ERRATA FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT and APPENDICES
For the Revised Land and Resource Management Plan, George Washington National Forest
R8-MB-137B and R8-MB-137D, August 11, 2011

Changes are highlighted in Bold Print

CHAPTER 2 - Alternatives

1) Page 2-5, Alternative A:

Timber Harvest: ASQ is 23.5 MMBF/year, Annual regeneration program of 2,400 acres. Suitable acres are 350,000. Actual average regeneration program has been 904 acres/year (10 year average).

Oil and Gas: Approximately 970,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

Page 2-6, Alternative B:

Timber Harvest: ASQ around 27.1 MMBF/year, Annual regeneration program of 1,800-3,000 acres. Suitable acres are 486,000.

Oil and Gas: Approximately 777,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

Page 2-10, Alternative D:

Timber Harvest: ASQ around 45.9 MMBF/year, Annual regeneration program of 3,000-5,000 acres. Suitable acres are 482,000.

Oil and Gas: Approximately 776,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

Page 2-10, Alternative E:

Timber Harvest: ASQ around 15.5 MMBF/year, Annual regeneration program of 1,800-3,000 acres. Suitable acres are 366,000.

Oil and Gas: Approximately 701,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

Page 2-10, Alternative F:

Timber Harvest: ASQ around 10.2 MMBF/year, Annual regeneration program of 1,000-1,800 acres. Suitable acres are 278,000.

Oil and Gas: Approximately 601,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

Page 2-10, Alternative G:

Timber Harvest: ASQ around 27.1 MMBF/year, Annual regeneration program of 1,800-3,000 acres. Suitable acres are 439,000.

Oil and Gas: Approximately 717,000 acres are available for leasing under standard or controlled surface occupancy stipulations.

2) Page 2-20, Table 2.2 Acreages for Rx 4FA and 12D in Alt F, due to mapping error:

Table 2-2. Land Allocation of Management Prescriptions by Alternative (Cont'd)

		ALT E		ALT F		ALT G	
Rx	RX DESCRIPTION	Acres	% of Forest	Acres	% of Forest	Acres	% of Forest
1A	Designated Wilderness	42,992	4%	42,992	4%	42,992	4%
1B	Recommended Wilderness Study	24,325	2%	112,144	11%	20,314	2%
2C2	Eligible Wild and Scenic River-Scenic	3,834	0%	2,176	0%	3,848	0%
2C3	Eligible Wild and Scenic River-Recreation	4,088	0%	4,341	0%	4,179	0%
4A	Appalachian Trail	8,513	1%	8,513	1%	8,519	1%
4B1	Research Natural Area	1,979	0%	1,978	0%	1,979	0%
4C1	Geologic Area	3,879	0%	176	0%	3,881	0%
4D	Special Biological Area	51,574	5%	30,438	3%	51,565	5%
4D1	Key Natural Heritage Community Area					3,308	0%
4F	Mt Pleasant National Scenic Area	7,744	1%	7,744	1%	7,744	1%
4FA	Recommended National Scenic Area			107,717	10%		
5B	Communication Site	13	0%	13	0%	13	0%
5C	Utility Corridor	6,754	1%	6,754	1%	6,714	1%
7A1	Scenic Byway	4,956	0%	4,956	0%	4,956	0%
7B	Scenic Corridors and Viewsheds	34,045	3%	32,358	3%	34,876	3%
7C	ATV Use Area	9,933	1%	9,933	1%	9,933	1%
7D	Concentrated Recreation Areas	664	0%	615	0%	662	0%
7E	Dispersed Recreation Areas					27,915	2%
7E1	Dispersed Recreation Areas-Unsuitable	21,263	2%	14,524	1%		
7E2	Dispersed Recreation Areas-Suitable	4,086	0%	1,125	0%		
7F	Blue Ridge Parkway	4,418	0%	4,390	0%	4,418	0%
7G	Pastoral Landscapes	4,112	0%	4,107	0%	4,280	0%
8A1	Mix of Successional Habitats						
8A1U	Mix of Successional Habitats-Unsuitable						
8B	Early Successional Habitats						
8BU	Early Successional Habitats-Unsuitable						
8C	Black Bear/Remote Habitats						
8CU	Black Bear/Remote Habitats-Unsuitable						
8E4a	Indiana Bat-Primary	1,671	0%	1,671	0%	1,671	0%
8E4b	Indiana Bat-Secondary	13,698	1%	13,713	1%	13,698	1%
8E7	Shen Mtn Crest-Cow Knob Salamander	49,644	5%	23,382	2%	46,812	4%
9A1	Source Water Watershed Protection						
10B	Timber Production						
10BU	Timber Production-Unsuitable						
12D	Remote Backcountry	264,184	25%	167,845	16%	252,159	24%
13	Mosaics of Habitat-Suitable	491,763	46%	350,453	33%	507,006	48%
13U	Mosaics of Habitat-Unsuitable	3,308	0%	109,380	10%		
Water	Lake Moomaw	2,479	0%	2,479	0%	2,479	0%
Total		1,065,918		1,065,918		1,065,918	

3) Page 2-22: Table 2-4

	Alternative						
	A	B	C	D	E	F	G
Soil and Water	Acres						
Areas of ground disturbance	212	292-384	79	635-785	189-275	260-323	315-407
Riparian Areas	Feet						
Riparian corridor width-perennial (ft)	66'+	100	100	66'+	100	100	100
Riparian corridor width-intermittent (ft)	33'+	50	50	33'+	50	50	50
Riparian corridor width-ephemeral (ft)		25	25		25	25	25

4) Page 2-22: add the following narrative and edits for Table 2-5.

The early successional forest habitat component includes timber regeneration harvest and natural disturbances, except for Alt C which has no timber harvest. The combined active management habitat components include timber harvest, prescribed fire and wildlife habitat improvements.

Table 2-5. Projected Habitat Components at 10 Years by Alternative

Habitat Component	Current Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Early Successional Forest	3%	4%	3-4%	2%	4-6%	3-4%	3%	3-4%
Open Woodlands	2%	5%	8-11%	2%	6-8%	11%	8-11%	8-11%
Grassland/Shrublands	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Mid- to late successional Hard Mast Producing Forest	90%	87%	89%	92%	88%	90%	91%	89%
Total acres of combined active management habitat components	2%	6%	9-13%	<1%	8-12%	12-13%	8-12%	9-13%

5) Page 2-26, Table 2-8:

The title for Table 2-8 should be: Acres in Southern Appalachian Montane Pine Forest and Woodland and Central Appalachian Pine-Oak Rocky Woodland Ecological Systems burned, regenerated, and thinned and at risk from southern pine beetle effects at the end of the next decade by alternative.

