operating Plan and reclamation worksheet.

#### I. Location and Construction of Facilities

Facilities include all structures and equipment necessary to conduct the exploration or mining operation. The goal of the following requirements is to avoid unreasonable and unnecessary surface resource damage.

- A. All equipment and facilities will be located out of riparian and floodplain areas to the extent practicable.
- B. Criteria for selection of suitable sites shall include minimizing clearing and leveling requirements, avoiding surface and ground water resources, protection of high value resources and facilities such as roads, camping areas, critical wildlife habitats, and cultural-historic resource.
- C. Construction of facilities will be limited to those necessary for mining or exploration.
- D. Refuse which cannot be disposed of by burning will be hauled to an approved disposal site, not buried.
- E. Primitive outdoor toilets must be located a minimum of 150 feet from any water course or must be constructed to prevent contamination to any water source.

Holding tanks or other chemical toilets must be emptied at dump stations or at facilities designed for sanitary disposal of human wastes.

- F. An outdoor toilet or pit must also be used to dispose of grey water.
- G. Developed water supply systems and septic/filter or sewage treatment plants will require State approval.

- H. The area of use will be maintained to present a clean, neat, and orderly appearance. Trash, debris, unusable machinery, improvements, etc., will be disposed of currently.
- I. All above ground structures will be located out of sight of visually sensitive areas, when possible. They will be of a color that blends with the surrounding landscape. Height, mass, and numbers of structures will be kept to the minimum necessary to conduct operations.

## II. Clearing and Excavation

Leveling, excavation, or other surface disturbing work will be reviewed and approved in advance by Forest Service personnel. The goal of these requirements is to keep the extent and duration of disturbance to a minimum consistent with mining/exploration needs.

- A. Prior to any leveling or excavation (excluding road construction) topsoil will be stripped and stored for use in reclamation.
  - 1. Topsoil shall be removed from areas to be affected by surface operations or major structures, any drilling, blasting, mining, or other surface disturbance or surface lands. The area of removal will be kept to the minimum necessary to minimize the amount of bare ground present, as well as the amounts of topsoil storage necessary.
  - 2. A minimum of six inches of topsoil or combination of topsoil and subsoil will be saved for use in reclamation.
  - 3. Other growth mediums may be used where there is a lack of suitable topsoil present. It will be necessary to supplement this material with chemical soil amendments based on the results of a soil analysis.
  - 4. Topsoil will be stockpiled in an area which will be sheltered from wind and water erosion, unnecessary compaction, and contaminants. It will stabilize as necessary with temporary vegetative cover.
- B. Timber will be cut only to the extent necessary for timely relocation of the operations. The following guidelines apply to timber removal (where timber is not used for mining purposes and is on a nonsurface rights claim):
  - 1. All live timber felled during a mining operation that meets the following specifications is considered merchantable: Diameter at breast height of 7.0 inches; an 8-foot piece length that is 6 inches in diameter inside the bark on the small end and is at least 1/3 sound. Disposal of merchantable timber will be the responsibility of the Forest Service.
  - 2. All limbs, unmerchantable trees, and brush will be piled where they can be burned (burning bays will be required in dense

timber) without damage to standing live trees and physical improvements such as fences, poles, buildings, signs, tables, grills, and cattleguards. If conditions make it impracticable to locate piles where damage to live trees and physical improvements cannot be avoided, a space shall be cleared in a location designated by the Forest Service. Piles shall not be made on main traveled roads, in drainage ditches, below high water marks or live streams, or in intermittent stream courses.

3. Operator shall lop limbs from at least three sides of all timber felled or pushed over to a three-inch top and sever the top at that point.
4. If slash amounts created from an operation are low, the piling requirements can be waived and the slash treated by loppings, as stated above.
5. Disposal of all slash and reclamation of disturbed areas will proceed concurrently with the mining/exploration operation.

C. Sediment Control Measures - Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the permit area, to meet the more stringent of applicable State or Federal effluent limitations, and to minimize erosion to the extent possible. The necessity for these measures will be evaluated each season the operation is current and at the time of final reclamation. A list of sediment control guidelines are described under 6-2,j.

1. Disturbing the smallest practicable area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation.
2. Stabilizing backfilled material to promote a reduction of the rate and volume of runoff.
3. Retaining sediment within disturbed areas.
4. Diverting runoff away from disturbed areas.
5. Diverting runoff using protected channels or pipes through disturbed areas to prevent additional erosion.
6. Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment.
7. Sediment ponds will be normally used as a last resort after other methods of diversion and retention have been considered. The following issues must be addressed in the design of these facilities: Proper location near the disturbed area and isolated from surface and ground water flows; sized to

accommodate the design flows (this must be determined on a case by case basis) and sediment from the disturbed area for the given period of retention; proper design of features such as emergency spillways, height, and width of embankments, design slopes, materials, and provisions for cleanout, inlet and outlet channels; proper construction techniques including site clearing and foundation preparation, material placement, stabilization, and revegetation.

Those structures which have embankments over 10 feet in height (measured from the bottom of the spillway to the base of the fill) will require State of Idaho review and approval.

### III. Hazardous Materials Storage and Use

Hazardous materials are those which are toxic or capable of causing damage to plant or animal life. This includes fuels and lubricants as well as other chemical compounds. The objective of the following requirements is to insure that such materials are properly transported and stored to prevent contact with the environment and that measures are in place to contain and dispose of such materials in case of an accidental spill.

- A. Manufacturers recommendations and governmental regulations must be followed for transportation, use, storage, disposal, and marking of any pesticide, chemical agent, fuel, or explosive. The primary federal agencies involved in administering such materials are the Department of Transportation (DOT) and the Mine Safety and Health Administration (MSHA).
- B. Facilities must be designed to contain the entire volume of stored hazardous materials in case of accidental spillage. A Spill Prevention Control and Countermeasures plan (SPCC) is required by DOT regulations for single tanks above ground in excess of 660 gallons or multiple tanks in excess of 1,320 gallons.
- C. An area should be established where all equipment would be serviced, fueled, and parked when not in use.
- D. All used lubricants, hydraulic fluids, or other hazardous byproducts or waste will be disposed of at a State approved site.
- E. Storage facilities for materials capable of causing water pollution, if accidentally discharged, shall be located to prevent any spillage into waters, or channels leading into water, that would result in harm to fish and wildlife or to human water supplies.
- F. Drainage from acid forming and toxic forming underground development waste into ground and surface water shall be avoided by:
  - 1. Identifying, burying, and treating, where necessary, waste and spoil which may be detrimental to vegetation or may adversely affect water quality if not treated or buried.

2. Burying, or otherwise treating, all acid forming or toxic forming underground development waste and spoil within 30 days after it is first exposed on the mine site. Temporary storage of such materials may be approved upon a finding that burial or treatment within 30 days is not reasonable and will not result in any material risk of water pollution or other environmental damage. Storage shall be limited to the period until burial or treatment first becomes feasible. Acid forming and toxic forming underground development waste and spoil to be stored shall be placed on impermeable material protected from erosion and contact with surface water.

#### IV. Waste Dumps, Settling Ponds, and Diversions

Settling ponds and waste dump locations and design will be reviewed and approved by the Forest Service using the following criteria:

- A. Waste dumps will be approved prior to construction by Forest and/or Regional engineering specialists. The following are issues which must be addressed before an evaluation can be completed:
  1. The volume of material must be estimated using present and potential plans.
  2. The size of material must be estimated.
  3. The kind of waste rock must be estimated with emphasis on those properties which influence weathering and stability, as well as the potential for release of acid forming or other toxic materials.
  4. Distance and accessibility of the dump site from the source of the waste rock.
  5. Slope steepness and shape (concave/convex) in the disposal area.
  6. Surface or ground water at the disposal site.
  7. Is the disposal site suitable for reclamation and revegetation compatible with the resource values present?
  8. Is the geology of the disposal area suitable as a stable foundation for the dump?

Based on such issues, the dump will be designed and constructed to minimize resource damage and enhance the reclamation effort. Design and construction features are likely to include the type of dump, site preparation needed, surface and subsurface drainage features, placement and compaction of waste rock, and the reclamation techniques which will be used. Specific dump stability and performance standards which were developed by the Intermountain region are appended to this document.

B. Settling ponds must be properly located and designed if they are to protect water quality and allow full operation. Design should be reviewed by the Forest Service and/or State of Idaho engineering departments if dams are over 10 feet in height or where serious damage could occur in the event of failure. Sediment ponds have been discussed under Clearing and Excavation. The following criteria apply to settling ponds used in placer operations:

1. Ponds must be located away from live water out of possible runoff channels and areas with seasonally high water tables.
2. Ponds must be constructed so that sediment laden water cannot become a point source of pollution to any water resource. Impermeable liners will be used where needed to maintain established water quality standards. Pollution in this sense means any change in ambient water quality in excess of that allowed under the State of Idaho Water Quality Standards.
3. To minimize the risk of failure, ponds should be excavated rather than enclosed by berms, where conditions (ground water) permit. Ponds with embankments which exceed 10 feet from the toe of the fill to the crest of the bank, must be reviewed and approved by the Idaho Department of Water Resources.
4. Where a central pond will be used to serve an entire operation, the issues of pond location, and design become especially critical.

Location must be well away from surface or ground water, and isolated from surface flows or seasonal runoff.

The materials in which the pond is constructed will dictate other design parameters. If water is lost too rapidly due to percolation through the bottom and sides, there may be a resulting water pollution problem and/or a shortage of process water. If the pond material is too tight, or if it must be lined to prevent pollution there will be a problem with disposal of the excess water unless the washing plant can use the wastewater.

In almost all cases provisions will have to be made for pond cleanout and sludge dewatering in order to maintain capacity.

The size of the pond will depend on the volumes of water used, particle size distribution of the placer material and the capability of the washing plan to use sediment laden water.

Flocculants may have to be used to increase the settling rate within the pond.

5. There can be no discharge to live water without an approved National Pollution Discharge Elimination System (NPDES) permit.

