Appendix I. Vegetation Composition and Age Tables

Landscape Ecosystem Objectives - Composition, Structure, and Age

Table 8.1. Dry-mesic Red and White Pine LE Vegetation Composition by Forest Type

Upland Forest Type	2009 %	FP 2003 %	FP Decade 1 %	2003 to Decade 1	2003 to 2009	2009 to Decade 1	2009/FP Decade 1 Comparison
Jack Pine	9	9	10	+1	0	+1	No Gain
Red Pine	13	13	13	0	0	0	Meets
White Pine	10	7	9	+2	+3	-1	Exceeds
Spruce-fir	8	8	11	+3	0	+3	No Gain
Oak	0	0	0	0	0	0	Meets
N. Hardwds.	1	1	1	0	0	0	Meets
Aspen	50	52	47	-5	-2	-3	Attaining
Paper Birch	9	10	9	-1	-1	0	Meets
	100	100	100				

Table 8.2. Dry-mesic Red and White Pine LE Age-Class Distribution

Age-Class	2009 %	FP 2003 %	FP Decade 1 %	Change Objective 2003 to Decade 1	Change in % from 2003 to 2009	2009 to Decade 1	2009/FP Decade 1 Comparison
0-9	9	10	10	0	-1	-1	Receding
10-49	37	33	44	+11	+4	-7	Attaining
50-99	42	45	32	-13	-3	+10	Attaining
100-139	12	12	14	+2	0	+2	No Gain
140+	0	0	0	0	0	0	Meets
	100	100	100				

Table 8.3. Mesic Red and White Pine LE Vegetation Composition by Forest Type

Upland Forest Type	2009 %	FP 2003 %	FP Decade 1 %	2003 to Decade 1	2003 to 2009	2009 to Decade 1	2009/FP Decade 1 Comparison
Jack Pine	5	5	6	+1	0	+1	No Gain
Red Pine	7	6	7	+1	+1	0	Meets
White Pine	4	3	5	+2	+1	+1	Attaining
Spruce-fir	15	16	18	+2	-1	+3	Receding
Oak	0	0	0	0	0	0	Meets
N. Hardwds.	3	2	2	-1	+1	-1	Exceeds
Aspen	51	51	47	-4	0	-4	No Gain
Paper Birch	16	15	15	-1	+1	-1	Exceeds
	100	98	100				

Table 8.4. Mesic Red and White Pine LE Age-Class Distribution							
Age-Class	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**Change Objective 2003 to Decade 1**	**Change in % from '03 to '09**	**2009 to Decade 1**	**09 FP Decade 1 Comparison**
0-9	7	15	10	-5	-8	-3	Receding
10-49	37	30	45	+15	+7	-8	Attaining
50-79	24	29	16	-13	-5	+8	Attaining
80-99	21	17	21	+4	+4	0	Meets
100-119	8	6	6	0	+2	+2	Exceeds
120+	3	2	2	0	+1	+1	Exceeds
	100	100	100				

Table 8.5. Jack Pine Black Spruce LE Vegetation Composition by Forest Type							
Upland Forest Type	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**2003 to Decade 1**	**2003 to 2009**	**2009 to Decade 1**	**09/FP Decade 1 Comparison**
Jack Pine	24	24	28	+4	0	+4	No Gain
Red Pine	10	10	10	0	0	0	Meets
White Pine	4	3	3	-1	+1	-1	Exceeds
Spruce-fir	12	13	15	2	-1	+3	Receding
Oak	0	0	0	0	0	0	Meets
N. Hardwds.	1	1	0	-1	0	-1	No Gain
Aspen	45	45	40	-5	0	-5	No Gain
Paper Birch	5	5	5	0	0	0	Meets
	100	101	101				

Table 8.6. Jack Pine LE Age-Class Distribution							
Age-Class	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**Change Objective 2003 to Decade 1**	**Change in % from '03 to '09**	**2009 to Decade 1**	**09 FP Decade 1 Comparison**
0-9	7	10	14	+4	-3	-7	Receding
10-49	41	38	42	+4	+3	-1	Attaining
50-79	22	24	18	-6	-2	+4	Attaining
80-109	26	25	22	-3	+1	+4	Exceeding
110-179	5	4	5	+1	+1	0	Meets
180+	0	0	0	0	0	0	Meets
	100	100	100				

Table 8.7. Sugar Maple LE Vegetation Composition by Forest Type							
Upland Forest Type	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**2003 to Decade 1**	**2003 to 2009**	**2009 to Decade 1**	**09/FP Decade 1 Comparison**
Jack Pine	0	0	0	0	0	0	Meets
Red Pine	5	5	5	0	0	0	Meets
White Pine	2	1	2	+1	+1	0	Meets
Spruce-fir	14	15	15	0	-1	+1	Receding
Oak	0	0	0	0	0	0	Meets
N. Hardwds.	37	36	37	+1	+1	0	Meets
Aspen	26	27	25	-1	-1	-1	Attaining
Paper Birch	16	17	17	0	-1	+1	Receding
	100	100	100				