6) Page 2-36, Table 2-17:

Table 2-17. Comparison of the Timber Harvest Issue by Alternative

	Alternative						
	A	B	C	D	E	F	G
Age Class Distribution in 2040	Percent of Forested Acres						
0-10 (1% in 2010)	2	3	0	5	2	1	3
11-40 (9% in 2010)	6	7	1	10	5	3	7
41-80 (7% in 2010)	10	10	10	8	10	10	10
81-100 (36% in 2010)	1	1	1	1	1	1	1
101-130 (33% in 2010)	35	34	40	34	35	38	34
131-150 (8% in 2010)	26	25	27	24	26	26	25
150+ (6% in 2010)	20	20	21	18	21	21	20
Timber Management	Acres In Thousands						
Lands Suitable for Timber Production	350	486	0	482	366	278	439
	Acres In Thousands						
Acres Regeneration Harvest (Total First Decade)	24	30	0	42	18	10	30
	MMBF						
Allowable Sale Quantity (Total First Decade)	235*	271	0	459	155	102	271
	MMCF						
Allowable Sale Quantity (Total First Decade)	47	54.3	0	92	31.1	20.4	54.3
	Percent of Current Annual Demand of GWNF Timber						
Timber Sale Program Quantity as a Percent of Demand	18	21	0	36	12	8	21

*In order to compare across the alternatives, the volume shown for Alternative A (current Forest Plan) is shown using the same current Regional conversion factor as the other alternatives, which is different from the conversion factor used in the 1993 Forest Plan.

CHAPTER 3 – Affected Environment and Environmental Consequences

7) Page 3-32, change the last paragraph as follows and update Table A4.3.

The cumulative effects to soil productivity from the actions taken during the first decade of a new Forest Plan by each alternative are displayed in Table A4.3 below. Table A4.3 is based on the levels of timber harvest and prescribed fire displayed in Table B2.10. As shown, the alternatives vary in their impact to long-term soil productivity on the Forest. It shows that soil productivity is being maintained on more than 99% of the Forest area. Cumulative effects to the soils considered past management actions taken prior to plan implementation and anticipated actions taken by the alternatives for the first 10 years including watershed condition improvement work.

Table A4.3 Cumulative Effects to Soil Productivity by GWNF Forest Plan Alternatives over first 10 years of the Plan.

Effects to Soil Productivity	Acres by Alternative						
	A	B	C	D	E	F	G
Cumulative Long Term Effects*	6752	6064 - 6394	6118	7290 - 7810	6688 - 6968	6457 - 6797	6769-7099
Cumulative Improved Soil Productivity***	1378	1547	1823	1362	1647	1593	1647
Adjusted Cumulative Long Term Effects	5374	4517 - 4847	4295	5928 - 6448	5041 - 5321	4864 - 5204	5122-5452
Percent of the GWNF Activity Areas** with Long Term Effects after 10 yr	0.5%	0.5-%	0.7%	0.6-0.7%	0.5-0.6%	0.6%	0.7-0.8%

*Cumulative Long Term Effects generated by Alternative actions plus Existing Long Term Effects. **Activity Area explained in the Scope of Analysis section above. *** Decommissioned roads and watershed improvement project acres.

8) Page 3-50, add the following to the end of the last paragraph, and update Table A6.3 for Alternative A:

Table A6.3 is based on the levels of timber harvest and prescribed fire displayed in Table B2.10. Alternative A as implemented would differ from the Alternative A and result in about 166 acres of soil disturbance.

Table A6.3 Acres of Soil Disturbance by Alternative

Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
212	**292 – 384**	**79**	**635 – 785**	**189 – 275**	**260 – 323**	**315 - 407**

9) Page 3-51, Groundwater, 3rd paragraph, 6th sentence:

Alternatives E and G would designate 14 cave and surrounding conservation areas (about 3,700 acres total) as Geologic Areas, and thus increase protection of karst groundwater areas.

Page 3-53, Cumulative Effects, last sentence:

Alternatives E and G would designate 14 cave and surrounding conservation areas (about 3,700 acres total) as Geologic Special Interest Areas, and thus increase protection of karst groundwater areas.

10) Page 3-62, add the following paragraph to the end of the page.

Tables B1.1 and B1.2 are based on prescribed fire levels of 3,000 acres in Alternative A, 12,000 acres in Alternative D, and 20,000 acres in Alternatives B, E, F, and G. Timber harvest levels are based on levels generated by the Spectrum model and are 2,400 acres in Alternative A, 3,000 acres in Alternative B, 0 acres in Alternative C, 4,258 acres in Alternative D, 1,800 acres in Alternative E, 1,000 acres in Alternative F and 3,000 acres in Alternative G.

11) Page 3-63, Table B1.1, change area of regenerating Pine Forests and Woodlands in Alternative A

Table B1.1 Ecological Systems – Indicators by Alternative at End of First Decade

Ecosystem Indicator	Current Condition (acres)	LandFire Condition (% of area)	Condition of Indicator at end of 10 years						
			Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Mafic Glade and Barrens and Alkaline Glades and Woodlands	933								
Acres Burned at Desired Frequency	0%	83%	19%	39%	0%	20%	39%	39%	39%
Caves and Karstlands	119,000								
Total Occurrences at Desired Condition	100%		100%	100%	100%	100%	100%	100%	100%
Cliff, Talus and Shale Barrens	23,401								
Acres of Open and Open Canopy	4%	100%	9%	25%	0%	13%	25%	25%	25%
Cove Forest	60,296								
Acres in mid to late successional stages	98%	96%	98%	98%	100%	97%	99%	98%	98%
Acres of Regenerating Forest	2%	4%	2%	2%	0%	3%	1%	2%	2%
Acres of open canopy in mid to late successional stages	2%	9%	2%	2%	2%	2%	2%	2%	2%
Northern Hardwood Forest	10,723								
Acres in mid to late successional stages	98%	90%	99%	99%	98%	98%	98%	98%	99%
Acres of Regenerating Forest	1%	10%	1%	1%	2%	2%	2%	2%	1%
Acres of open canopy in mid to late successional stages	4%	10%	5%	5%	5%	5%	5%	5%	5%
Oak Forests and Woodlands	756,267								
Acres in mid to late successional stages	96%	78%	94%	94%	97%	92%	95%	97%	94%
Acres of Regenerating Forest	3%	22%	5%	5%	2%	7%	4%	2%	5%
Acres of open canopy in mid to late successional stages	2%	50%	6%	13%	2%	9%	12%	12%	13%
Acres of open grasslands or forbs	1%	4%	1%	1%	1%	1%	1%	1%	1%
Pine Forests and Woodlands	159,660								
Acres in mid to late successional stages	97%	87%	97%	97%	99%	98%	97%	95%	97%
Acres of Regenerating Forest	2%	13%	2%	3%	1%	2%	3%	4%	3%
Acres of open canopy in mid to late successional stages	2%	79%	5%	13%	1%	8%	13%	13%	13%
Floodplains, Wetlands and Riparian Areas	53,560								
Compliance with Riparian Guidelines	Yes								
Spruce Forest	526								
Total System Acres at Desired Condition	100%		100%	100%	100%	100%	100%	100%	100%

12) Page 3-64, Table B1.2, change area of regenerating Pine Forests and Woodlands in Alternative A