6. The ponds will be stabilized and revegetated as soon as practicable after construction.
  7. Emergency spillways will be constructed to safely pass accidental overflow. The interior of the pond will be stabilized in the area of the inlet pipe or ditch to prevent erosion.
- C. All diversion channels, or alterations of channels, will be reviewed by Forest hydrology and engineering departments and have the necessary Idaho Stream Alteration Permit.
1. All permanent diversion structures and channels must be designed to handle seasonal high flows without damage to the structure or stream channel. The combination of channel, bank, and flood plain configurations shall be adequate to safely pass the peak runoff of a 10-year, 24-hour precipitation event for temporary diversions; a 100-year, 24-hour precipitation event or larger for permanent diversions. However, the capacity of channel, itself, should be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream of the diversion.
  2. Temporary diversions or pumps must be removed prior to high flows in the spring.
  3. When no longer needed to achieve the purpose for which they are authorized, all temporary stream channel diversions shall be removed and the affected land regraded and revegetated.
  4. When permanent diversions are constructed or stream channels restored after temporary diversions, the operator shall restore, enhance where practicable, or maintain natural riparian vegetation on the banks of the stream; establish or restore the stream to a natural meandering shape of an environmentally acceptable gradient; establish or restore the stream to a longitudinal profile and cross section, including aquatic habitats (usually a pattern of riffles, pools, and drops rather than uniform depth) that approximate natural stream channel characteristics.
- D. Dam location, design, and construction will be reviewed and approved by the Forest engineering, hydrology, and fisheries departments and will meet all applicable State and Federal regulations.

#### V. Roads

The objectives of the following requirements are to minimize the amount of land disturbed by construction, ensure sound road design to minimize mass stability and erosion problems, avoid impacts to other resources control use, and provide for reclamation of disturbed areas.

- A. Road location, alignment, width, grades, and drainage will be agreed upon prior to construction. This will normally involve the claimant,

district, and engineering personnel. The Salmon National Forest Soil and Water Guidelines for Mining Access Roads will be used, unless more site specific design criteria are available.

- B. Right-of-way timber will be cut (not pushed over) and handled as described in clearing-excavation. Care will be taken to avoid forming windrows of slash along the shoulder of the fillslope. Stumps and slash may be windrowed at the toe of the fillslope for disposal.
- C. Maintenance of Forest roads outside the claims will be approved through the use of a road maintenance agreement.
- D. Cut and fillslopes will be reseeded in the fall after construction.

#### VI. Exploratory Drilling

- A. Drill site locations will have topsoil removed and stockpiled prior to construction. The amount of topsoil will vary depending on the thickness of the soil horizon. A general rule will be to save the upper 12 inches of soil, except on talus slopes and very steep sideslopes. Once the drill site is no longer needed, it will be shaped to as near a natural contour as practicable, the topsoil spread, and the area reseeded as described under Reclamation.
- B. Drill cuttings, circulation muds, and additives shall be contained on site using metal tanks or circulation pits. Upon completion of the hole, the pits (if used) will be covered and the generated wastes buried.
- C. Materials used to maintain circulation will be biodegradable and nontoxic, except bentonitic mud additives and materials used for plugging holes.
- D. Drill holes will be capped when necessary for safety or water quality reasons.
- E. Drill rig type (core, rotary) and delivery systems (truck, helicopter, caterpillar tractor) will be chosen to provide the necessary geologic information in an economic and environmentally sound manner. The relative weight given to environmental concerns and economics will vary with the resources involved (wilderness vs. roadless vs. unclassified lands).
- F. Other earth moving exploration methods such as trenching or the digging of pits should be designed to obtain the needed geologic information with a minimum of surface disturbance. In most cases the operator will be required to consider the use of excavators or backhoes in lieu of dozer excavation where the depth of excavation allows the use of these machines. Excavation programs will usually be staged to recognize the opportunity of gathering the full complement of information in those areas with the highest geologic potential, while minimizing disturbance areas with low mineral values.

## VII. Reclamation

The goal of reclamation requirements are to minimize surface disturbance during operations (concurrent reclamation) and to return disturbed lands to a productive and stable condition within one year after operations cease.

- A. A reclamation bond will be required based on an estimate of the actual cost of reclamation. In formulating the bond the following will be considered:
1. Removal or disposal of all equipment and facilities. This includes disposal of toxic or waste materials and draining of ponds. All such work will be accomplished in such a way to ensure long term stability of the site and to prevent contamination of ground or surface waters. If necessary, these materials shall be treated to neutralize toxicity, in order to prevent water pollution and sustained combustion and minimize adverse effects on plant growth and land uses. Acid forming or toxic forming material shall not be buried or stored in proximity to a drainage course to prevent, or pose a threat of, water pollution.
  2. Backfilling - In placer operations this involves replacing graded waste so that coarse gravels are covered by successively finer materials.  
  
Backfilled materials shall be selectively hauled or conveyed and compacted wherever necessary to prevent leaching of acid forming and toxic forming materials into surface or ground water and wherever necessary to ensure stability of the backfilled materials. The method and design specifications of compacting material shall be approved before acid forming or toxic forming materials are covered. As backfilling progresses, materials must be compacted and graded to the desired contour and slope. Final grading should be on the contour and slopes should not exceed 3 to 1.
  3. Topsoil Spreading - Topsoil or other acceptable growing medium will be spread and final grading should be on the contour.
  4. Seedbed Preparation - Where compacted layers would inhibit vegetative growth, the topsoil will be ripped or harrowed on the contour. Where erosion is expected to be a problem, mulch and/or terracing will be used. Where soil fertility is expected to be a limiting factor, a fertilizer or other amendment may be required.
  5. Reseeding - A seed mixture designed to promote rapid ground cover and long term stability will be formulated based on site specific conditions. Seed will be broadcast in most cases, but where erosion is expected to be a problem, drilling or hydro-mulching may be required. Revegetation efforts shall be

considered successful if it results in at least 70 percent of the ground cover of the pre-mined or adjacent reference area for a period of two years, and is effective in controlling on site erosion. Trees and/or shrubs may be required to meet visual and/or wildlife habitat requirements. Stocking density of trees and shrubs will be specified based on site requirements.

6. Channel Reconstruction - Where stream channels will be reconstructed, sound engineering design will ensure that material selection, size, and placement will result in stable channels for a period of at least two years after construction. Where high value fisheries are involved additional design features may be required to restore habitat based on channel shape, depth, and alignment.
7. Reclamation Protection - Reclaimed areas will be protected as necessary with fencing, road closures, or other means until such time as minimum stocking levels have been achieved.
8. Bonds will be held until the Forest Service determines that no significant erosion is occurring and reseeded has resulted in a continuous ground cover as described under reseeded. This will normally be a minimum of one year for mechanical or structural stability and two years for revegetation.
9. Sediment Control Measures - Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to prevent additional contributions of sediment to stream flow or to runoff outside the permit area, to meet the more stringent of applicable State or Federal effluent limitations, and to minimize erosion to the extent possible. The necessity for these measures will be evaluated each season the operation is current and at the time of final reclamation. These measures include, but are not limited to:
  - Disturbing the smallest area practicable at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation.
  - Stabilizing the backfilled material to promote a reduction of the rate and volume of runoff.
  - Diverting runoff away from disturbed areas.
  - Diverting runoff using protected channels or pipes through disturbed areas to prevent additional erosion.
  - Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment.
  - Sediment ponds will be normally used as a last resort after other methods of diversion and retention have been considered.

The following issues must be addressed in the design of these facilities: Proper location near the disturbed area and isolated from surface and ground water flows; sized to accommodate the design flows (this must be determined on a case by case basis) and sediment from the disturbed area for the given period of retention; proper design of features, such as emergency spillways, height, and width of embankments, design slopes, materials and provisions for cleanout, inlet and outlet channels; proper construction techniques, including site clearing and foundation preparation, material placement, stabilization and revegetation.

- Those structures which have embankments over 10 feet in height (measured from the bottom of the spillway to the base of the fill) will require State of Idaho review and approval.

- Maintain undisturbed buffer strips along streams or other bodies of water.

- Proper design of stream crossings including road approaches, use of culverts, fords or other measures to prevent roadways from contributing sediment to streams.

10. Disturbed areas will be left in a stable condition on a yearly basis. While this may not require complete reclamation, diversions, draining of ponds, and use of sediment ponds may be required to prevent resource damage. Areas which will not be used again the following year should be prepared for reclamation as described in 1 through 9, above.

#### VIII Resources

The following requirements will be employed on a case by case basis where high value resources are involved.

- A. Wildlife - Road building and other severe disturbances should be scheduled on key wildlife habitat areas during periods of non-occupancy, where possible. The periods of occupancy for big game calving/fawning areas, May 1 through July 15; breeding areas, September 1 through October 1 (elk) and November 1 through December 10 (mule deer); winter range, December 1 through April 15; security areas, critical periods coincide with hunting season dates. For raptors and other birds of prey, the critical nesting/rearing period would be from March 1 through July 1, and may continue into August. Critical nesting/rearing periods for waterfowl would be from about March 1 through July 1. Nesting may also continue into August.

Reduce the effective loss of big game habitat from road access by adhering to the following recommendations:

1. Locate roads as far away from key habitat areas as reasonably possible.

2. Locate roads in timbered habitats when cover is not a limiting factor and keep clearing of rights-of-way to a minimum.
3. Locate roads to facilitate closure after use.
4. Establish seasonal closures in key habitat areas.
5. Avoid creation of loop roads.
6. Design activities to concentrate disturbance into the smallest possible area for the shortest possible time.

Minimize the loss of limited or unique habitats by adhering to the following recommendations:

7. Where timber is harvested for other than clearing purposes, maintain at least three standing dead trees per acre greater than, or equal to, eight inches DBH as nesting/rearing sites.
8. Avoid activities near cliff, talus, or cave habitats whenever possible.
9. Maintain a buffer zone of nondisturbance with a radius of at least 300 feet around raptor nest sites, where possible.

Reduce the loss of riparian habitat by adhering to the following recommendations:

10. Maintain vegetation around bodies of water and along all perennial streams and waterways that will not be used in operating the mineral development.
11. Protect all marsh and wetland areas from drainage, where feasible.
12. Design roads and other constructed facilities to be located out of riparian zones, where feasible.
13. Fencing will be provided to exclude wildlife from water sources contaminated by toxic wastes.

- B. Cultural Resources - Prior to approving any surface disturbing activities, the Forest Service will conduct an inventory in the affected area to determine if prehistoric or cultural-historic resources are present. If resources are discovered, a mitigation plan will be developed by the Forest Service and implemented by the operator according to the provisions of the Antiquities Act of 1909 and the National Historic Preservation Act of 1966.

