
Quartzite Watershed Management Project

EIS Appendix

Appendix A: Other Issues

Appendix B: Alternative Maps & Tables

Appendix C: Other past, present, and reasonably foreseeable future actions

A Other Issues

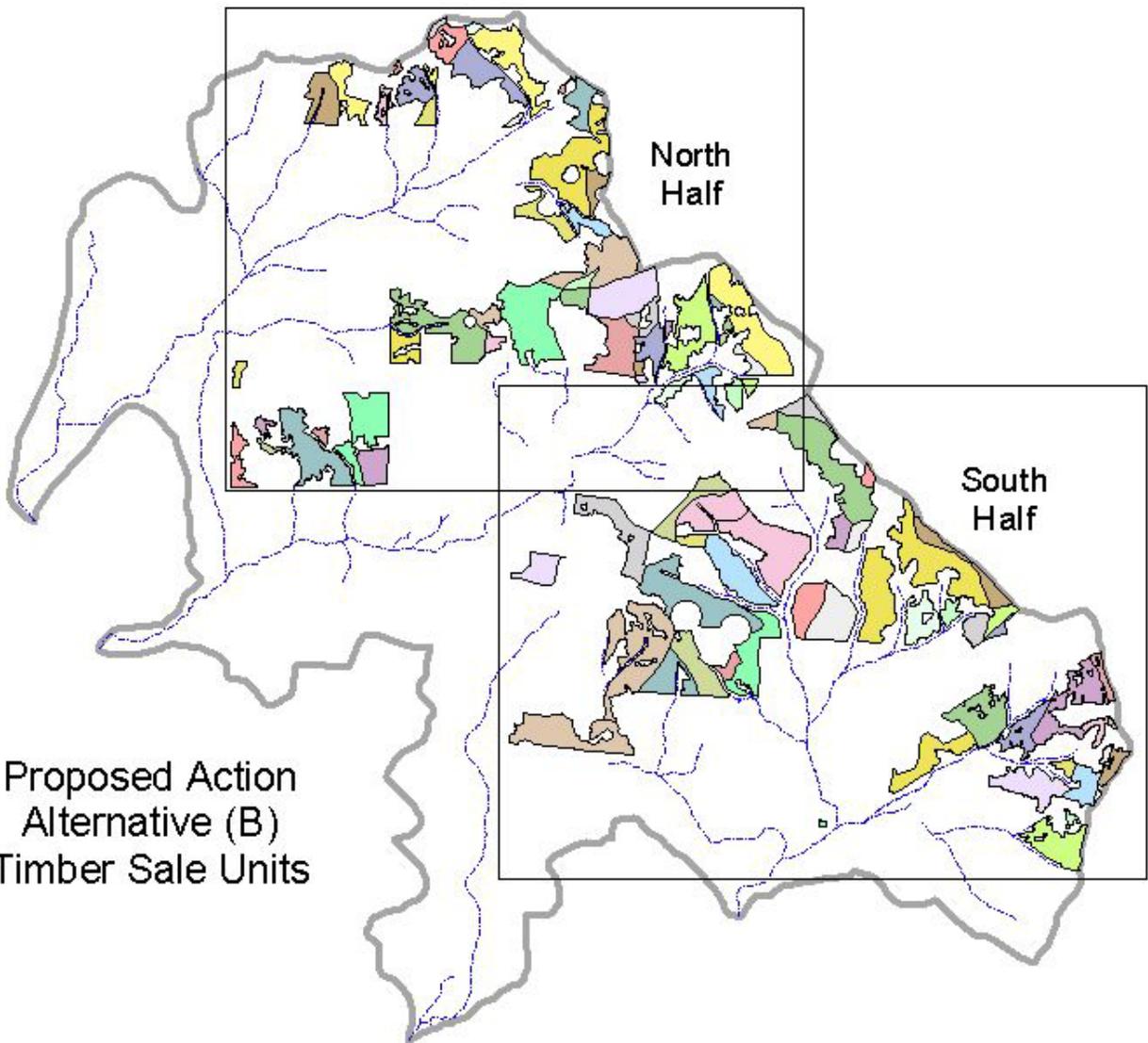
Other concerns discussed by the public were used to design the project and mitigation measures, but not to develop a range of alternatives. Some comments were not considered in developing a range of alternatives or in the general design of the project, because they are addressed in the Forest Plan, the Regional Forester's Amendment No. 1 and 2, existing laws or regulations, are not applicable to the project, or are outside the scope of this decision. Those comments are listed here.

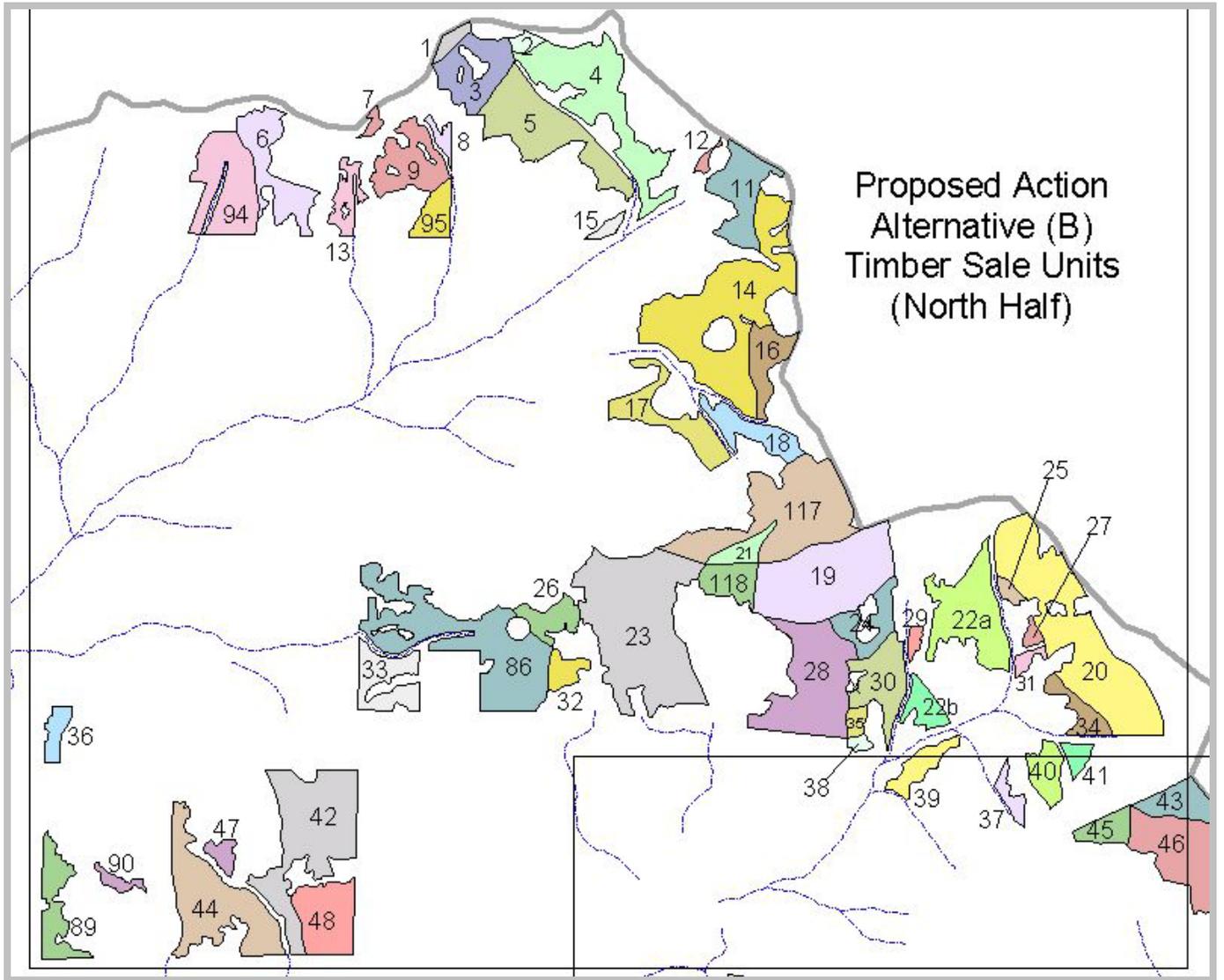
- Helicopter yarding may render the commercial harvest economically un-feasible.
- Prescribed fire could kill merchantable trees.
- Applying herbicides on noxious weeds could reduce water quality and threaten human health.
- Commercial logging may reduce the quality of recreational experiences.
- Riparian buffer zones may reduce riparian forest health.
- Habitat management objectives that focus on native species may reduce habitat quality for desired non-native species.
- Building roads, cutting trees or prescribed fire could reduce visual quality, which could discourage recreation.
- Limiting road construction could reduce wild fire response time, which could threaten adjacent private lands.
- Limiting road construction could reduce the recreation opportunities for people with special needs.
- Commercial logging could reduce quality of wildlife habitat.
- Building roads could eliminate areas from future wilderness consideration.
- Commercial harvest could reduce the amount of old growth forest.
- Prescribed fire may get out of control and burn private timber and reduce the \$ value.
- Building roads, commercial logging and prescribed fire may cost more than it yields and as a result, burden the taxpayer.

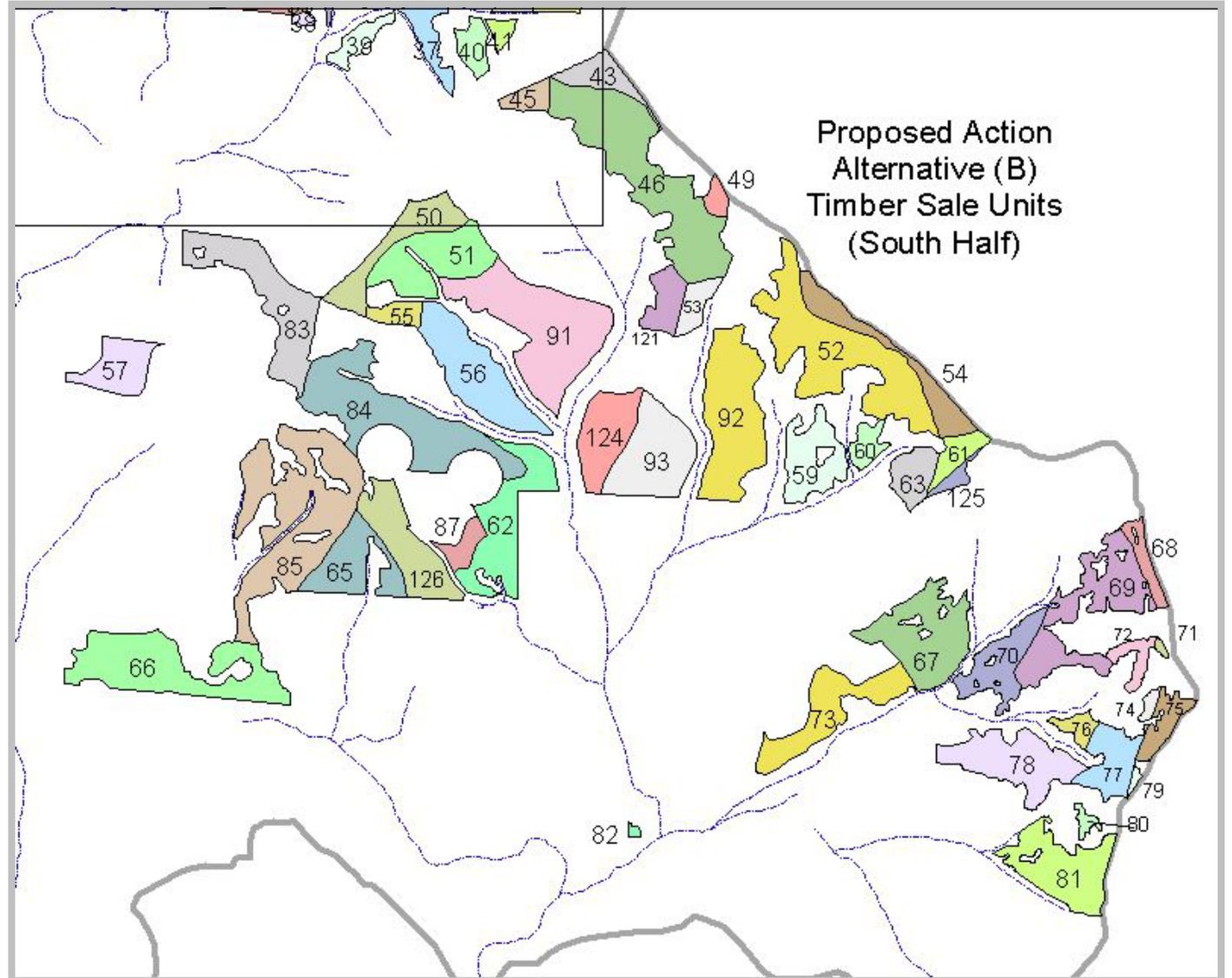
B Alternative Maps & Tables

- Timber Sale Activity Area Maps
- Timber Sale Information Tables
- Prescribed Fire & Non-commercial Thinning Activity Area Maps
- Prescribed Fire & Non-commercial Thinning Information Tables
- Road Development Activity Area Maps

Proposed Action
Alternative (B)
Timber Sale Units







Proposed Action Alternative (B)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	61				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	s	3A,7	iHSH/HCR/HSV	55/40/05		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HCR/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100			24			NTM
19	95	s	5	iHSH/HTH	90/10		85	10			JPB(50%)
20	129	s	5	iHSH/HTH/HSV	80/15/5		103	20		6	JPB(100%), PLT(25%)
21	11	s	5	HTH	100			11			NTM
22	89	h	5	iHSH/HTH/HSV	50/40/10		44	36		9	JPB(20%), PLT(20%)
23	145	t	5,6,7	iHSH/HTH/HSV	65/30/5		94	44		7	JPB(50%)
24	21	h	5	iHSH/HTH	80/20		17	4			JPB(100%)
25	4	h	5	iHSH	100		4				JPB(100%)
26	17	s	7	iHSH/HTH	90/10		15	2			NTM
27	4	h	5	HTH	100			4			NTM
28	77	t	5	iHSH/HTH	50/50		39	38			JPB(50%)
29	4	h	5	iHSH	100		4				NTM
30	34	s	5,7	HTH/HSV	90/10			31		3	SLASH(100%)
31	4	h	5	iHSH	100		4				NTM
32	10	s	6	iHSH	100		10				JPB(100%)
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
34	15	h	5	iHSH	100		15				NTM
35	5	h	5	HTH	100			5			NTM
36	10	h	6	iHSH	100		10				JPB(100%)
37	24	h	5	HTH/iHSH/HSV	70/20/10		5	17		2	NTM
38	3	s	7	iHSH	100		3				JPB(100%)
39	15	h	7	HTH/HSV	85/15			13		2	NTM
40	17	h	5	HTH/iHSH	50/50		9	8			NTM
41	7	h	5	HTH	100			7			NTM
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
43	25	t	5,7	iHSH/HTH	70/30		18	7			JPB(100%), PLT(20%)
44	99	h	6,8	iHSH/HTH	70/30		69	30			JPB(30%), RB
45	14	h	5,7	iHSH/HCR	80/20		11		3		JPB(100%), PLT(50%)
46	152	s	5,7	HTH/iHSH/HSV	60/30/10		46	91		15	JPB(30%), PLT(10%)
47	7	h	6	iHSH	100		7				RB

Proposed Action Alternative (B)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)
49	8	t	7	iHSH/HTH	80/20		6	2			GRAP/PLT(80%)
50	48	t	5	HTH/iHSH	60/40		19	29			GRAP/PLT(30%), JPB(70%), RB
51	70	s	5,7	iHSH/HTH	50/50		35	35			PLT(50%), JPB(100%), RB
52	137	s	5,7	HTH/iHSH/HSV	70/20/10		27	96		14	PLT(30%), JPB(100%)
53	17	h	7	HTH/iHSH	80/20		3	14			JPB(100%)
54	46	t	5,7	HTH/iHSH/HSV	65/20/15		9	30		7	GRAP/PLT(15%), JPB(20%)
55	13	s	5	iHSH/HTH	70/30		9	4			JPB(70%), RB
56	82	h	5	HTH/iHSH/HSV	70/20/10		17	57		8	JPB(100%), PLT(20%), RB
57	38	t	8	HTH/iHSH	60/40		15	23			JPB/PLT(40%)
59	47	h	8	HTH/iHSH/HSV	60/15/25		7	28		12	JPB(40%), PLT(20%)
60	14	h	7,8	iHSH/HSV	65/35		9			5	JPB(100%), PLT(50%)
61	17	h	5,7	iHSH/HTH	90/10		15	2			JPB(100%)
62	73	h	6,8	HTH/iHSH	60/40		29	44			JPB(40%), PLT (10%), RB (10%)
63	25	s	5,7	iHSH/HTH	70/30		18	7			JPB(70%), PLT (50%)
65	52	h	6,8	iHSH	100		52				RB
66	112	t	8	HTH/iHSH	90/10		11	101			JPB(10%)
67	81	t	5,8	iHSH/HTH/HSV	55/40/5		45	32		4	JPB/PLT(10%), RB
68	15	t	5	iHSH/HTH	50/50		8	7			JPB(50%)
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26		9	JPB(20%), PLT(10%)
70	43	h	5,7	iHSH/HTH	70/30		30	13			JPB(70%), PLT(35%)
71	2	t	5	HCR	100				2		JPB/PLT(100%)
72	13	s	5	iHSH/HTH	50/50		7	6			PCT(50%)
73	64	s	5,8	iHSH/HTH	80/20		51	13			JPB(50%), PLT(15%), RB
74	5	s	5	HCR	100				5		JPB/PLT(100%),
75	20	t	5	iHSH	100		20				GRAP/PLT(100%)
76	10	h	5	iHSH	100		10				JPB(100%), PLT(50%)
77	37	s	5	iHSH/HTH	90/10		33	4			PLT(30%), JPB(100%), CLEAN(75%)
78	69	h	5,7	iHSH/HTH	60/40		41	28			JPB(60%), PLT (10%), PCT(30%)
79	2	t	5	iHSH	100		2				JPB/PLT(100%)
80	5	h	5	HTH	100			5			NTM
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21		14	JPB(70%), PLT(25%), PCT(10%)
82	2	t	8	iHSH	100		2				GRAP/PLT(100%)
83	86	h	5,6,8	HTH/iHSH	70/30		26	60			JPB (30%)
84	124	h	5,6	iHSH/HTH/HSV	35/35/30		43	43		38	JPB(65%), PLT(20%)
85	158	h	6,8	HTH/iHSH	70/30		47	111			JPB (10%)
86	109	h	5,6,7	HTH/iHSH/HSV	65/30/5		33	71		5	JPB (30%), SLASH(10%)
87	15	t	6	iHSH	100		15				NTM
88	8	h	6	iHSH/HSV	90/10		7			1	JPB(100%)
89	27	h	5,6	iHSH/HTH	80/20		22	5			JPB(50%), RB
90	6	h	6	iHSH	100		6				JPB (100%)
91	133	h	5,7	HTH/iHSH/HSV	50/45/5		60	67		7	JPB(50%), PLT(15%), RB
92	104	h	7,8	iHSH/HTH/HSV	65/30/5		68	31		5	JPB(30%)
93	74	h	8	iHSH/HTH	50/50		37	37			JPB(50%)
94	54	t	6	iHSH/HTH	80/20		43	11			JPB(80%)
95	15	t	6	iHSH/HTH	60/40		9	6			JPB(60%), RB
117	98	s	5	HTH/iHSH	70/30		29	69			JPB(30%), PLT(10%)
118	19	s	5	iHSH	100		19				JPB(100%)

Proposed Action Alternative (B)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
121	24	h	7	iHSH/HTH/HSV	50/30/20		12	7		5	PLT(40%), JPB(100%), RB
124	51	h	7,8	HTH/iHSH	60/40		20	31			NTM
125	8	h	5,7	iHSH	100		8				NTM
126	62	h	6,8	iHSH/HTH	50/50		31	31			JPB(50%), RB
4254						66	2098	1830	52	208	

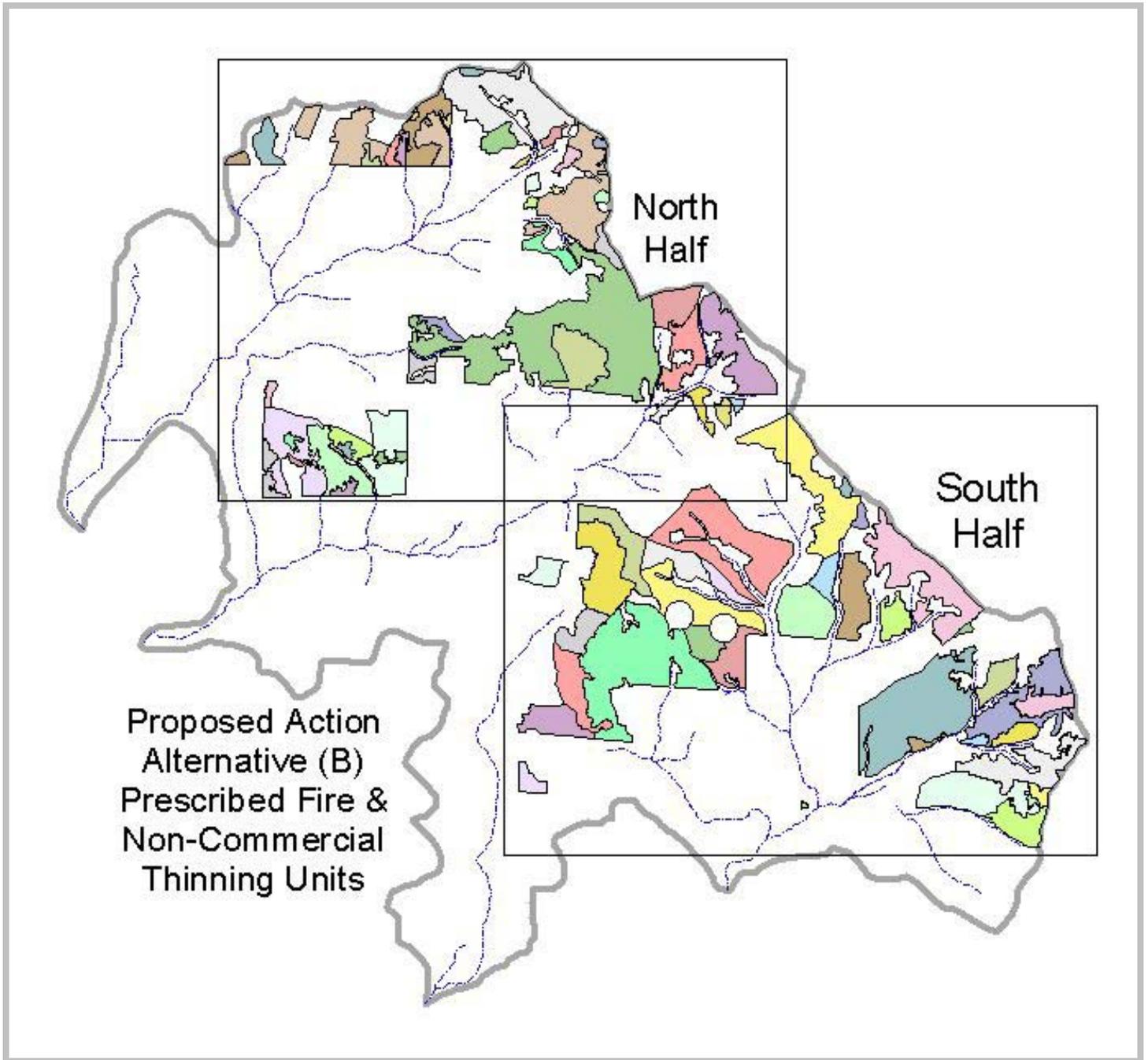
Table Key

Rx Silvicultural prescription
Rx% The percent of the unit area affected by the associated silvicultural prescription.
HTH Commercial free thinning
HSL Uneven-age silvicultural system
HCR Seed tree silvicultural system
iHSH Irregular Shelterwood silvicultural system
HSV Salvage silvicultural system

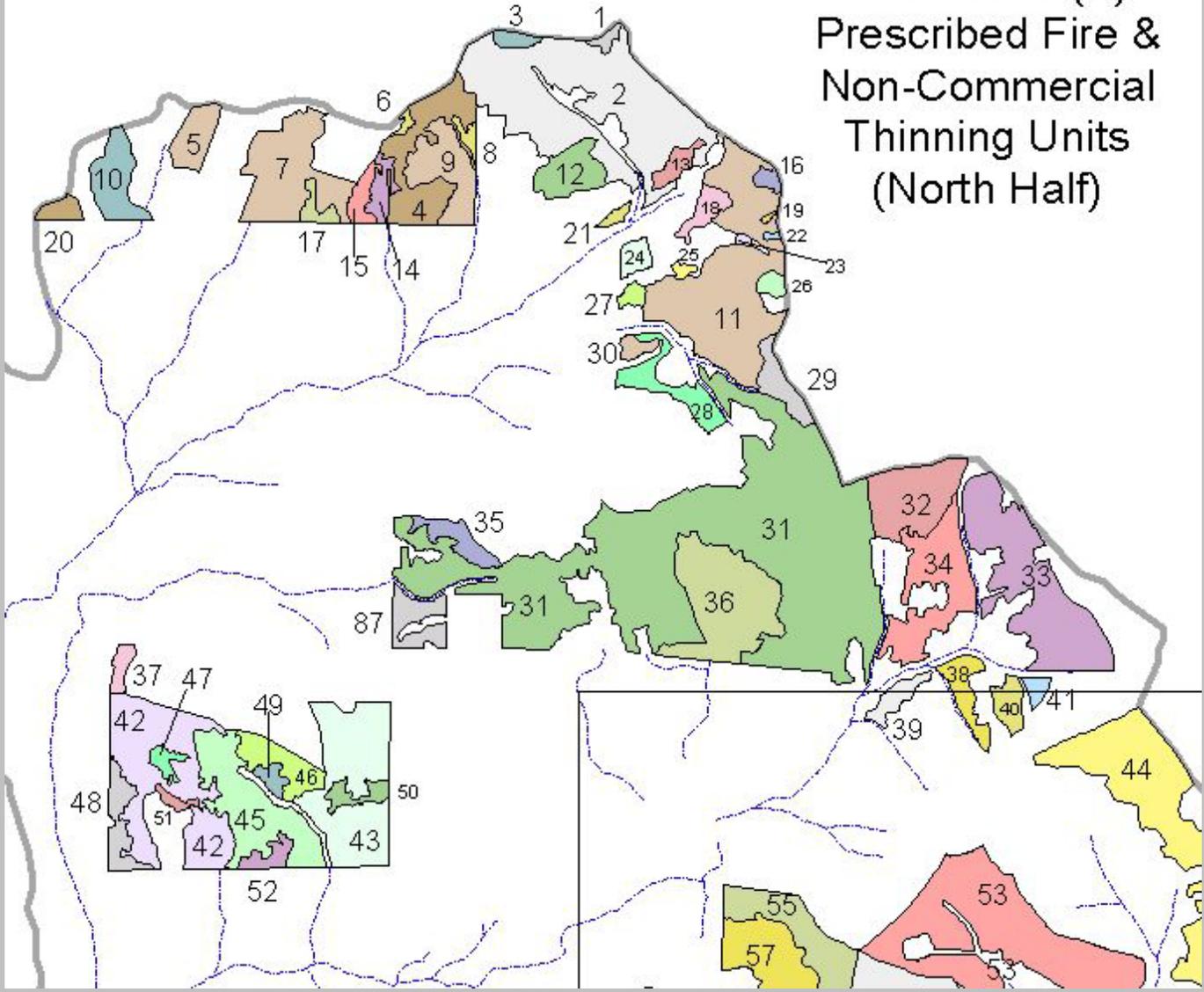
PHT Post Harvest Treatment Activity
NTM No post harvest activity
GRAP Grapple pile
CLEAN Cut small damaged or suppressed trees.
SLASH Cut small diameter material less then 4.9" dbh.
SPC Non-commercial thinning
JPB Jackpot burn
RB Restoration prescribed fire
PLT Artificial plant
WLS Log on 4inches of frozen ground or 2 foot snow depth.
WLR Harvest timing restriction, recreation concerns.