Table B1.2 Ecological Systems – Indicators by Alternative at End of Fifth Decade

Ecosystem Indicator	Current Condition (acres)	LandFire Condition (% of area)	Condition of Indicator at end of 50 years						
			Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Mafic Glade and Barrens and Alkaline Glades and Woodlands	933								
Acres Burned at Desired Frequency	0%	83%	34%	95%	0%	44%	95%	95%	95%
Caves and Karstlands	119,000								
Total Occurrences at Desired Condition	100%		100%	100%	100%	100%	100%	100%	100%
Cliff, Talus and Shale Barrens	23,401								
Acres of Open and Open Canopy	4%	100%	16%	49%	0%	28%	49%	49%	49%
Cove Forest	60,296								
Acres in mid to late successional stages	98%	96%	98%	98%	100%	96%	99%	97%	98%
Acres of Regenerating Forest	2%	4%	2%	2%	0%	4%	1%	3%	2%
Acres of open canopy in mid to late successional stages	2%	9%	2%	2%	2%	2%	2%	2%	2%
Northern Hardwood Forest	10,723								
Acres in mid to late successional stages	98%	90%	98%	98%	99%	81%	99%	99%	98%
Acres of Regenerating Forest	1%	10%	2%	2%	1%	19%	1%	1%	2%
Acres of open canopy in mid to late successional stages	4%	10%	5%	5%	5%	6%	5%	5%	5%
Oak Forests and Woodlands	756,267								
Acres in mid to late successional stages	96%	78%	94%	94%	97%	92%	95%	96%	94%
Acres of Regenerating Forest	3%	22%	5%	5%	2%	7%	4%	3%	5%
Acres of open canopy in mid to late successional stages	2%	50%	7%	20%	2%	14%	20%	19%	20%
Acres of open grasslands or forbs	1%	4%	1%	1%	1%	1%	1%	1%	1%
Pine Forests and Woodlands	159,660								
Acres in mid to late successional stages	97%	87%	97%	97%	99%	95%	97%	98%	97%
Acres of Regenerating Forest	2%	13%	2%	3%	1%	5%	3%	2%	3%
Acres of open canopy in mid to late successional stages	2%	79%	6%	22%	1%	14%	22%	22%	22%
Floodplains, Wetlands and Riparian Areas	53,560								
Compliance with Riparian Guidelines	Yes								
Spruce Forest	526								
Total System Acres at Desired Condition	100%		100%	100%	100%	100%	100%	100%	100%

13) Page 3-69, add the following paragraph to the end of the 3rd paragraph.

Tables B2.2 and B2.3 are based on prescribed fire levels of 3,000 acres in Alternative A, 12,000 acres in Alternative D, and 20,000 acres in Alternatives B, E, F, and G. Timber harvest levels are based on levels generated by the Spectrum model and are 2,400 acres in Alternative A, 3,000 acres in Alternative B, 0 acres in Alternative C, 4,258 acres in Alternative D, 1,800 acres in Alternative E, 1,000 acres in Alternative F and 3,000 acres in Alternative G.

14) Page 3-69, Table B2.2, change acres of Hard and Soft Mast Dependent acres, High Elevation Regeneration acres, Regenerating Forests acres, and Shrublands acres in Alternative A

Table B2.2 Terrestrial Species Groups – Indicators by Alternative at End of First Decade

Species Group Indicator	Current Condition	Condition of Indicator at end of 10 years						
		Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Alkaline glades and barrens		See mafic and alkaline grades ecological system						
Area Sensitive Grassland and Shrubland and Open Woodlands								
Total acres of area sensitive grasslands, shrublands or open woodlands	24,341	58,215	121,389	22,360	86,859	121,389	121,389	121,389
Shrublands > 40 acres	367	367	367	367	367	367	367	367
Area Sensitive Grasslands								
Area sensitive open Habitat grasslands greater than 100 ac	2,358	2,358	2,358	2,358	2,358	2,358	2,358	2,358
Area Sensitive Grasslands								
Area sensitive open habitat grasslands greater than 40 ac	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744
Area Sensitive Shrubland and Open Woodlands								
Area sensitive open habitat shrubland and open woodland greater than 100 ac	21,339	55,213	118,387	19,358	83,857	118,387	118,387	118,387
Shrublands > 100 acres	109	109	109	109	109	109	109	109
Area Sensitive Mature Coniferous, Deciduous, and/or Mixed Forest Associates								
Cove, spruce, pine, oak, northern hardwood and riparian ecological systems	899,645	878,879	878,879	907,616	866,882	890,309	881,576	890,309
Calciphiles								
Total High-Quality Habitat Type Acres	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
Caves		See caves and karstlands ecological system						
Cavity Trees, Den Trees and Snags								

Species Group Indicator	Current Condition	Condition of Indicator at end of 10 years Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Compliance with den/cavity tree and snag guidelines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cliff and Talus and large rock outcrops Compliance with cliff, talus and large rock outcrop guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Cove Forests		See cove forests ecological system						
Fire Dependent and Fire Enhanced Acres burned at desired frequency in all systems	18,376	35,855	99,029	0	64,499	99,029	99,029	99,029
Grasslands Existing grasslands in open conditions	4,861	4,861	4,861	2,431	4,861	4,861	4,861	4,861
Total grasslands acres	4,861	5,963	7,227	2,815	6,536	7,227	7,227	7,227
Hard and Soft Mast Dependent Total shrubland acres	15,213	25,513	31,503	1,562	43,582	19,562	11,503	31,503
Regenerating forest, pine + oak	29,411	39,589	45,306	16,722	57,183	34,292	25,382	45,306
Mature Oak	652,219	626,690	626,690	652,236	613,267	637,705	632,362	626,690
Open canopy pine + oak	17,788	50,289	109,633	16,722	78,038	109,633	109,633	109,633
High Elevation Coniferous, Deciduous and/or Mixed Forests Total acres of oak, cove or pine ecosystems in mid-late succession at elevations >3000 feet	156,312	156,312	156,312	156,312	156,312	156,312	156,312	156,312
High Elevation Openings, grassy or shrubby or open woodlands Total High Elevation Grassland acres	891	891	891	891	891	891	891	891
Total high elevation shrubland acres	151	151	151	151	151	151	151	151
Regeneration at high elevation	1,018	1,361	1,561	563	1,964	1,163	894	1,561
Late Successional Hardwood Dominated Forest Mature and late successional oak, cove and northern hardwoods	690,022	669,611	669,611	695,568	656,069	681,042	675,062	669,611
Lepidopterans - Compliance with lepidopteron guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Mafic Rocks		See mafic and alkaline grades ecological system						
Occurrence Protection Compliance with Species Occurrence Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Species Group Indicator	Current Condition	Condition of Indicator at end of 10 years Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Open Woodlands Open canopy pine, oak, mafic, cliff, riparian, cove, northern hardwood systems	21,230	55,104	118,278	19,249	83,748	118,278	118,278	118,278
Regenerating Forests Regenerating forest, pine, oak, cove, northern hardwood systems	30,539	40,839	46,829	16,888	58,908	34,888	26,829	46,829
Riparian		See riparian ecological system						
Ruderal Compliance with ruderal species guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sandstone Glades and Barrens Compliance with sandstone glades species guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Over-Collection Compliance with guidelines for over collection	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Recreation Traffic Compliance with recreation traffic guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Shale Barrens		See cliff, talus and shale barrens ecological system						
Shrublands Total shrubland acres	15,213	25,513	31,503	1,562	43,582	19,562	11,503	31,503
Total maintained Shrubland acres	1,503	1,503	1,503	1,503	1,503	1,503	1,503	1,503
Species in a Special Biologic Area Special Biological Area Managed for the habitat needed by the species	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

15) Page 3-72, Table B2.3, change acres of Hard and Soft Mast Dependent acres, High Elevation Regeneration acres, Regenerating Forests acres, and Shrublands acres in Alternative A

Table B2.3 Terrestrial Species Groups – Indicators by Alternative at End of Fifth Decade