The Operator shall not damage, alter or destroy any object of antiquity, historic structure or feature. If the operator should discover such an object, structure or feature he will notify the Forest Service representative of its existence so that the necessary inventory and investigation can be done as described in B. above.

C. Fire and Fuels Management -

1. Prior to burning of materials, such as road right-of-way slash, mine clearing slash, and other refuse, the operator will be required to obtain a burning permit.
2. Approved mufflers and/or spark arrestors will be required on all internal combustion engines.
3. The operator will be required to maintain a cache of fire-ready tools at his/her operating site(s) at all times.

D. Recreation - The following will be used to minimize adverse impacts on developed campgrounds:

1. Maintain vegetation buffers around developed sites.
2. Conduct activities in low use season, where feasible.
3. Where feasible, minimize activities in early morning or afternoon hours when operating near an occupied site.
4. The Forest Service may take measures relative to managing developed sites including temporary closures, permanent closures, providing visitor information regarding the mining activity, and conversion from overnight to day use.

To minimize adverse effects on dispersed recreation use of the following measures may be required:

1. Maintain a buffer zone along highly sensitive trails.
2. Encourage activity in areas already containing evidence of human modification.
3. Utilize existing roads to the extent possible.
4. Coordinate new road construction with planned or proposed travel corridors.
5. Forest Service may choose to prohibit motorized public recreation access where necessary.
6. Forest Service may choose to relocate trails or segments of trails where necessary.

E. Air - The purpose of the following measures is to minimize adverse impacts to air quality in the short and long term.

1. Minimize the aerial extent of disturbed areas, prompt revegetation of disturbed sites.
2. Periodic watering or use of dust abatement chemicals.

3. Use of traffic control including timing, types, and speed of vehicles.
  4. Special point source techniques such as enclosed conveyors, watering or covering trucks, and use of vacuum scrubbers may be required where necessary.
- F. Water - Violation of State of Idaho Water Quality Standards as a result of any activity or facility covered by this Plan shall be cause for immediate cessation of operations until successful corrective action has been taken. All diversions and water use must be authorized by the Idaho Department of Water Resources.

IX. General

The right of the public to lawfully use the land encompassed by the boundaries of the mining claims shall not be restricted or denied by the operator. The right of the public does not include any activity that interferes with the operation of any activity that is mineral related without the consent of the claimant.

The operator, in the exercise of this operating plan, shall require that his employees, sublessees, contractors, subcontractors, or renters and their employees comply with all conditions of this plan.

APPENDIX D

TABLE I

Developed Recreation Construction Schedule  
(Campgrounds, Boating Sites, and Trailheads)

	<u>PAOT CAPACITY</u>	<u>MGM'T AREA</u>
1986-90		
Spring Creek Campground	200	4A
Spring Creek Boating Site	40	4A
Saddle Creek Trailhead	30	3A-5B
1991-2000		
Owl Creek Boating Site	40	4A
Newland Ranch Picnic Ground	50	4A
Newland Ranch Boating Site	40	4A
Big Timber Creek Trailhead	30	5B
Bannock Pass Trailhead	30	5B
2001-10		
Ebenezer Campground	100	4A
Meadow Lake Campground	90	5C
Camas Creek Trailhead	30	3A-5C
Middle Fork Little Timber Cr. Trailhead	30	5B
2011-20		
Lost Trail Pass Trailhead	30	3A-5A
Twin Creek Trailhead	30	3A-5A
Big Hole Pass Trailhead	30	3A-5A
2021-30		
North Fork Hat Creek Trailhead	30	5B
Spring Creek Trailhead	30	3A-5B

TABLE II

## 10-Year Wildlife Habitat (Terrestrial) Improvement Action Plan

Project Descrip.	District	Unit of Measure	Output Units (By Year)												
			86Rx	87Rx	88Rx	89Rx	90Rx	91Rx	92Rx	93Rx	94Rx	95Rx			
Prescribed Burning Sagebrush/Grass	Cobalt D-1	Acres	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A
	N. Fork D-2	Acres	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A
	Leadore D-4	Acres	50 4A/8A	4A/8A	100 4A/8A	50 4A/8A	4A/8A	4A/8A	100 4A/8A	4A/8A	4A/8A	50 4A/8A	100 4A/8A	4A/8A	4A/8A
	Salmon D-5	Acres	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	50 4A/8A	4A/8A	50 4A/8A	4A/8A	4A/8A	50 4A/8A	4A/8A	50 4A/8A
Aspen Regeneration	Cobalt D-1	Acres	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B
	N. Fork D-2	Acres	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B
	Leadore D-4	Acres	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B
	Salmon D-5	Acres	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B	20 5A/5B
Wildlife Seeding	Cobalt D-1	Acres	10 5A/5B	10 5A/5B	10 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B
	N. Fork D-2	Acres	5 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B	5 5A/5B	10 5A/5B
	Leadore D-4	Acres	5 5A/5B	5 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	10 5A/5B	10 5A/5B
	Salmon D-5	Acres	5 5A/5B	5 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	10 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	5 5A/5B	10 5A/5B	10 5A/5B
Browse Regeneration	Cobalt D-1	Acres							5 4A						
	N. Fork D-2	Acres								5 4A					
	Leadore D-4	Acres	5 4A								5 4A			5 4A	
	Salmon D-5	Acres										5 4A			
Road Closures	Cobalt D-1	Struct	2 A11	2 A11	1 A11	1 A11		A11	1 A11		A11	1 A11		A11	1 A11
	N. Fork D-2	Struct	2	2	1 A11	1 A11			1 A11		1 A11			1 A11	1 A11
	Leadore D-4	Struct	2 A11	2 A11	2 A11	1 A11		1 A11			1 A11			1 A11	2 A11
	Salmon D-5	Struct	2 A11	2 A11	2 A11	1 A11		1 A11			1 A11			1 A11	1 A11
Water Developments	Cobalt D-1	Struct							1 8A					1 8A	
	N. Fork D-2	Struct	1 8A				1 8A					1 8A			
	Leadore D-4	Struct			1 8A						1 8A				
	Salmon D-5	Struct		1 8A						1 8A					1 8A
Nongame Hbtat Imp. (Nest boxes, etc.)	Cobalt D-1	Struct	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A
	N. Fork D-2	Struct	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A
	Leadore D-4	Struct	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A
	Salmon D-5	Struct	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A	2 4A

TABLE III  
Fish Habitat Improvement

Project Name and/or Description	District	Unit	Output by Year										
			86Rx	87Rx	88Rx	89Rx	90Rx	91Rx	92Rx	93Rx	94Rx	95Rx	
Panther Creek Stream Improvement (Fencing, reveg. barriers, etc.)	Cobalt	Acres	4A	5 4A	5 4A	5 4A							
		Struct.	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A	40 4A
Moyer Creek Stream Improvement (Fencing, reveg. barriers, etc.)	Cobalt	Acres				2 4A/5C	2 4A/5C	2 4A/5C	2 4A/5C				
		Struct.				5 4A/5C	5 4A/5C						
Panther Creek Culvert Correction Barrier	Cobalt	Acres	40 4A										
Pony Lake Rehab.	Cobalt	Acres										5 5B	
Resident Lake & Stream Survey	Cobalt	Acres	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11	50 A11
Camas Creek Stream Improvement	Cobalt	Acres	5 3A/5C	5 3A/5C									
		Struct.	20 3/5C	20 3A/5C	20 3A/5C	20 3A/5C							
Chinook Rearing Ponds	Cobalt	Struct.			1 4A	1 4A	1 4A	1 4A					
Anadromous Spawning and Rearing Habitat Acquisition	Cobalt	Acres					10 3A/4A	10 3A/4A	10 3A/4A	10 3A/4A			
Anadromous Species Incubation Facilities	Cobalt	Struct.				1 4A	1 4A	1 4A	1 4A				
Anadromous Species Spawning and Rearing Surveys	Cobalt	Acres	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11

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Project Name and/or Description	District	Unit	Output by Year											
			86Rx	87Rx	88Rx	89Rx	90Rx	91Rx	92Rx	93Rx	94Rx	95Rx		
Squaw Creek Culvert Correction	North Fork	Acres		4 3A										
Twin Creek Culvert Correction	North Fork	Acres			5 3A									
Spring Cr. Culvert Correction	North Fork	Acres				3 3A								
Owl Creek Barrier Removal	North Fork	Acres					4 3A/4A							
Owl & Squaw Creeks Diversion Screens	North Fork	Structures						1 4A	1 3A					
Horse Creek Debris Removal	North Fork	Acres			5 3A	5 3A	5 3A							
N. Fork Incubation Channels	North Fork	Structures			1 3A	1 3A	1 3A	1 3A						
North Fork Chinook Rearing Ponds	North Fork	Structures					1 3A	1 3A	1 3A	1 3A				
Anadromous Spawning and Rearing Survey	North Fork	Acres	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11	10 A11
Ditch Cr. Culvert Correction	North Fork	Acres									5 3A			
Resident Fish Take & Stream Survey	North Fork	Acres	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11	30 A11
Bear Valley Creek Stabilization	Leadore	Structures			2 3A									

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Project Name and/or Description	District	Unit	86Rx	87Rx	88Rx	89Rx	90Rx	91Rx	92Rx	93Rx	94Rx	95Rx
Anadromous Species Incubation Channels	Leadore	Structures			1 3A	1 3A	1 3A	1 3A				
Anadromous Species Rearing Ponds	Leadore	Structures				1 3A	1 3A	1 3A	1 3A			
Anadromous Species Spawning and Rearing Surveys	Leadore	Acres	5 A11									
Big Bear Creek Stabil- ization and Stream Improvement (Fencing, reveg., barriers, etc.)	Leadore	Structures	10 8A									
		Acres	1 8A									
Hawley Creek Stabili- zation and Stream Improvement (Fencing, reveg., barriers, etc.)	Leadore	Structures	5 4A									
		Acres	1 4A									
Big Timber Creek Stabilization and Stream Improvement (Fencing, reveg., barriers, etc.)	Leadore	Acres	1 5B									
		Structures		5 5B								
Eightmile Creek Sta- bilization and Stream Improvement	Leadore	Structures				5 5B						
Middle Fork Timber Creek Reservoir Recon.	Leadore	Structures			1 5B							
Reservoir Creek Lake Improvement	Leadore	Structures				1 8A						