Yard Yarding method
H Helicopter
T Ground based logging system
S Cable or skyline based logging system
CTL Cut to length logging system

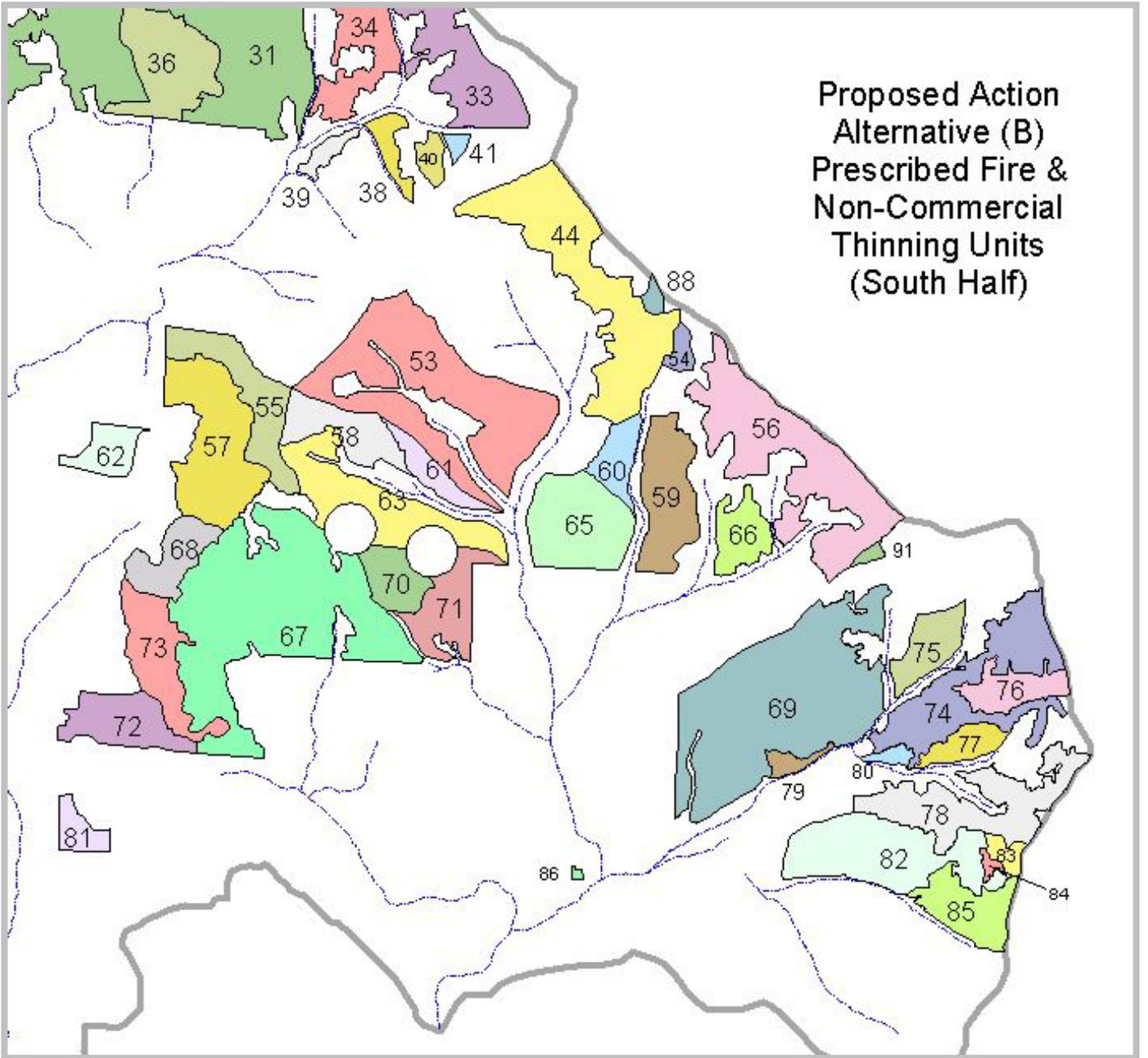
PMA Forest Plan Management Area



Proposed Action
Alternative (B)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)



Proposed Action
Alternative (B)
Prescribed Fire &
Non-Commercial
Thinning Units
(South Half)



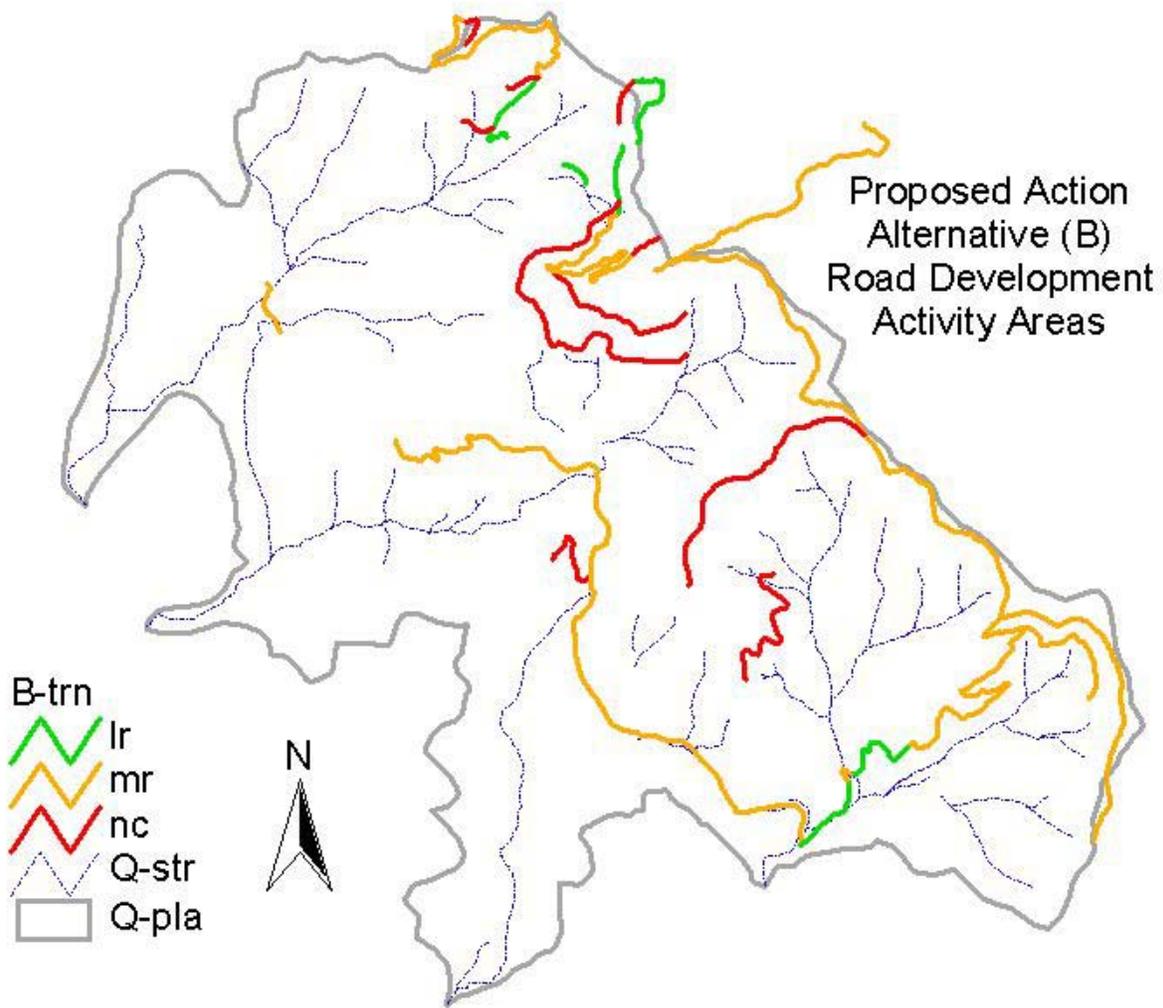
Proposed Action Alternative (B)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	45	2	99
2	25	270	46	1	34
3	1	8	47	2	8
4	1	76	48	2	27
5	1	26	49	2	8
6	2	3	50	1	14
7	5	98	51	2	6
8	25	5	52	1	12
9	25	53	53	25	312
10	1	40	54	3	14
11	5	203	55	5	97
12	1	35	56	5	242
13	6	13	57	1	162
14	2	15	58	3	70
15	1	14	59	5	104
16	6	6	60	3	39
17	1	10	61	2	34
18	6	16	62	5	38
19	6	1	63	56	128
20	1	10	65	25	125
21	2	4	66	5	50
22	6	1	67	25	423
23	6	2	68	3	59
24	6	11	69	25	399
25	6	4	70	3	48
26	6	7	71	5	74
27	6	7	72	5	77
28	5	36	73	1	94
29	6	24	74	56	165
30	6	8	75	1	52
31	5	686	76	6	50
32	1	71	77	14	33
33	25	158	78	56	144
34	25	89	79	1	14
35	1	22	80	1	10
36	1	123	81	1	26
37	5	10	82	1	164
38	5	24	83	3	15
39	5	15	84	5	5
40	5	17	85	56	72
41	5	7	86	5	2
42	1	147	87	5	29
43	5	133	88	5	8

Proposed Action Alternative (B)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
44	5	241	91	25	6
				Total	6342

Table Key

Type:

- 1**= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.
- 2** = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.
- 3** = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.
- 5** = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.
- 6** = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.
- 14** = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.
- 25** = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.
- 56** = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.

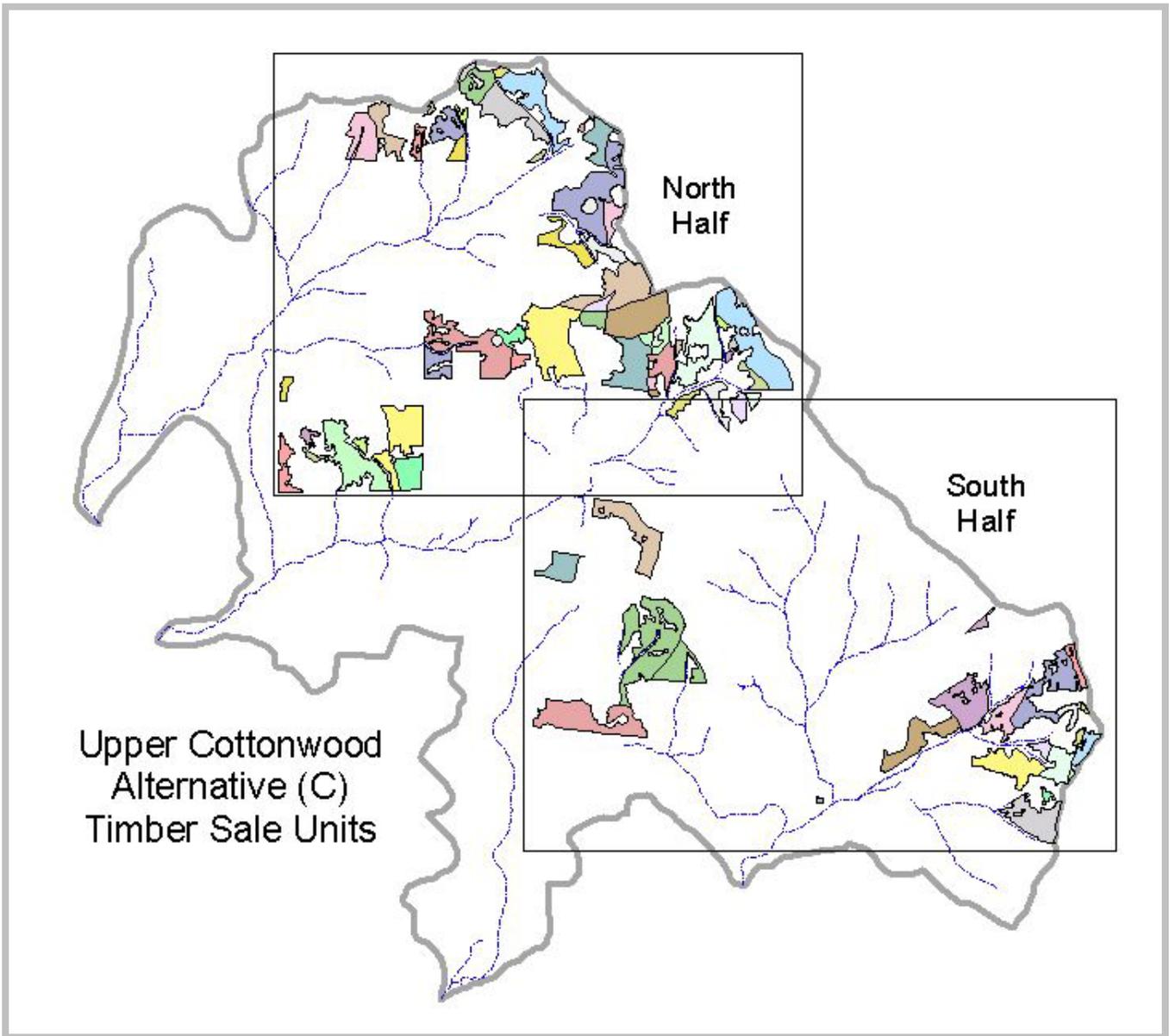


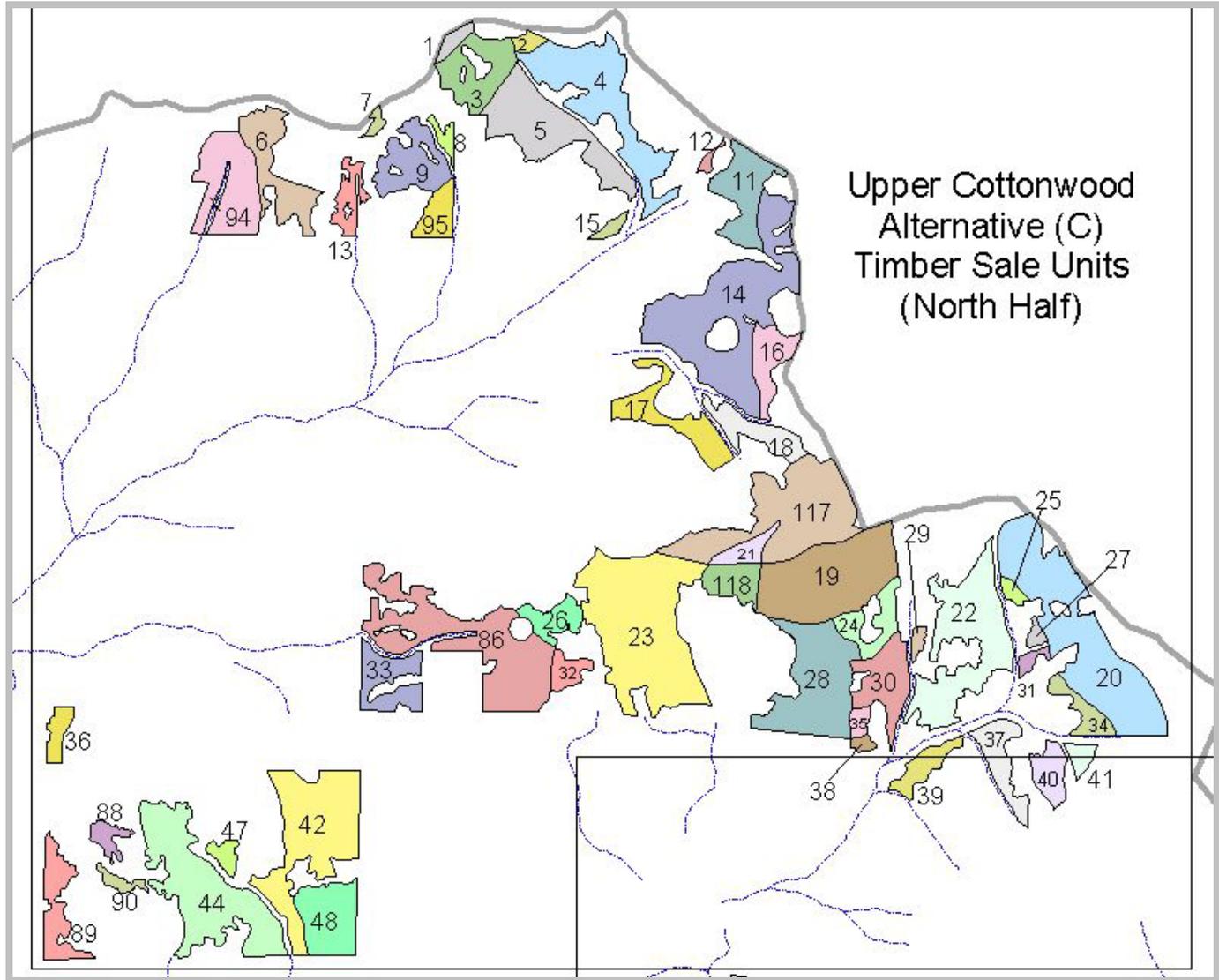
Legend Key

lr = Light re-construction (4.18 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

mr = Medium re-construction (31.34 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

nc = New construction (10.83 miles): New road construction activities would start by removing right of way trees from the road location. Earth moving equipment (excavators, bulldozers) would then establish the roadbed, install drainage features and where appropriate, apply an aggregate surface.





Upper Cottonwood Alternative (C)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	61				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	s	3A,7	iHSH/HCR/HSV	55/40/5		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HCR/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100			24			NTM
19	95	s	5	iHSH/HTH	90/10		85	10			JPB(50%)
20	129	s	5	iHSH/HTH/HSV	80/15/5		103	19	7		JPB(100%), PLT(25%)
21	11	s	5	HTH	100			11			NTM
22	89	h	5,7	iHSH/HTH/HSV	50/40/10		44	36		9	JPB(20%), PLT(20%)
23	144	t	5,6,7	iHSH/HTH/HSV	65/30/5		94	43		7	JPB(50%)
24	21	h	5	iHSH/HTH	80/20		17	4			JPB(100%)
25	4	h	5	iHSH	100		4				JPB(100%)
26	17	s	5,6,7	iHSH/HTH	70/30		12	5			JPB(70%), RB
27	4	h	5	HTH	100			4			NTM
28	77	t	5	iHSH/HTH	50/50		39	38			JPB(50%)
29	4	h	5	HTH	100			4			NTM
30	34	s	5,7	HTH/HSV	90/10			31		3	SLASH(100%)
31	4	h	5	iHSH	100		4				NTM
32	10	s	6	iHSH	100		10				JPB(100%)
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
34	15	h	5	iHSH	100		15				NTM
35	5	h	5	HTH	100			5			NTM
36	10	h	6	iHSH	100		10				JPB(100%)
37	24	h	5,7	HTH/iHSH/HSV	70/20/10		5	17		2	NTM
38	3	s	5,7	iHSH	100		3				JPB(100%)
39	15	h	7	HTH/HSV	85/15			13		2	NTM
40	17	h	5	HTH/iHSH	50/50		9	8			NTM
41	7	h	5	HTH	100			7			NTM
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
44	99	h	6,8	iHSH/HTH	70/30		69	30			JPB(30%), RB
47	7	h	6	iHSH	100		7				RB
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)
57	38	t	8	HTH/iHSH	60/40		15	23			JPB/PLT(40%)
65	51	h	6,8	iHSH	100		51				RB

Upper Cottonwood Alternative (C)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	HTH	HCR	HSV	PHT	
66	112	t	8	HTH/iHSH	90/10		11	101		JPB(10%)	
67	81	t	5,8	iHSH/HTH/HSV	55/40/5		45	32	4	JPB/PLT(10%), RB	
68	15	t	5	iHSH/HTH	50/50		8	7		JPB(50%)	
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26	9	JPB(20%), PLT(10%)	
70	43	h	5,7	iHSH/HTH	70/30		30	13		JPB(70%), PLT(35%)	
71	2	t	5	HCR	100				2	JPB/PLT(100%)	
72	13	s	5	iHSH/HTH	50/50		7	6		PCT(50%)	
73	64	s	5,8	iHSH/HTH	80/20		51	13		JPB(50%), PLT(15%), RB	
74	5	s	5	HCR	100				5	JPB/PLT(100%),	
75	20	t	5	iHSH	100		20			GRAP/PLT(100%)	
76	10	h	5	iHSH	100		10			JPB(100%), PLT(50%)	
77	37	s	5	iHSH/HTH	90/10		33	4		PLT(30%), JPB(100%), CLEAN(75%)	
78	69	h	5,7	iHSH/HTH	60/40		41	28		JPB(60%), PLT (10%), PCT(30%)	
79	2	t	5	iHSH	100		2			JPB/PLT(100%)	
80	5	h	5	HTH	100			5		NTM	
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21	14	JPB(70%), PLT(25%), PCT(10%)	
82	2	t	8	iHSH	100		2			GRAP/PLT(100%)	
83	83	h	5,6,8	HTH/iHSH	70/30		25	58		JPB (30%)	
85	158	h	6,8	HTH/iHSH	70/30		47	111		JPB(10%)	
86	109	h	5,6,7	HTH/iHSH/HSV	65/30/5		33	71	5	JPB (30%), SLASH(10%)	
88	8	h	6	iHSH/HSV	90/10			7	1	JPB(100%)	
89	27	h	5,6	iHSH/HTH	80/20		22	5		JPB(50%), RB	
90	6	h	6	iHSH	100		6			JPB (100%)	
94	54	t	6	iHSH/HTH	80/20		43	11		JPB(80%)	
95	15	t	6	iHSH/HTH	60/40		9	6		JPB(60%), RB	
117	99	s	5	HTH/iHSH	70/30		30	69		JPB(30%), PLT(10%)	
118	19	s	5	iHSH	100		19			JPB(25%)	
125	8	h	5,7	iHSH	100		8			JPB(50%)	
2877						66	1520	1146	56	87	

Table Key

Rx Silvicultural prescription
Rx% The percent of the unit area affected by the associated silvicultural prescription.
HTH Commercial free thinning
HSL Uneven-age silvicultural system
HCR Seed tree silvicultural system
iHSH Irregular Shelterwood silvicultural system
HSV Salvage silvicultural system

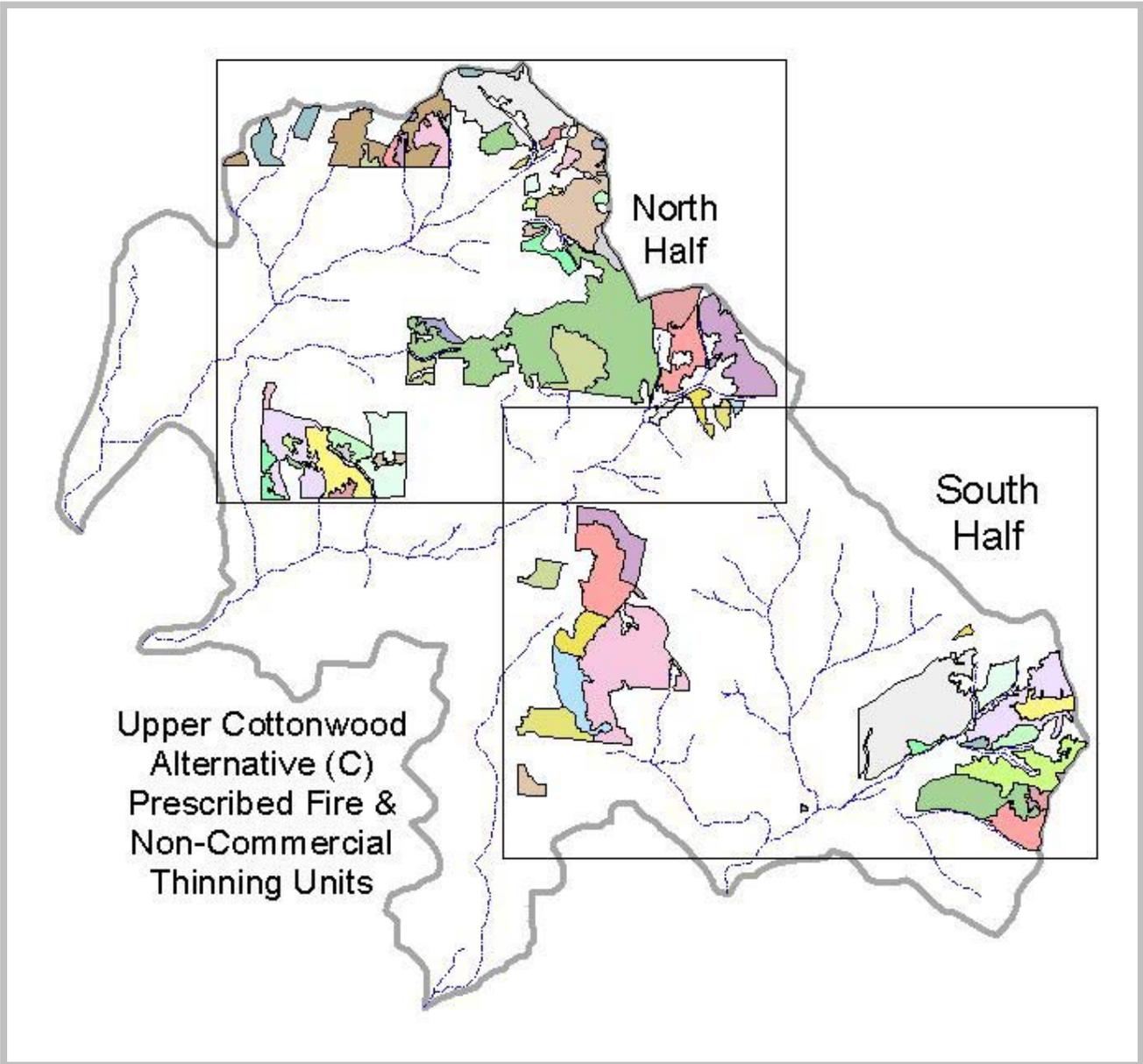
PHT Post Harvest Treatment Activity
NTM No post harvest activity
GRAP Grapple pile
CLEAN Cut small damaged or suppressed trees.
SLASH Cut small diameter material less than 4.9" dbh.
SPC Non-commercial thinning
JPB Jackpot burn
RB Restoration prescribed fire
PLT Artificial plant
WLS Log on 4 inches of frozen ground or 2 foot snow depth.
WLR Harvest timing restriction, recreation concerns.

