

TER 2 Appendix 5

Successional Rules

Private Lands

TY1	TY10	TY15	TY30	TY45
SS1	96% → SS 4% → DEV	50% → P 44% remains SS 2% → DEV 4% remains DEV	41% → P 50% remains P 3% → DEV 6% remains DEV	40% → MS 9% remains DEV 3% → DEV 48% → SS1
SS	46% → P 50% remains SS 4% → DEV	48% → P 46% remains P 2% → DEV 4% remains DEV	75% remains P 16% → MS 3% → DEV 6% remains DEV	50% → MS 22% → SS1 9% remains DEV 3% → DEV 16% → SS
P	96% remains P 4% → DEV	69% remains P 25% → MS 2% → DEV 4% remains DEV	66% → MS 25% → SS1 3% → DEV 6% remains DEV	13% → SS1 25% → P 9% remains DEV 3% → DEV 50% → SS
MS	76% remains MS 20% → SS1 4% → DEV	20% → SS 10% → SS1 64% remains MS 4% remains DEV 2% → DEV	20% → P 30% → SS1 31% remains MS 3% → DEV 6% remains DEV 10% → SS	50% → P 18% → SS1 10% → M 10% → SS 9% remains DEV 3% → DEV
M	76% remains M 20% → SS1 4% → DEV	54% remains M 20% → SS 20% → SS1 4% remains DEV 2% → DEV	21% remains M 10% → SS1 40% → P 3% → DEV 6% remains DEV 20% → SS	8% → SS1 30% → P 30% → MS 9% remains DEV 3% → DEV 20% → SS
OG	76% remains OG 20% → SS1 4% → DEV	54% remains OG 20% → SS 20% → SS1 4% remains DEV 2% → DEV	21% remains OG 10% → SS1 40% → P 3% → DEV 6% remains DEV 20% → SS	18% → SS1 30% → P 20% → MS 9% remains DEV 3% → DEV 20% → SS
LP	100% remains LP	100% remains LP	100% remains LP	100% remains LP
UD	5% → UM 91% remains UD 4% → DEV	10% → SS1 5% remains UM 2.5% → UM 78.5% remains UD	10% → SS1 10% → P 43.5% remains UD 7.5% → UM	10% → SS1 20% → P 7.5% → UM 9% remains DEV

Private Lands

TY1	TY10	TY15	TY30	TY45
		2% → DEV 4% remains DEV	3% → DEV 6% remains DEV 20% → SS	3% → DEV 20% → SS 30.5% remains UD
YUD	46% → UD 4% → DEV 50% remains YUD	26% → UD 2% → DEV 4% remains DEV 46% remains UD 22% remains YUD	19% → UD 3% → DEV 6% remains DEV 72% remains UD	18% → UM 50% remains UD 3% → DEV 9% remains DEV 10% → SS1 10% → SS
UM	6% → MS 90% remains UM 4% → DEV	8% → MS 80% remains UM 4% remains DEV 2% → DEV 3% → SS1 3% → SS	17% → MS 3% → DEV 6% remains DEV 6% → P 40% remains UM 10% → SS1 18% → SS	37% → MS 3% → DEV 9% remains DEV 21% → SS 10% → P 10% → SS1 10% → UM
RS	100% remains RS	100% remains RS	100% remains RS	100% remains RS
YRM	100% remains YRM	100% remains YRM	100% remains YRM	100% remains YRM
RD	100% remains RD	100% remains RD	50% remains RD 50% → RM	50% remains RM 50% → RM
RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM
AG	96% remains AG 4% → DEV	94% remains AG 2% → DEV 4% remains DEV	91% remains AG 3% → DEV 6% remains DEV	88% remains AG 3% → DEV 9% remains DEV
SH	100% remains SH	100% remains SH	100% remains SH	100% remains SH