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Project Name and/or Description	District	Unit	86Rx	87Rx	88Rx	89Rx	90Rx	91Rx	92Rx	93Rx	94Rx	95Rx
Resident Fish Lake and Stream Survey	Salmon	Acres	20 A11									
Fish Population Control	Forestwide	Acres	50 A11									
Fish Population Control	Forestwide	Acres	20 A11									
Enhancement	Forestwide	Structure	20 A11									

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TABLE IV  
-1-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
Meyers Cove Meadow Reseeding	D-1	Camas Creek (3A-5C)	Acres			200	100							
Meyers Cove Division Fence	D-1	Camas Creek (3A-5C)	Miles	1.0										
Meyers Cove Water Developments	D-1	Camas Creek (3A-5C and 2A)	Struct.	2										
Morgan Creek Spring Developments	D-1	Morgan Creek (5B)	Struct.						2					
Morgan Creek Division Fence Reconst.	D-1	Morgan Creek (4A and 5B)	Miles	1.0										
Forney Spring Developments	D-1	Forney (4A)	Struct.		1	1	1							
Forney Boundary Fence Reconst	D-1	Forney (4A)	Miles			2.0	2.0							
Ransack Meadows Fence	D-2	Indian Ridge (4A)	Miles		.5									
Unnamed Spring	D-2	Burns Basin	Struct.				1							
Hull Saddle and Drift Fence	D-2	Indian Ridge	Miles				.2	.2						
Hull Saddle Cattle Guard	D-2	Indian Ridge	Struct.				1							
Hughes, Hull Drift Fence	D-2	Indian Ridge	Miles							1				
Bear Spring	D-2	Indian Ridge	Struct.								1			

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TABLE IV

-2-

FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
Alder Spring and Drift Fence	D-2	Indian Ridge	Struct.									1		
Lower Kriley Spring	D-2	4th of July	Struct.			1								
Cottonwood Spring Lower	D-2	4th of July	Struct.				1							
Cottonwood Spring Upper	D-2	4th of July	Struct.					1						
Tin Cup Spring	D-2	Indian Ridge	Struct.									1		
Two Water Develop. in Upper Sage Unit	D-2	Sage Creek	Struct.						1	1				
Division Fence be- tween Buster Gulch and Lower Sage Cr.	D-2	Sage Creek	Miles					.75						
Boundary Fence be- tween Sage Creek and Hull Creek	D-2	Sage Creek	Miles				.5							
Hughes Creek Pasture Fence	D-2	Adminis- trative	Miles						2					
Noxious Weed Control	-	Forestwide (All)	Acres	60	60	60	60	60	60	60	60	60	60	60
Hayden Basin Boundary Fence (3 miles)	D-4	North Hayden (5B)	Miles				.5	.5						
McNutt/Bear Creek Fence (1.5 miles)	D-4	North Hayden (5B)	Miles							.7				

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TABLE IV  
-3-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
		(Mgmt. Area)												
Bear Creek Water Development (1)	D-4	North Hayden (8A)	Struct.											
Coiner Slope Water Development	D-4	North Hayden (8A)	Struct.											1
Fir Spring Water Development	D-4	North Hayden (8A)	Struct.							1				
Upper Fork Lake Cr. Water Development	D-4	North Hayden	Struct.		1									
Tobin Spring Water Development	D-4	North Hayden (8A)	Struct.									1		
Left Fork Lake Cr. Water Development	D-4	North Hayden	Struct.			1								
McNutt/Bear Cr. Burn	D-4	North Hayden (5B-8A)	Acres									150		
Rye Grass/Lake Cr Burn	D-4	North Hayden	Acres					100						
Stroud Creek Burn	D-4	Lee Creek (5B)	Acres					150						
Short Creek Water Development	D-4	Timber Creek (5B)	Struct.			1								
Short Creek Fence	D-4	Timber Creek (5B)	Miles		.3									
Timber Creek Division Fence	D-4	Timber Creek (5B)	Miles		.4									
Trail/Lake Creek Fer	D-4	Timber Creek (5B)	Miles					.8						

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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year											
				86	87	88	89	90	91	92	93	94	95		
Mud Spring Water Development	D-4	Powder Horn (8A)	Struct.				1								
Dry-Perk-Bull Canyon Burn	D-4	Powder Horn (8A)	Acres		50	75									
Patte Creek Ridge Div- ision Fence (2.5 miles)	D-4	Agency Creek (5B)	Miles	.8	.5	.3									
High Creek Water Development	D-4	Agency Creek (6A)	Struct.				1								
Agency Creek #2 Water Development	D-4	Agency Creek (6A)	Struct.	1											
Buffalo Basin/Lemhi Pass Burn	D-4	Agency Creek	Acres			50	100	50	100				100		
Moonshine Spring Water Development	D-4	Lee Creek (5B)	Struct.									93			
Stroud - Eightmile Unit Fence	D-4	Lee Creek (5B)	Miles							.3				.3	
Walters Creek Forest Bndry Fence	D-4	Lee Creek (5B)	Miles									.5			
Meadow Creek Water Development	D-4	South Hayden (5B)	Struct.				1								
Meadow Mtn. Boundary Fence	D-4	South Hayden (3A-5B)	Miles		2.5										
Meadow Zeph Unit Fence	D-4	South Hayden (5B)	Miles				.5						.5		

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year											
				86	87	88	89	90	91	92	93	94	95		
Birch Spring Water Development	D-4	(Mgmt. Area) Hawley Creek (8A)	Struct.												1
Box Spring Water Development	D-4	Hawley Creek (8A)	Struct.								1				
Hawley Creek Forest Bndry Fence	D-4	Hawley Creek (4A)	Miles					.2				.2			.1
Little Bear Big Bear Fence	D-4	Hawley Creek	Miles		2										
Whittaker Spr. Water Development	D-4	Hawley Creek (8A)	Struct.									1			
Cabin Creek (Right Fork) Wtr. Develop.	D-4	Hawley Creek (4B-1)	Struct.							1					
Aspen Creek (Left Fork) Wtr. Develop.	D-4	Hawley Creek (4B-1)	Struct.		1										
Lower Reservoir Drift Fence	D-4	Hawley Creek (4B-1)	Miles											.4	
Upper Reservoir Drift Fence (.6 mile)	D-4	Hawley Creek (4B-1)	Miles								.6				
Wheetip Wtr. Develop.	D-4	Hawley Creek	Struct.					1							
Big Bear-Meadow Flat Creek Fence	D-4	Hawley Creek	Struct.		1	1									
Upper Reservoir Drift Fence (.6 mile)	D-4	Hawley Creek (4B-1)	Miles								.6				
Wheetip Wtr. Develop.	D-4	Hawley Creek (4B-1)	Struct.					1							

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TABLE IV  
-6-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year									
				86	87	88	89	90	91	92	93	94	95
Big Bear-Meadow Flat Wtr Developments	D-4	(Mgmt. Area) Hawley Creek (8A)	Struct.		1	1							
Wheetip-Deep Cr-Elk Mountain Burns	D-4	Hawley Creek (8A/4B-1)	Acres	100		100		100					
Meadow Mtn-Mill Creek Burns	D-4	South Hayden (4B-1 5B)	Acres	150									150
Kenney Creek Boundary Fence	D-4	Pattee Creek (2A)	Miles							.8			
Pasture Mtn. Water Development	D-4	Pattee Creek (2A)	Struct.		2								
Kenney Creek Slope Water Development	D-4	Pattee Creek	Struct.		1								
Little Dry Gulch Water Development	D-4	Nez Perce (5C)	Struct.		1								
Nez Perce Cr. Bndry Fence	D-4	Nez Perce (5C)	Miles	.5									
Deer Park Creek Burn	D-4	Deer Park (5B)	Acres			150							
Deer Park Bndry Fence (.5 mile)	D-4	Deer Park (5B)	Miles			.5							
Sandy Cr. Wtr. Devel.	D-4	Sandy Creek (2A)	Struct.	2									
Grove Creek Pipeline	D-4	Swan Basin (8A)	Struct.					1					

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TABLE IV  
-7-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
Swan Basin Range Burns	D-4	Swan Basin (8A)	Acres		100						100			
Swan Basin Bndry Fence (2.5 miles)	D-4	Swan Basin (8A)	Miles			2.5								
Cruikshank Spring Water Development	D-4	Grizzly Hill (8A)	Struct.								1			
Wagon Box Spring Water Develop.	D-4	Grizzly Hill (5B)	Struct.						2					
Grizzly Hill Bndry Fence	D-4	Grizzly Hill (2A/8A)	Miles		.5	1.5								
Grizzly Hill Division Fence	D-4	Grizzly Hill (8A)	Miles							2				
Grizzly Hill Range Burns	D-4	Grizzly Hill (2A/8A)	Acres	100		100		100						
Upper Hayden Range Burns	D-4	Upper Hayden (3A/5B)	Acres		100		100							
Hayden Creek Division Fence	D-4	Upper Hayden (3A/5B)	Miles								1.0			
Upper Hayden Water Devel. Replace.	D-4	Upper Hayden (3A/5B)	Struct.			2		2						
Apple Creek Fence	D-4	Upper Hayden	Miles			.3		.5						
Mouth of Little Eightmile Drift Fence	D-4	Little Eightmile (2A)	Miles		.4									

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TABLE IV

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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year									
				86	87	88	89	90	91	92	93	94	95
Little Eightmile Bndry Fence	D-4	(Mgmt. Area) Little Eightmile (2A)	Miles		.8			1.2					
North Basin Water Development (Recon- struction - 1 trough and fence spring)	D-5	North Basin (4B-1)	Struct.	1									
Kadletz-Cheney Unit Fence (Upgrade and install cattleguard & metal gate - 1.1 miles plus 8'x12' cattleguard and metal gate)	D-5	Haynes Creek (8A)	Miles	1.1									
Bob Moore Boundary Fence (Restretch and wood stay)	D-5	Diamond- Moose (8A)	Miles	2.0									
Little Hat Creek Fence #5191 (Recon- struction)	D-5	Hat Creek (8A)	Miles		.5								
Hat Creek Division Fence #5192 (Recon- struction)	D-5	Hat Creek (5B)	Miles		.25								
North Fork Hat Creek Bndry Fence #5032 (Recon. 3 miles plus cattleguard)	D-5	Hat Creek (5B)	Miles Struct.		3.0 1								
Iron Mtn. Wtr. Devel. #5068 (Reconstruct 1 trough & 800' of B&P fence)	D-5	Hat Creek (8A)	Struct.		1								