Yard Yarding method

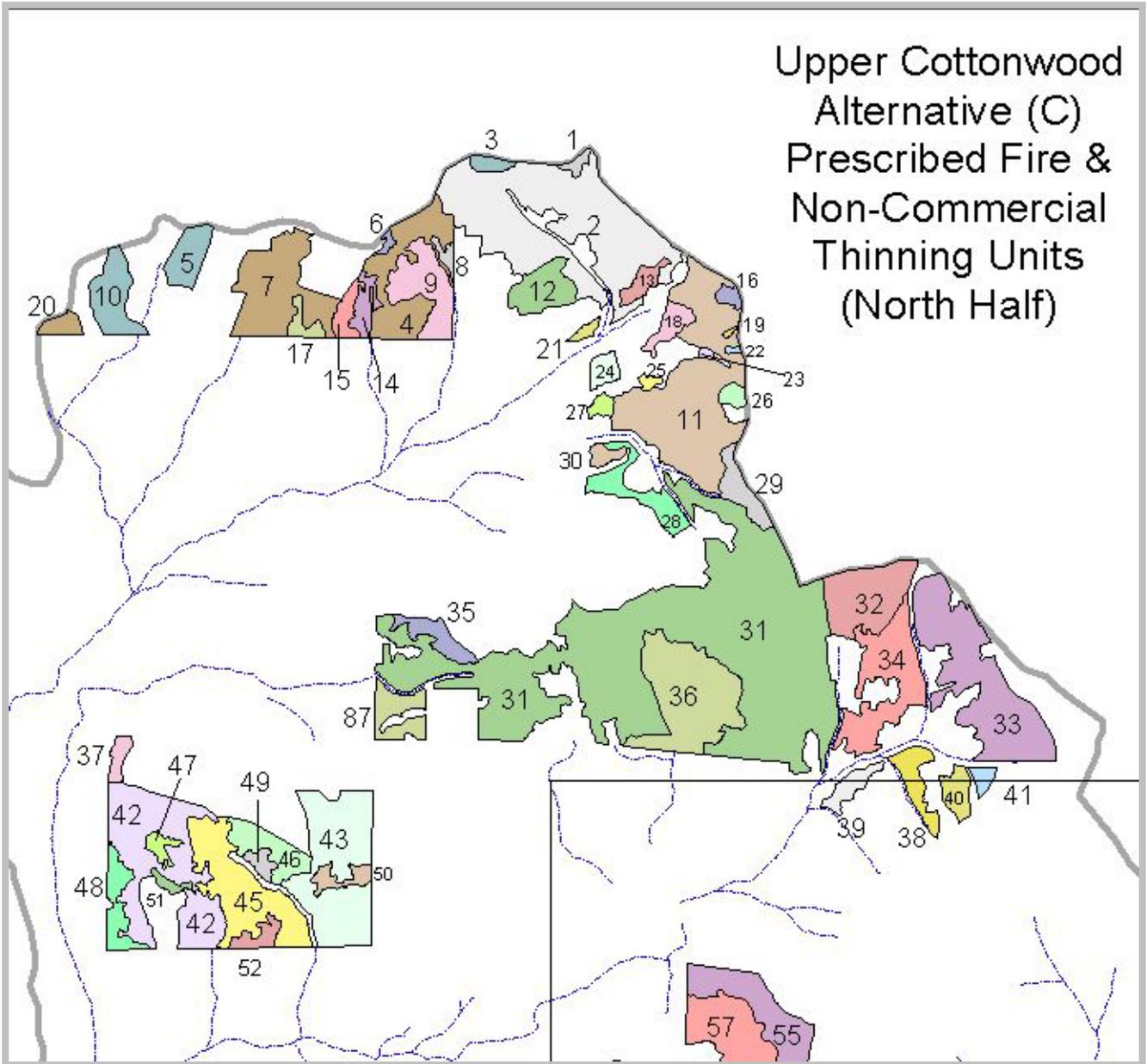
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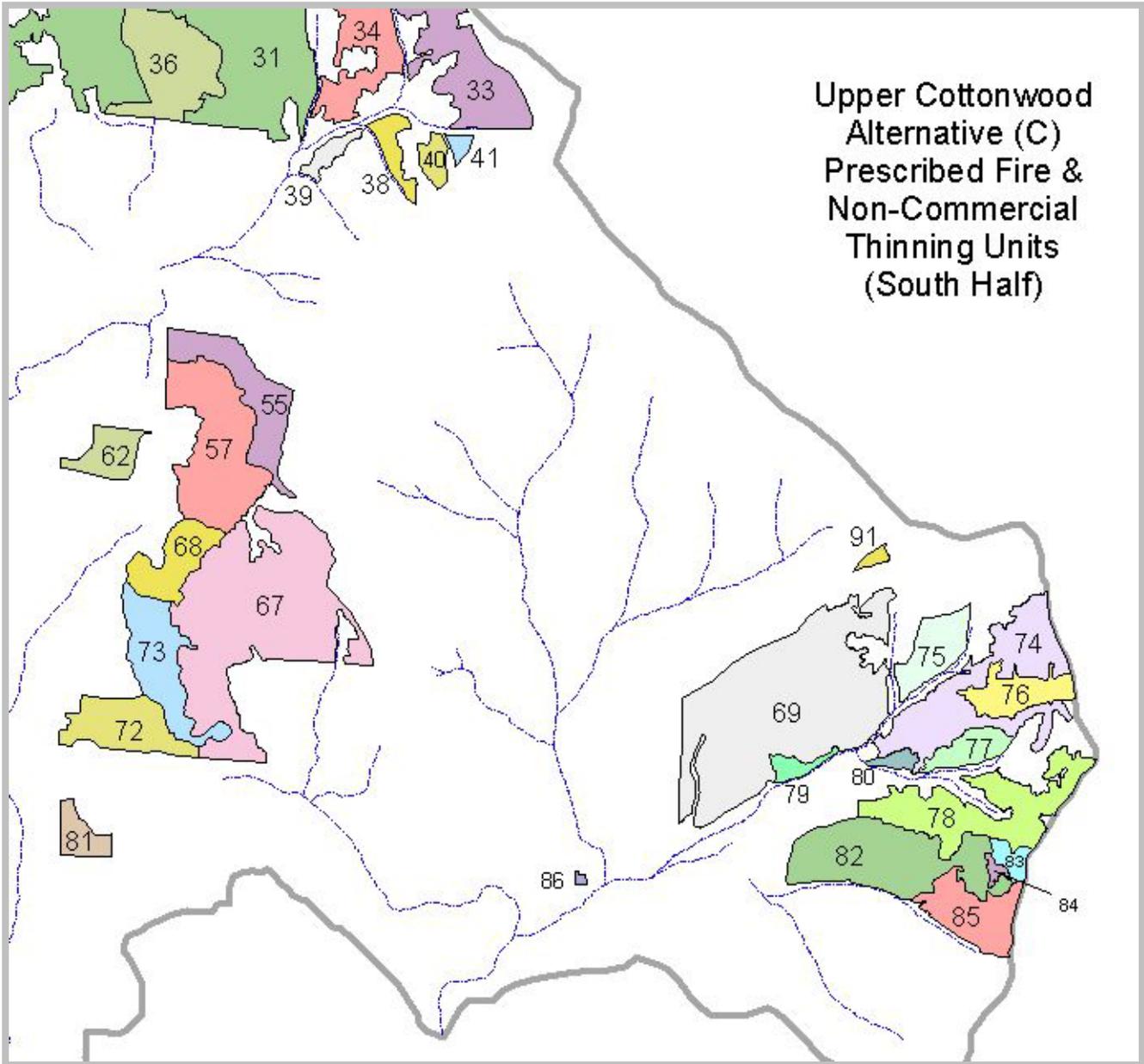
H Helicopter
T Ground based logging system
S Cable or skyline based logging system
CTL Cut to length logging system

PMA Forest Plan Management Area



Upper Cottonwood
Alternative (C)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)





Upper Cottonwood Alternative (C)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	38	5	24
2	25	270	39	5	15
3	1	8	40	5	17
4	1	76	41	5	7
5	1	26	42	1	147
6	2	3	43	5	133
7	5	98	45	2	99
8	25	5	46	1	34
9	25	53	47	2	8
10	1	40	48	2	27
11	5	203	49	2	8
12	1	35	50	1	14
13	6	13	51	2	6
14	2	15	52	1	12
15	1	14	55	5	90
16	6	6	57	1	162
17	1	10	62	5	38
18	6	16	67	25	361
19	6	1	68	3	59
20	1	10	69	25	398
21	2	4	72	5	77
22	6	1	73	1	94
23	6	2	74	56	165
24	6	11	75	1	52
25	6	4	76	6	50
26	6	7	77	14	33
27	6	7	78	56	144
28	5	36	79	1	14
29	6	24	80	1	10
30	6	8	81	1	26
31	5	686	82	1	164
32	1	71	83	3	15
33	25	158	84	5	5
34	25	89	85	56	71
35	1	22	86	5	2
36	1	123	87	5	29
37	5	10	91	25	6
				Total	4784

Table Key

Type:

1= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.

2 = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.

3 = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.

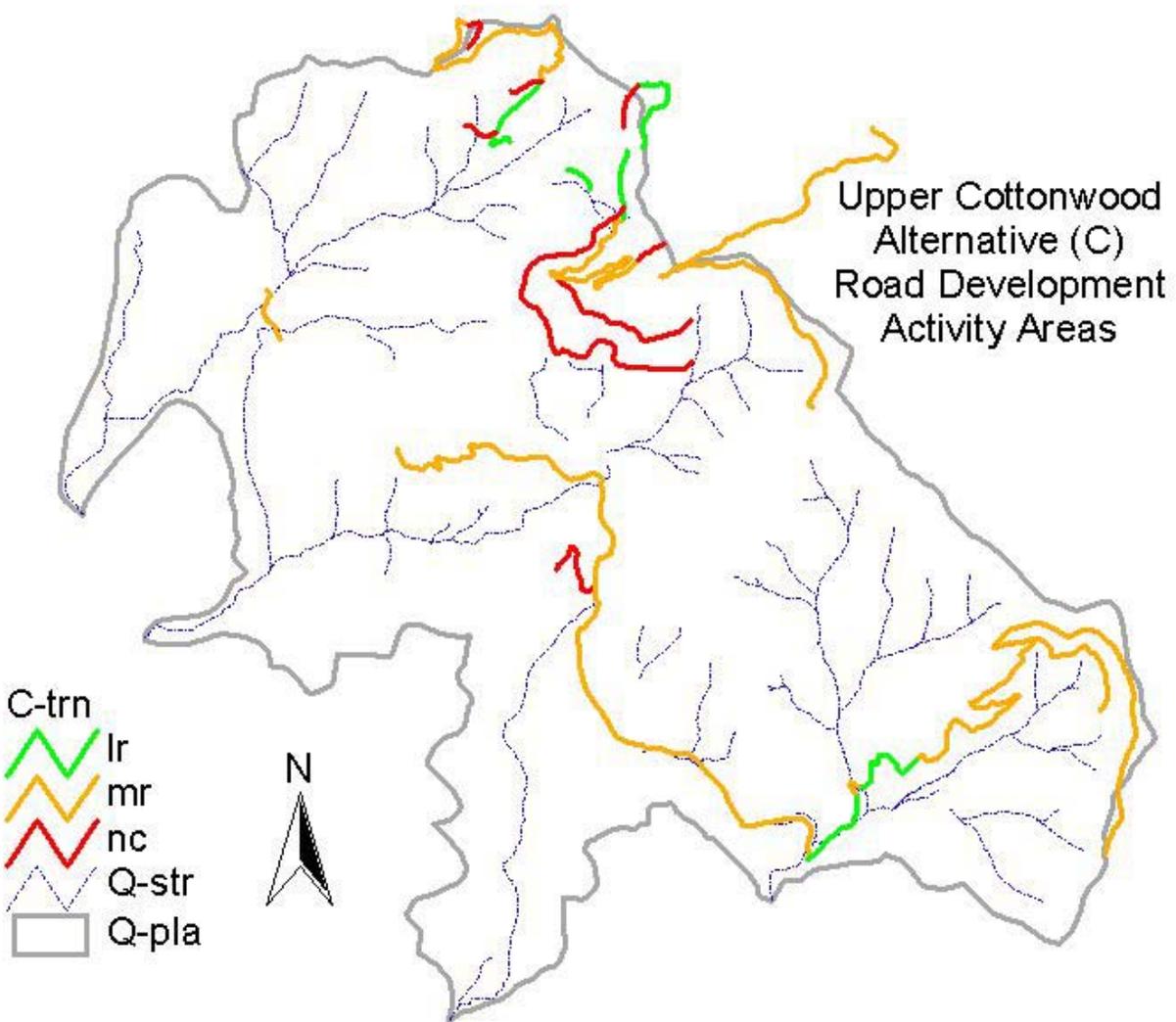
5 = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

6 = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.

14 = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.

25 = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

56 = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.

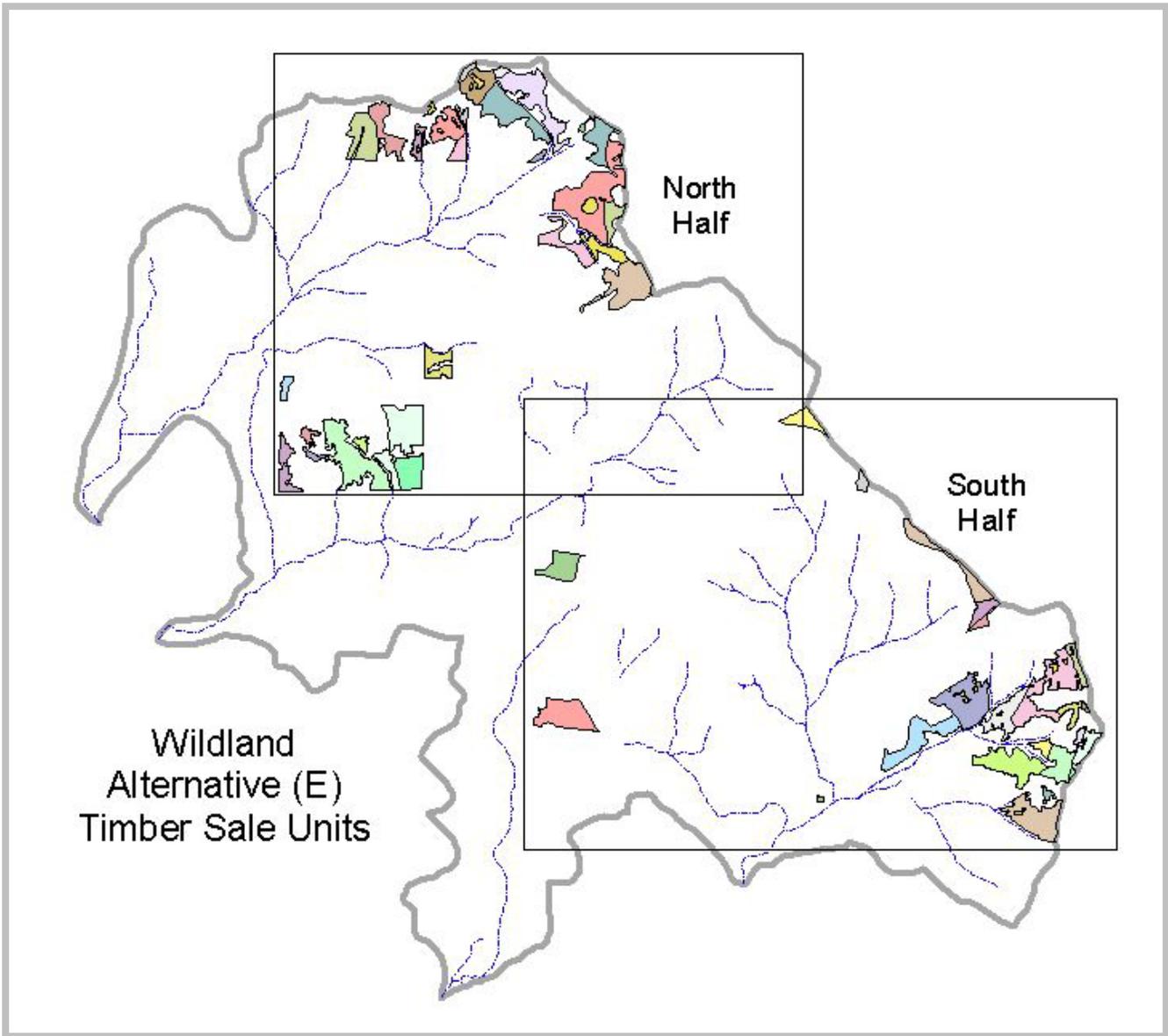


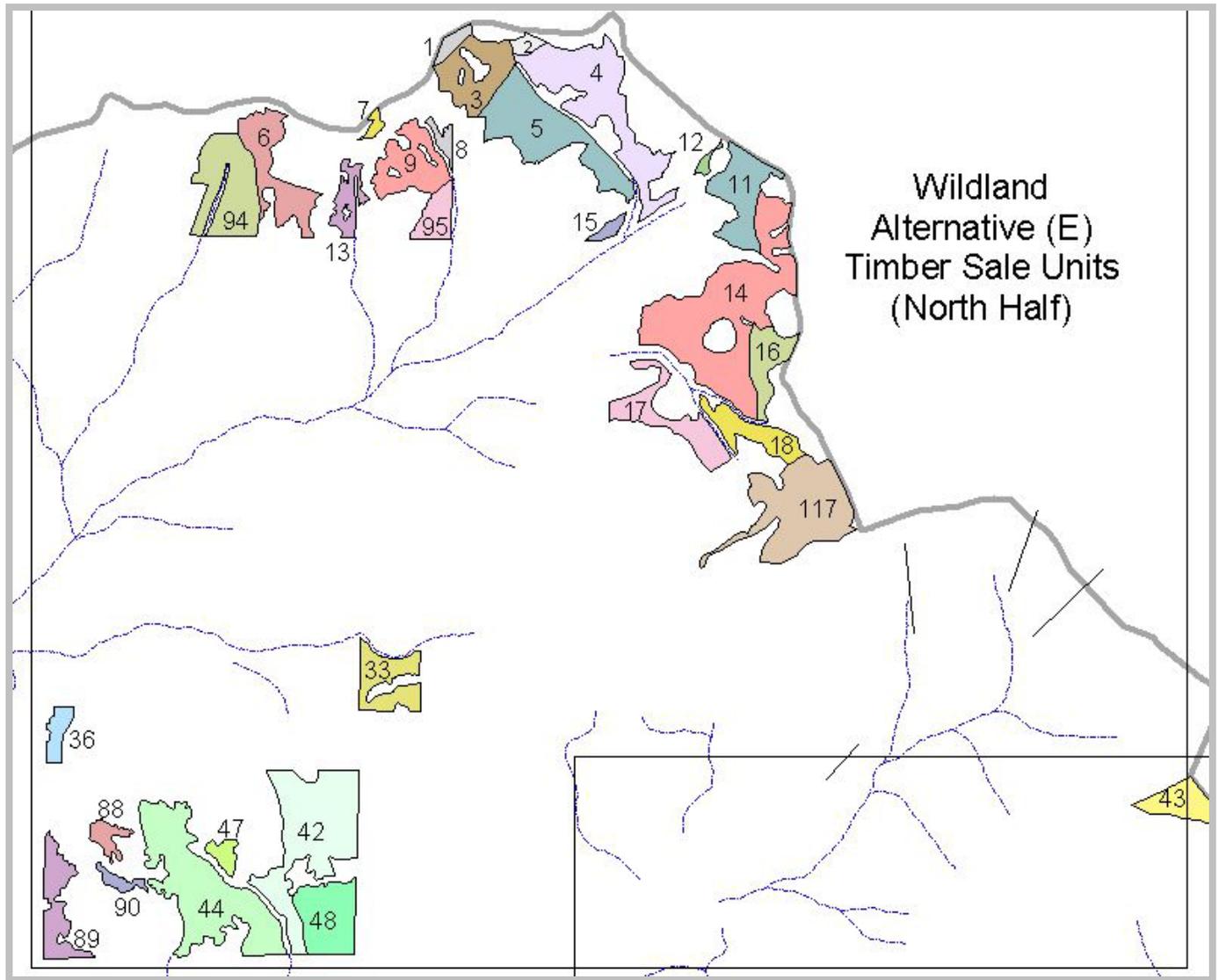
Legend Key

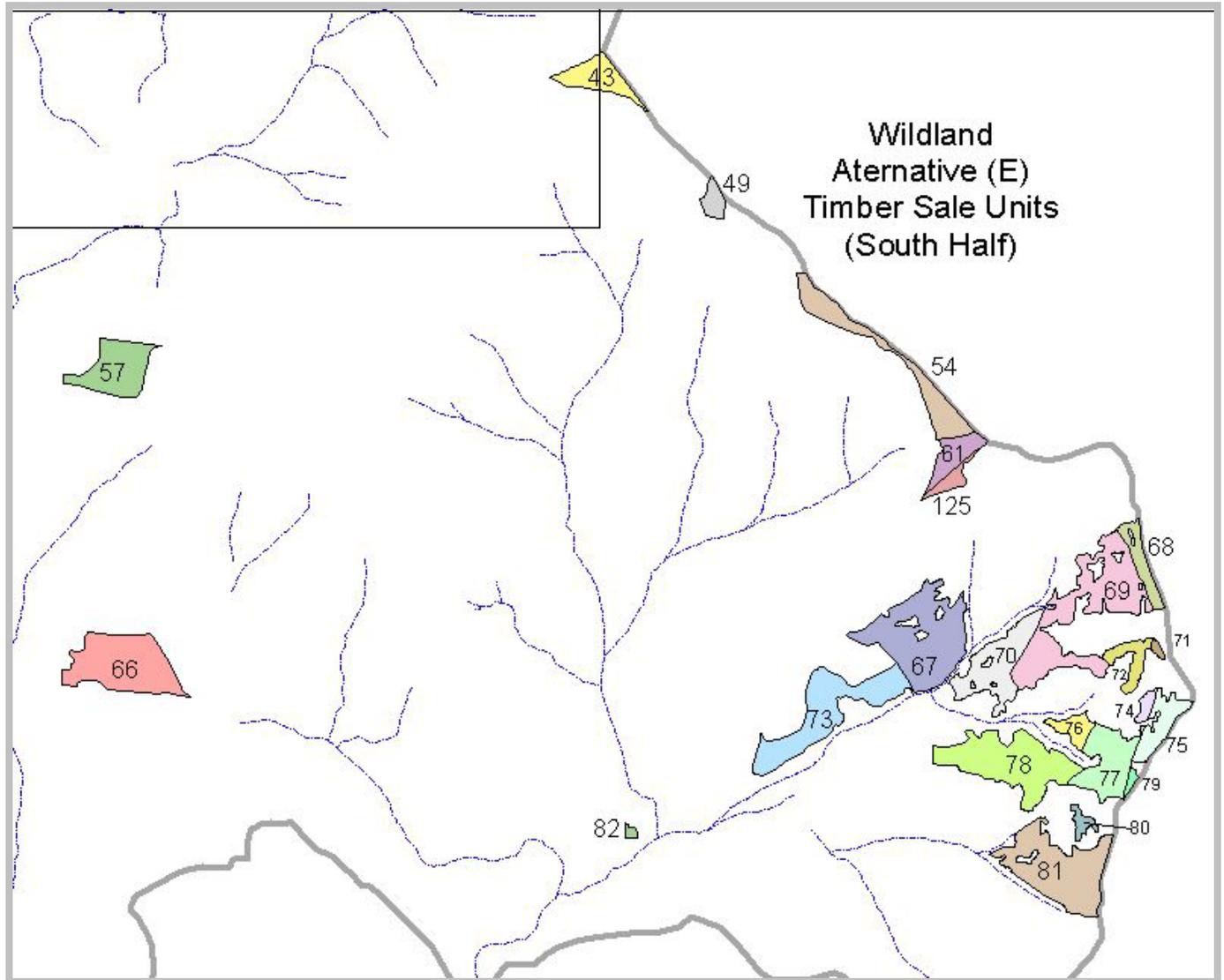
lr= Light re-construction (4.18 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

mr = Medium re-construction (28.5 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

nc = New construction (6.89 miles): New road construction activities would start by removing right of way trees from the road location. Earth moving equipment (excavators, bulldozers) would then establish the roadbed, install drainage features and where appropriate, apply an aggregate surface.