Table 8.8. Sugar Maple LE Age-Class Distribution							
Age-Class	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**Change Objective 2003 to Decade 1**	**Change in % from '03 to '09**	**2009 to Decade 1**	**09 FP Decade 1 Comparison**
0-9	5	6	4	-2	-1	+1	Attaining
10-49	27	27	34	+7	0	-7	No Gain
50-99	43	45	38	-7	-2	+5	Attaining
100-149	24	21	23	+2	+3	-1	Exceeding
150+	1	1	2	+1	0	+1	No Gain
	100	100	100				

Table 8.9. Mesic Birch/Aspen/Spruce-fir LE Vegetation Composition by Forest Type							
Upland Forest Type	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**2003 to Decade 1**	**2003 to 2009**	**2009 to Decade 1**	**2009/FP Decade 1 Comparison**
Jack Pine	4	3	4	+1	+1	0	Meets
Red Pine	5	5	5	0	0	0	Meets
White Pine	3	2	3	+1	+1	0	Meets
Spruce-fir	25	25	26	+1	0	+1	No Gain
Oak	0	0	0	0	0	0	Meets
N. Hardwds.	5	4	4	0	+1	-1	Exceeds
Aspen	44	45	43	-2	-1	-1	Exceeds
Paper Birch	15	15	14	-1	0	-1	Exceeds
	100	100	100				

8.10. Mesic Birch/Aspen/Spruce-fir LE Age-Class Distribution							
Age-Class	**2009 %**	**FP 2003 %**	**FP Decade 1 %**	**Change Objective 2003 to Decade 1**	**Change in % from '03 to '09**	**2009 to Decade 1**	**09 FP Decade 1 Comparison**
0-9	6	13	10	-3	-7	+4	Receding
10-49	37	33	45	+12	+4	+8	Attaining
50-79	24	28	15	-13	-4	-9	Attaining
80-99	23	19	21	+2	+4	-2	Exceeding
100+	10	8	9	+1	+2	-1	Exceeding
	100	100	100				

Table 8.11. Lowland Conifer LE Age-Class Distribution							
Percentages of Age Classes for Lowland Conifer A-JPBS-DMRWP							
Age Class	**2009 %**	**Existing Condition 2003 %**	**FP Decade 1 Objective %**	**Change Objective from 2003 to Decade 1**	**Change in % from 2003 to 2009**	**2009 to Decade 1**	**2009/FP Decade 1 Comparison**
0-9	0	0	3	+3	0	+3	static-below
10-39	7	7	5	-2	0	-2	static-exceeds
40-79	25	24	18	-6	+1	-7	exceeding
80-159	66	65	69	+4	+1	+3	attaining
160+	2	3	4	+1	-1	+2	receding
Total	100	100	100				

Table 8.11. Lowland Conifer LE Age-Class Distribution							
Percentages of Age Classes for Lowland Conifer B-MRW-MBASF							
0-9	1	1	2	+1	0	+1	static-below
10-39	5	4	4	0	+1	-1	exceeding
40-79	23	25	14	-11	-2	-9	attaining
80-159	65	62	70	+8	+3	+5	attaining
160+	6	8	10	+2	-2	+2	receding
Total	100	100	100				
Percentages of Age Classes for Lowland Conifer C-SM							
0-9	1	0	1	+1	+1	0	meets
10-39	3	2	2	0	+1	-1	exceeding
40-79	16	25	19	-6	-9	+3	receding
80-159	58	49	45	-4	+9	-13	exceeding
160+	22	24	33	+9	-2	+11	receding
Total	100	100	100				

Vegetation Spatial Distribution

Table 8.12. Vegetation Spatial Distribution (patch type and size) FY-2009						
	2009		**Forest Plan S&G's Objectives**		**2004**	
Patch size	**Acres**	**#**	**Acres**	**#**	**Acres**	**#**
Red/White pine mature and older forests patches (Forest-wide)						
100+	22,689	106	17,300	88	17,300	88
300+	7,511	12	4,700	8	4,700	8
All upland mature and older forest by Zone						
Zone 1						
300+	45,627	79	44,700	na	51,500	86
1000+	9,466	5	na	8	13,200	8
Zone 2						
300+	62,599	36	54,400	na	60,700	35
1000+	51,029	14	na	14	50,000	14
10,000+	16,539	1	11,700	1	13,000	1
Zone 3						
300+	200,059	167	O-VG-24 Strive to minimize decrease in acres and numbers of patches of mature or older upland forest in patches ≥ 300 acres.		185,200	177
1000+	134,854	43			116,500	47
10,000+	28,002	2			10,100	1
Lowland Conifer mature and older forest patches						
100+	81,462	351	O-VG-19 Maintain representative array of large patches (≥300 ac) of mature or older lowland forest.		72,500	310
300+	34,517	58			30,300	52
1000+	9,412	6			6,600	4