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
Wards Butte Water Development (1 trough & 800' B&P fence)	D-5	Hat Creek (5B)	Struct.		1									
Tree Camp Water Development (1 trough and 800' B&P fence)	D-5	Hat Creek (8A)	Struct.		1									
10 Ponds - Reconst.	D-5	Hat Creek (8A and 5B)	Struct.		10									
Moose Creek - Park Creek pipeline (1.5 miles + 2 troughs)	D-5	Hat Creek (8A and 5B)	Struct.		2									
Hat Creek Boundary Fence #5190 (Recon.)	D-5	Hat Creek (8A)	Miles		1.0									
Hat Creek Division Fence	D-5	Hat Creek (4B-1)	Miles		1.5									
North Basin #2 Water Devel. (1 trough & 800' B&P Fence)	D-5	North Basin (4B-1)	Struct.				1							
Copper Basin Water Devel. (Reconstruct and fence spring)	D-5	North Basin (4B-1)	Struct.				1							
Watson Peak #3 Water Devel. (1 trough & 800' B&P fence)	D-5	North Basin (4B-1)	Struct.				1							

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
		(Mgmt. Area)												
Watson Peak #1 Water Devel. (1 trough & 800' B&P fence)	D-5	North Basin (4B-1)	Struct.			1								
Henry Creek Division Fence (Recon.)	D-5	Lake Creek (5B)	Miles		3.0									
Deer Creek Boundary Fence (Ext.)	D-5	Deer-Iron (3A-5B)	Miles		.3									
Fenster Creek Unit Fence (Restretch & wood stay)	D-5	Diamond- Moose (8A)	Miles		1.0									
Larkspur Control	D-5	Lake Creek (4A)	Acres			30								
Burn Sagebrush in Bob Moore Creek	D-5	Diamond- Moose (8A)	Acres			50								
Trail Creek Pass Fence (Recon.)	D-5	North Basin (5C)	Miles				1.0							
Watson Peak Fence (Recon.)	D-5	North Basin (4B-1)	Miles				.5							
North Basin Pipeline	D-5	North Basin (4B-1)	Struct.				2							
First Basin #1 Water Develop. (1 trough +800' B&P fence)	D-5	North Basin (4B-1)	Struct.				1							

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year											
				86	87	88	89	90	91	92	93	94	95		
South Fork Boundary Fence (Recon.)	D-5	South Fork Williams Creek (8A)	Miles				2.0								
Haynes Creek Bndry Fence (Recon.)	D-5	Baldy Mtn. (8A)	Miles				.5								
Larkspur Control	D-5	Cabin Creek (5B)	Acres				100								
Burn Sagebrush in Camp Creek	D-5	Lake Creek (5B)	Acres				40								
Deer Creek Bndry Fence (Restretch & wood stay)	D-5	Deer-Iron (5B)	Miles				3.5								
Deer Creek Fence (Restretch and wood stay)	D-5	Deer-Iron (5B)	Miles				1.5								
Warm Springs Creek Fence (Recon.)	D-5	North Basin (4B-1)	Miles						1.0						
Phantom Creek Pipe- line (.6 miles pipeline + 1 trough)	D-5	North Basin (5C)	Struct.						1						
Watson Peak #2 Water Devel. (1 trough & 800' B&P fence)	D-5	North Basin (4B-1)	Struct.						1						
Williams Creek Fence (Recon.)	D-5	South Fork Williams Creek (5B)	Miles						1.0						

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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	
Williams Creek Fence (Recon.)	D-5	Williams- Napias (5B)	Miles					.6						
Williams Creek Fence (Upgrade)	D-5	Williams- Napias (5B)	Miles					.5						
Fenster Creek Fence	D-5	Diamond- Moose (8A)	Miles					1.5						
Fenster Creek Water Devel. (1 trough & 800' B&P fence)	D-5	Diamond- Moose (8A)	Struct.					1						
Burn Sagebrush in Williams Basin	D-5	Williams- Napias (8A)	Acres					50						
Larkspur Control	D-5	South Fork Williams Cr. (8A)	Acres					100						
Badger Basin Fence (Restretch & wood stay)	D-5	Deer-Iron (3A-5B)	Miles					1.5						
Baldy Basin Water Devel. (2 troughs & 200' B&P fence)	D-5	Baldy Mtn. (8A)	Struct.							2				
Upper Basin Water Devel. (1 trough & 200' B&P fence)	D-5	Baldy Mtn. (8A)	Struct.							1				

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95			
Chandler Basin Water Devel. (Recon. and relocation of trough - 1 trough + 200' B&P fence)	D-5	(Mgmt. Area) Baldy Mtn. (8A)	Struct.								1					
K-Mountain Water Devel. (Recon. 1 trough + 400' B&P fence)	D-5	Haynes Creek (8A)	Struct.								1					
Ziegler Spring Water Devel. (Recon. 1 trough + 100' B&P fence)	D-5	Haynes Creek (8A)	Struct.								1					
Haynes Creek Bndry Fence (Recon.)	D-5	Haynes Creek (8A)	Miles									2.5				
K-Mountain Drift Fence (Recon.)	D-5	Haynes Creek (5B)	Miles									.5				
Baldy Basin Unit Fence (Upgrade)	D-5	Baldy Mtn. (8A and 5B)	Miles									2.0				
Tendoy Pipeline (.5 miles pipeline + 1 trough)	D-5	Diamond- Moose (8A)	Miles									1				
Larkspur Control	D-5	Baldy Mtn. (8A)	Acres										10			
Hat Creek Boundary Fence (Restretch & wood stay 3 miles)	D-5	Hat Creek (8A)	Miles										3.0			

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TABLE IV

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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	
		(Mgmt. Area)												
South Fork #1 Water Devel. (1 trough & 600' B&P fence)	D-5	South Fork Williams Cr. (5B)	Struct.									1		
North Fork Henry Creek #2 Water Devel. (1 trough & 600' B&P fence)	D-5	South Fork Williams Cr. (8A)	Struct.									1		
Upper Henry Creek Water Devel. (1 trough & 400' B&P fence)	D-5	South Fork Williams Cr. (8A)	Struct.									1		
Telephone Line Water Devel. (1 trough & 400' B&P fence)	D-5	South Fork Williams Cr. (5B)	Struct.									1		
Henry Creek Boundary Fence (Reconstruct)	D-5	South Fork Williams Cr. (5B)	Miles									1.5		
Heifer Pasture Fence (Recon.)	D-5	South Fork Williams Cr. (5B)	Miles									1.5		
Lucky Point Water Devel. (Fence spring 800' B&P fence - construct new intake system)	D-5	Deer-Iron (3A-5B)	Struct.									1		
Deer Creek #2 Water Devel. (Fence spring 600' B&P fence)	D-5	Deer-Iron (5B)	Struct.									1		

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TABLE IV  
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FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
Degan Ridge #1 Water Devel. (1 trough & 800' B&P fence)	D-5	Deer-Iron (3A-5B)	Struct.								1			
Camp Creek Fence (Recon.)	D-5	Deer-Iron (5B)	Miles								1.5			
Corral Creek Drift Fence (Recon.)	D-5	Deer-Iron (5B)	Miles								2.5			
Deer Creek Water Devel. (Recon. 1 trough + 400' B&P fence)	D-5	Deer-Iron (5B)	Struct.								1			
Tormay Creek Water Devel. (1 trough, 1/4 mi. pipeline, & 200' B&P fence)	D-5	Williams- Napias (8A)	Struct.									1		
Coyote Basin Drift Fence (Restretch & wood stay)	D-5	Williams- Napias (8A)	Miles									.6		
Perreau Creek Drift Fence (Restretch, wood stay, & recon- struct braces)	D-5	Williams- Napias (8A)	Miles									.5		
Perreau Creek-Jesse Creek Fence (Re- stretch and wood stay)	D-5	Williams- Napias (8A and 2A)	Miles									6.0		
Tin Cup Drift Fence (Recon.)	D-5	Lake Creek (4A)	Miles									2.0		

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TABLE IV

-16-

FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year										
				86	87	88	89	90	91	92	93	94	95	
		(Mgmt. Area)												
Birch Creek Ridge Fence (Restretch & wood stay)	D-5	Lake Creek (5B)	Miles									1.3		
Middle Ridge Unit Fence (Restretch & wood stay)	D-5	Lake Creek (5B)	Miles									1.0		
Rattlesnake Water Devel. (1 trough + 400' B&P fence)	D-5	Lake Creek (5B)	Struct.									1		
Sleigh Runner Ridge Fence (Restretch & wood stay)	D-5	Baldy Mtn. (5B)	Miles									2.5		
Tule Lake Drift Fence (Restretch & wood stay)	D-5	Baldy Mtn. (5B)	Miles									.2		
Hat Creek Boundary Fence (Restretch & wood stay a portion)	D-5	Hat Creek (8A)	Miles									3.0		
Reseeding in Copper Basin	D-5	North Basin (4B-1)	Acres										70	
Burn Sagebrush in Copper Basin	D-5	North Basin (4B-1)	Acres										90	
Hot Springs Unit Fence (Restretch & wood stay)	D-5	Withington Creek (5B)	Miles										.5	

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TABLE IV  
-17-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment	Unit of Measure	Output Units By Year												
				86	87	88	89	90	91	92	93	94	95			
Withington Creek Unit Fence (Re- stretch, wood stay, & reconst. braces)	D-5	(Mgmt. Area) Withington Creek (5B)	Miles												1.5	
Mulkey Creek #1 Water Devel. (1 trough & 300' B&P fence)	D-5	Withington Creek (5B)	Struct.													1
Porcupine Springs Water Develop. (1 trough & 800' B&P)	D-5	Twelvemile (5B)	Struct.													1
Meadows Trail Water Devel. (1 trough & 400' B&P fence)	D-5	Twelvemile (5B)	Struct.													1
Twelvemile Meadows #2 Water Develop. (1 trough & 800' B&P fence)	D-5	Twelvemile (4B-1)	Struct.													1
Tenmile Water Devel- opment (1 trough & 800' B&P fence)	D-5	Twelvemile (5B)	Struct.													1
North Basin Corral	D-5	North Basin (4B-1)	Struct.													1
Slide Creek Fence (Restretch & wood stay)	D-5	Deer-Iron (3A-5B)	Miles													2.0

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TABLE IV  
-18-  
FOREST ACTION SCHEDULE  
Range Improvements