Species Group Indicator	Current Condition	Condition of Indicator at end of 50 years						
		Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Alkaline glades and barrens		See mafic and alkaline grades ecological system						
Area Sensitive Grassland and Shrubland and Open Woodlands								
Total acres of area sensitive grasslands, shrublands or open woodlands	24,341	65,080	193,160	22,360	131,032	193,160	193,168	193,160
Shrublands > 40 acres	367	367	367	367	367	367	367	367
Area Sensitive Grasslands								
Area sensitive open Habitat grasslands greater than 100 ac	2,358	2,358	2,358	2,358	2,358	2,358	2,358	2,358
Area Sensitive Grasslands								
Area sensitive open habitat grasslands greater than 40 ac	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744
Area Sensitive Shrubland and Open Woodlands								
Area sensitive open habitat shrubland and open woodland greater than 100 ac	21,339	62,078	190,158	19,358	128,030	190,158	190,166	190,158
Shrublands > 100 acres	109	109	109	109	109	109	109	109
Area Sensitive Mature Coniferous, Deciduous, and/or Mixed Forest Associates								
Cove, spruce, pine, oak, northern hardwood and riparian ecological systems	899,645	891,856	891,864	996,149	815,558	922,743	962,257	921,827
Calciphiles								
Total High-Quality Habitat Type Acres	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
Caves		See caves and karstlands ecological system						
Cavity Trees, Den Trees and Snags								
Compliance with den/cavity tree and snag guidelines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cliff and Talus and large rock outcrops								
Compliance with cliff, talus and large rock outcrop guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cove Forests		See cove forests ecological system						
Fire Dependent and Fire Enhanced								

Species Group Indicator	Current Condition	Condition of Indicator at end of 50 years Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Acres burned at desired frequency in all systems	18,376	42,720	170,808	0	108,680	170,808	170,808	170,808
Grasslands								
Existing grasslands in open conditions	4,861	4,861	4,861	2,431	4,861	4,861	4,861	4,861
Total grasslands acres	4,861	6,100	8,662	2,815	7,419	8,662	8,662	8,662
Hard and Soft Mast Dependent								
Total shrubland acres	15,213	25,211	31,119	1,503	52,583	19,503	11,503	31,119
Regenerating forest, pine + oak	29,411	39,711	44,958	16,722	63,571	34,302	24,663	44,958
Mature Oak	652,219	625,470	625,470	723,901	558,694	654,172	694,015	625,470
Open canopy pine + oak	17,788	55,369	175,145	16,722	118,464	175,145	175,145	175,145
High Elevation Coniferous, Deciduous and/or Mixed Forests								
Total acres of oak, cove or pine ecosystems in mid-late succession at elevations >3000 feet	156,312	156,312	156,312	156,312	156,312	156,312	156,312	156,312
High Elevation Openings, grassy or shrubby or open woodlands								
Total High Elevation Grassland acres	891	891	891	891	891	891	891	891
Total high elevation shrubland acres	151	151	151	151	151	151	151	151
Regeneration at high elevation	1,018	1,351	1,548	561	2,263	1,161	894	1,548
Late Successional Hardwood Dominated Forest								
Mature and late successional oak, cove and northern hardwoods	690,022	682,588	681,756	784,101	609,346	711,795	751,488	681,756
Lepidopterans								
Compliance with lepidopteron guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mafic Rocks		See mafic and alkaline grades ecological system						
Occurrence Protection								
Compliance with Species Occurrence Guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Open Woodlands								
Open canopy pine, oak, mafic, cliff, riparian, cove, northern hardwood systems	21,230	61,969	190,049	19,249	127,921	190,049	190,057	190,049
Regenerating Forests								
Regenerating forest, pine, oak, cove, northern hardwood systems	30,539	40,537	46,437	16,829	67,901	34,821	26,829	46,437
Riparian		See riparian ecological system						

Species Group Indicator	Current Condition	Condition of Indicator at end of 50 years Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Ruderal Compliance with ruderal species guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sandstone Glades and Barrens Compliance with sandstone glades species guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Over-Collection Compliance with guidelines for over collection	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Recreation Traffic Compliance with recreation traffic guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shale Barrens		See cliff, talus and shale barrens ecological system						
Shrublands Total shrubland acres	15,213	25,211	31,119	1,503	52,583	19,503	11,503	31,119
Total maintained Shrubland acres	1,503	1,503	1,503	1,503	1,503	1,503	1,503	1,503
Species in a Special Biologic Area Special Biological Area Managed for the habitat needed by the species	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

16) Page 3-78, Table B2.5, correct the Outcome Group Headings.

Table B2.5 Number of Species Whose Viability Outcome Changes by Alternative

Viability Outcome Groups Indicator	Number of Species Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Outcome Group E							
Total in group		44	44	44	44	44	44
Benefit from direction for additional protection		44	44	44	44	44	44
Small improvements in habitat due to effects of management activities		2	0	9	1	1	2
Improvements in habitat due to effects of management activities		7	0	0	7	7	7
Reductions in habitat due to effects of management activities		0	10	0	0	1	0
Minimal change in habitat due to effects of management activities		2	1	2	3	2	2
Outcome Group D							
Total in group		41	41	41	41	41	41
Benefit from direction for additional protection		40	40	40	40	40	40
Small improvements in habitat due to effects of management activities		1	1	9	0	0	1
Improvements in habitat due to effects of management activities		8	0	0	8	8	8

Viability Outcome Groups	Number of Species						
Indicator	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Reductions in habitat due to effects of management activities		1	9	1	1	2	1
Minimal change in habitat due to effects of management activities		2	2	2	3	2	2
Outcome Group C							
Total in group		12	12	12	12	12	12
Benefit from direction for additional protection		12	12	12	12	12	12
Small improvements in habitat due to effects of management activities		1	1	3	0	1	1
Improvements in habitat due to effects of management activities		2	0	0	2	2	2
Reductions in habitat due to effects of management activities		1	3	1	1	1	1
Minimal change in habitat due to effects of management activities		0	0	0	1	0	0
Outcome Group B							
Total in group		188	188	188	188	188	188
Benefit from direction for additional protection		170	170	170	170	170	170
Small improvements in habitat due to effects of management activities		23	1	57	11	12	23
Improvements in habitat due to effects of management activities		36	0	2	36	34	36
Reductions in habitat due to effects of management activities		1	59	1	1	11	1
Minimal change in habitat due to effects of management activities		9	9	9	21	12	9
Outcome Group A							
Total in group		17	17	17	17	17	17
Benefit from direction for additional protection		12	12	12	12	12	12
Small improvements in habitat due to effects of management activities		3	0	9	3	5	3
Improvements in habitat due to effects of management activities		6	0	0	6	2	6
Reductions in habitat due to effects of management activities		0	9	0	0	0	0
Minimal change in habitat due to effects of management activities		3	3	3	3	5	3

17) Page 3-102, add the following to the end of the second paragraph.

The tables in this section are based on the levels of timber harvest and prescribed fire displayed in Table B2.10.