0.21% annual development rate in young to mid-successional upland cover types
 Based on 1963-2001 changes along river below Merwin Dam
 on 2/20/02, the HEP Team decided to double the development rate in TY10
 and TY15 from 2 to 4% in TY10 and from 2 to 3% in TY15 to account for the expected high
 development pressure over the first 15 years of the license

Non-Merwin Utility Lands

	TY1	TY10	TY15	TY30	TY45
SS1	100% → SS		50% → P 50% remains SS	50% → P 50% remains P	100% → MS
SS	50% → P 50% remains SS		50% → P 50% remains P	75% remains P 25% → MS	75% → MS 25% remains MS
P	100% remains P		75% remains P 25% → MS	75% → MS 25% remains MS	100% remains MS
MS	100% remains MS		100% remains MS	50% → M 100% remains MS	10% → M 90% remains MS
M	100% remains M		100% remains M	100% remains M	5% → OG 95% remains M
OG	100% remains OG		100% remains OG	100% remains OG	100% remains OG
UD	5% → UM 95% remains UD		2.5% → UM 5% remains UM 92.5% remains UD	7.5% → UM 7.5% remains UM 85% remains UD	7.5% → UM 7.5% → MS 7.5% remains UM 77.5% remains UD
YUD	50% → UD 50% remains YUD		25% → UD 50% remains UD 25% remains YUD	25% → UD 75% remains UD	50% → UM 50% remains UD
YUM	50% → UM 50% remains YUM		25% → UM 50% remains UM 25% remains YUM	25% → UM 75% remains UM	100% remains UM
UM	10% → MS 90% remains UM		10% → MS 80% remains UM 10% remains MS	30% → MS 50% remains UM 20% remains MS	30% → MS 20% remains UM 40% remains MS 10% → M
RS	100% remains RS		100% remains RS	100% remains RS	100% remains RS
YRM	100% remains YRM		100% remains YRM	100% remains YRM	100% remains YRM
RD	100% remains RD		100% remains RD	50% remains RD 50% → RM	50% remains RM 50% → RM
RM	100% remains RM		100% remains RM	100% remains RM	100% remains RM

Merwin Lands

Clearcuts and thinning planned for 2002 and 2003 will be added so that the TY0 acreages are up-to-date

Clearcuts and thinning planned in years beyond 2003 will be used to adjust acreage in TY10, TY15, TY 30, and TY45

All other successional changes will be the same as for Non-Merwin utility lands except for the following:

	TY15	TY30	TY45
MS-t created in TY10	100% remains MS-t	50% → M 50% remains MS-t	50% → M 50% remains M
MS-t created in TY15	--	100% remains MS-t	50% → M 50% remains MS-t
MS-t created in TY30	--	--	100% remains MS-t
P-t created in TY10	100% remains P-t	50% → MS 50% remains P-t	50% → MS 50% remains MS
P-t created in TY15	--	50% → MS 50% remains P-t	50% → MS 50% remains MS
P-t created in TY30	--	--	50% → MS 50% remains P-t

DNR Lands

	TY1	TY10	TY15	TY30	TY45
SS1	100% → SS		50% → P 50% remains SS	50% → P 50% remains P	90% → MS 10% → SS1
SS	50% → P 50% remains SS		50% → P 50% remains P	75% remains P 25% → MS	75% → MS 25% → SS1
P	90% remains P 10% → MS		70% remains P 20% → MS 10% → SS1	50% → MS 20% → SS1 10% → P 20% → SS	50% → SS1 20% → P 10% → MS 20% → SS
MS	50% remains MS 50% → SS1		50% → SS 25% → SS1 25% remains MS	50% → P 15% → SS1 25% → P 10% → SS	50% → SS1 15% → P 25% → MS 10% → SS
M	50% remains M 50% → SS1		25% remains M 50% → SS 25% → SS1	25% → MS 15% → SS1 50% → P 10% → SS	15% → SS1 25% → P 50% → MS 10% → SS
OG	50% remains OG 50% → SS1		25% remains OG 50% → SS 25% → SS1	25% → MS 15% → SS1 50% → P 10% → SS	15% → SS1 25% → P 50% → MS 10% → SS
UD	5% → UM 95% remains UD		10% → SS1 5% remains UM 2.5% → UM 82.5% remains UD	20% → SS1 10% → P 52.5% remains UD 7.5% → UM 10% → SS	20% → SS1 30% → P 7.5% → UM 20% → SS 22.5% remains UD
YUD	50% → UD 50% remains YUD		25% → UD 50% remains UD 25% remains YUD	25% → UD 75% remains UD	25% → UM 50% remains UD 15% → SS1 10% → SS
UM	10% → MS 90% remains UM		10% → MS 80% remains UM 10% → SS1	40% → MS 10% → SS1 10% → P 40% remains UM	20% → SS 20% → SS1 10% → P 40% remains UM
RS	100% remains RS		100% remains RS	100% remains RS	100% remains RS