Project Name or Description	Dist	Allotment (Mgmt. Area)	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95		
McKim Creek Pipeline (1-1/2 mi. pipeline, 2 troughs, 200' B&P)	D-5	North Basin (8A)	Struct.												2
Haynes Creek Bndry Fence (Restretch & wood stay)	D-5	Baldy Mtn. (8A)	Miles												4.8
Chandler Basin Fence (Restretch & wood stay)	D-5	Baldy Mtn. (8A)	Miles												.6
Upper Basin-Baldy Mtn. Fence (Re- stretch & wood stay)	D-5	Baldy Mtn. (8A)	Miles												.3
Degan Ridge #2 Water Devel. (1 trough & 600' B&P fence)	D-5	Deer-Iron (3A-5B)	Struct.												1
Aspen Parch Water Devel. (1 trough & 600' B&P fence)	D-5	Diamond- Moose (8A)	Struct.												1
Lower Bob Moore Water Devel. (1 trough & 600' B&P fence)	D-5	Diamond- Moose (8A)	Struct.												1
Park Creek Saddle Water Devel. (1 trough & 600' B&P)	D-5	Hat Creek (8A)	Struct.												1

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CODES FOR WATERSHED IMPROVEMENT NEEDS INVENTORY

(Codes apply to following Table)

<u>Column</u>	<u>Description</u>
1-2	Two number State code
3-4	Two number Forest code
5-6	Two number District code
7-30	Project name
31-35	Acres to be treated
36-39	Treatment cost - 090 Funds (M\$)
41-44	Treatment cost - Other Funds (M\$)
46	Purpose: 1 = Water Quality Improvement 2 = Soil Productivity Improvement 3 = Both
48	<u>Category 1:</u> Lands in declining watershed condition or soil productivity, and continuing to decline because of past management activities or natural disaster, and which will respond to treatment to arrest decline. <u>Category 2:</u> Lands in unsatisfactory watershed condition, where soil productivity is remaining constant, but below potential levels. Applied improvement projects would increase resource production and/or improve watershed condition. <u>Category 3:</u> Lands in satisfactory watershed condition where water yield improvement or soil productivity enhancement measures could be applied to increase commodity outputs and economic returns.
49	Forest Priority: 1 = High (Significant existing or potential effects) 2 = Medium (Moderate existing or potential effects) 3 = Low (Little or minor expected effects)
52-53	Improvement measure code number 1 (Primary)
55-56	Improvement measure code number 2 (Secondary)
58-59	Improvement measure code number 3 (Secondary)
61-62	Improvement measure code number 4 (Secondary)
64-67	Fiscal Year of project completion

Regional Improvement Measure Codes

- 10 = Mechanical sheet erosion control
- 11 = Vegetative sheet erosion control
- 20 = Road and trail obliteration
- 30 = Streambank stabilization
- 40 = Gully stabilization
- 50 = Stream channel clearing
- 60 = Sediment basin construction
- 70 = Lakeshore and reservoir-shore stabilization
- 80 = Abandoned mine restoration
- 90 = Pollution abatement

SALMON FOREST WATERSHED IMPROVEMENT NEEDS INVENTORY

PROJECT NAME	AC.	COST 090	COST OTHER	PURPOSE	CATEGORY	FOREST PRIORITY	IMPROVEMENT MEASURE CODE NO.			
							1	2	3	4
161301 Silver Creek	30	21		1	1	1	30			
Rabbitfoot Mine Road	4	5	-0-	3	1	2	10			
Porphyry Creek	2	3		1	1	2	30			
Hot Springs Road	5	5		3	1	1	10	40		
Upper Napias-Smith Gulch	3	2		3	1	2	20			
Moyer Basin	27	7		3	1	2	20			
Sawpit Meadows	80	13		3	1	1	40	30	11	
Jureano Mt.-Missouri Gulch	36	9		3	1	2	20	40	30	50
161302 Burns Basin	5	5		3	1	1	40			
Ransack Road	5	2		3	1	1	20			
Long Tom Rd.-Spring Creek	10	3		3	1	2	20			
Thompson Gulch	1	1		3	1	1	40			
Indian Creek Road	12	3		3	1	1	20			
Sheep Creek Channel	1	2		1	1	2	30			
Dahlonga Creek	1	4		1	1	2	30			
161304 Big Bear Gully	1	1		3	1	1	40			
Bog Creek Road	5	1		3	1	2	20	40		
Rocky Canyon Road	10	1		3	2	2	20			
Cruikshank	1	1		3	2	2	40			
Timber Creek Trail	2	1		3	2	1	20			
Bear Valley Trail	4	2		3	1	1	20			
Blue Jay Mine	10	3		3	1	1	80	20	11	
Little Eightmile Creek	3	4		1	1	2	30			
McNutt Gully	20	11		3	1	2	40			
Mill Lake Road	22	4		3	1	2	20			
Chamberlain Basin	120	6		3	1	1	10			
Morrison Lake Trail Road	11	3		3	1	1	20			
Canyon Creek Project	2	5		1	1	2	30			
Frank Hall Creek	1	2		1	1	2	30			
Bear Valley Gully	3	3		3	1	2	40			
Agency Creek Gully	2	2		3	1	2	40			
161305 Copper Creek Gully	5	3		3	1	1	40			
Moose Cr Rd/E Boulder Rd	17	5		3	1	2	20			
Gannet Creek Jeep Road	4	1		3	1	2	20	40	10	11
East Boulder Creek	4	3		1	1	1	30	50		
South Fork Williams Creek	7	4		1	1	2	30	50		
North Fork Iron Creek	4	3		1	1	1	50	30		
Williams Creek	10	6		1	1	1	30	50		
North Fork Hat Creek	11	3		1	1	1	50			
Middle Fork Hat Creek	4	2		1	1	1	50			
Little Hat Cr. Mining Road	2	2		3	1	1	20	10	11	
mp Creek Mine Road 65034	4	1			1	1	11	10	90	
slvemile Jeep Road	2	1			1	1	20	10	11	

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SALMON NATIONAL FOREST WATERSHED IMPROVEMENT NEEDS  
IMPLEMENTATION SCHEDULE

YEAR SCHEDULED	PROJECT NAME	ACRES	COST 090 M\$	MANAGEMENT AREA
1986	Sawpit Meadows	30	5	5B
	Year Totals:	30	5	
1987	Silver Creek	30	21	3A-5B, 3A-5C
	North Fork Hat Creek	7	2	5B
	Moose Cr Rd/E Boulder Rd	17	5	5B
	Year Totals:	54	28	
1988	Sawpit Meadows	20	3	5B
	Hot Springs Road	5	5	4A
	Big Bear Gully	1	1	8A
	North Fork Iron Creek	4	3	3A-5B
	Year Totals:	30	12	
1989	Blue Jay Mine	10	3	5B
	Williams Creek	10	6	5B
	Middle Fork Hat Creek	4	2	5B
	Little Hat Cr. Mining Rd.	2	2	8A
	Dump Creek Mine Road	4	1	5B
	Year Totals:	30	14	
1990	Burns Basin	5	5	4A
	Ransack Road	5	2	3A-5A
	Timber Creek Trail	2	1	2A
	North Fork Hat Creek	11	3	5B
	Twelvemile Jeep Road	2	1	5B
	Thompson Gulch	1	1	3A-5A
	Indian Creek Road	12	3	3A-5A, 4A
	Bear Valley Trail	4	2	2A-1
Year Totals:	42	18		
1991	Jureano Mountain	25	6	5B
	Morrison Lake Trail Rd.	11	3	4B-1
	Year Totals:	36	9	
1992	Missouri Gulch	11	3	5B
	Porphyry Creek	2	3	4A
	Upper Napias-Smith Gulch	3	2	5B
	Long Tom Rd.-Spring Cr.	10	3	3A-5B
	Gannett Creek Jeep Road	4	1	5B
	Year Totals:	30	12	

SALMON NATIONAL FOREST WATERSHED IMPROVEMENT NEEDS  
IMPLEMENTATION SCHEDULE (cont.)

YEAR SCHEDULED	PROJECT NAME	ACRES	COST 090 M\$	MANAGEMENT AREA
1993	Moyer Basin	27	7	4A/4B-1/5C
	Cruikshank	1	1	8A
	Copper Creek Gully	5	3	4B-1
	Year Totals:	<u>34</u>	<u>11</u>	
1994	Rabbitfoot Mine Road	4	5	3A-5B
	Bog Creek Road	5	1	8A
	Rocky Canyon Road	10	4	8A/4B-1
	South Fork Williams Cr.	7	4	4A/5B
	Year Totals:	<u>26</u>	<u>14</u>	
1995	Sawpit Meadows	30	5	5B
	E. Boulder Creek	4	3	5B
	Year Totals:	<u>34</u>	<u>8</u>	

TABLE VI

Fire Program

Table 2, Historical Fire Program Data, is based on a Level I Fire Management Analysis for the period 1971-1980. The annual average of 57 fires and 1,750 acres burned represents a moderately complex fire management situation. Therefore, a Level II Fire Management Analysis has been completed.

Fire management program projections for planning periods are displayed in Table 1. These projections are based on a Level II Fire Management Analysis. We can expect a gradual increase in person-caused fire occurrence and total acres burned over the period. This will come about because of population increases and increased recreational activities. The hazard from natural fuel accumulation will continue to increase with higher fire intensities and increased acres burned. This will be partially offset by timber harvest and cleanup of resulting fuels. No significant changes are expected in lightning fire occurrence during the planning period.