Wildland Alternative (E)
Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	62				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	s	3A,7	iHSH/HCR/HSV	55/40/05		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HRC/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100				24		NTM
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
36	10	h	6	iHSH	100		10				JPB(100%)
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
43	23	t	5,7	iHSH/HTH	70/30		16	7			JPB(100%), PLT(22%)
44	99	h	6,8	iHSH/HTH	70/30		69	30			JPB(30%), RB
47	7	h	6	iHSH	100		7				RB
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)
49	8	t	7	iHSH/HTH	80/20		6	2			GRAP/PLT(80%)
54	42	t	5,7	HTH/iHSH/HSV	65/20/15		9	27		6	GRAP/PLT(15%), JPB(20%)
57	38	t	8	HTH/iHSH	60/40		15	23			JPB/PLT(40%)
61	17	h	5,7	iHSH/HTH	90/10		15	2			JPB(100%)
66	64	t	8	HTH	100				64		NTM
67	81	t	5,8	iHSH/HTH/HSV	55/40/5		45	32		4	JPB/PLT(10%), RB
68	15	t	5	iHSH/HTH	50/50		8	7			JPB(50%)
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26		9	JPB(20%), PLT(10%)
70	43	h	5,7	iHSH/HTH	70/30		30	13			JPB(70%), PLT(35%)
71	2	t	5	HCR	100					2	JPB/PLT(100%)
72	13	s	5	iHSH/HTH	50/50		7	6			PCT(50%)
73	64	s	5,8	iHSH/HTH	80/20		51	13			JPB(50%), PLT(15%), RB
74	5	t	5	HCR	100					5	JPB/PLT(100%),
75	20	t	5	iHSH	100		20				GRAP/PLT(100%)
76	10	h	5	iHSH	100		10				JPB(100%), PLT(50%)
77	37	s	5	iHSH/HTH	90/10		33	4			PLT(30%), JPB(100%), CLEAN(75%)
78	69	h	5,7	iHSH/HTH	60/40		41	28			JPB(60%), PLT (10%), PCT(30%)
79	2	t	5	iHSH	100		2				JPB/PLT(100%)
80	5	h	5	HTH	100				5		NTM
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21		14	JPB(70%), PLT(25%), PCT(10%)
82	2	t	8	iHSH	100		2				GRAP/PLT(100%)
88	8	h	6	iHSH/HSV	90/10				7	1	JPB(100%)

Wildland Alternative (E)
Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
89	27	h	5,6	iHSH/HTH	80/20		22	5			JPB(50%), RB
90	6	h	6	iHSH	100		6				JPB (100%)
94	54	t	6	iHSH/HTH	80/20		43	11			JPB(80%)
95	15	t	6	iHSH/HTH	60/40		9	6			JPB(60%), RB
117	78	s	5	HTH/iHSH	70/30		23	55			NTM
125	8	h	5,7	iHSH	100		8				NTM
	1748						67	929	638	49	63

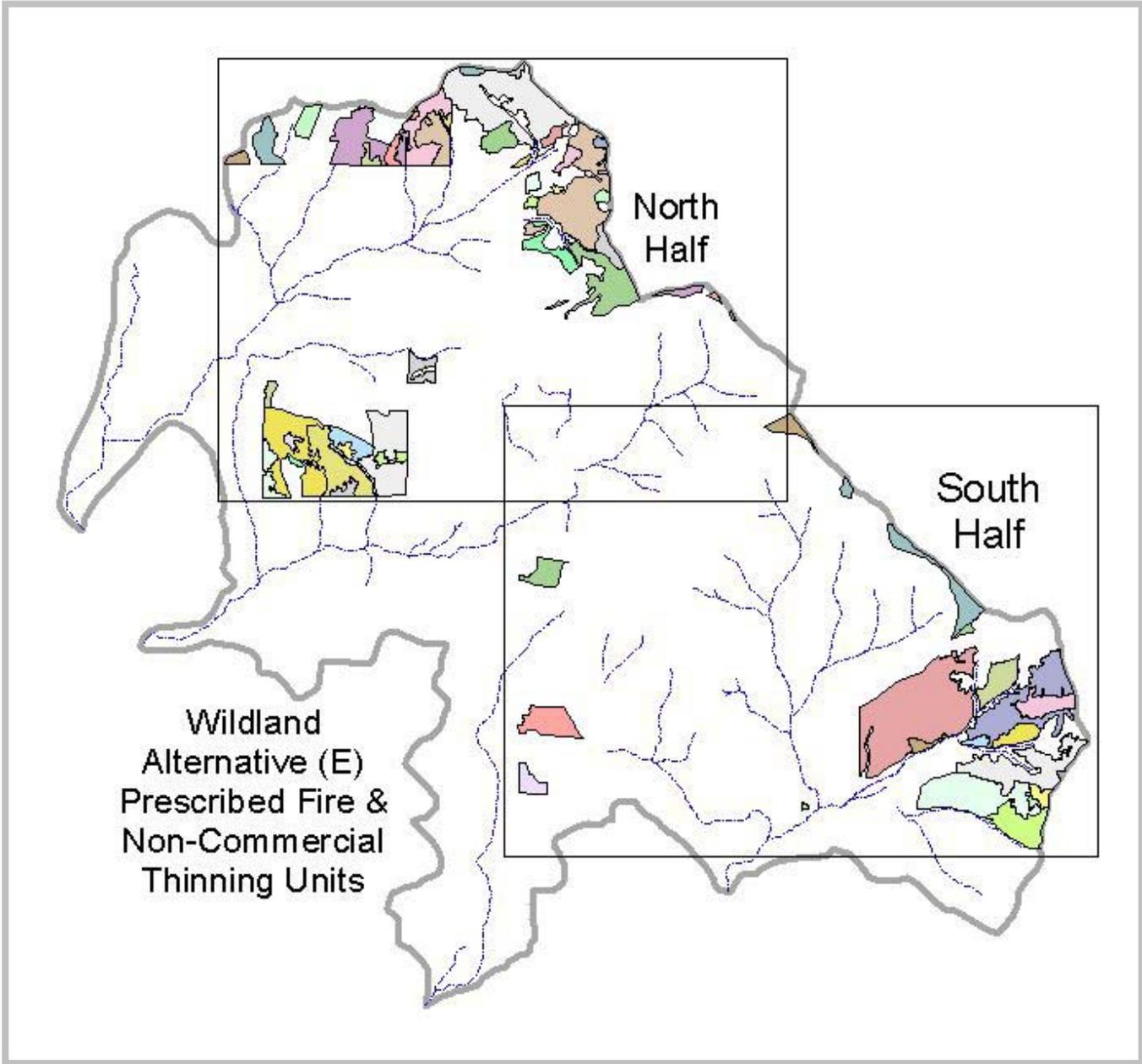
Table Key

Rx Silvicultural prescription
Rx% The percent of the unit area affected by the associated silvicultural prescription.
HTH Commercial free thinning
HSL Uneven-age silvicultural system
HCR Seed tree silvicultural system
iHSH Irregular Shelterwood silvicultural system
HSV Salvage silvicultural system

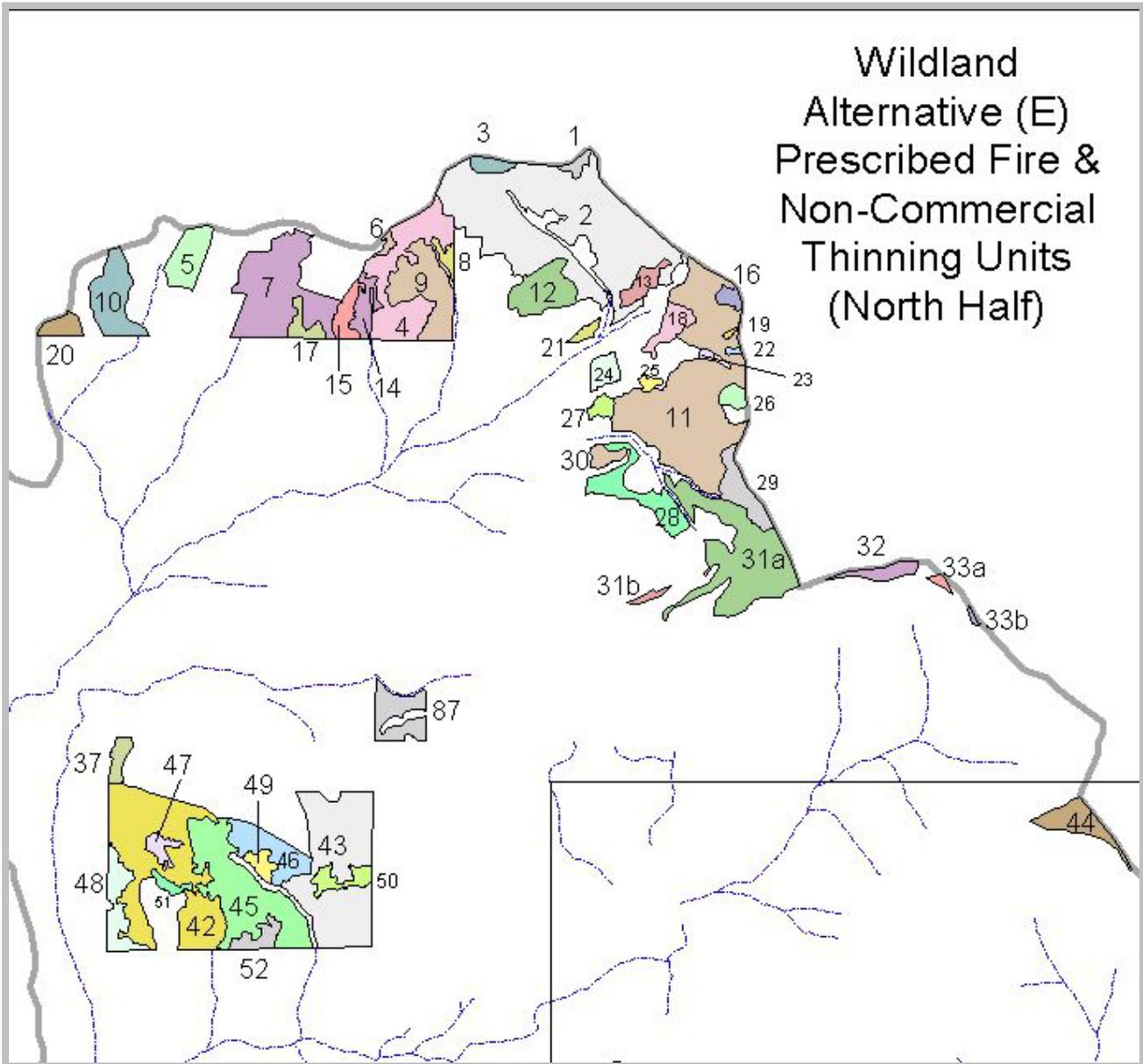
PHT Post Harvest Treatment Activity
NTM No post harvest activity
GRAP Grapple pile
CLEAN Cut small damaged or suppressed trees.
SLASH Cut small diameter material less than 4.9" dbh.
SPC Non-commercial thinning
JPB Jackpot burn
RB Restoration prescribed fire
PLT Artificial plant
WLS Log on 4inches of frozen ground or 2 foot snow depth.
WLR Harvest timing restriction, recreation concerns.

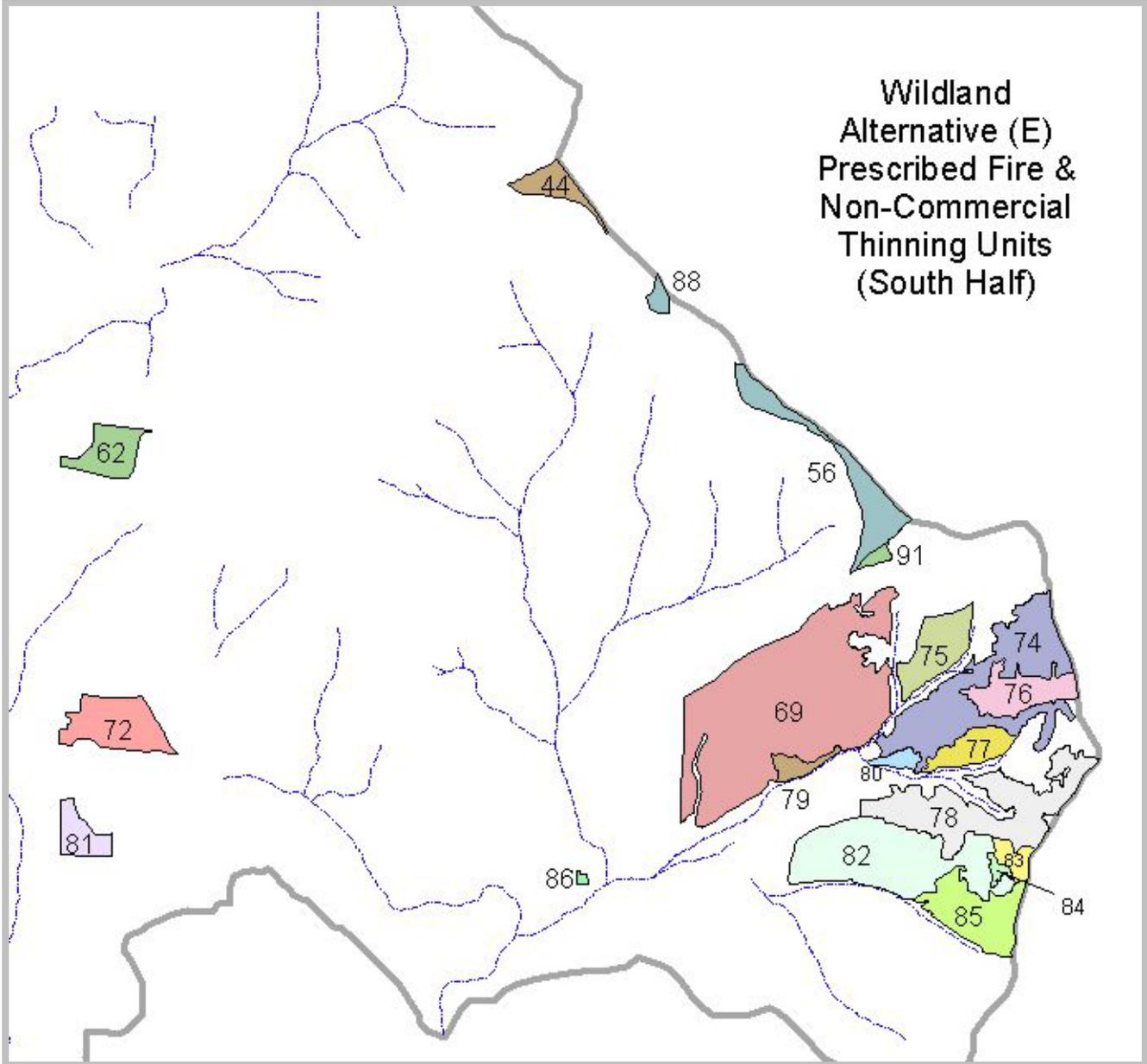
Yard Yarding method
H Helicopter
T Ground based logging system
S Cable or skyline based logging system
CTL Cut to length logging system

PMA Forest Plan Management Area



Wildland
Alternative (E)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)





Wildland Alternative (E)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	33a	5	3
2	25	270	33b	5	1
3	1	8	37	5	10
4	1	76	42	1	147
5	1	26	43	5	133
6	2	3	44	5	25
7	5	98	45	2	99
8	25	5	46	1	34
9	25	53	47	2	8
10	1	40	48	2	27
11	5	203	49	2	8
12	1	35	50	1	14
13	6	13	51	2	6
14	2	15	52	1	12
15	1	14	56	5	66
16	6	6	62	5	38
17	1	10	69	25	398
18	6	16	72	5	65
19	6	1	74	56	165
20	1	10	75	1	52
21	2	4	76	6	50
22	6	1	77	14	33
23	6	2	78	56	144
24	6	11	79	1	14
25	6	4	80	1	10
26	6	7	81	1	26
27	6	7	82	1	164
28	5	35	83	3	15
29	6	24	84	5	5
30	6	8	85	56	72
31a	5	106	86	5	2
31b	5	3	87	5	29
32	1	12	88	5	8
			91	25	6
				Total	3020

Table Key

Type:

1= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.
 2 = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.
 3 = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.

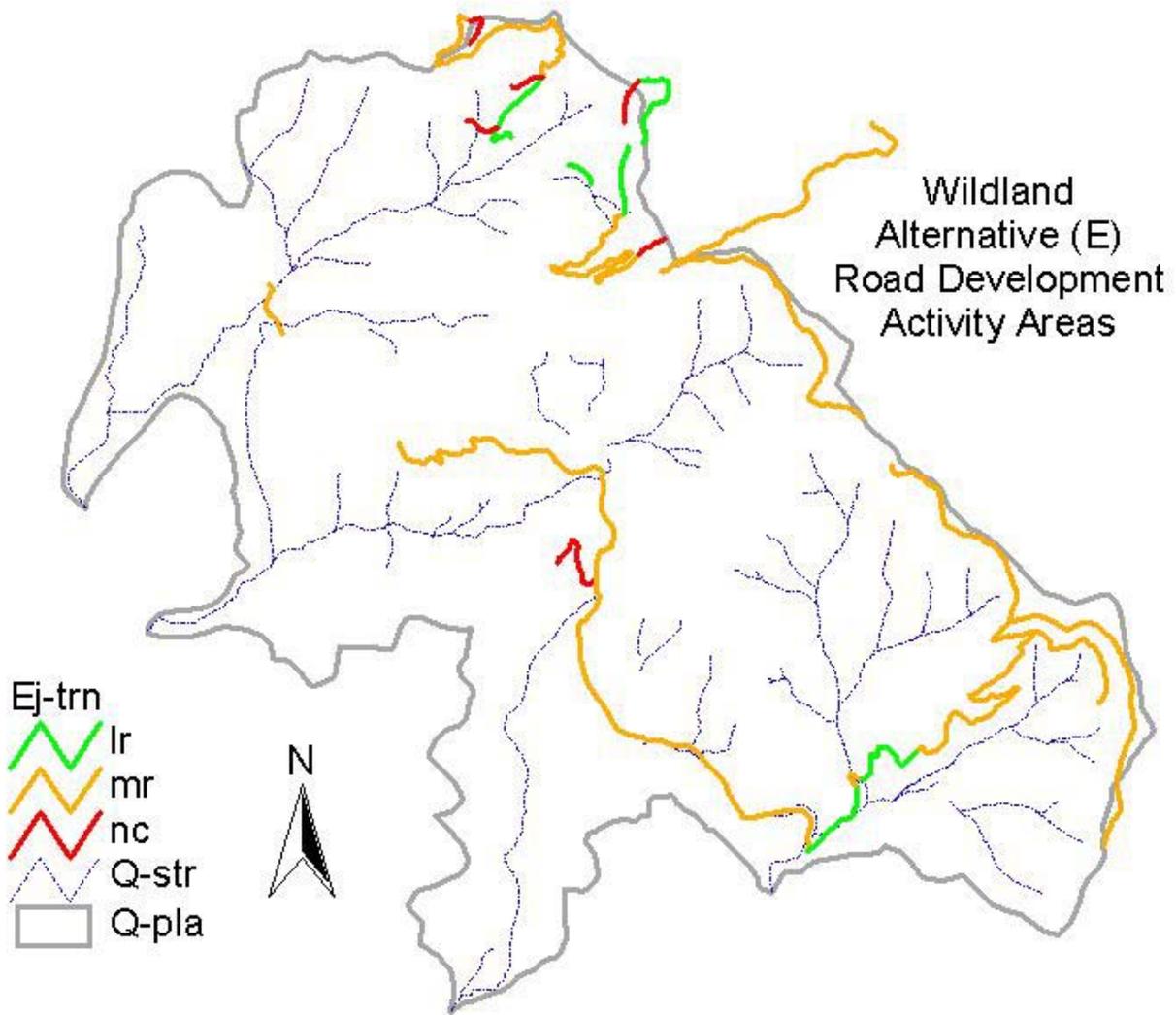
5 = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

6 = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.

14 = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.

25 = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

56 = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.

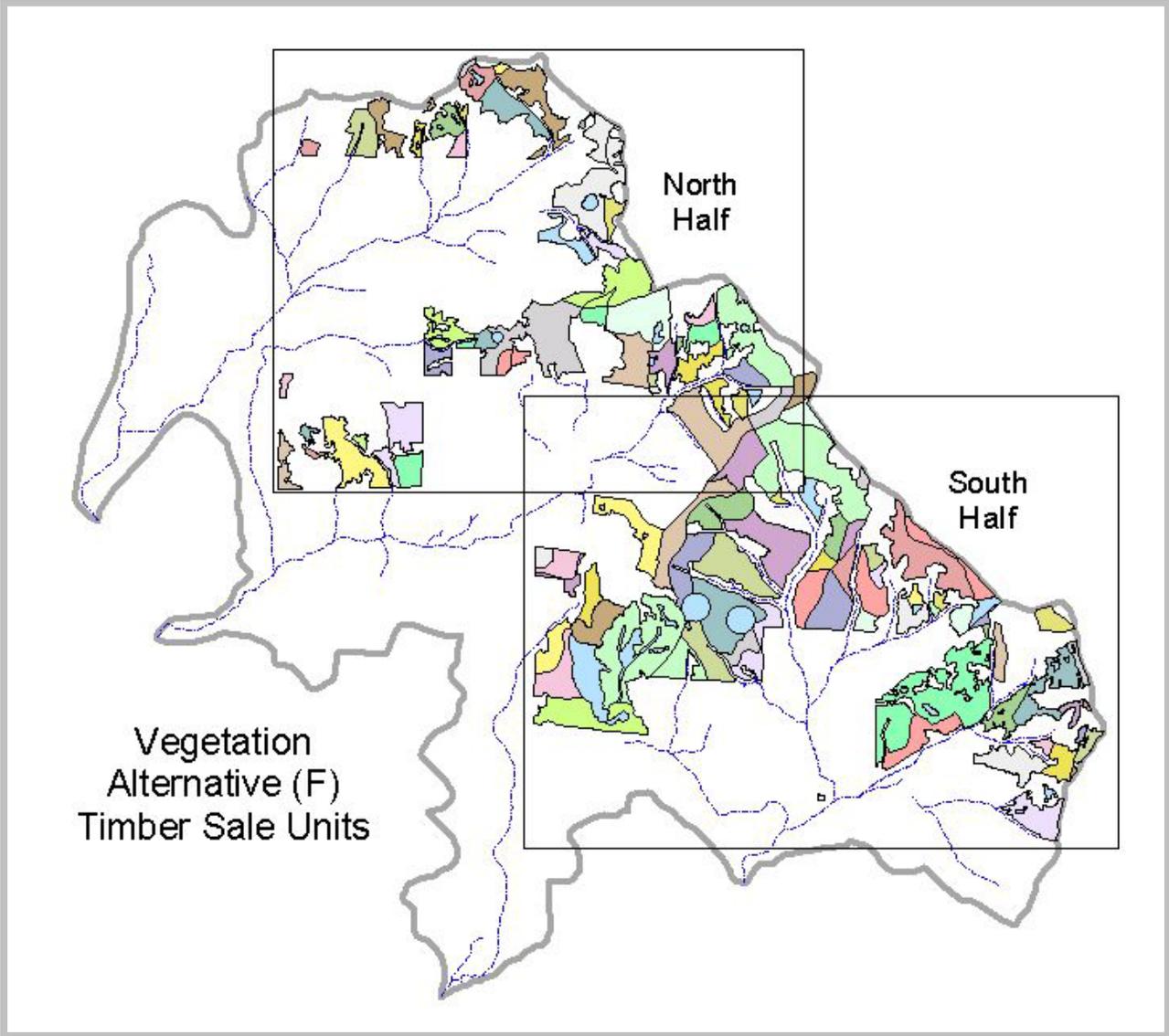


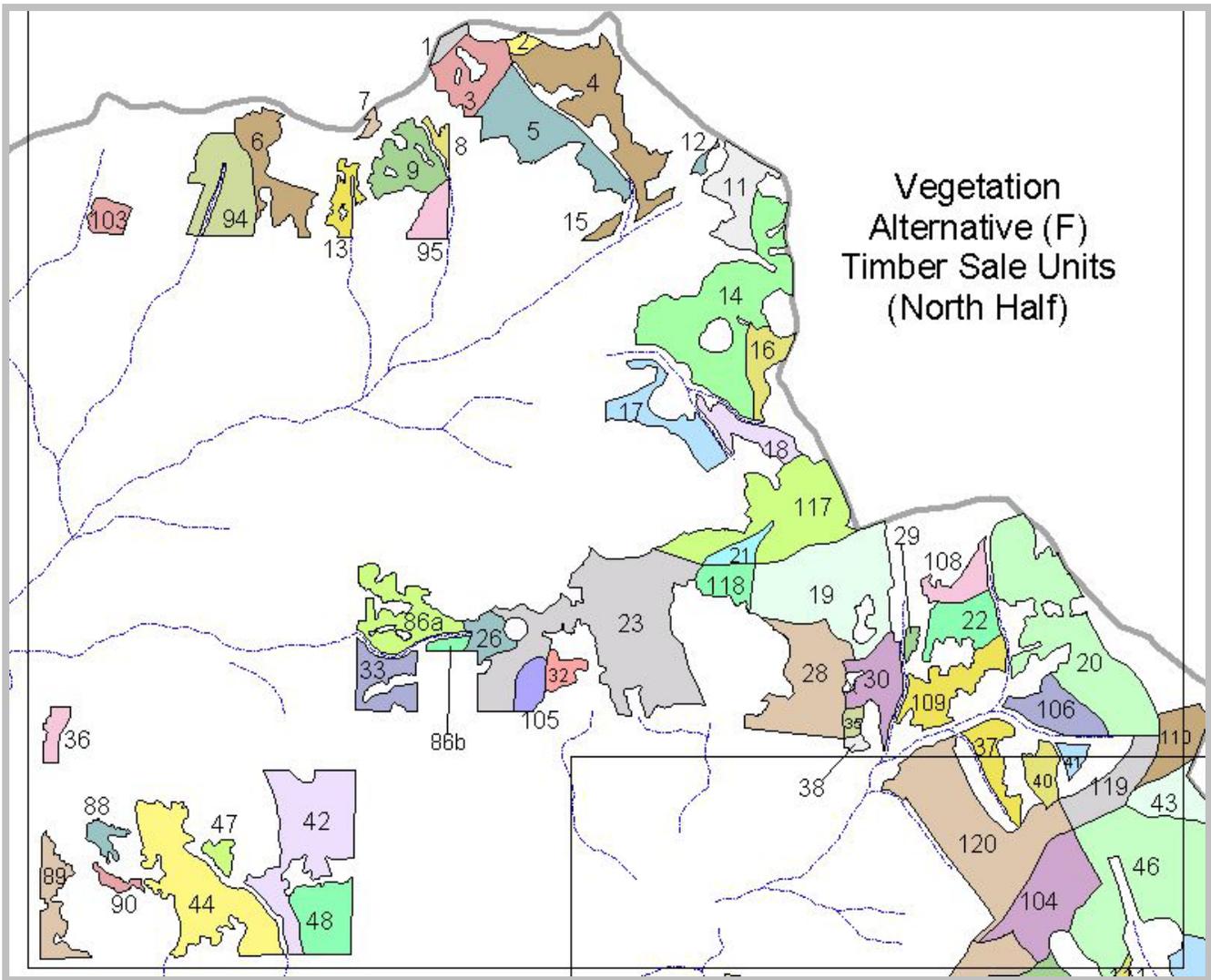
Legend Key

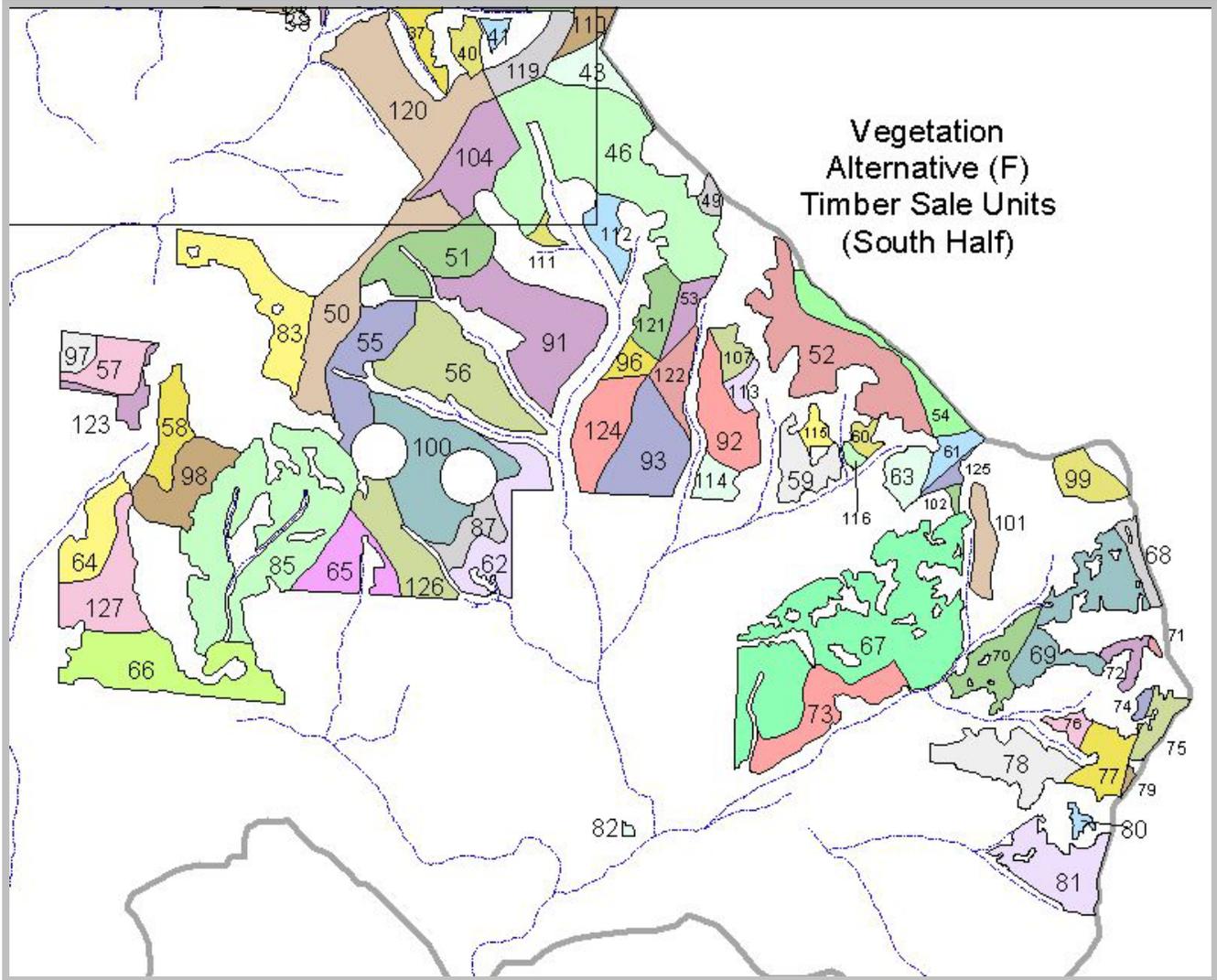
Ir= Light re-construction (4.18 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

mr = Medium re-construction (30.87 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

nc = New construction (2.33 miles): New road construction activities would start by removing right of way trees from the road location. Earth moving equipment (excavators, bulldozers) would then establish the roadbed, install drainage features and where appropriate, apply an aggregate surface.