18) Page 3-103, Table B2.9: Correct Percent of GWNF in County and Number of GWNF Acres in County

Table B2.9 White-tailed Deer Population Index Trend across the GWNF **(Virginia)**, 1996 to 2005 (Source: VDGIF)

County	Percent GWNF in County	Number of GWNF Acres in County	Ranger Districts Included	R^1	p^2 Value	Status
Allegheny	49	141,873	James River, Warm Springs	-3.23%	0.180	Stable
Amherst	19	57,877	Pedlar	-6.90%	0.762	Decreasing
Augusta	30	196,057	North River, Pedlar	-1.80%	0.168	Stable
Bath	51	173,705	North River, Warm Springs	-4.70%	0.299	Stable
Botetourt	4	13,047	James River,	-3.04	0.325	Decreasing
Frederick	2	4,885	Lee	-4.58	0.297	Stable
Highland	22	58,267	North River, Warm Springs	-4.80%	0.269	Stable
Nelson	7	19,825	Pedlar	-4.39%	0.254	Stable
Page	13	27,082	Lee	-0.12%	0.002	Stable
Rockbridge	12	45,542	North River, James River, Pedlar	-3.85%	0.374	Decreasing
Rockingham	25	139,783	North River, Lee,	-5.15%	0.545	Decreasing
Shenandoah	23	76,057	Lee	-1.98%	0.284	Stable
Warren	5	6,290	Lee	2.95%	0.150	Stable

19) Page 3-105, Table B2.10: Change Timber Regeneration Harvest Acres in Alt A and Alt F

Table B2.10 Planned Annual Activities in acres, by Alternative

Active management activities	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Timber regeneration harvest	2,400	1,800-3,000	0	3,000-5,000	1,800-3,000	1,000-1,800	1,800-3,000
Prescribed fire	3,000	12,000-20,000	0	5,000-12,000	20,000	12,000-20,000	12,000-20,000
Grassland/shrubland restoration and maintenance	407	622	292	722	652	622	652
Temporary wildlife openings	120	250	0	250	250	250	250

20) Page 3-105 and 3-106, change the sections on open woodland restoration, grassland/shrubland restoration, and the first 2 paragraphs of mid- to late successional forest to the following:

> Open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). The success of prescribed fire in improving deer habitat depends on many factors, including site quality, stand conditions, and fire prescriptions (VDGIF 2007). Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape, can provide high quality year-round food and cover for deer. Open woodland conditions allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees species for deer and many other high priority species . While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for deer. In addition, open woodland habitat is restored at a larger scale than early successional forest habitat Dense grassy/shrubby escape cover for fawns vulnerable to predators such as coyotes and black bears is more effective when it is in a 500 to 1,000 acre patch of open woodlands (average prescribed burn block) than a 25-40 acre patch of early successional forest habitat (average timber treatment unit) or a 1-5 acre grassland/shrubland patch (average size of wildlife opening). Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.
>
> Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands (Table B2.11). Alternatives B, E, F, and G have the highest objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years. Alternative C has the lowest objective at 4,318 at 10 years.
>
> Mid- to late – successional hard mast producing forest. The GWNF currently has about 940,286 acres (90%) of mid- to late-successional forest containing hard mast producing trees. Forest types include Cove Forest, Oak Forests and Woodlands, and Pine Forests and Woodlands. The alternative with the highest projections for mid- to late successional hard mast producing forest is C with 953,762 acres (92%) at 10 years. Alternative D has the lowest objective with 911,742 acres (88%) at 10 years. All alternatives have projected mid- to late successional forest of at least 87% or greater on the GWNF, with the difference between the lowest and highest acreage only five percentage points. All alternatives have an abundance of mature hard mast producing forest to provide hard mast and seasonal cover for white-tailed deer (VDGIF 2007).
>
> The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is Alternative C with 4,318 acres (<1%) at 10 years.

21) Page 3-107, change the paragraph under Cumulative Effects to the following.

> Table B2.12 displays the projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for white-tailed deer. The amount of early successional forest, grassland/shrublands, and mid- to late successional hard mast producing forest acres stay relatively constant from 10 year to 50 years under each

alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B,E,F, and G, 127,921 acres (12%) under Alternative D, and 61,969 acres (6%) under Alternative A. Open woodland habitat stays the same between years 10 to 50 under Alternative C [19,249 acres (2%)]. Open woodland structural conditions do not affect the age of the overstory trees, therefore preserving the mid- to late successional age structure of the forest. The largest difference is in the understory, because the overstory trees are spaced far enough apart to allow sunlight to reach the forest floor. Many high priority species need both mature overstory trees and a dense grassy/shrubby/herbaceous understory, including white-tailed deer. When combining early successional forest, grassland/shrubland, and open woodland restoration, Alternatives B,E,F, and G project a cumulative increase in the acreage of habitat important for white-tailed deer at year 50 up to 210,965 acres (20%.) Alternatives D and A also projects a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Long-term deer populations should be expected to stabilize and possibly increase under Alternatives B, E, F, G, and D. Long-term deer populations should be expected to decrease due to lack of available high quality habitat under Alternatives A and C.

22) Page 3-108 and 3-109, Tables B2.11 and B2. 12:

Table B2.11 Projected Habitat components in acres and percentage of forested landscape at 10 years by alternative.

Habitat Component	Current Condi-tions	%	Alt A	%	Alt B	%	Alt C	%	Alt D	%	Alt E	%	Alt F	%	Alt G	%
Early Successional Forest from Natural Disturbances	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2
Early Successional Forest from Timber Harvest	13,710	1	24,000	2	18,000-30,000	2-3	0	0	30,000 - 50,000	3-5	18,000-30,000	2-3	10,000-18,000	2	18,000-30,000	2-3
Open Woodlands from Natural Disturbances	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2
Open Woodlands from Prescribed Fire	1,981	1	35,855	3	64,499 - 99,029	6 - 9	0	2	43,406 - 64,499	4-6	99,029	9	64,499 - 99,029	6 - 9	64,499 - 99,029	6 - 9
Grassland/ shrublands	6,364	<1	7,466	<1	8,730	<1	4,318	<1	8,039	<1	8,730	<1	8,730	<1	8,730	<1
Total acres of combined active management habitat components	22,055	2	67,321	6	91,299-137,759	9-13	4,318	<1	81,445 - 122,538	8-12	125,759 - 137,759	12-13	83,229 - 125,759	8 - 12	91,229 - 137,759	9-13
Mid- to late successional Hard Mast Producing Forest	940,286	90	929,051	87	923,810	89	953,762	92	911,742	88	935,772	90	943,833	91	923,810	89

Table B2.12 Projected Habitat components in acres and percentage of forested landscape at 50 years by alternative.

Habitat Component	Current Condi-tions	%	Alt A	%	Alt B	%	Alt C	%	Alt D	%	Alt E	%	Alt F	%	Alt G	%
Early Successional Forest from Natural Disturbances	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2	16888	2
Early Successional Forest from Timber Harvest	13,710	1	24,000	2	18,000-30,000	2-3	0	0	30,000 - 50,000	3-5	18,000-30,000	2-3	10,000-18,000	2	18,000-30,000	2-3
Open Woodlands from Natural Disturbances	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2	19,249	2
Open Woodlands from Prescribed Fire	1,981	1	42,720	4	108,672 - 170,800	10-16	0	0	39,022 - 108,672	4-10	170,800	16	108,672 - 170,800	10-16	108,672 - 170,800	10-16
Grassland/ shrublands	6,364	<1	7,603	1	10,165	1	4,318	<1	8,922	1	10,165	1	10,165	1	10,165	1
Total acres of combined active management habitat components	22,055	2	74,323	7	136,837 - 210,965	13-20	4,318	<1	77,944 - 167,594	7-16	198,965 - 210,965	19 - 20	128,837 - 198,965	12-19	136,837 - 210,965	13-20
Mid- to late successional Hard Mast Producing Forest	940,286	90	929,311	87	924,220	89	953,762	92	904,509	87	935,762	90	943,786	91	924,220	89

23) Page 3-111 and 3-112, change the sections on open woodland restoration, grassland/shrubland restoration, and the first 2 paragraphs of mid- to late successional forest to the following:

Open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under Alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). The success of prescribed fire in improving wild turkey habitat depends on many factors, including site quality, stand conditions, and fire prescriptions (VDGIF 2010). Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape can provide high quality year-round food, nesting, brood-rearing habitat, and seasonal cover for wild turkeys. Open woodland conditions allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees species for wild turkeys and many other high priority species. While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for turkeys. Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.

Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands. (Table B2.11). Alternatives B, E, F, and G have the highest objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years (Alternative C has the lowest objective at 4,318 at 10 years.

Mid- to late – successional hard mast producing forest. The GWNF currently has about 940,286 acres (90%) of mid- to late-successional forest containing hard mast producing trees. Forest types include Cove Forest, Oak Forests and Woodlands, and Pine Forests and Woodlands (Table B2.11). The alternative with the highest projections for mid- to late successional hard mast producing forest is C with 953,762 acres (92%) at 10 years. Alternative D has the lowest objective with 911,742 acres (88%) at 10 years. All alternatives have projected mid- to late successional forest of at least 87% or greater on the GWNF, with the difference between the lowest and highest acreage only five percentage points. All alternatives have an abundance of mature hard mast producing forest to provide hard mast and seasonal cover for wild turkeys.

The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is alternative C with 4,318 acres (<1%) at 10 years.

24) Page 3-112, change the paragraph under Cumulative Effects to the following.

Table B2.12 displays the projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for wild turkey. The amount of early successional forest, grassland/shrublands, and mid- to late successional hard mast producing forest acres stay relatively constant from 10 year to 50 years under each alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B, E, F, and G, 127,921 acres (12%) under Alternative D, and 61,969 acres (6%) under Alternative A. Open woodland habitat stays the same between years 10 to 50 under Alternative C [19,249 acres (2%)]. Open woodland structural conditions do not affect the age of the overstory trees, therefore preserving the mid- to late successional age structure of the forest. The largest difference is in the understory, because the overstory trees are spaced far enough apart to allow sunlight to reach the forest floor. Many high priority species need both mature overstory trees and a dense grassy/shrubby/herbaceous understory, including wild turkeys. When combining early successional forest, grassland/shrubland, and open woodland restoration, Alternatives B, E, F, and

G project a cumulative increase in the acreage of habitat important for wild turkeys at year 50 up to 210,965 acres (20%.) Alternatives D and A also projects a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Long-term wild turkey populations should be expected to stabilize and/or increase under Alternatives B, D, E, F, and G. Long-term wild turkey populations should be expected to stabilize and/or decrease due to lack of available high quality habitat other than mid- to late successional mast producing forest under Alternatives A and C.

25) Page 3-116, change the sections on open woodland restoration, grassland/shrubland restoration, and the first 2 paragraphs of mid- to late successional forest to the following:

Prescribed fire and open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). The success of prescribed fire in improving ruffed grouse habitat depends on many factors, including site quality, stand conditions, and fire prescriptions (ACGRP 2004 and Harper et al. 2005). Prescribed fire often feathers into coves and more mesic forest types, but intensity is much less and will often be too moist to burn. In fact, when burning relatively large areas (200 or more acres, which is usually necessary on National Forests where there is a lack of roads or firebreaks), coves, creeks, and northern/eastern exposures are commonly used as natural firebreaks. This provides an exceptional mosaic of conditions across the burned area, which is quite favorable for ruffed grouse for both winter foraging and brooding habitat. Following prescribed fire, areas supporting a diverse herbaceous community can by utilized almost exclusively by grouse broods during the critical summer months. Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape, allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees species for ruffed grouse and many other high priority species. While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for ruffed grouse. Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.

Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands. (Table B2.11). Alternatives B, E, F, and G have the highest objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years. Alternative C has the lowest objective at 4,318 at 10 years.

Mid- to late – successional hard mast producing forest. The GWNF currently has about 940,286 acres (90%) of mid- to late-successional forest containing hard mast producing trees. Forest types include Cove Forest, Oak Forests and Woodlands, and Pine Forests and Woodlands (Table B2.11). The alternative with the highest projections for mid- to late successional hard mast producing forest is C with 953,762 acres (92%) at 10 years. Alternative D has the lowest objective with 911,742 acres 88(%) at 10 years. All alternatives have projected mid- to late successional forest of at least 87% or greater on the GWNF, with the difference between the lowest and highest acreage only five percentage points. All alternatives have an abundance of mature hard mast producing forest to provide hard mast and seasonal cover for ruffed grouse.

The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is Alternative C with 4,318 acres (<1%) at 10 years.

26) Page 3-117, change the paragraph under Cumulative Effects to the following.

Table B2.12 displays the projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for ruffed grouse. The amount of early successional forest, grassland/shrublands, and mid- to late successional hard mast producing forest acres stay relatively constant from 10 year to 50 years under each alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B, E, F, and G, 127,921 acres (12%) under Alternative D, and 61,969 acres (6%) under Alternative A. Open woodland habitat stays the same between years 10 to 50 under Alternative C [19,249 acres (2%)]. Open woodland structural conditions do not affect the age of the overstory trees, therefore preserving the mid- to late successional age structure of the forest. The largest difference is in the understory, because the overstory trees are spaced far enough apart to allow sunlight to reach the forest floor. Many high priority species need both mature overstory trees and a dense grassy/shrubby/herbaceous understory, including ruffed grouse. When combining early successional forest, grassland/shrubland, and open woodland restoration, Alternatives B, E, F, and G project a cumulative increase in the acreage of habitat important for ruffed grouse at year 50 up to 210,965 acres (20%.) Alternatives D and A also projects a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Long-term ruffed grouse populations should be expected to stabilize and/or increase under Alternatives B, D, E, F, and G. Long-term ruffed grouse populations should be expected to stabilize and/or decrease due to lack of available high quality habitat other than mid- to late successional mast producing forest under Alternatives A and C.

27) Page 3-119, change the sections on open woodland restoration, grassland/shrubland restoration, and the first 2 paragraphs of mid- to late successional forest to the following:

Open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape, can provide high quality year-round food and cover for black bear. Open woodland conditions allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees species for black bear and many other high priority species. While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for black bear. In addition, open woodland habitat is restored at a larger scale than early successional forest habitat. Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.

Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands. (Table B2.11). Alternatives B, E, F, and G have the highest objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years. Alternative C has the lowest objective at 4,318 at 10 years.

Mid- to late – successional hard mast producing forest. The GWNF currently has about 940,286 acres (90%) of mid- to late-successional forest containing hard mast producing trees. Forest types include Cove Forest, Oak Forests and Woodlands, and Pine Forests and Woodlands. The alternative with the highest projections for mid- to late successional hard mast producing forest is C with 953,762 acres (92%) at 10 years. Alternative D has the lowest objective with 911,742 acres (88%) at 10 years. All alternatives have projected mid- to late successional forest of at least 87% or greater on the GWNF, with the difference between the lowest and highest acreage only five

percentage points. All alternatives have an abundance of mature hard mast producing forest to provide hard mast and cavities and den trees for black bears (VDGIF 2009).