Table 1

PROJECTED FIRE PROGRAM

Forest Plan Time Period	Total FFP Budget M\$*	Suppression M\$*	Total Fire Program M\$*	Expected Area Burn Acres
1985	432	610	1,042	2,700
1986-1990	595	426	1,021	1,878
1991-2000	600	428	1,028	1,890
2001-2010	605	430	1,035	1,908
2011-2020	610	432	1,042	1,926
2021-2030	615	434	1,049	1,934

\* M\$ = Thousand dollars

Table 2

HISTORICAL FIRE PROGRAM DATA

Year	COSTS		Total Fire Program	Acres Burned	Total Number Fires
	Total FFP Budget	Suppression			
1971	164,673	292,866	457,539	637	66
1972	138,717	759,523	898,240	1,914	107
1973	122,631	1,190,049	1,312,680	81	68
1974	137,554	595,251	732,805	26	52
1975	126,142	597,068	723,210	5	31
1976	181,069	834,505	1,015,574	38	29
1977	564,722	169,205	733,927	112	60
1978	542,746	154,824	697,570	183	42
1979	480,670	563,645	1,044,315	14,434	79
1980	547,390	125,000	795,000	66	37
Average 1971-1980	300,631	528,194	828,825	1,750	57

SOIL SURVEY ACTION PLAN

<u>Fiscal Year</u>	<u>Action</u>
1988	Proposed progress field review
1989	Proposed progress field review
1990 (March)	Proposed completion basic manuscript
1990 (August)	Proposed comprehensive field review
1991 (September)	Proposed completion of field mapping
1991 (September/October)	Proposed final field review
1991 (September/October)	Proposed field correlation
1992 (January)	Proposed final correlation
1992 (February)	Proposed final draft manuscript

APPENDIX E

LANDTYPES WITH CULTURAL RESOURCES POTENTIAL

<u>Landtype</u>	<u>Slope</u>	<u>Elevation</u>	<u>Erosion</u>	<u>Remarks</u>
<b>Lands Suitable for Major Villages:</b>				
30, V.B. ) 130 S )	Flat	3200-4500'	High	Fits Ethno-graphic Pattern
<b>Lands Suitable for Season/Ephemeral Use:</b>				
30, V,B ) 130 S )	0-10%	6000-7500'	Very Low	Elk Summer Range; Wet Meadows
30, V,B ) 130 S )	0-20%	6000-8000'	Low	Travel Routes; Big Game Summer Range
Q125 ) S125 ) V125 ) S125n ) V125n ) V125f )	45-65%	5000-7500'	Low	Stable Benches
G110w ) Q110w ) S110w ) V110w ) Q110x ) V110x )	10-25%	7000'+	Low	Lakes; Big Game Summer Range
<b>Lands Suitable for Use, But Where Evidence is Likely to be Disturbed:</b>				
G109a ) Q109a ) S109a ) V109a ) G109as-1 ) Q109as-1 ) S109as-1 )	20-55%	----	Low	Frost Churned, Glacial Origin; Deer/Elk Summer Range
G109j ) Q109j ) V109j )	20-45%	6500-7500'	Low	Frostheaved; Deer/Elk Summer Range

Appendix E (Cont.)

Landtype	Slope	Elevation	Erosion	Remarks
G110w )				
Q110w )				
S110w )	15-35%	4500'+	Moderate	Lakes/Cirques;
V110w )				Big Game Range
Q110x )				
V110x )				
G109 )				
Q109 )				
S109 )				
V109 )				
G109-1 )				
Q109-1 )				Frostheaved;
V109-1 )	35-60%	7000'+	Moderate	Deer/Elk Summer
Q109s )				Range
S109s )				
V109s )				
G113 )				
Q113 )				
S113 )				
G120bs-1 )				
Q120bs-1 )	45-70%	4500-6000'	High	Deer/Elk
S120bs-1 )				Winter Range
V120bs-1 )				
G120bs )				
Q120bs )				Big Game
S120bs )	45-65%	3500-5000'	High	Winter Range
V120bs )				
G120cs )				
Q120cs )				
S120cs )				Deer/Elk Winter
V120cs )	55-75%	4500-6000'	High	Range
G120cs-1 )				
Q120cs-1 )				
S120cs-1 )				
V120cs-1 )				
G124s )				
Q124s )				
S124s )				Big Game Winter
V124s )	68-85%	3500-6000'	Very High	Range
G124n )				
Q124n )				
S124n )				
V124n )				

Appendix E (Cont.)

<u>Landtypes</u>	<u>Slope</u>	<u>Elevation</u>	<u>Erosion</u>	<u>Remarks</u>
Lands Likely to Contain Rock Art, Caves or Rockshelters:				
G120d-R )	65-75%	4500-6000'	Very High	10-30% Rock Outcrop; South- west Aspects
Q120d-R )				
S120d-R )				
V120d-R )				
G124-R )	55-85%	3500-6000'	Very High	10-70% Rock Outcrop; Big Game Range
Q124-R )				
S124-R )				
V124-R )				

Source: The Farthest Frontier of All: A Cultural Resource Overview of the River of No Return Wilderness, Idaho by Leslie E. Wildesen.



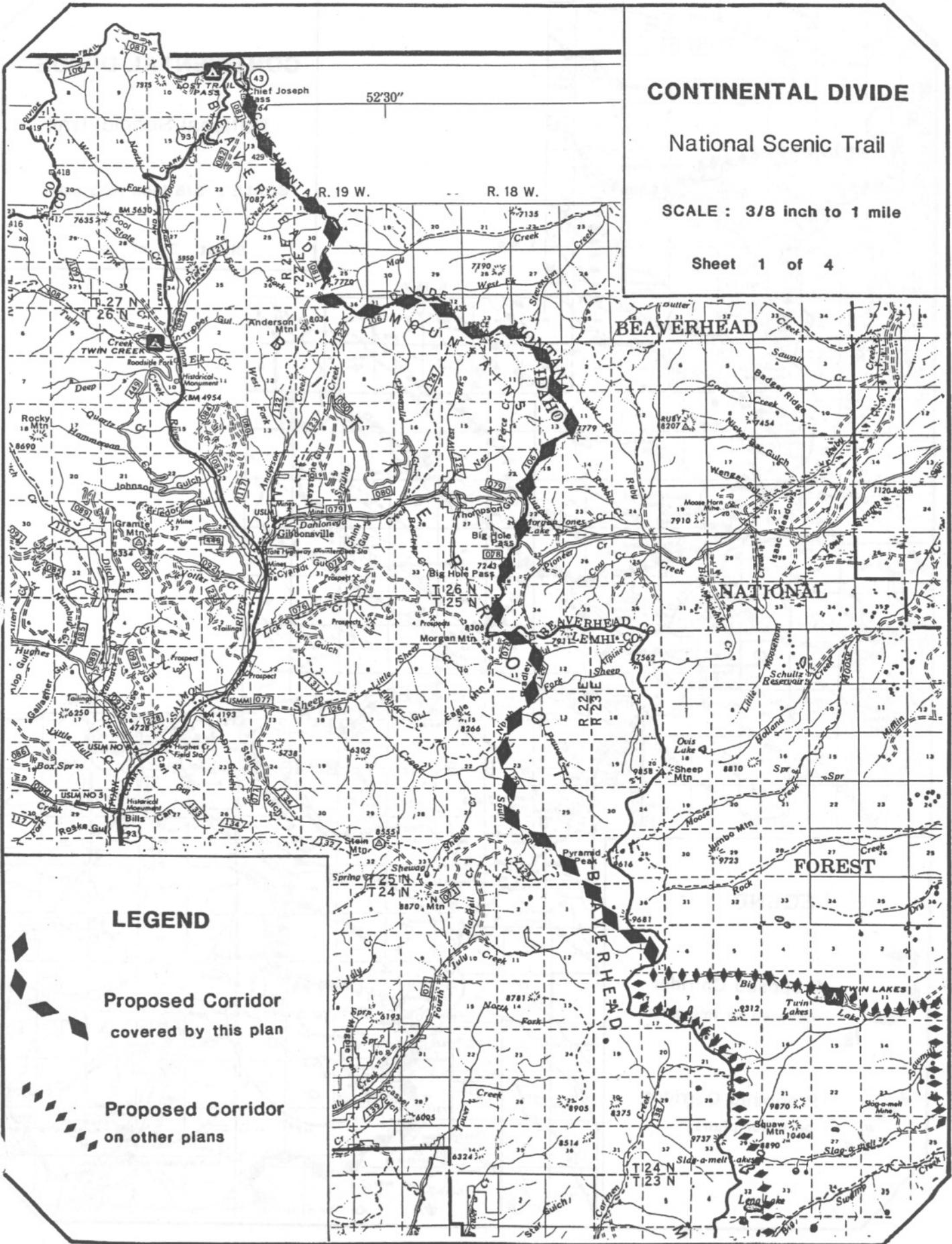
Salmon National Forest - Land and Resource Management Plan

CONTINENTAL DIVIDE

National Scenic Trail

SCALE : 3/8 inch to 1 mile

Sheet 1 of 4



LEGEND

Proposed Corridor covered by this plan

Proposed Corridor on other plans

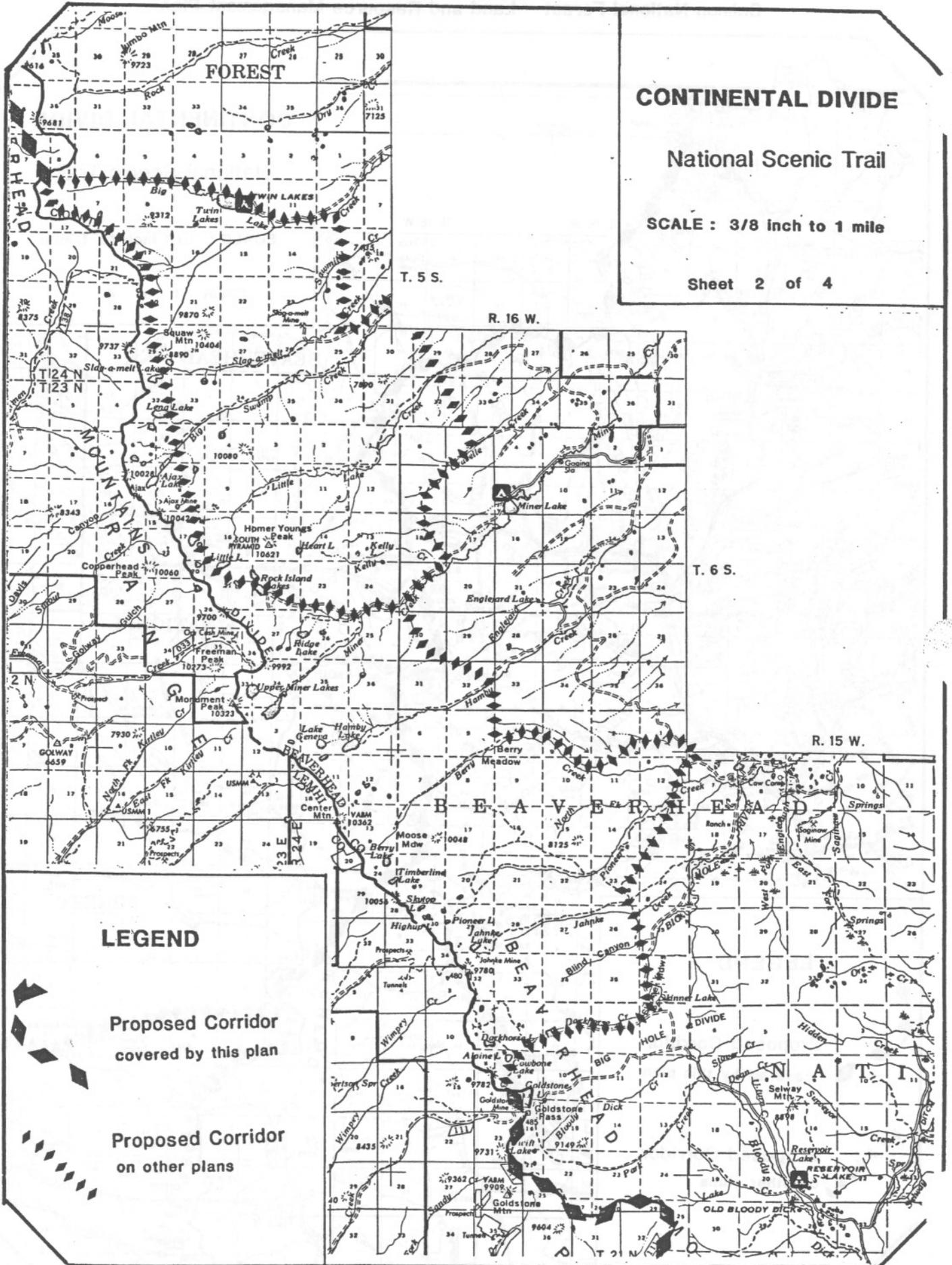
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CONTINENTAL DIVIDE