Vegetation Alternative (F)
Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	62				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	s	3A,7	iHSH/HCR/HSV	55/40/05		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HRC/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100			24			NTM
19	116	s	5	iHSH/HTH	90/10		104	12			JPB(60%)
20	142	s	5	iHSH/HTH/HSV	80/15/5		114	21		7	JPB(100%), PLT(20%)
21	11	s	5	HTH	100			11			NTM
22	31	s	5	iHSH/HTH/HSV	80/10/10		25	3		3	NTM
23	191	t	5,6,7	iHSH/HTH/HSV	65/30/5		124	57		10	JPB(50%), SLASH(5%), RB
26	16	s	5,6	iHSH/HTH	70/30		11	5			JPB(70%), RB
28	77	t	5	iHSH/HTH	50/50		39	38			JPB(50%)
29	4	h	5	iHSH	100		4				NTM
30	34	s	5,7	HTH/HSV	90/10			31		3	SLASH(100%)
32	10	s	6	iHSH	100		10				JPB(100%)
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
35	5	h	5	HTH	100			5			NTM
36	10	h	6	iHSH	100		10				JPB(100%)
37	24	h	5	HTH/iHSH/HSV	70/20/10		5	17		2	NTM
38	3	s	7	iHSH	100		3				JPB(100%)
40	17	h	5	HTH/iHSH	50/50		9	8			NTM
41	7	h	5	HTH	100			7			NTM
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
43	33	t	5,7	iHSH/HTH	70/30		23	10			JPB(100%), PLT(20%)
44	99	h	6,8	iHSH/HTH	70/30		69	30			JPB(30%), RB
46	251	s	5,7	iHSH/HTH/HSV	85/10/05		213	25		13	JPB(85%), PLT(10%)
47	7	h	6	iHSH	100		7				RB
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)
49	8	t	7	iHSH/HTH	80/20		6	2			GRAP/PLT(80%)
50	93	t	5,6	iHSH/HTH	80/20		74	19			GRAP/PLT(15%), JPB(65%), RB
51	76	s	5,7	iHSH/HTH	50/50		38	38			PLT(50%), JPB(100%), RB
52	137	s	5,7,8	HTH/iHSH/HSV	70/20/10		27	96		14	PLT(30%), JPB(100%)
53	21	h	7	HTH/iHSH	80/20		4	17			JPB(100%)
54	46	t	5,7	HTH/iHSH/HSV	65/20/15		9	30		7	GRAP/PLT(15%), JPB(20%)

Vegetation Alternative (F)
Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HSV	PHT
55	74	s	5,6	iHSH/HTH/HSV	80/10/10		60	7	7	JPB(90%), PLT(10%), RB
56	114	h	5,6,7,8	iHSH/HTH/HSV	50/30/20		57	34	23	JPB(100%), PLT(20%), RB
57	38	t	8	HTH/iHSH	60/40		15	23		JPB/PLT(40%)
58	37	t	8	HTH/iHSH	70/30		11	26		JPB(30%)
59	37	s	7,8	iHSH/HTH	70/30		26	11		JPB(70%)
60	9	h	7,8	iHSH/HSV	80/20		7		2	JPB(100%)
61	17	h	5,7	iHSH/HTH	90/10		15	2		JPB(100%)
62	60	s	6,8	HTH/iHSH	70/30		18	42		JPB(30%)
63	25	s	5,7	iHSH/HTH	70/30		18	7		JPB(70%), PLT (50%)
64	45	s	8	HTH/iHSH	90/10		5	40		NTM
65	52	h	6,8	iHSH	100		52			RB
66	112	t	8	HTH/iHSH	90/10		11	101		JPB(10%)
67	286	t	5,7,8	iHSH/HTH/HSV	70/25/5		200	72	14	JPB(30%), PLT(5%), RB
68	15	t	5	iHSH/HTH	50/50		8	7		JPB(50%)
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26	9	JPB(20%), PLT(10%)
70	43	h	5,7	iHSH/HTH	70/30		30	13		JPB(70%), PLT(35%)
71	2	t	5	HCR	100				2	JPB/PLT(100%)
72	13	s	5	iHSH/HTH	50/50		7	6		PCT(50%)
73	64	s	5,8	iHSH/HTH	80/20		51	13		JPB(50%)/PLT(15%), RB
74	5	s	5	HCR	100				5	JPB/PLT(100%),
75	20	t	5	iHSH	100		20			GRAP/PLT(100%)
76	10	h	5	iHSH	100		10			JPB(100%), PLT(50%)
77	37	s	5	iHSH/HTH	90/10		33	4		PLT(30%), JPB(100%), CLEAN(75%)
78	69	h	5,7	iHSH/HTH	60/40		41	28		JPB(60%), PLT (10%), SPC(30%)
79	2	t	5	iHSH	100		2			JPB/PLT(100%)
80	5	h	5	HTH	100			5		NTM
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21	14	JPB(70%), PLT(25%), PCT(10%)
82	2	t	8	iHSH	100		2			GRAP/PLT(100%)
83	86	h	5,6,8	HTH/iHSH	70/30		26	60		JPB (30%)
85	232	h	6,8	iHSH/HTH/HSV	50/45/5		116	104	12	JPB(50%), PLT(5%), RB
86a	44	h	7	iHSH	100		44			RB
86b	5	h	5,7	iHSH	100		5			RB
87	27	t	6	iHSH/HTH	60/40		16	11		NTM
88	8	h	6	iHSH/HSV	90/10		7		1	JPB(100%)
89	27	h	5,6	iHSH/HTH	80/20		22	5		JPB(50%), RB
90	6	h	6	iHSH	100		6			JPB (100%)
91	133	h	5,7	HTH/iHSH/HSV	50/45/5		60	67	7	JPB(50%), PLT(15%), RB
92	58	s	7,8	iHSH/HTH/HSV	70/25/5		40	15	3	JPB(40%)
93	79	h	7,8	iHSH/HTH	50/50		40	39		JPB(50%)
94	54	t	6	iHSH/HTH	80/20		43	11		JPB(80%)
95	15	t	6	iHSH/HTH	60/40		9	6		JPB(60%), RB
96	15	s	7	iHSH	100		15			JPB/PLT(30%)
97	15	s	8	iHSH	100		15			NTM
98	59	h	6,8	iHSH/HTH/HCR	60/20/20		35	12	12	JPB(80%)
99	30	t	5	iHSH/HCR	90/10		27		3	JPB(100%), PLT(50%)
100	109	h	5,6	iHSH/HTH/HSV	70/15/15		77	16	16	JPB (70%), PLT(15%)
101	27	s	5	iHSH	100		27			JPB(100%), PLT(50%), RB
102	3	s	5	iHSH	100		3			JPB(100%), RB

Vegetation Alternative (F)
Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
103	12	t	8	iHSH	100		12				RB
104	69	h	5	iHSH/HTH	50/50		35	34			JPB(50%), SLASH(30%)
105	14	h	6	HTH/HCR	70/30			10	4		NTM
106	32	h	5	iHSH	100		32				JPB/PLT(60%)
107	17	h	7	iHSH/HTH	50/50		9	8			NTM
108	19	t	5	iHSH/HTH	70/30		13	6			PLT(50%)
109	40	h	5,7	HTH/iHSH/HSV	70/15/15		6	28		6	JPB/PLT(30%)
110	29	h	5	iHSH/HCR	80/20		23		6		JPB(100%), PLT(20%)
111	6	h	7	iHSH	100		6				NTM
112	26	h	7	iHSH	100		26				NTM
113	11	t	7,8	iHSH/HTH	50/50		6	5			NTM
114	19	h	8	HTH	100			19			NTM
115	10	t	8	iHSH/HSV	50/50		5			5	JPB(100%), PLT(50%), RB
116	4	s	8	iHSH/HSV	50/50		2			2	JPB(100%), PLT(50%), RB
117	98	s	5	HTH/iHSH	70/30		29	69			JPB(30%), PLT(10%)
118	19	s	5	iHSH	100		19				JPB(100%)
119	36	s	5	iHSH/HTH	50/50		18	18			PLT(20%)
120	134	h	5,7	HTH/iHSH/HSV	50/45/05		60	67		7	CLEAN(50%), SLASH(20%)
121	33	h	7	iHSH/HTH/HSV	50/30/20		17	10		6	NTM
122	28	s	7,8	iHSH	100		28				SLASH(100%),RB
123	17	t	8	HTH/iHSH	70/30		5	12			NTM
124	58	h	7,8	HTH/iHSH	60/40		23	35			NTM
125	8	h	5,7	iHSH	100		8				NTM
126	62	h	6,8	iHSH/HTH	50/50		31	31			JPB(50%), RB
127	70	t	6,8	HTH/iHSH	90/10	0	7	63	0	0	NTM
5446						67	3104	1974	74	222	

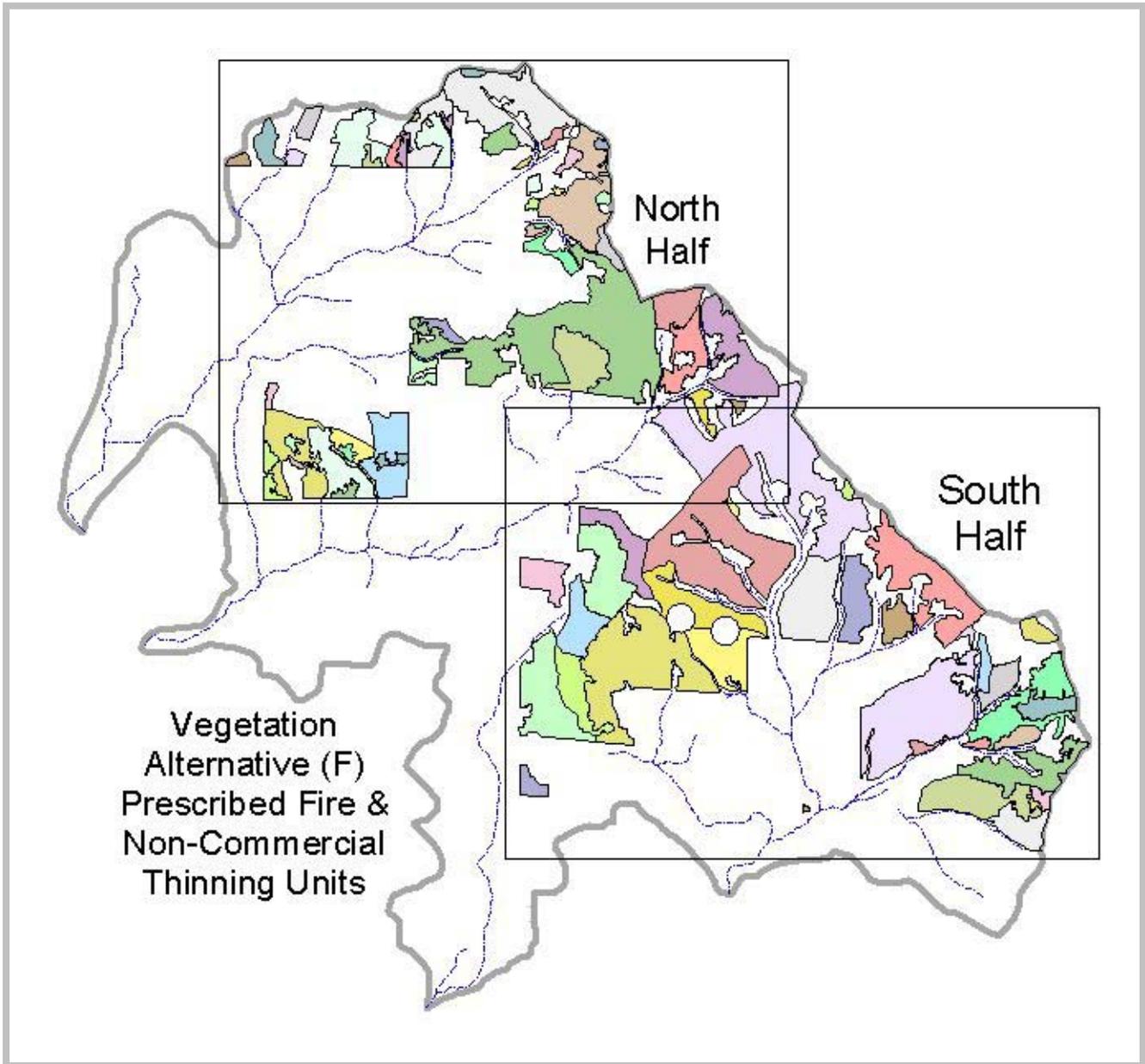
Table Key

Rx Silvicultural prescription
Rx% The percent of the unit area affected by the associated silvicultural prescription.
HTH Commercial free thinning
HSL Uneven-age silvicultural system
HCR Seed tree silvicultural system
iHSH Irregular Shelterwood silvicultural system
HSV Salvage silvicultural system

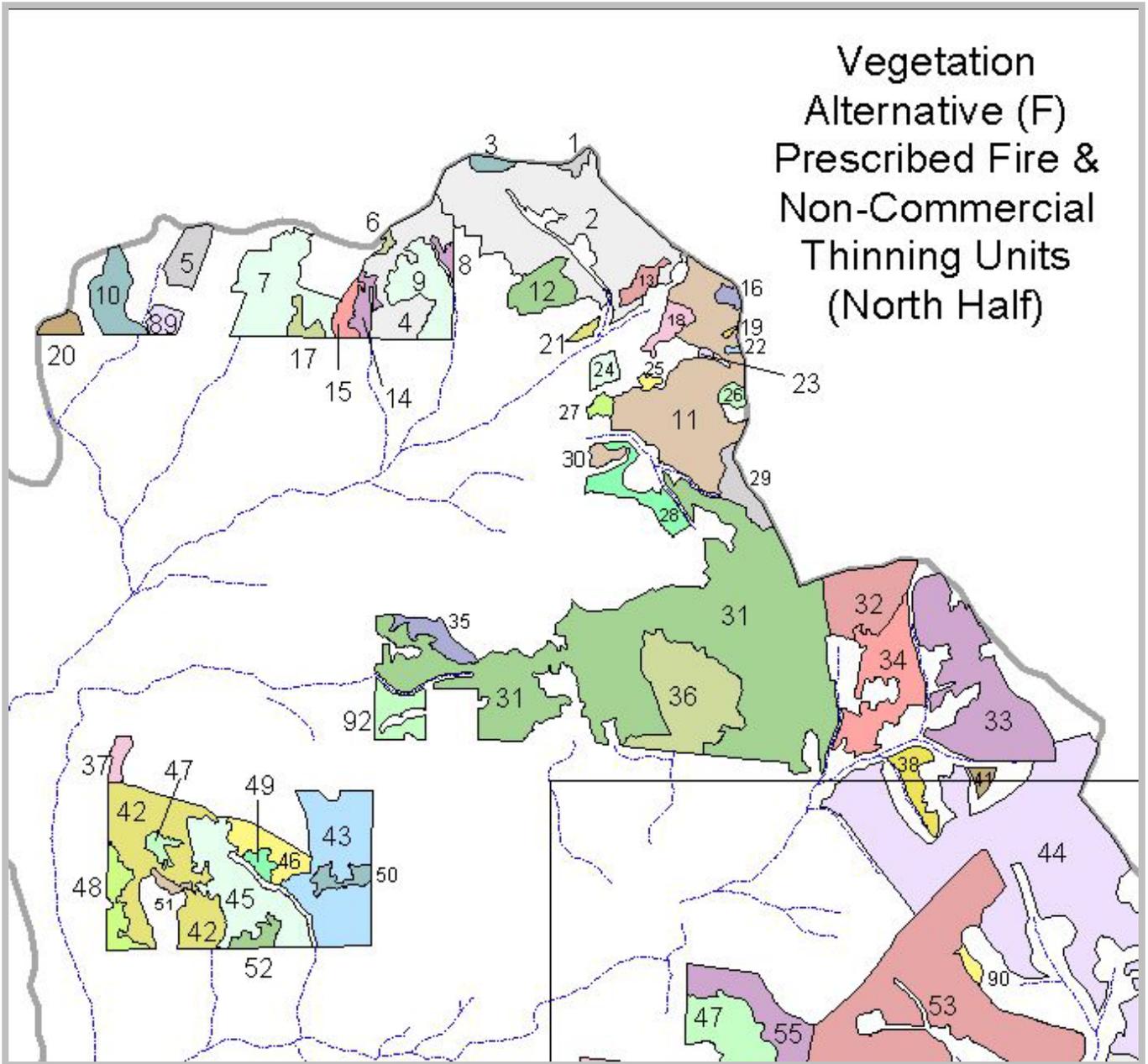
PHT Post Harvest Treatment Activity
NTM No post harvest activity
GRAP Grapple pile
CLEAN Cut small damaged or suppressed trees.
SLASH Cut small diameter material less than 4.9" dbh.
SPC Non-commercial thinning
JPB Jackpot burn
RB Restoration prescribed fire
PLT Artificial plant
WLS Log on 4inches of frozen ground or 2 foot snow depth.
WLR Harvest timing restriction, recreation concerns.

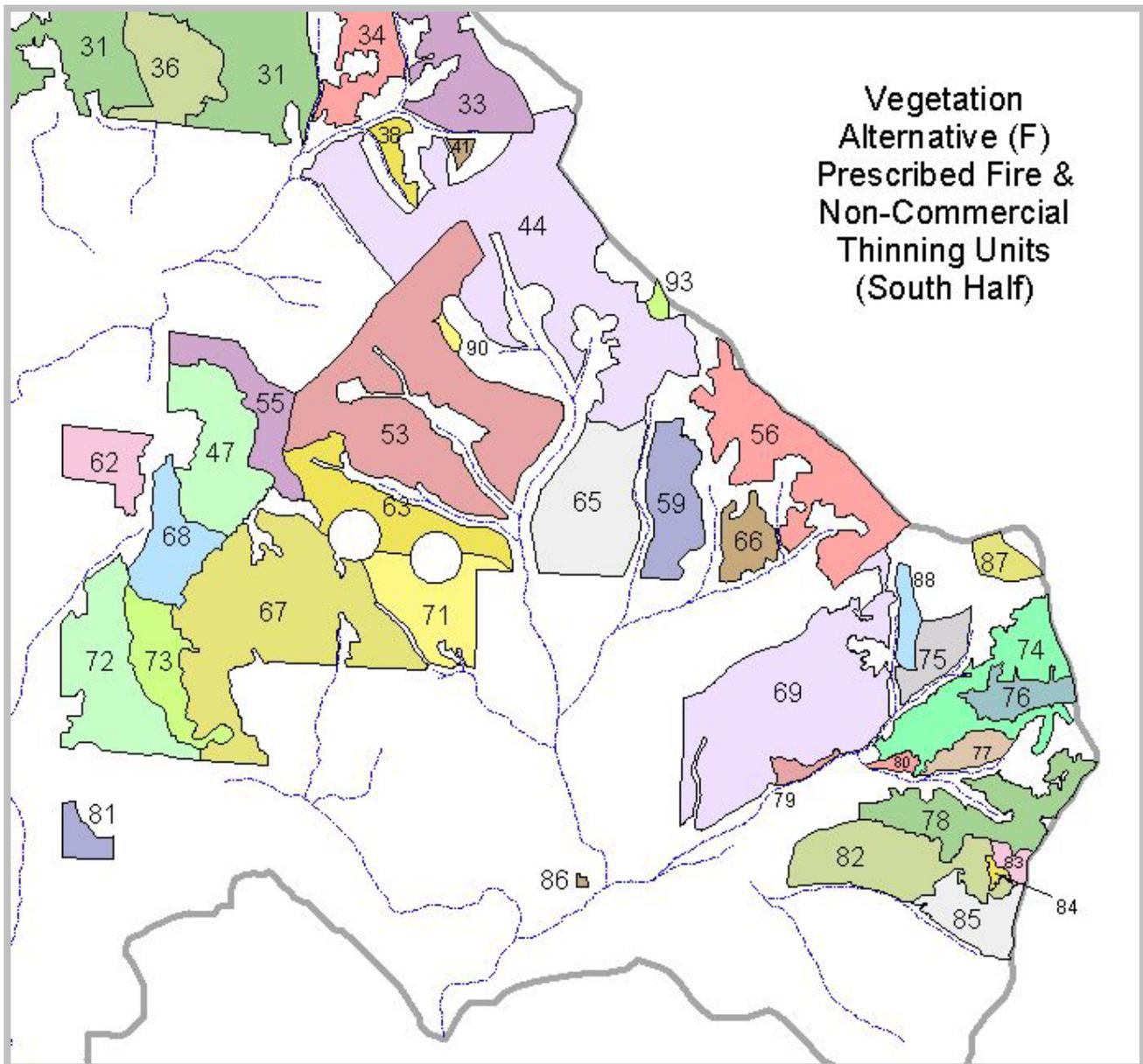
Yard Yarding method
H Helicopter
T Ground based logging system
S Cable or skyline based logging system
CTL Cut to length logging system

PMA Forest Plan Management Area



Vegetation
Alternative (F)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)





Vegetation Alternative (F)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	45	2	99
2	25	270	46	1	34
3	1	8	47	1	162
4	1	76	47	2	8
5	1	26	48	2	27
6	2	3	49	2	8
7	5	98	50	1	14
8	25	5	51	2	6
9	25	53	52	1	12
10	1	40	53	25	488
11	5	203	55	5	97
12	1	35	56	5	242
13	6	13	59	5	104
14	2	15	62	5	71
15	1	14	63	56	128
16	6	6	65	25	194
17	1	10	66	5	50
18	6	16	67	25	423
19	6	1	68	5	96
20	1	10	69	25	406
21	2	4	71	5	120
22	6	1	72	5	192
23	6	2	73	1	94
24	6	11	74	56	165
25	6	4	75	1	51
26	6	7	76	6	50
27	6	7	77	14	33
28	5	36	78	56	144
29	6	24	79	1	14
30	6	8	80	1	10
31	5	686	81	1	26
32	1	71	82	1	164
33	25	176	83	3	15
34	25	89	84	5	5
35	1	22	85	56	72
36	1	123	86	5	2
37	5	10	87	5	30
38	5	24	88	5	27
41	5	7	89	25	12
42	1	147	90	5	6
43	5	133	92	5	29
44	5	600	93	5	8
				Total	7034

Table Key

Type:

1= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.

2 = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.

3 = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.