The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is alternative C with 4,318 acres (<1%) at 10 years.

28) Page 3-120, change the paragraph under Cumulative Effects to the following.

Table B2.12 displays the projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for black bear. The amount of early successional forest, grassland/shrublands, and mid- to late successional hard mast producing forest acres stay relatively constant from 10 year to 50 years under each alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B, E, F, and G, 127,921 acres (12%) under alternative D, and 61,969 acres (6%) under Alternative A. Open woodland habitat stays the same between years 10 to 50 under Alternative C [19,249 acres (2%)]. Open woodland structural conditions do not affect the age of the overstory trees, therefore preserving the mid- to late successional age structure of the forest. The largest difference is in the understory, because the overstory trees are spaced far enough apart to allow sunlight to reach the forest floor. Many high priority species need both mature overstory trees and a dense grassy/shrubby/herbaceous understory, including black. When combining early successional forest, grassland/shrubland, and open woodland restoration, Alternatives B, E, F, and G project a cumulative increase in the acreage of habitat important for black bear at year 50 up to 210,965 acres (20%.) Alternatives D and A also projects a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Percentage of forest with remote conditions as a desired condition is 40% or greater in all alternatives except B and not expected to change between year 10 and 50. Long-term black bear populations are projected to continue to increase or stabilize due to factors other than habitat availability (territoriality and/or other population density pressures), under all alternatives.

29) Page 3-122, change the sections on open woodland restoration, grassland/shrubland restoration to the following:

Open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). The success of prescribed fire in improving bobwhite quail habitat depends on many factors, including site quality, stand conditions, and fire prescriptions (VDGIF 2008). Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape, can provide high quality year-round food and cover for bobwhite quail. Open woodland conditions allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees species for bobwhite quail and many other high priority species. While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for bobwhite quail. In addition, open woodland habitat is restored at a larger scale than early successional forest habitat, usually 500 to 1,000 acres in size (average prescribed burn block). Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.

Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands. (Table B2.11). Alternatives B, E, F, and G have the highest

objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years. Alternative C has the lowest objective at 4,318 at 10 years.

The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is alternative C with 4,318 acres (<1%) at 10 years.

30) Page 3-123, change the paragraph under Cumulative Effects to the following.

Table B2.12 displays the projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for northern bobwhite quail. The amount of early successional forest and grassland/shrublands acres stay relatively constant from 10 year to 50 years under each alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B, E, F, and G, 127,921 acres (12%) under Alternative D, and 61,969 acres (6%) under Alternative A. Projected open woodland acres stay the same between years 10 to 50 under alternative C [19,249 acres (2%)]. When combining early successional forest, grassland/shrubland, and open woodland restoration, Alternatives B, E, F, and G project a cumulative increase in the acreage of habitat important for bobwhite quail at year 50 to up to 210,965 acres (20%.) Alternatives D and A also project a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Long-term bobwhite quail populations have the greatest chance to increase under Alternatives B, E, F, G, and D. Long-term quail populations have very little chance of increasing due to low availability of suitable habitat, under Alternatives A and C.

31) Page 3-124 and 3-125, change the sections on open woodland restoration, grassland/shrubland restoration to the following:

Prescribed fire and open woodland restoration. The highest acreage of prescribed fire is 200,000 acres at 10 years under alternative E. The lowest is 0 acres under Alternative C. Alternatives B, F, and G have similar fire management objectives (120,000 – 200,000 acres at 10 years). Alternatives D and A have lower fire management objectives (50,000 – 120,000 and 30,000 acres at 10 years, respectively). The success of prescribed fire in improving American woodcock habitat depends on many factors, including site quality, stand conditions, and fire prescriptions (ACGRP 2004 and Harper et al. 2005). Prescribed fire that restores open woodland structural conditions (in appropriate forest types) in an otherwise closed canopy forested landscape, allows the development of woody browse, grasses, forbs, and soft and hard mast producing shrubs in the understory, while maintaining an overstory of hard- and soft- mast producing trees. Such habitat is favorable for singing grounds and evening roost areas for American woodcock. While early successional forest is ephemeral, changing locations over time across the GWNF, open woodlands, when maintained by fire, creates permanent habitat for ruffed grouse. Prescribed fire, especially when applied over large areas, feathers into more mesic sites. The lighter fire effects can create shrubby conditions in moist soil areas, creating suitable foraging areas for woodcock (WMI 2008). Table B2.11 shows the amount of projected open woodland restoration by forest type and alternative at 10 years, restored and maintained through prescribed fire. The highest projected open woodland acres are 118,278 acres at 10 years under Alternatives B, E, F, and G. The lowest is 19,249 acres at 10 years under Alternative C.

Grassland/shrubland restoration and maintenance. The GWNF currently has about 6,364 acres in maintained grasslands/shrublands. (Table B2.11). Alternatives B, E, F, and G have the highest objectives for grassland/shrubland restoration and maintenance of 8,730 acres at 10 years. Alternative C has the lowest objective at 4,318 at 10 years.

The alternatives with the highest combination of projected early successional forest habitat, open woodlands, and grassland/shrublands from active management activities are B, E, and G with up to 137,759 acres (13%) at 10 years. The alternative with the lowest combination early forest, open woodlands, and grassland/shrublands is Alternative C with 4,318 acres (<1%) at 10 years.

32) Page 3-125, change the paragraph under Cumulative Effects to the following.

Table B2.12 displays projected habitat components at year fifty, by alternative, that have the greatest influence on habitat quality for American woodcock. The amount of early successional forest and grassland/shrublands stay relatively constant from 10 year to 50 years under each alternative. The largest difference is the increase in open woodland habitat for some alternatives, increasing to about 190,000 acres (18%) at year 50 under Alternatives B, E, F, and G, 127,921 acres (12%) under Alternative D, and 61,969 acres (6%) under Alternative A. When combining early successional forest, grassland/shrubland, and open woodland restoration, alternatives B,E,F, and G project a cumulative increase in the acreage of habitat important for woodcock at year 50 up to 210,965 acres (20%.) Alternatives D and A also projects a cumulative increase, but at a lower rate. Alternative C projects no increase in these habitat components. Long-term American woodcock populations have the greatest chance to stabilize and/or increase under Alternatives B, D, E, F, and G. Long-term ruffed grouse populations should be expected to stabilize and/or decrease due to low availability of suitable habitat under alternatives A and C.