National Scenic Trail

SCALE : 3/8 inch to 1 mile

Sheet 2 of 4



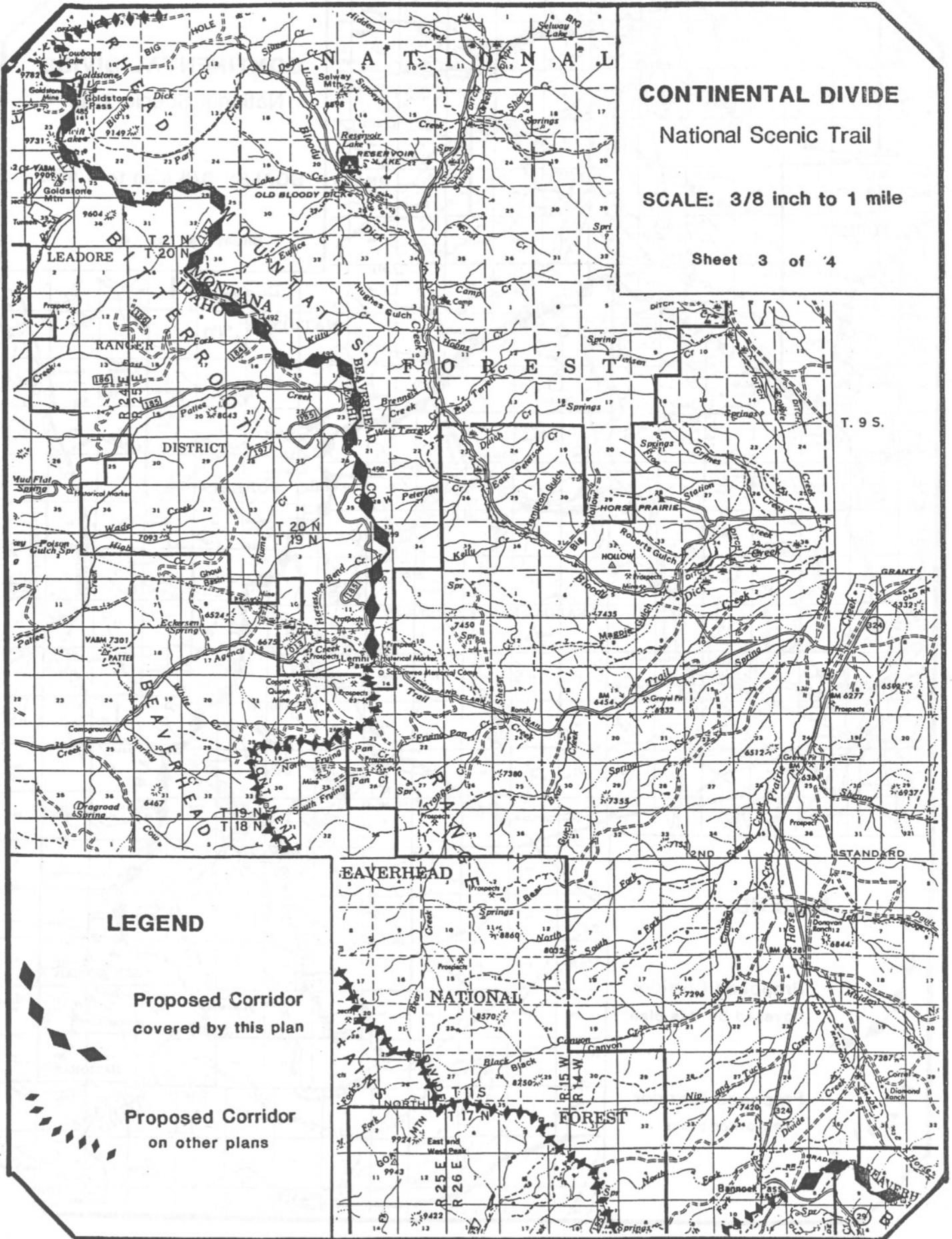
LEGEND



Proposed Corridor covered by this plan

Proposed Corridor on other plans

Salmon National Forest - Land and Resource Management Plan



CONTINENTAL DIVIDE

National Scenic Trail

SCALE: 3/8 inch to 1 mile

Sheet 3 of 4

LEGEND

Proposed Corridor covered by this plan

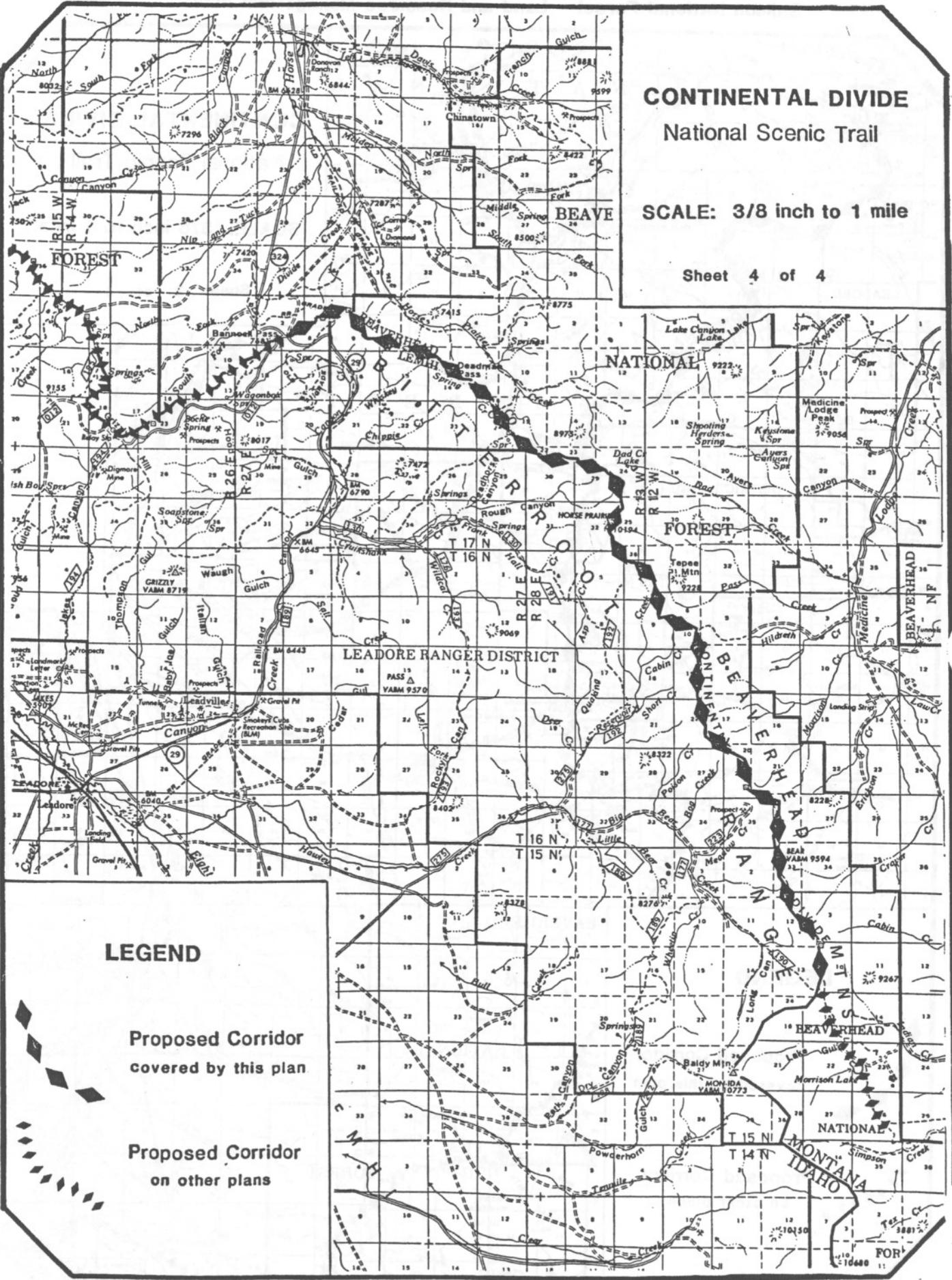
Proposed Corridor on other plans

Salmon National Forest – Land and Resource Management Plan

**CONTINENTAL DIVIDE**  
National Scenic Trail

SCALE: 3/8 inch to 1 mile

Sheet 4 of 4



**LEGEND**

Proposed Corridor covered by this plan

Proposed Corridor on other plans

United States  
Department of  
Agriculture

Forest  
Service

Salmon  
National  
Forest



# LAND and RESOURCE MANAGEMENT PLAN

## for the SALMON *National Forest*