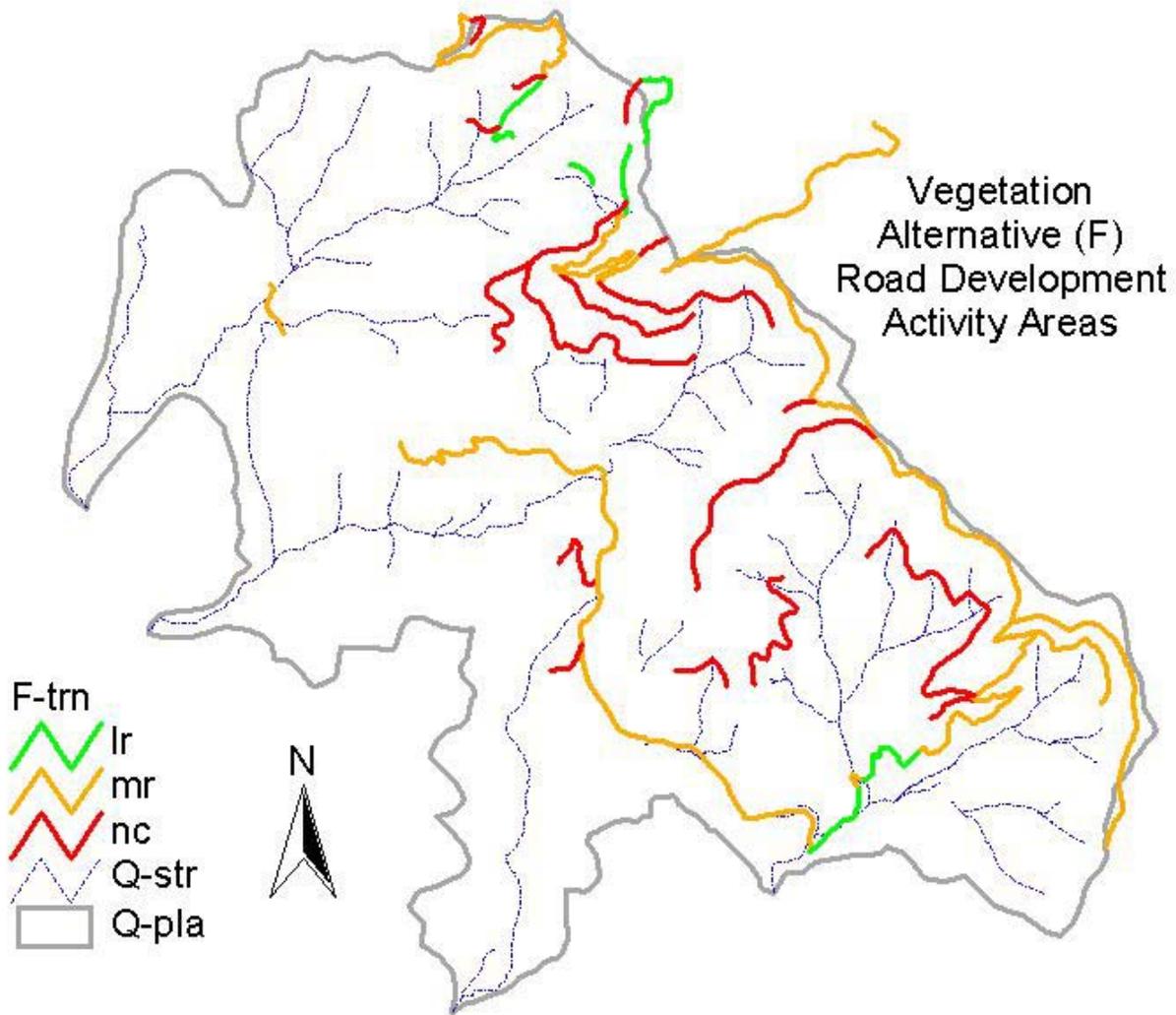
5 = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

6 = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.

14 = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.

25 = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

56 = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.

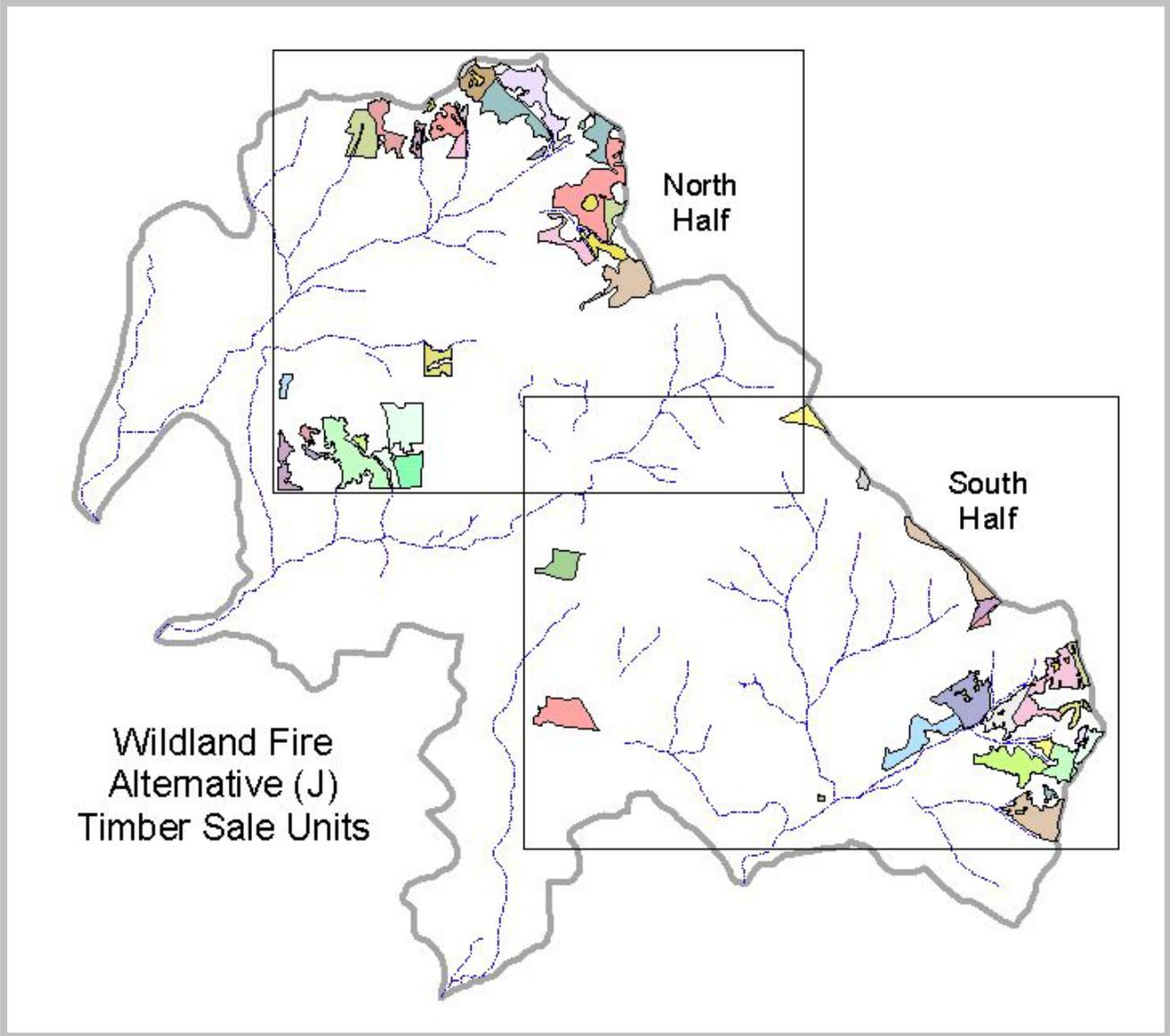


Legend Key

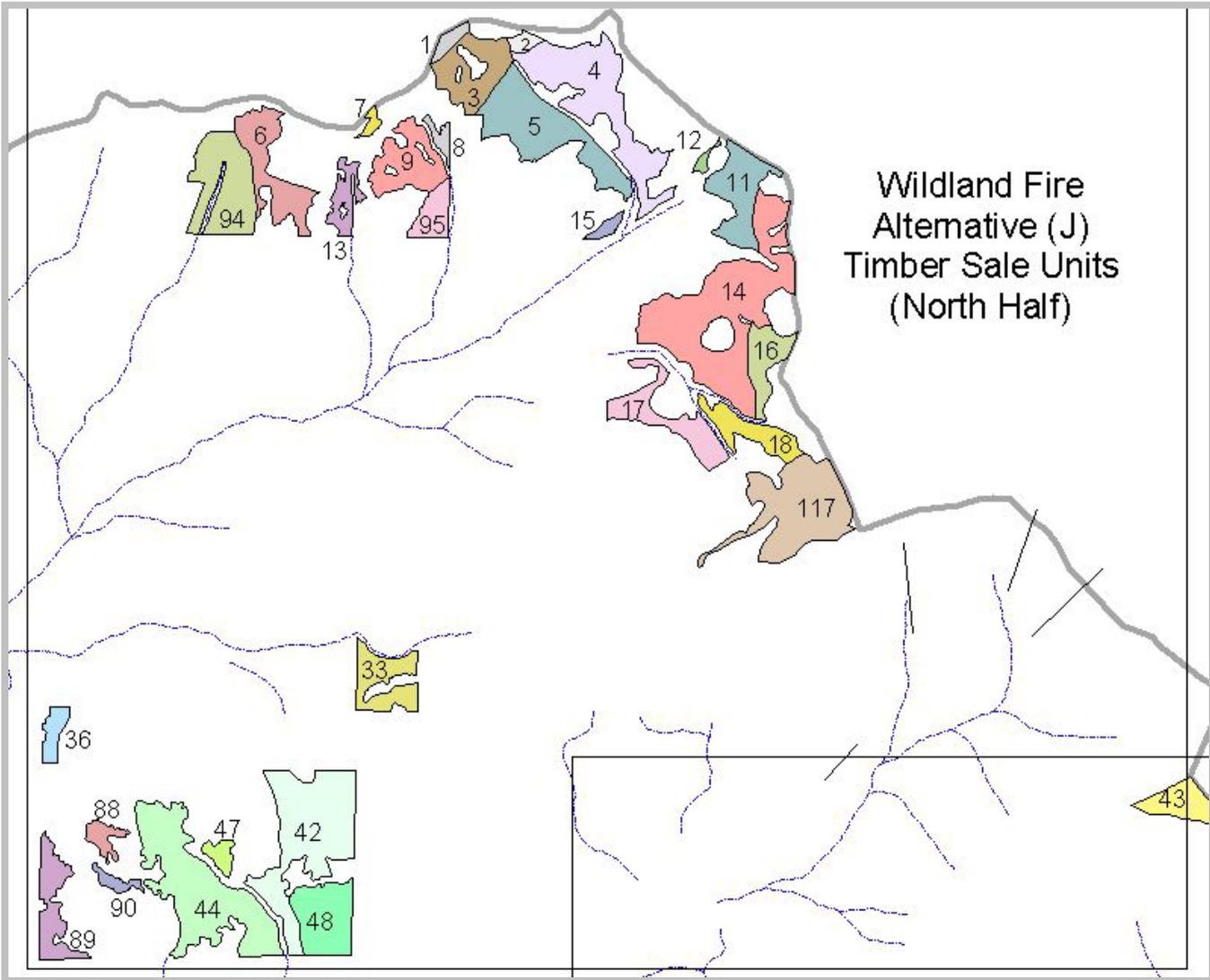
lr = Light re-construction (4.2 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

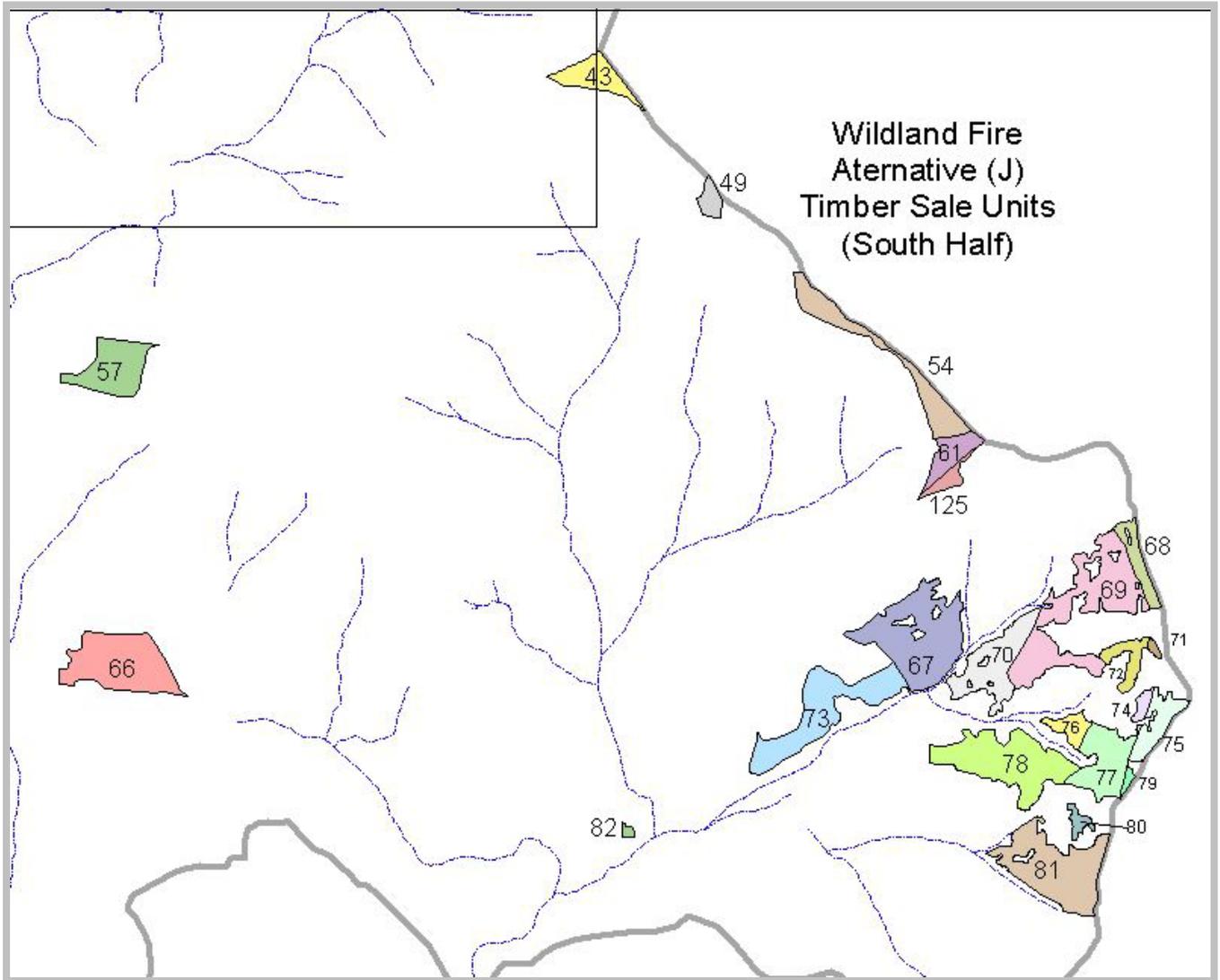
mr = Medium re-construction (31.34 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

nc = New construction (18.37 miles): New road construction activities would start by removing right of way trees from the road location. Earth moving equipment (excavators, bulldozers) would then establish the roadbed, install drainage features and where appropriate, apply an aggregate surface.



Wildland Fire
Alternative (J)
Timber Sale Units
(North Half)





Wildland Alternative (J)
Timber Sale Unit Information

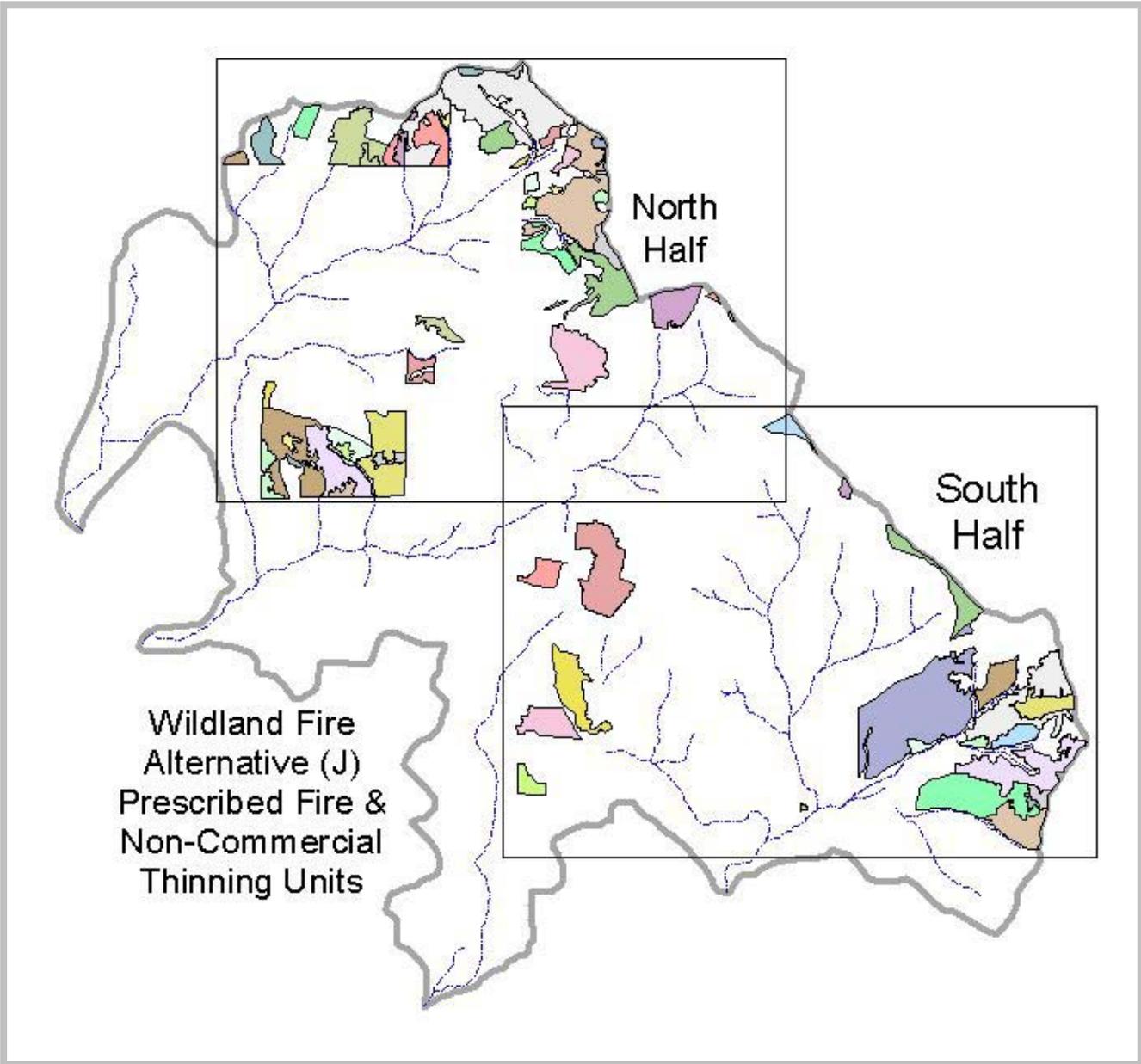
	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	62				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	s	3A,7	iHSH/HCR/HSV	55/40/05		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HRC/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100			24			NTM
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
36	10	h	6	iHSH	100		10				JPB(100%)
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
43	23	t	5,7	iHSH/HTH	70/30		16	7			JPB(100%), PLT(22%)
44	99	h	6,8	iHSH/HTH	70/30		69	30			JPB(30%), RB
47	7	h	6	iHSH	100		7				RB
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)
49	8	t	7	iHSH/HTH	80/20		6	2			GRAP/PLT(80%)
54	42	t	5,7	HTH/iHSH/HSV	65/20/15		9	27		6	GRAP/PLT(15%), JPB(20%)
57	38	t	8	HTH/iHSH	60/40		15	23			JPB/PLT(40%)
61	17	h	5,7	iHSH/HTH	90/10		15	2			JPB(100%)
66	64	t	8	HTH	100			64			NTM
67	81	t	5,8	iHSH/HTH/HSV	55/40/5		45	32		4	JPB/PLT(10%), RB
68	15	t	5	iHSH/HTH	50/50		8	7			JPB(50%)
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26		9	JPB(20%), PLT(10%)
70	43	h	5,7	iHSH/HTH	70/30		30	13			JPB(70%), PLT(35%)
71	2	t	5	HCR	100				2		JPB/PLT(100%)
72	13	s	5	iHSH/HTH	50/50		7	6			PCT(50%)
73	64	s	5,8	iHSH/HTH	80/20		51	13			JPB(50%), PLT(15%), RB
74	5	t	5	HCR	100				5		JPB/PLT(100%),
75	20	t	5	iHSH	100		20				GRAP/PLT(100%)
76	10	h	5	iHSH	100		10				JPB(100%), PLT(50%)
77	37	s	5	iHSH/HTH	90/10		33	4			PLT(30%), JPB(100%), CLEAN(75%)
78	69	h	5,7	iHSH/HTH	60/40		41	28			JPB(60%), PLT (10%), PCT(30%)
79	2	t	5	iHSH	100		2				JPB/PLT(100%)
80	5	h	5	HTH	100			5			NTM
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21		14	JPB(70%), PLT(25%), PCT(10%)
82	2	t	8	iHSH	100		2				GRAP/PLT(100%)

Wildland Alternative (J)
Timber Sale Unit Information

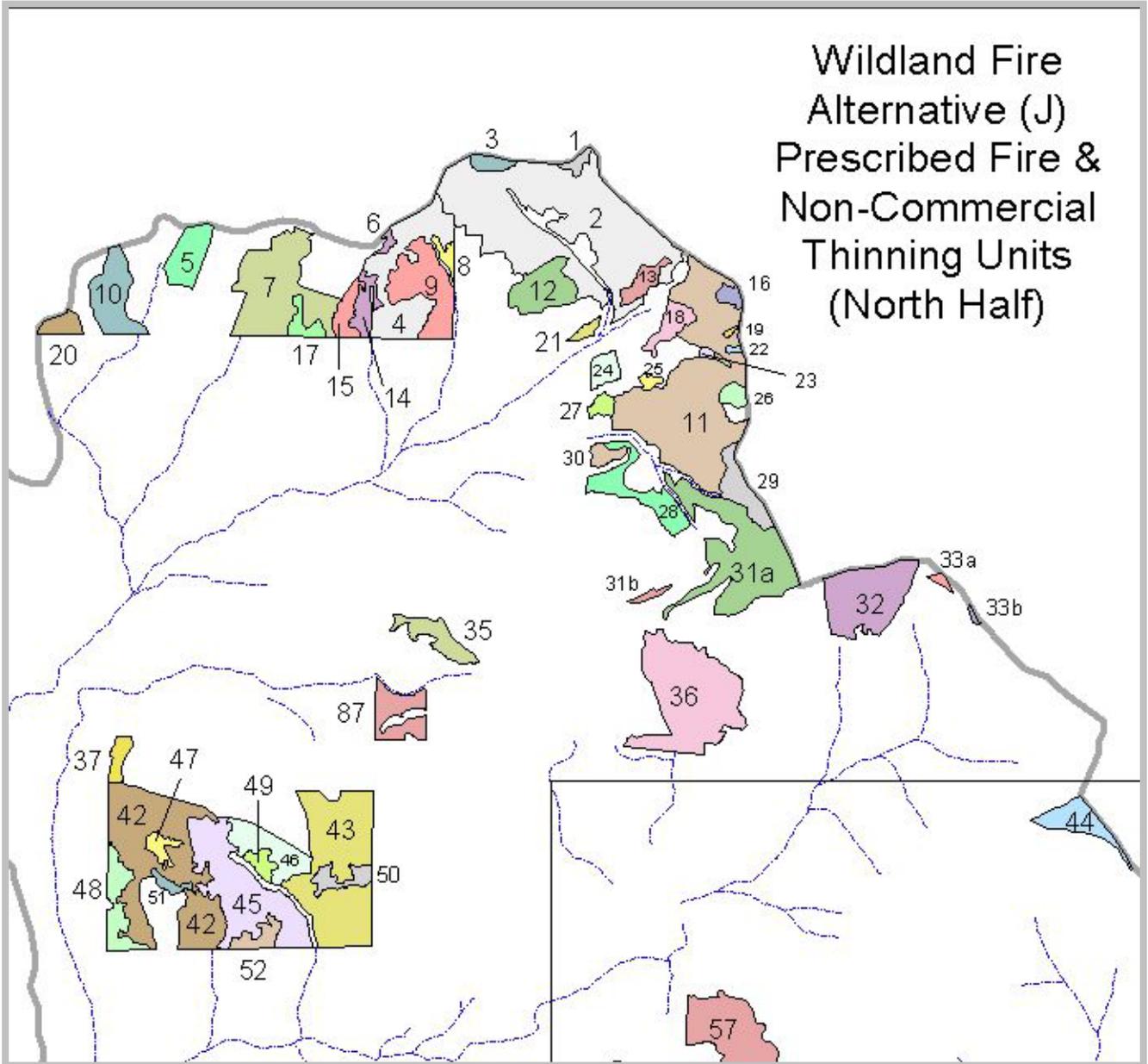
UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
88	8	h	6	iHSH/HSV	90/10			7		1	JPB(100%)
89	27	h	5,6	iHSH/HTH	80/20		22	5			JPB(50%), RB
90	6	h	6	iHSH	100		6				JPB (100%)
94	54	t	6	iHSH/HTH	80/20		43	11			JPB(80%)
95	15	t	6	iHSH/HTH	60/40		9	6			JPB(60%), RB
117	78	s	5	HTH/iHSH	70/30		23	55			NTM
125	8	h	5,7	iHSH	100		8				NTM
1748						67	929	638	49	63	

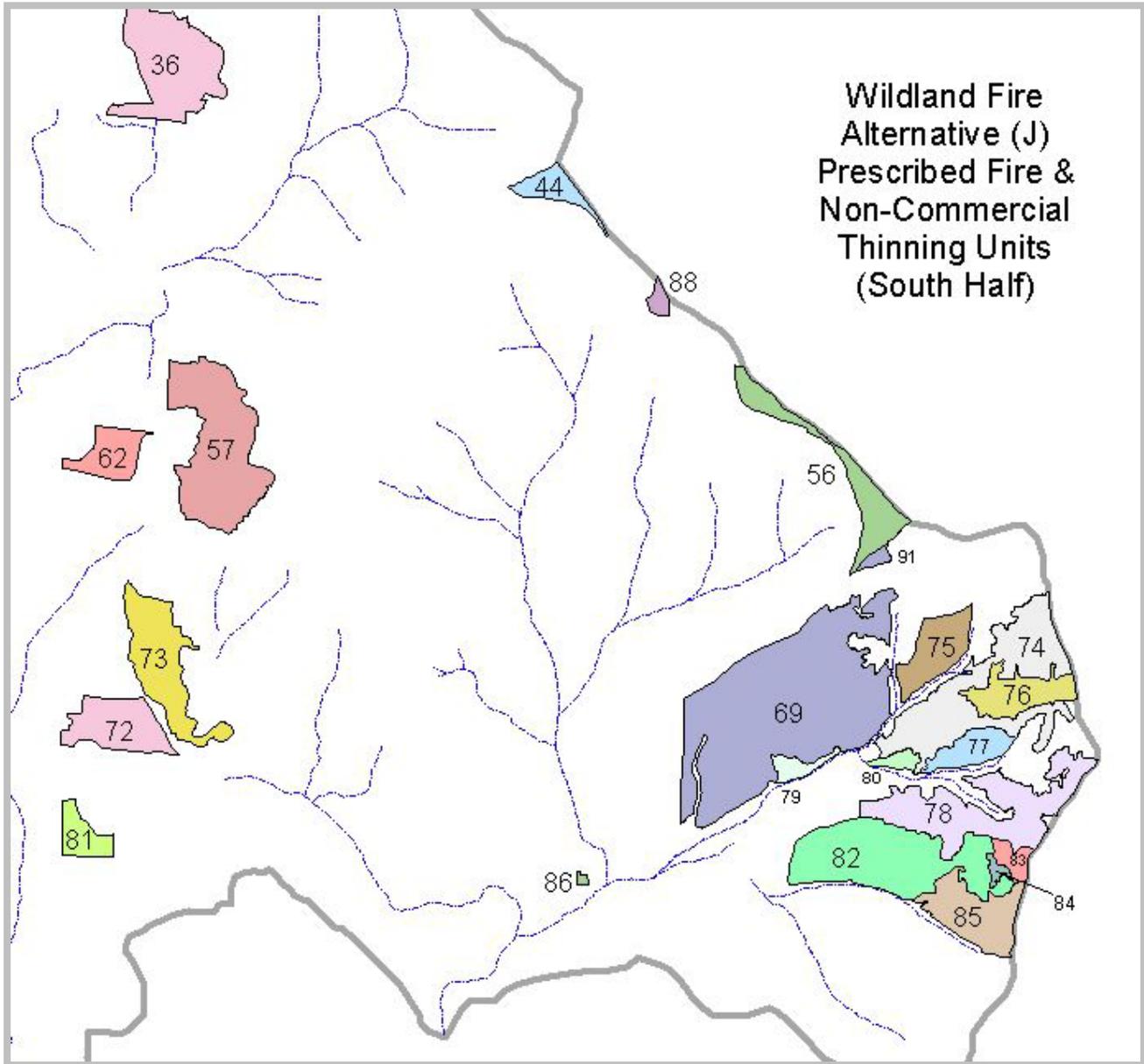
Table Key

Rx	Silvicultural prescription
Rx%	The percent of the unit area affected by the associated silvicultural prescription.
HTH	Commercial free thinning
HSL	Uneven-age silvicultural system
HCR	Seed tree silvicultural system
iHSH	Irregular Shelterwood silvicultural system
HSV	Salvage silvicultural system
<hr/>	
PHT	Post Harvest Treatment Activity
NTM	No post harvest activity
GRAP	Grapple pile
CLEAN	Cut small damaged or suppressed trees.
SLASH	Cut small diameter material less than 4.9" dbh.
SPC	Non-commercial thinning
JPB	Jackpot burn
RB	Restoration prescribed fire
PLT	Artificial plant
WLS	Log on 4inches of frozen ground or 2 foot snow depth.
WLR	Harvest timing restriction, recreation concerns.
<hr/>	
Yard	Yarding method
H	Helicopter
T	Ground based logging system
S	Cable or skyline based logging system
CTL	Cut to length logging system
<hr/>	
PMA	Forest Plan Management Area
<hr/>	



Wildland Fire
Alternative (J)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)





Wildland Fire Alternative (J)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	35	1	22
2	25	270	36	1	123
3	1	8	37	5	10
4	1	76	42	1	147
5	1	26	43	5	133
6	2	3	44	5	25
7	5	98	45	2	99
8	25	5	46	1	34
9	25	53	47	2	8
10	1	40	48	2	27
11	5	203	49	2	8
12	1	35	50	1	14
13	6	13	51	2	6
14	2	15	52	1	12
15	1	14	56	5	66
16	6	6	57	1	162
17	1	10	62	5	38
18	6	16	69	25	398
19	6	1	72	5	65
20	1	10	73	1	94
21	2	4	74	56	165
22	6	1	75	1	52
23	6	2	76	6	50
24	6	11	77	14	33
25	6	4	78	56	144
26	6	7	79	1	14
27	6	7	80	1	10
28	5	35	81	1	26
29	6	24	82	1	164
30	6	8	83	3	15
31a	5	106	84	5	5
31b	5	3	85	56	72
32	1	71	86	5	2
33a	5	3	87	5	29
33b	5	1	88	5	8
			91	25	6
				Total	3479

Table Key

Type:

- 1= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.
- 2 = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.
- 3 = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.