DNR Lands

	TY1	TY10	TY15	TY30	TY45
YRM	100% remains	YRM	100% remains	YRM	100% remains
RD	100% remains	RD	100% remains	RD	50% remains
				50% → RM	50% → RM
RM	100% remains	RM	100% remains	RM	100% remains
SH	100% remains	SH	100% remains	SH	100% remains

**USFS
Lands**

TY1	TY10	TY15	TY30	TY45
SS	50% → P 50% remains SS	50% → P 50% remains P	100% remains P	100% → MS
P	100% remains P	100% remains P	50% → MS 50% remains P	50% → MS 50% remains MS
MS	100% remains MS	100% remains MS	50% → M 50% remains MS	50% → M 50% remains M
M	100% remains M	100% remains M	100% remains M	50% → OG 50% remains M
OG	100% remains OG	100% remains OG	100% remains OG	100% remains OG
UD	5% → UM 95% remains UD	2.5% → UM 5% remains UM 92.5% remains UD	7.5% → UM 7.5% remains UM 85% remains UD	7.5% → UM 77.5% remains UD 15% remains UM
UM	10% → MS 90% remains UM	10% → MS 80% remains UM 10% remains MS	30% → MS 50% remains UM 20% remains MS	30% → MS 20% remains UM 40% remains MS 10% → M
RS	100% remains RS	100% remains RS	100% remains RS	100% remains RS
RD	100% remains RD	100% remains RD	50% remains RD 50% → RM	50% remains RM 50% → RM
RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM
SH	100% remains SH	100% remains SH	100% remains SH	100% remains SH

Table 1. Acreage changes in cover types on utility-owned lands with and without harvest as a management tool^{1,2}.

TY1	Y10		TY15		TY30		TY45	
	With Harvest	W/Out Harvest	With Harvest	W/Out Harvest	With Harvest	W/Out Harvest	With Harvest	Without Harvest
MS	5%→MS-t 2.5%→SS1 2.5%→SS 90% remains MS	100% remains MS	2.5%→SS1 2.5% (SS1)→SS 2.5%→MS-t 5% remains MS-t 87.5% remains MS	100% remains MS	3.75%→SS1 3.75%→SS 7.5%→MS-t 5% (SS1/SS)→P 7.5% remains MS-t 72.5% remains MS	100%→MS	3.75% →SS1 3.75% →SS 7.5% →MS-t 10%→M 7.5% (SS1/SS)→P 7.5% remains P 15% remains MS-t 45% remains MS	10%→M 90% remains MS
MS-t	2.5%→SS1 2.5%→SS 95% remains MS-t	100% remains MS-t (Merwin only)	1.25%→SS1 1.25%→SS 2.5% remains SS 95% remains MS-t	100% remains MS-t (Merwin only)	3.75%→SS1 3.75% →SS 5% (SS1/SS)→P 87.5%→MS-t	100%→MS (Merwin only)	3.75% →SS1 3.75% →SS 7.5% (SS1/SS) →P 5% (P)→P-t 10%→M 70% remains MS-t	10%→M 90% remains MS (Merwin only)
P	5%→P-t 95% remains P	100% remains P	2.5% →P-t 25%→MS 5% remains P-t 67.5%→remains P	25%→MS 75% remains P	7.5% (P-t)→MS 3.75% (MS)→SS1 3.75% (MS)→SS 7.5% (MS)→MS-t 67.5%→MS 10% remains MS	75%→MS 25% remains MS	3.75% (MS)→SS 3.75% (MS)→SS1 7.5% (MS)→MS-t 3.75% (SS1)→P 3.75% (SS)→P 7.5% remains MS-t 70% remains MS	100% remains MS
SS	50%→P 50% remains SS	50%→P 50% remains SS	50%→P 2.5%→P-t 47.5% remains P	50%→P 50% remains P	25%→MS 7.5%→P-t 67.5% remains P	25%→MS 75% remains P	3.75% (MS)→SS1 3.75% (MS)→SS 7.5% (MS)→MS-t 7.5% (P-t)→MS 47.5%→MS 30% remains MS	75%→MS 25% remains MS
SS1	100%→SS	100%→SS	50%→P 50% remains SS	50%→P 50% remains SS	7.5%→P-t 50%→P 42.5% remains P	50%→P 50% remains P	7.5%→MS-t 92.5%→MS	100%→MS