Management Area – Harvest Treatments

Table 8.13. FY2009 Harvest Treatments in Acres by Management Area							
Management Area	**Thin**	**Clearcut**	**Shelterwood & Partial Cut 30**	**Uneven-Aged**	**Uneven-aged (aspen-aspen/fir)**	**Permanent Land Clearing**	**Totals**
General Forest (GF)	708	1940	190	0	0	21	2859
GF Longer Rotation	962	638	267	15	1	0	1883
Rec Use in Scenic Landscape	244	95	0	0	0	0	339
SPM Recreation	67	105	0	0	0	0	172
Eligible WSR Rivers	63	0	0	0	0	0	63
Totals	2044	2778	457	15	1	21	5316

Table 8.14. Annual Average of Proposed and Probable Harvest Treatments in Acres by Management Area and Treatment Type in Decade 1						
Management Area	**Thin**	**Clear cut**	**Shelterwood & partial cut. 30BA**	**Uneven-aged**	**Uneven-aged asp-asp/fir**	**Total annual average Decade**
General Forest (GF)	745	5,604	993	65	479	7,886
GF Longer Rotation	356	2,539	808	73	249	4,025
Rec Use in Scenic Landscape	0	225	302	134	49	710
Eligible WSR Rivers	0	0	110	7	44	161
SPM Recreation	0	0	71	10	223	304
Semi-Primitive Non-motorized Recreation	0	0	0	0	7	7
Riparian Emphasis Areas	0	0	36	2	61	99
Total Annual Average	1,101	8,368	2,320	291	1,112	13,192

Table 8.15. Acres Cut by Age at Time of Harvest - FY 2009										
		Age at Time of Harvest (years)								
Management Area	**Harvest Treatment**	**< 10**	**10**	**20**	**30**	**40**	**50 - 99**	**100 - 149**	**150+**	**Total Acres**
General Forest (GF)	Clearcutting	38	44	30	17	15	1788	273	0	2205
	Shelterwood	0	0	0	0	0	174	15	0	189
	Thinning	0	0	0	0	174	488	41	0	703
Eligible WSR Rivers	Thinning	0	0	0	0	43	20	0	0	63
GF Longer Rotation	Clearcutting	4	2	8	16	5	431	130	0	596
	Uneven-Aged (aspen-aspen/fir)	0	0	0	0	0	1	0	0	1
	Uneven-Aged	0	0	0	0	0	15	0	0	15
	Shelterwood & Partial Cut 30	1	0	2	3	2	159	98	0	265
	Thinning	0	27	5	76	386	451	18	0	963
Rec Use in Scenic Landscape	Clearcutting	0	14	0	0	0	79	2	0	95
	Thinning	0	0	244	0	0	0	0	0	244
SPM Recreation	Clearcutting	0	0	4	1	0	92	7	0	104
	Thinning	5	0	0	1	24	19	18	0	67
	Total Harvest Treatment Acres	48	87	293	114	649	3717	602	0	5510

Figure 8.2.

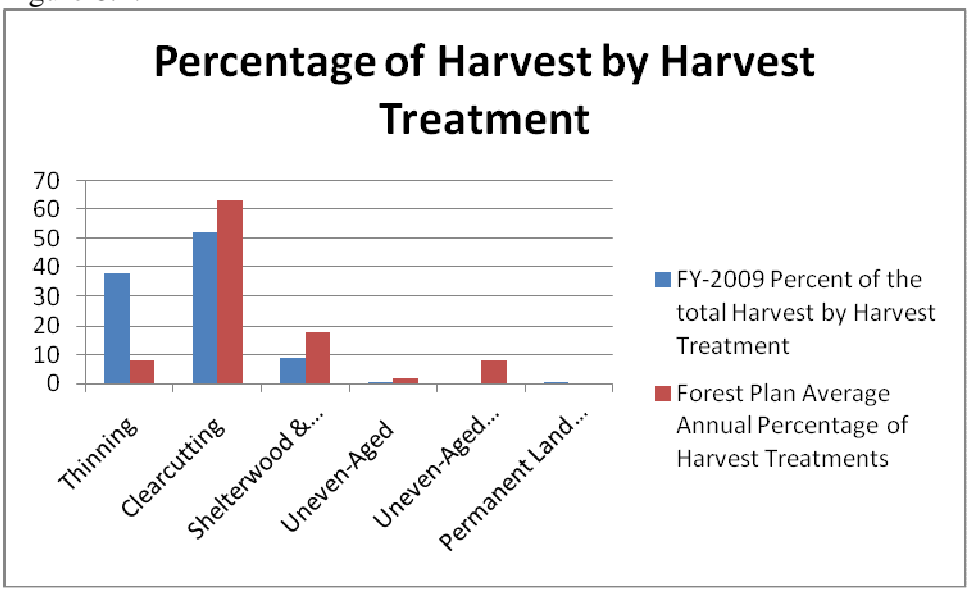


Figure 8.3.