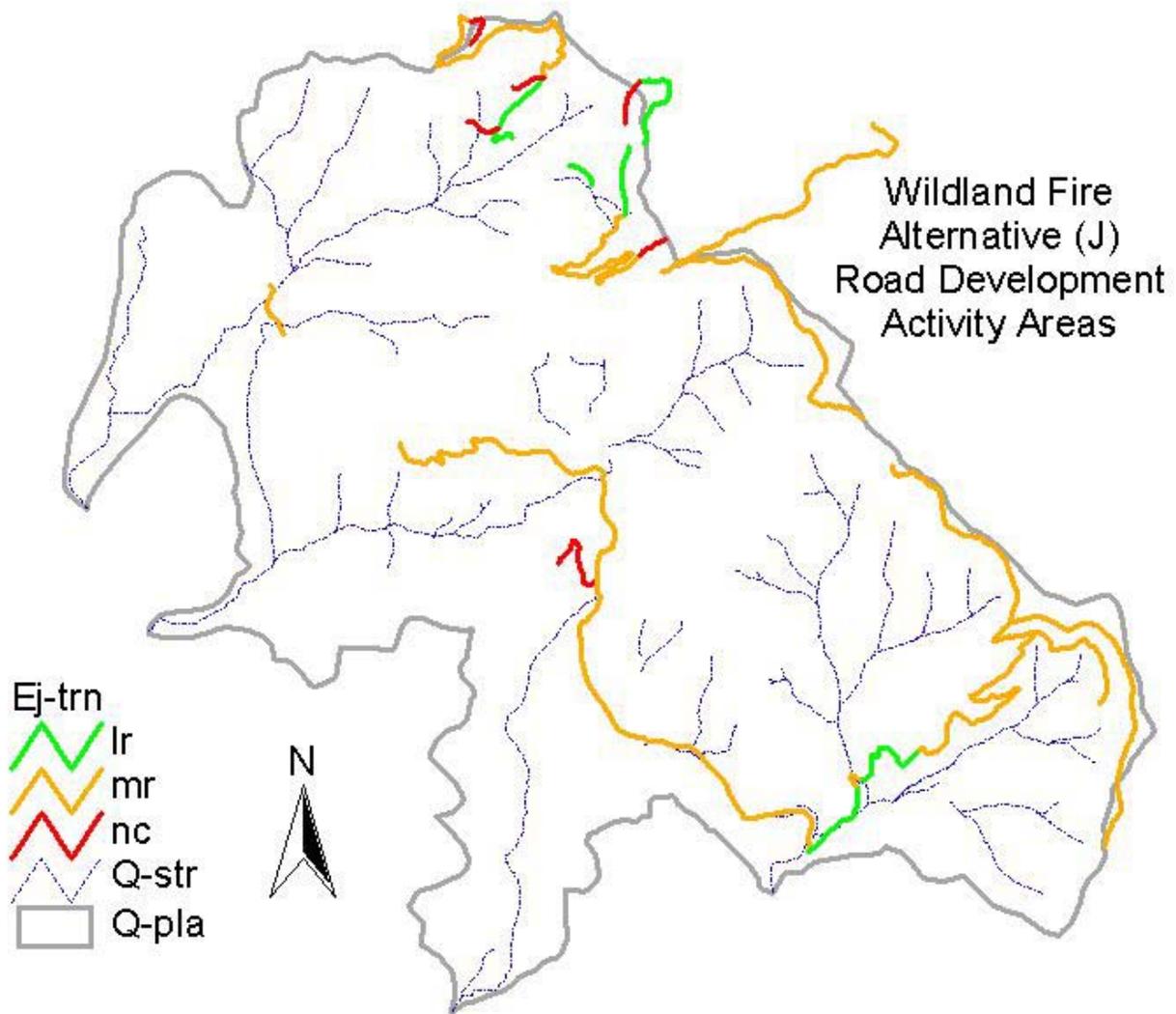
5 = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

6 = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.

14 = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.

25 = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

56 = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.

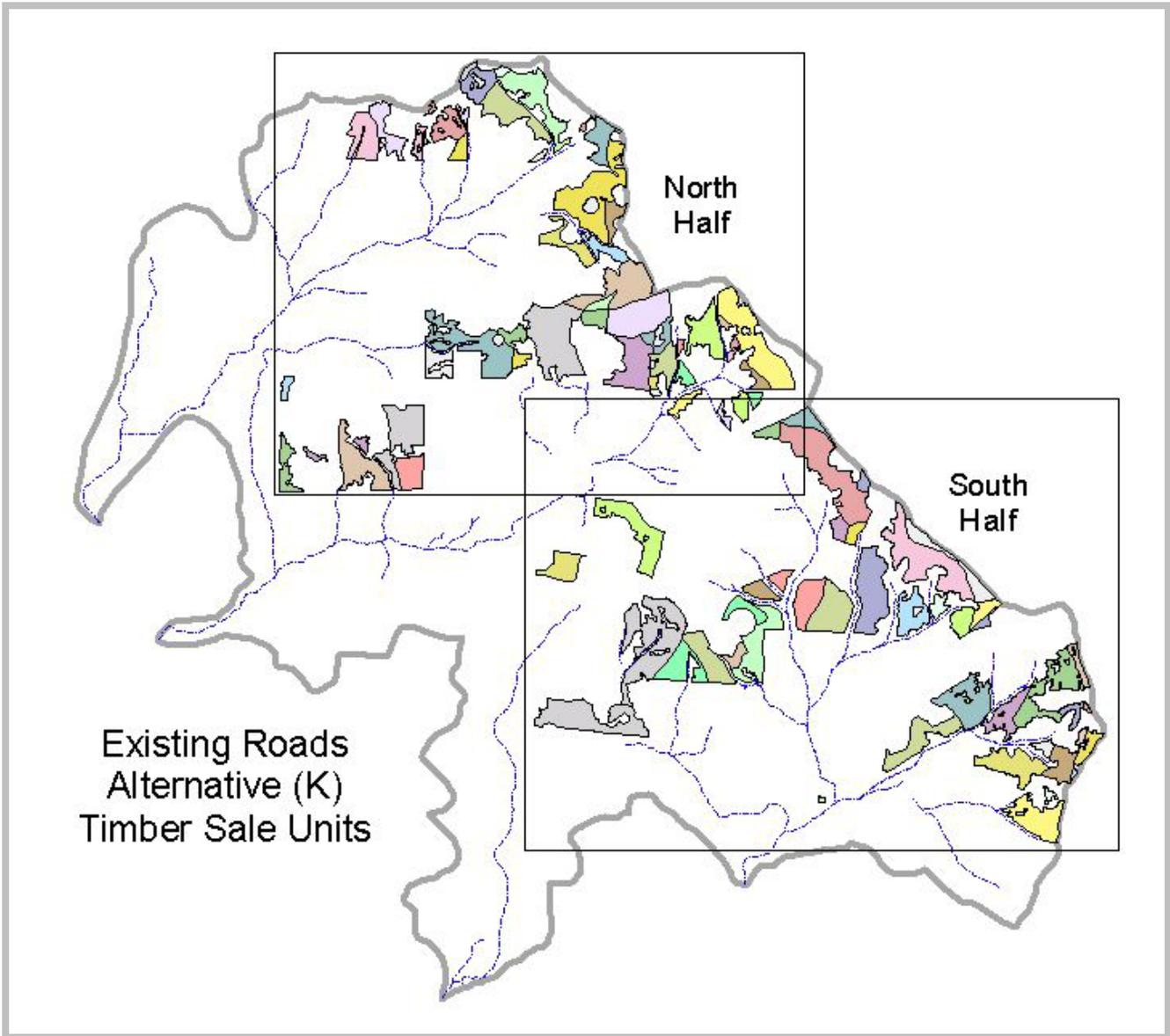


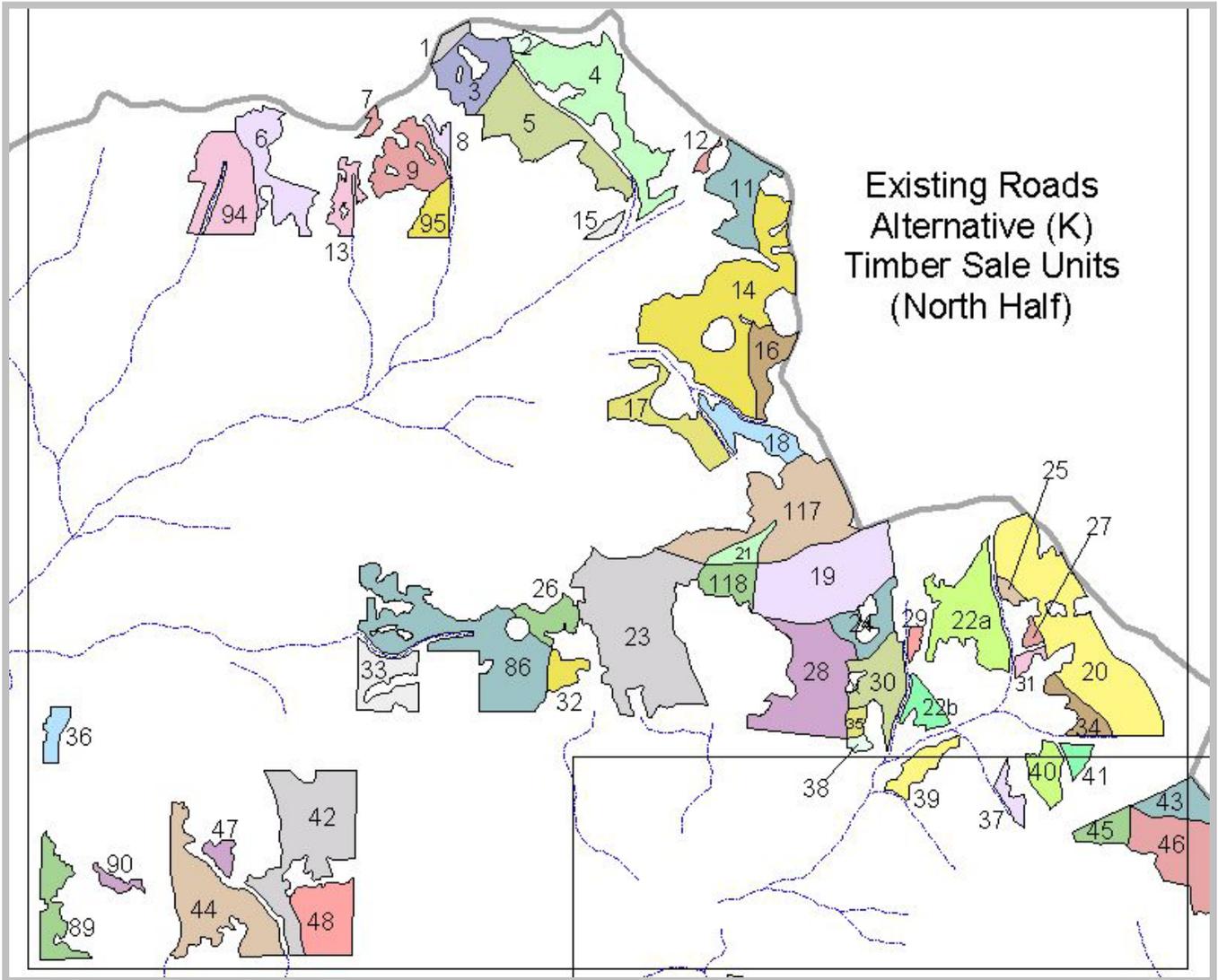
Legend Key

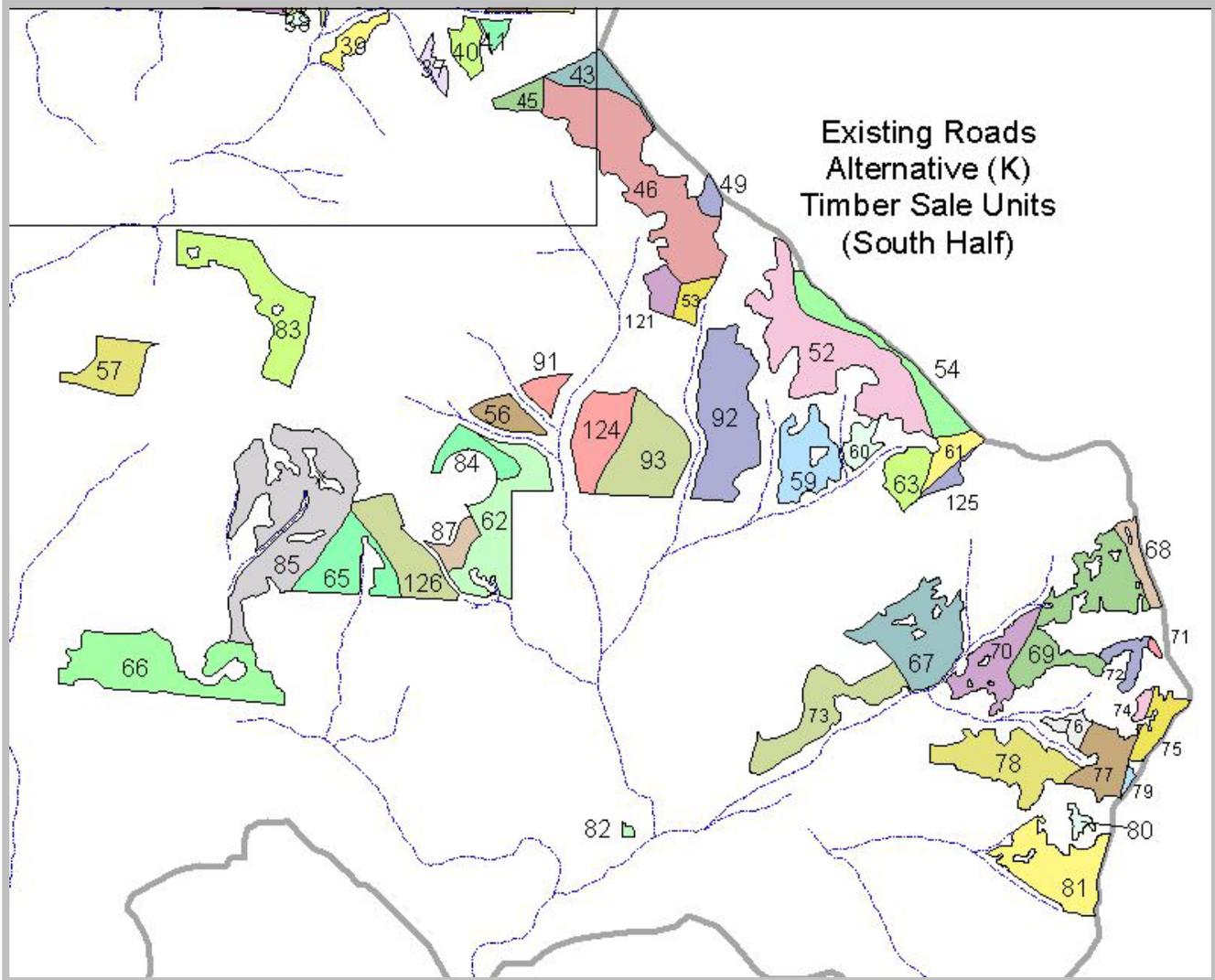
lr= Light re-construction (4.18 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

mr = Medium re-construction(30.87 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

nc = New construction (2.33 miles): New road construction activities would start by removing right of way trees from the road location. Earth moving equipment (excavators, bulldozers) would then establish the roadbed, install drainage features and where appropriate, apply an aggregate surface.







Existing Roads Alternative (K)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
1	6	t	5,6	iHSH	100		6				NTM
2	5	h	6	HSL	100	5					JPB(100%), RB
3	36	s	6	iHSH	100		36				JPB(50%), RB
4	82	t	6,7,8	HSL/HSV	75/25	62				21	GRAP/PLT(25%), JPB(75%), RB
5	69	t	6,8	iHSH	100		69				GRAP/PLT(20%), JPB(80%), RB
6	40	h	6	HTH	100			40			JPB(50%)
7	3	t	6	iHSH	100		3				RB
8	5	h	6	iHSH	100		5				JPB(100%), RB
9	35	h	6	iHSH	100		35				JPB(100%), RB
11	38	h	3A,7	iHSH/HCR/HSV	55/40/05		21		15	2	JPB/PLT(45%), RB
12	2	s	7	iHSH	100		2				NTM
13	15	h	6	iHSH	100		15				RB
14	133	t	3A,5,7	iHSH/HTH/HCR/HSV	50/35/10/5		67	46	13	7	CTL(40%), PLT(25%), CLEAN (5%), JPB(20%)
15	4	t	8	iHSH	100		4				JPB(100%)
16	23	s	3A,5	HTH/HCR	70/30			16	7		GRAP/PLT(30%)
17	36	t	3A,5	HTH/iHSH/HCR	50/30/20		11	18	7		JPB(30%),PLT(20%), CLEAN(10%)
18	24	t	3A,5	HTH	100			24			NTM
19	95	s	5	iHSH/HTH	90/10		85	10			JPB(50%)
20	129	s	5	iHSH/HTH/HSV	80/15/5		103	19		7	JPB(100%), PLT(25%)
21	11	s	5	HTH	100			11			NTM
22a	58	h	5	iHSH/HTH/HSV	50/35/15		29	20		9	JPB(100%), PLT(20%), RB
22b	14	h	5,7	HTH/iHSH	60/40		6	8			JPB(40%)
23	145	h	5,6,7	iHSH/HTH/HSV	65/30/5		94	44		7	JPB(50%), RB
24	21	h	5	iHSH/HTH	80/20		17	4			JPB(100%)
25	4	h	5	iHSH	100		4				JPB(100%)
26	17	h	7	iHSH/HTH	90/10		15	2			NTM
27	4	h	5	HTH	100			4			NTM
28	77	h	5	iHSH/HTH	50/50		39	38			JPB(50%)
29	4	h	5	iHSH	100		4				NTM
30	34	h	5,7	HTH/HSV	90/10			31		3	SLASH(100%)
31	4	h	5	iHSH	100		4				NTM
32	10	h	6	iHSH	100		10				JPB(100%)
33	29	h	7	iHSH/HTH	70/30		20	9			JPB(70%)
34	15	h	5	iHSH	100		15				NTM
35	5	h	5	HTH	100			5			NTM
36	10	h	6	iHSH	100		10				JPB(100%)
37	8	h	5	iHSH	100		8				NTM
38	3	h	7	iHSH	100		3				JPB(100%)
39	15	h	7	HTH/HSV	85/15			13		2	NTM
40	17	h	5	HTH/iHSH	50/50		9	8			NTM
41	7	h	5	HTH	100			7			NTM
42	92	h	5,6,8	HTH/iHSH	70/30		28	64			JPB(100%)
43	25	t	5,7	iHSH/HTH	70/30		18	7			JPB(100%), PLT(20%)
44	76	h	6,8	iHSH	100		76				JPB(25%), RB
45	14	h	5,7	iHSH/HCR	80/20		11		3		JPB(100%), PLT(50%)
46	152	s	5,7	HTH/iHSH/HSV	60/30/10		46	91		15	JPB(30%), PLT(10%)
47	7	h	6	iHSH	100		7				RB
48	40	t	8	HTH/iHSH	70/30		12	28			GRAP/PLT(30%)

Existing Roads Alternative (K)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
49	8	t	7	iHSH/HTH	80/20		6	2			GRAP/PLT(80%)
52	137	s	5,7	HTH/iHSH/HSV	70/20/10		27	96		14	PLT(30%), JPB(100%)
53	14	h	7	HTH/iHSH	80/20		3	11			JPB(100%)
54	46	t	5,7	HTH/iHSH/HSV	65/20/15		9	30		7	GRAP/PLT(15%), JPB(20%)
56	20	h	5	iHSH	100		20				JPB(100%), PLT(25%), RB
57	38	t	8	HTH/iHSH	60/40		15	23			JPB/PLT(40%)
59	47	h	8	HTH/iHSH/HSV	60/15/25		7	28		12	JPB(40%), PLT(20%)
60	14	h	7,8	iHSH/HSV	65/35		9			5	JPB(100%), PLT(50%)
61	17	h	5,7	iHSH/HTH	90/10		15	2			JPB(100%)
62	73	h	6,8	HTH/iHSH	60/40		29	44			JPB(40%), PLT (10%), RB (10%)
63	25	s	5,7	iHSH/HTH	70/30		18	7			JPB(70%), PLT (50%)
65	51	h	6,8	iHSH	100		51				RB
66	112	t	8	HTH/iHSH	90/10		11	101			JPB(10%)
67	81	t	5,8	iHSH/HTH/HSV	55/40/5		45	32		4	JPB/PLT(10%), RB
68	15	t	5	iHSH/HTH	50/50		8	7			JPB(50%)
69	87	s	5	iHSH/HTH/HSV	60/30/10		52	26		9	JPB(20%), PLT(10%)
70	43	h	5,7	iHSH/HTH	70/30		30	13			JPB(70%), PLT(35%)
71	2	t	5	HCR	100				2		JPB/PLT(100%)
72	13	s	5	iHSH/HTH	50/50		7	6			PCT(50%)
73	64	s	5,8	iHSH/HTH	80/20		51	13			JPB(50%), PLT(15%), RB
74	5	s	5	HCR	100				5		JPB/PLT(100%),
75	20	t	5	iHSH	100		20				GRAP/PLT(100%)
76	10	h	5	iHSH	100		10				JPB(100%), PLT(50%)
77	37	s	5	iHSH/HTH	90/10		33	4			PLT(30%), JPB(100%), CLEAN(75%)
78	69	h	5,7	iHSH/HTH	60/40		41	28			JPB(60%), PLT (10%), PCT(30%)
79	2	t	5	iHSH	100		2				JPB/PLT(100%)
80	5	h	5	HTH	100			5			NTM
81	70	h	5	iHSH/HTH/HSV	50/30/20		35	21		14	JPB(70%), PLT(25%), PCT(10%)
82	2	t	8	iHSH	100		2				GRAP/PLT(100%)
83	83	h	5,6,8	HTH/iHSH	70/30		25	58			JPB (30%)
84	22	h	6	iHSH	100		22				JPB
85	158	h	6,8	HTH/iHSH	70/30		47	111		0	JPB(10%)
86	109	h	5,6,7	HTH/iHSH/HSV	65/30/5		33	71		5	JPB (30%), SLASH(10%)
87	15	h	6	iHSH	100		15				NTM
89	27	h	5,6	iHSH/HTH	80/20		22	5			JPB(50%), RB
90	6	h	6	iHSH	100		6				JPB (100%)
91	13	h	7	iHSH	100		13				JPB(100%), RB
92	104	h	7,8	iHSH/HTH/HSV	65/30/5		68	31		5	JPB(30%)
93	74	h	8	iHSH/HTH	50/50		37	37			JPB(50%)
94	54	t	6	iHSH/HTH	80/20		43	11			JPB(80%)
95	15	h	6	iHSH/HTH	60/40		9	6			JPB(60%), RB
117	98	s	5	HTH/iHSH	70/30		29	69			JPB(30%), PLT(10%)
118	19	s	5	iHSH	100		19				JPB(100%)
121	15	h	7	iHSH/HTH/HSV	50/30/20		8	5		2	NTM
124	51	h	7,8	HTH/iHSH	60/40		20	31			NTM
125	8	h	5,7	iHSH	100		8				NTM
126	56	h	6,8	iHSH/HTH	50/50		28	28			JPB(50%), RB