TY1	Y10		TY15		TY30		TY45	
	With Harvest	W/Out Harvest	With Harvest	W/Out Harvest	With Harvest	W/Out Harvest	With Harvest	Without Harvest
UM	2.5%→SS 2.5%→SS1 10%→MS 5%→UM-t 80% remains UM	10%→MS 90% remains UM	1.25%→SS1 1.25%→SS 2.5% (SS1)→SS 2.5% (SS)→P 10%→MS 2.5%→UM-t 10% remains MS 5% remains UM-t 65% remains UM	10%→MS 10% remains MS 80% remains UM	3.75%→SS1 3.75%→SS 5% (SS1/SS)→P 2.5% remains P 7.5% (MS)→MS-t 40%→MS 7.5%→UM-t 12.5% remains MS 7.5 % remains UM-t 10% remains UM	40%→MS 20% remains MS 40% remains UM	3.75%→SS1 3.75%→SS 2.5%→MS 15% (UM-t)→MS 3.75% (MS)→SS1 3.75% (MS)→SS 7.5% (MS)→MS-t 37.5% remains MS 7.5% remains MS-t 7.5% (SS/SS1)→P 7.5% remains P	40%→MS 60% remains MS
UD	10%→SS1 10%→SS 5%→UM 75% remains UD	5%→UM 95% remains UD	10% → SS1 10% (SS1)→SS 10%→P 2.5%→UM 2.5% (UM)→UM-t 2.5% remains UM 62.5% remains UD	2.5%→UM 5% remains UM 92.5% remains UD	15%→SS1 15%→SS 7.5%→UM 20% (SS1/SS)→P 7.5% (P)→P-t 2.5% remains P 2.5% remains UM-t 2.5% (UM)→UM-t 2.5% remains UM 25% remains UD	7.5%→UM 7.5 % remains UM 85% remains UD	10%→SS1 15%→SS 5% (UM-t)→SS 10% (UM)→MS 30% (SS/SS1)→P 7.5% (P)→P-t 7.5% remains P-t 15% remains P	7.5%→UM 15% remains UM 77.5% remains UD
RD	100% remains RD	100% remains RD	100% remains RD	100% remains RD	50% remains RD 50%→RM	50% remains RD 50%→RM	50% remains RM 50%→RM	50% remains RM 50%→RM
RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM	100% remains RM change tree/snag SIs	100% remains RM

¹ Cover types in parentheses are shown for tracking purposes only. For example, for Upland Mixed Forest (UD), 10% →MS means that 20% of the UM converts to MS. 7.5% (MS)→SS1 means that 7.5% of the UM that had been converted to MS in a previous target year, is now being clearcut and moved to SS1.

² Assumes the same successional changes as the base case.