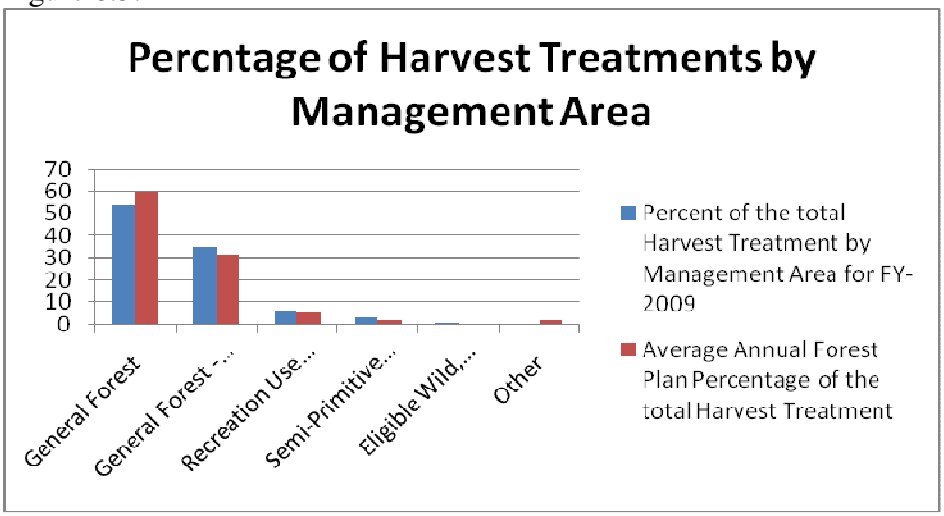
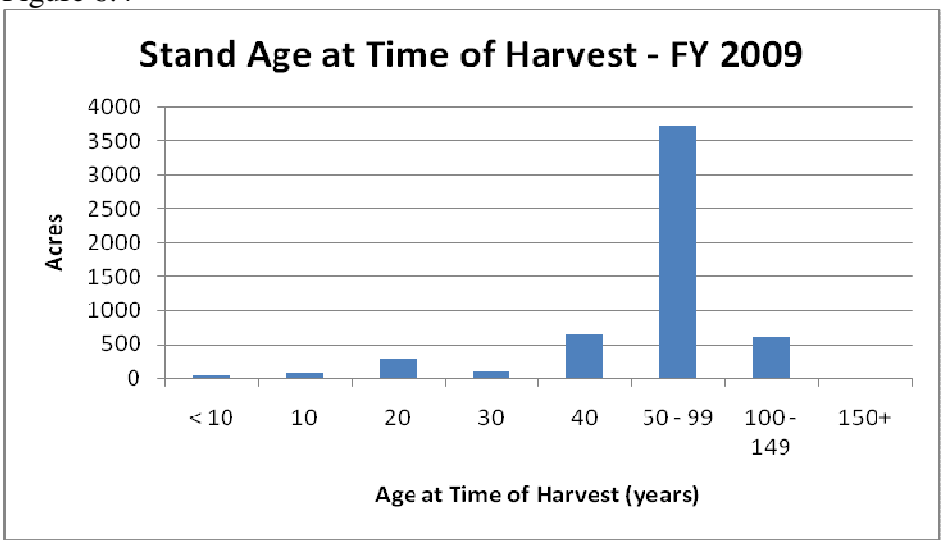


Figure 8.4



Management Indicator Species - White Pine

8.16. White Pine Forest Type Composition by Landscape Ecosystem

LE	2009 %	FP 2003 %	FP Decade 1 %	2003 to Decade 1	2003 to 2009	2009 to Decade 1	2009/FP Decade 1 Comparison
MBA	3	2	3	+1	+1	0	Meets
SMA	2	1	2	+1	+1	0	Meets
JPB	4	3	3	-1	+1	-1	Exceeds
MRW	4	3	5	+2	+1	+1	Attaining
DRW	10	7	9	+2	+3	-1	Exceeds

MBA - Mesic Birch/Aspen/Spruce-fir; **SMA** – Sugar Maple; **JPB** – Jack Pine/Black Spruce; **MRW** - Mesic Red and White Pine; **DRW** – Dry-mesic Red and White Pine