Existing Roads Alternative (K)

Timber Sale Unit Information

UNIT #	ACRES	YARD SYS.	MA	Rx	Rx%	HSL	iHSH	HTH	HCR	HSV	PHT
	3753					67	1956	1528	52	150	

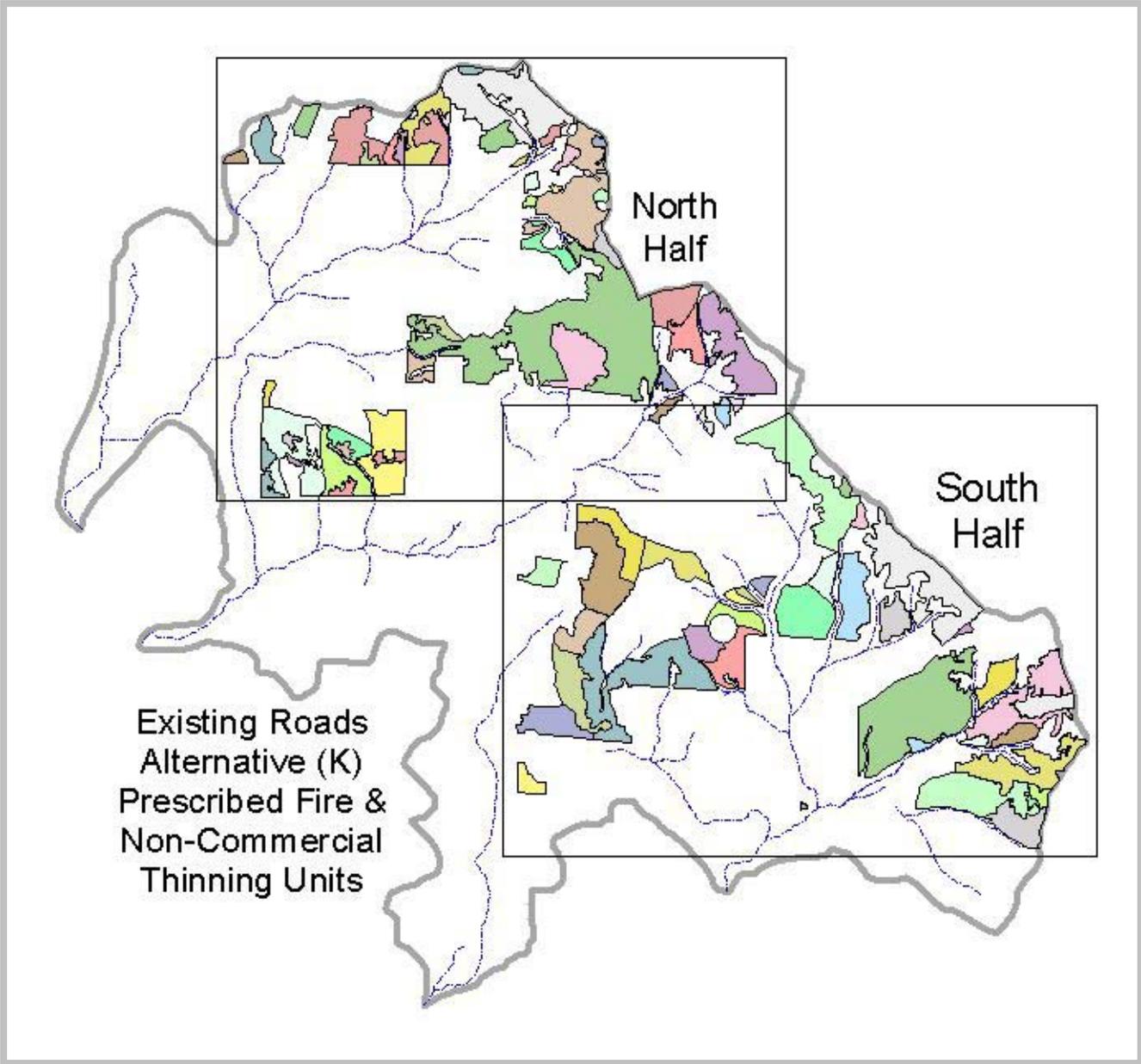
Table Key

Rx Silvicultural prescription
Rx% The percent of the unit area affected by the associated silvicultural prescription.
HTH Commercial free thinning
HSL Uneven-age silvicultural system
HCR Seed tree silvicultural system
iHSH Irregular Shelterwood silvicultural system
HSV Salvage silvicultural system

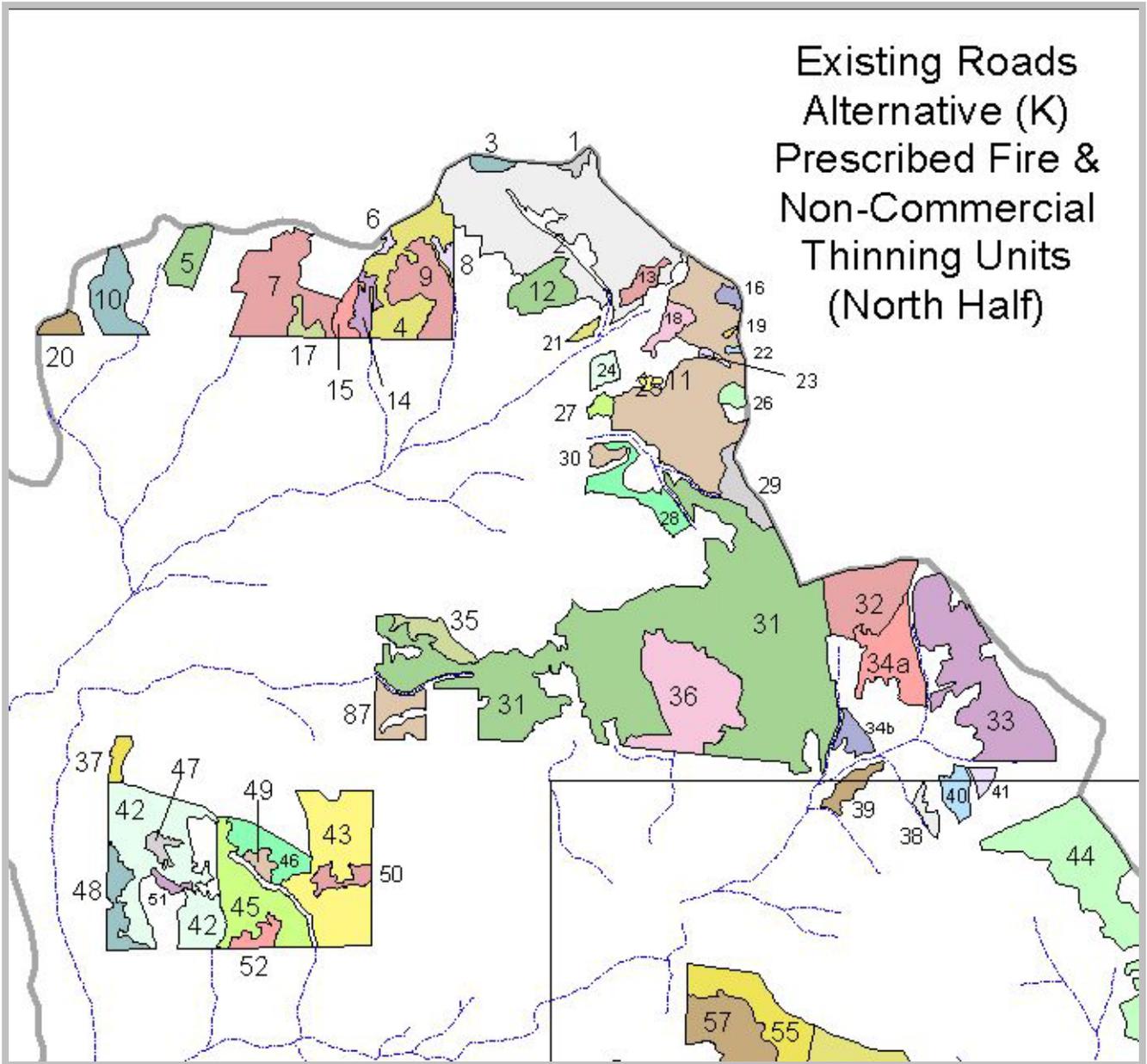
PHT Post Harvest Treatment Activity
NTM No post harvest activity
GRAP Grapple pile
CLEAN Cut small damaged or suppressed trees.
SLASH Cut small diameter material less than 4.9" dbh.
SPC Non-commercial thinning
JPB Jackpot burn
RB Restoration prescribed fire
PLT Artificial plant
WLS Log on 4inches of frozen ground or 2 foot snow depth.
WLR Harvest timing restriction, recreation concerns.

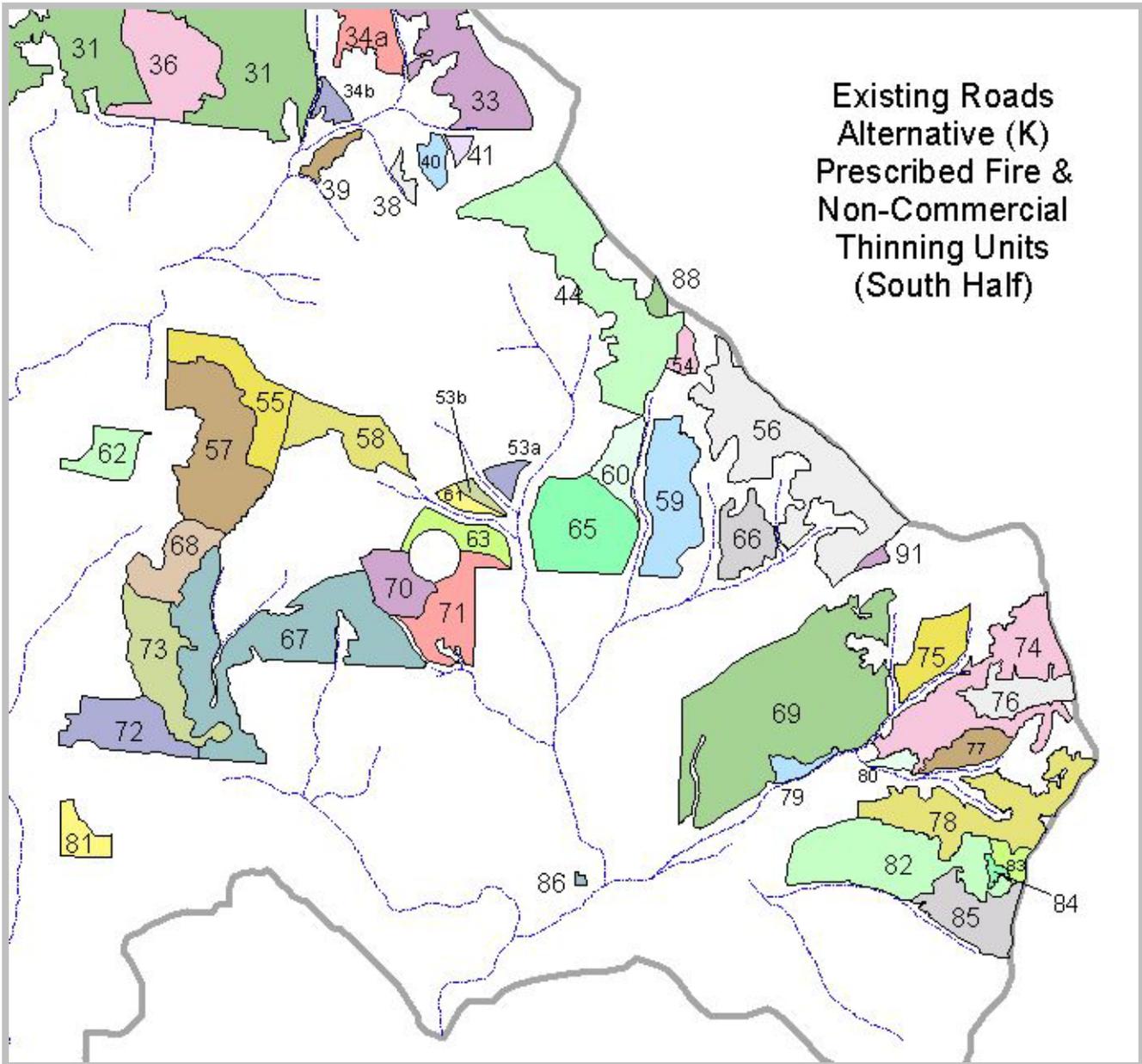
Yard Yarding method
H Helicopter
T Ground based logging system
S Cable or skyline based logging system
CTL Cut to length logging system

PMA Forest Plan Management Area



Existing Roads
Alternative (K)
Prescribed Fire &
Non-Commercial
Thinning Units
(North Half)





Existing Roads Alternative (K)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
1	1	5	44	5	229
2	25	270	45	2	76
3	1	8	46	1	34
4	1	76	47	2	8
5	1	26	48	2	27
6	2	3	49	2	8
7	5	98	50	1	14
8	25	5	51	2	6
9	25	53	52	1	12
10	1	40	53a	25	13
11	5	203	53b	25	8
12	1	35	56	5	242
13	6	13	57	1	162
14	2	15	58	3	70
15	1	14	59	5	104
16	6	6	60	3	39
17	1	10	61	2	12
18	6	16	62	5	38
19	6	1	63	56	47
20	1	10	65	25	125
21	2	4	66	5	50
22	6	1	67	25	271
23	6	2	68	3	59
24	6	11	69	25	398
25	6	4	70	3	54
26	6	7	71	5	87
27	6	7	72	5	77
28	5	36	73	1	94
29	6	24	74	56	165
30	6	8	75	1	52
31	5	686	76	6	50
32	1	71	77	14	33
33	25	158	78	56	144
34a	25	58	79	1	14
34b	25	14	80	1	10
35	1	22	81	1	26
36	1	123	82	1	164
37	5	10	83	3	15
38	5	8	84	5	5
39	5	15	85	56	71
40	5	17	86	5	2

Existing Roads Alternative (K)					
Rx Fire and Non-Commercial Thinning Unit Information					
UNIT	TYPE	ACRES	UNIT	TYPE	ACRES
41	5	7	87	5	29
42	1	147	88	5	8
43	5	133	91	25	6
				Total	5635

Table Key

Type:

1= Prescribed fire would be used to maintain stands in the current condition of open park-like seral ponderosa pine and Douglas fir.

2 = Stand treatment and prescribed fire would be used to move these areas toward historic conditions. Treatments are designed to maintain and enhance conditions by restoring open, park-like stands of seral species. Prescribed fire would treat natural fuels and slash.

3 = Mechanical thinning would be used to reduce live fuels and restore high frequency/low severity tree stocking levels.

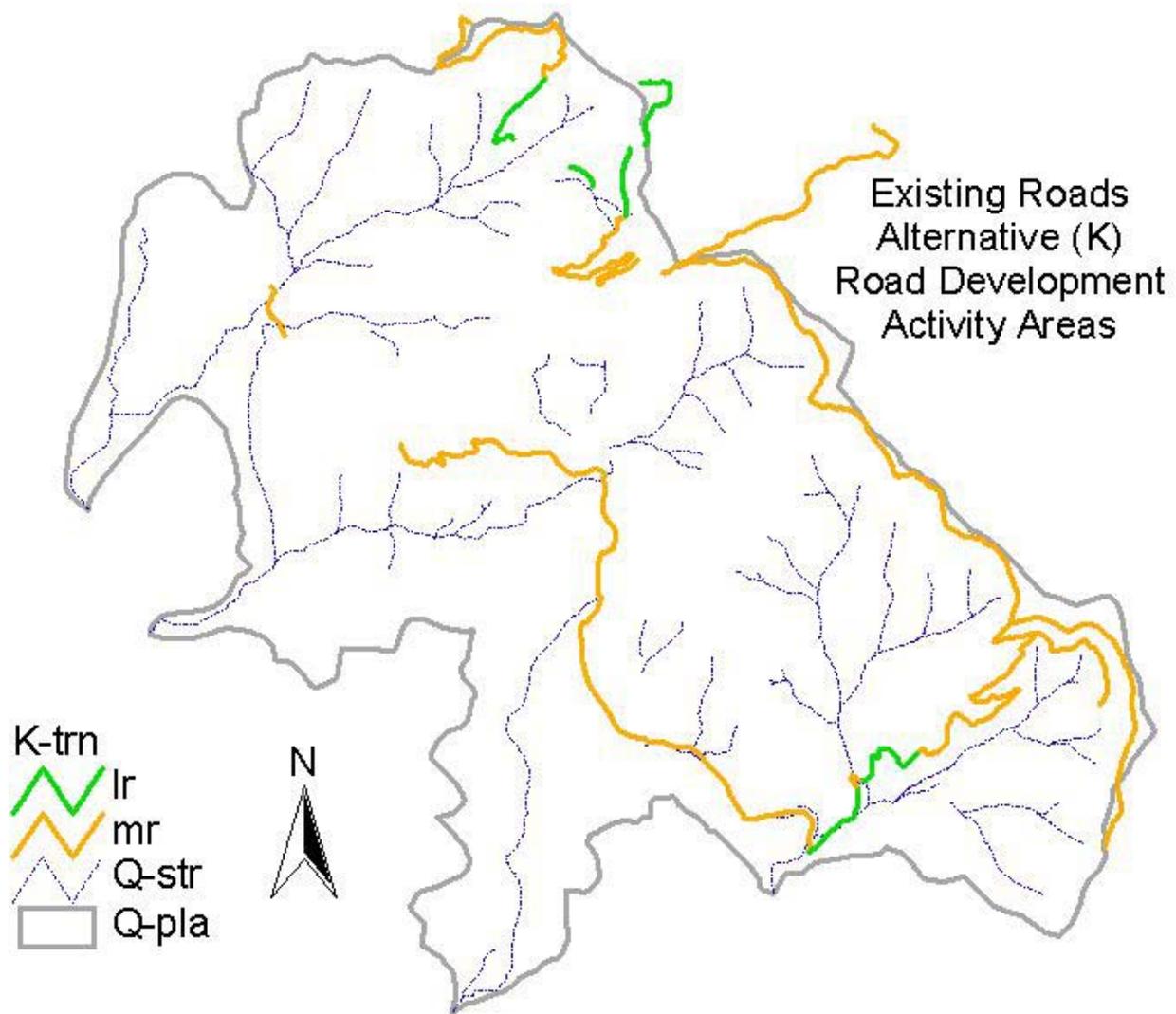
5 = Prescribed fire or grapple piling would reduce post-stand treatment slash for planting and natural regeneration, restore or improve visual conditions, brush disposal and hazardous fuels. Some areas may not be treated with fire if stand treatment slash is low. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

6 = Mechanical thinning would reduce inter-tree competition for site resources. Activities are designed to accelerate the establishment of late and old forest conditions.

14 = Prescribed fire would maintain these stands in the current condition of open park-like seral ponderosa pine and Douglas fir. The main objectives are to reintroduce fire back into fire dependent ecosystems, and to enhance big game forage habitat.

25 = Prescribed fire would reduce slash for planting and natural regeneration. Prescribed fire would also for restoration purposes. Also, grapple-piling areas may be jackpot burned instead, if stand treatment slash is low.

56 = A combination of prescribed fire, grapple piling, thinning, cleaning and slashing would create planting spots, enhance natural regeneration, thin out residual non-merchantable trees and clean skins and breaks.



Legend Key

lr= Light re-construction (4.18 miles): Light reconstruction would involve occasional construction of drainage features, with associated light blading and brushing on roads used for log haul. Most drainage features would be drain dips that are designed to reduce sedimentation by moving water off of the roadbed. Rocking of drain dips in Riparian Habitat Conservation Areas and their contributing areas, and rocking of roadbed for grade and sub grade strength is also included.

mr = Medium re-construction (31.34 miles): Medium reconstruction would involve light reconstruction plus occasional cut bank and roadbed excavation to increase width (for safety).

Past, Present, and Reasonably Foreseeable Future Actions

The Council on Environmental Quality's regulations (40 CFR 1500 – 1508) implementing the procedural provisions of the National Environmental Policy Act of 1969, as amended define cumulative effects as:

The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency [Federal or non-Federal] or person, undertakes such other actions.

Those actions associated with the Quartzite Watershed Management Project are listed here.

Past and Present Actions

Chewelah Peak Mountain Resort

49° North Mountain Resort offers downhill skiing to roughly 50,000 visitors per year. It operates on 1,265 acres of ski-able terrain on Colville National Forest land, just east of the analysis area. The Resort has offered skiing at this location for more than 25 years. The season of operation typically runs from November to April. Four lifts service the resort. Off-season activities include facility maintenance and vegetation management.

Farming and Grazing

Farming and cattle grazing has occurred on non-federal land over the past 100 years. Betts Meadow will continue to be improved under a conservation easement. The Cottonwood Grazing Allotment located on National Forest System Lands has been vacant since 1986.

Dispersed Recreation

A groomed snowmobile route coincides with Forest Service Road #4342 (Cottonwood Divide Road), from the Flowery Trail road to Woodward Meadows. The season of use typically runs from November to April.

Timber Management

Cumulative effects analysis considered past and current harvest on both federal and non-federal land.

- Past Forest Service timber harvest projects include Backlakes, Addy-Chewelah, M. F. Mill, Millstream, Twigs, Dominion, Hudson, Stoney, United Eagle, 49 Degrees North and Rocky and completed projects in Aladdin Blowdown, Bestrom, Butte Creek Riparian, Divine, Flowery Trail, Frater, Hande Creek, Holford, Hosmer, Hound, Longshot, Master Deluxe, Meadows, Middleport, MF Mill Cr. Riparian, Mitchell Meadows, No Smacks, Quark, Riddy Salvage, Rocky Creek Riparian, and Six Bits.

Within the 23,311-acre Quartzite Project analysis area, timber has been harvested on 990 acres of the 10,587 acres of National Forest System land located within the federal land within the analysis area.

- Forest Service activity data base queries combined with an inventory of Washington State Department of Natural Resource Forest Practices Applications reveal that timber has been harvested on 9,362 acres of non-federal land within the 23,311-acre analysis area.

Fire Management

Forest Service and Washington State Department of Natural Resource fire suppression has been ongoing for the past 80 years. Both agencies have conducted limited controlled burns within the 23,311-acre analysis area.

Road Management

The watershed currently contains 91 miles of classified roads. The main arterials represent almost one third of this mileage (27 miles), and are primarily county roads accessing private lands in the lower portion of the watershed. The remaining miles are made up of local and collector roads almost evenly split between National Forest lands and private ownership (31 miles of Forest Service Roads and 33 miles of private roads). All but 6.4 miles of the 91 miles of classified roads, are open road. The 6.4 miles of closed road occur on National Forest System land, where, closures are either natural closures or earthen berms. Road maintenance on county and federal roads is ongoing.

An additional 8.45 miles of unclassified roads exist in the watershed. The bulk of this mileage occurs on private lands (7.17 private roads, versus 1.28 miles on National Forest System lands). The private roads are associated with recent timber harvest on private lands adjacent to National Forest System lands. The roads on National Forest System lands are all older roads associated with timber harvest that have since been abandoned; or are illegally constructed firewood gathering roads.

Flowery Trail Road Improvement Project

Pend Oreille and Stevens Counties, in cooperation with the U.S. Forest Service, Washington State Department of Transportation and the Western Federal Lands Highway Division of the Federal Highway Administration, have implemented phases I & II and are implementing phase III of the Flowery Trail Road Improvement Project. Improvements include realigning this paved county highway to accommodate minimum speeds of 35-mph. This multi-phase project began on the east end of this 21-mile project in 1997, at Danforth Road near Usk, WA. The project has progressed west over the last 5 years. The current phase begins work on the western-most section of the Flowery Trail Road, which terminates in Chewelah, WA. Six and one half miles of this section pass through the analysis area and improvements will affect other area roads.

Reasonable Foreseeable Future Actions

Chewelah Peak Learning Center

The Chewelah Peak Learning Center is a work-in-progress by the Association of Washington School Principals, the Washington Department of Natural Resources and Educational Service District #101.

The goal of the Chewelah Peak Learning Center experience will be to foster an enduring understanding and appreciation of the physical and biological world, while developing skills and attitudes to affect the individual's life long learning and decision making processes.

The Chewelah Peak Learning Center will furnish functional, aesthetically sound facilities, and curricular resources for supporting outdoor education and leadership training to

young people. In addition, Chewelah Peak will provide facilities and outdoor education learning opportunities to various adult and student groups, which are deemed compatible with the Chewelah Peak setting.

When built, the learning center will provide opportunities for Eastern Washington schools that cannot afford the time and transportation expense of sending students across the state to Cispus. The Center will serve schools in the counties of: Spokane, Stevens, Ferry, Lincoln, Whitman, Adams, Pend Oreille, Douglas, Grant, and Franklin as well as other areas.

Construction began July 8, 2002. The Main Lodge and Maintenance Shop were shell-enclosed for the winter by early November. Additionally, the foundation for the first dormitory is complete, which will enable construction to begin once the snow melts in the spring of 2003. One to two additional dorms are planned to be ready for use by the fall of 2003. Eventually, accommodations for 200 people are planned for the center.

Noxious Weeds

Noxious Weed management will continue as populations are spread.

Private Land Uses

Farming and cattle grazing will continue at existing levels over the next 5-10 years. Betts Meadow will continue to be improved under a conservation easement.

Dispersed Recreation

Dispersed recreational use on federal lands will increase slightly in direct proportion to population growth in the county and in urban areas such as Spokane.

Timber Management

Timber harvest on private land will continue with a slightly upward trend as harvest levels continue to decline on federal lands. The next planning area for the eastern (Colville) portion of the District is South Deep.

- Root diseases such as *Armillaria mellea* will continue to infect Douglas fir. This root disease also increases the susceptibility of Douglas fir to secondary attack by bark beetles.
- Insect attacks by the Douglas fir bark beetle, *Dendroctonus pseudotsugae*, will continue at existing or increasing levels over the next 3-5 years. This will result in patch mortality of mature trees in openings up to several acres in size.
- The Forest Service may respond to insect attacks with some form of management such as timber harvest.

Fire Management

No changes are expected to Forest Service fire suppression policies in the next 3-5 years (i.e. no let-burn policy with regard to naturally occurring wildfires).

Road Management

Road construction on state and private land will continue at decreased levels (compared to the last 20 years) since many areas are already accessible from primitive road systems. Road maintenance on county roads will increase slightly with increasing use by residents and non-residents of these watersheds.

The upgrade to the Flowery Trail Road will continue during the project.

Wildland Urban Interface

The Colville National Forest will initiate a Forest-wide vegetation management project in 2003 that is designed to improve defensible fire space around structures near National

Forest System Lands. National Forest Systems lands within two miles of known structures will be considered. Proposed activities include thinning, brush disposal and prescribed fire.