33) Page 3-147, Table B3.3

Table B3.3. Acreage in Key Management Prescriptions that will Provide for Most Large Blocks (>= 2,500 acres) of Future Old Growth, by Alternative

Management Prescription		Alternative						
		A	B	C	D	E	F	G
1A	Designated Wilderness	42,954	43,049	42,992	42,992	42,992	42,992	42,992
1B	Recommended Wilderness Study	1,413	20,422	386,786	14,627	24,325	112,144	20,314
4B1	Research Natural Area	2,808	1,980	1,979	1,979	1,979	1,979	1,979
4D	Special Biological Area	24,454	51,427	21,303	51,574	51,574	30,438	51,565
4D1	Key Natural Heritage Community Area	0	0	0	0	0	0	3,308
4F	Mt Pleasant National Scenic Area	7,753	7,742	7,744	7,744	7,744	7,744	7,744
4FA	Recommended National Scenic Area	0	0	0	8,241	0	107,717	0
8A1U	Mix of Successional Habitats – Unsuitable	69,736	0	0	0	0	0	0
8CU	Black Bear / Remote Habitats - Unsuitable	61,204	0	0	0	0	0	0
8E7	Shenandoah Mtn Crest – Cow Knob Salamander	43,137	46,692	20,343	53,855	49,644	23,382	46,812
12D	Remote Backcountry	198,858	191,935	113,852	190,423	264,184	167,845	252,159
13U	Mosaics of Habitat - Unsuitable	0	0	245,678	0	3,308	109,380	0
Total Acres		452,317	363,247	840,677	371,435	445,750	603,621	426,873

34) Page 3-157, Table B4.4 to include special use roads and potential Forest Highway roads:

Table B4.4 General Riparian Direction by Forest Plan Alternative

Species Sensitivity Factor	Forest Plan Alternative Measure	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E	Alt. F	Alt. G
Riparian Integrity	riparian corridor width-perennial	66'+	100′	100′	66'+	100′	100′	100′
	riparian corridor width-intermittent	33'+	50′	50′	33'+	50′	50′	50′
	riparian corridor width-ephemeral		25′	25′		25′	25′	25′
Sediment	acres of soil disturbance	212 acres	292-384 acres	79 acres	635-785 acres	189-275 acres	260-323 acres	315-407 acres
	filter strip zone-perennial	66-200'	100-150′	100-150′	66-200'	100-150′	100-150′	100-150′
	filter strip zone-intermittent	33-100'	50-100′	50-100′	33-100'	50-100′	50-100′	50-100′
	filter strip zone-ephemeral		25′	25′		25′	25′	25′
Habitat Complexity	LWD DFC -cold water	125-300	200+	200+	125-300	200+	200+	200+
	LWD DFC -cool water	75-200	200+	200+	75-200	200+	200+	200+
Temperature	shade strip width-perennial	66'	100′	100′	66'	100′	100′	100′
	shade strip width-intermittent	33'	50′	50′	33'	50′	50′	50′
	shade strip width-ephemeral		25′	25′		25′	25′	25′
Acid dep	Treatment of acid streams with lime a priority?	yes	yes	no	yes	yes	yes	yes
Passage	Net road system at end of 10 years	1,999 miles	1,849 miles	1,696 miles	1,933 miles	1,836 miles	1,813 miles	1,836 miles

35) Page 3-180, Table B5.5:

Table B5.5 Acres in Northeastern Interior Dry-Mesic Oak Forest and Central and Southern Appalachian Montane Oak Forest Ecological Systems regenerated and at risk from oak decline effects at the end of the next decade by alternative

Activity in Susceptible Types	Alternative (acres)						
	A	B	C	D	E	F	G
Acres Regenerated	20,200	25,300	0	38,600	15,200	8,400	22,800
Total Acres Vulnerable/High Risk	736,100	731,000	756,300	717,700	741,100	747,900	733,500

36) Pages 3-209 through 3-210, Table C1.11 and Developed Recreation Narrative: edits to the table and replace all of the Developed Recreation narrative.

The developed recreation capacity in 1993 was 13,820 persons at one time (PAOTs). The 1993 Forest Plan provided for the expansion of 10 campgrounds, 1 picnic area, 1 fishing/picnic area and an organizational camp. It also provided for the development of new recreation areas including 5 minimally developed campgrounds, 1 horse campground, 2 interpretive sites and 3 target ranges. The total projected capacity to be achieved was 16,200 PAOTs. During Plan implementation, there were expansions at several recreation areas, one minimally developed campground was constructed, the horse campground was developed, and one new target range was constructed. However, due to budget constraints, most of the expansions and new facilities were never developed. The organizational camp planned for expansion was closed along with 2 visitor centers, 3 minimally developed campgrounds, 2 specialized sites (hang gliding), 2 picnic areas and a trailhead. One organizational camp was converted to an administrative site. The number of PAOTs has been reduced at numerous recreation areas since the 1993 Plan, and the way PAOTs are counted may have changed as well. At the time of this writing, the current developed recreation capacity is 10,225 PAOTs plus 2,608 PAOTs that support dispersed recreation opportunities for a total of 12,833.

Assuming for Alternative A that the expansions listed in the 1993 Forest Plan will still occur, that planned new facilities will be constructed, but the closed and disposed sites will not be reopened, and using current PAOTs for existing sites, the projected capacity is 12,546 PAOTs. The developed recreation facilities that support dispersed activities (trailheads and trail shelters) supply another 1,188 PAOTs. Table C.1.11 below indicates the range of developed recreation capacity by Alternative excluding developed sites that support dispersed recreation, with the baseline being current capacity.

Table C1.11 Estimated Capacity (PAOTs) of Developed Recreation Areas by Alternative

Site Type	Current Capacity (Baseline)	Alt A No Action	Alt B Increase 0 - 5%	Alt C Decrease 5-15%	Alt D No change	Alt E Decrease 5-15%	Alt F Increase 5 - 15%	Alt G Increase 0 - 5%
Water Based Recreation: Swimming, boating, developed fishing	1,295	1,315	1,295-1,360	1,101-1,230	1,295	1,101-1,230	1,360-1,489	1,295-1,360
Overnight Use: Family, Equestrian, Group Campgrounds	6,765	7,996	6,765-7,103	5,750-6,427	6,765	5,750-6,427	7,103-7,780	6,765-7,103
Interpretive and Observation Day Use Sites	1,300	2,220	1,300-1,365	1,105-1,235	1,300	1,105-1,235	1,365-1,495	1,300-1,365
Day Use Picnic Sites	730	870	730-767	621-694	730	621-694	767-840	730-767
Specialized Sports Sites*	135	145	135-142	115-128	135	115-128	142-155	135-142
Grand Total	10,225	12,546	10,225-10,736	8,691-9,714	10,225	8,691-9,714	10,736-11,759	10,225-10,736

* Specialized sports sites include target ranges and hang gliding sites.

In all alternatives there will be an emphasis to upgrade the accessibility of existing and expanded sites, which are considered high priority improvements. Effects include a greater satisfaction for users of all abilities as more sites become accessible. Families of all ages and ability levels can share the same facilities and site furnishings, and visitors will find their choices have broadened in selecting campsites, picnic sites, shooting range lanes, and other types of developed recreation sites.

None of the alternatives meet the demand for developed recreation opportunities that serve activities such as highly developed camping and swimming, or developed fishing sites which are typically at the lower end of the development scale. The effects of this unmet demand will be greatest with Alternatives C and E, followed by D. Alternatives B and G are in the middle of the range of alternatives. Alternatives A and F meet more of the demand than the others, with A best meeting this demand. The ability to meet demand for developed recreation will diminish with time as the population increases while the amount of public lands offering these opportunities remain static.

Some sites will become increasingly overused and crowded, particularly the highly developed campgrounds and day use areas. Initially this may occur only at peak times such as holidays and weekends; but over time this could extend to the entire primary recreation season from Memorial Day to Labor Day. This will result in lower satisfaction levels as people are turned away from full recreation areas, and some visitors will have unmet expectations. Some will seek the supply of developed recreation provided on state, county and private lands.

Hotspots of developed recreation are sites that are consistently at or over their design capacity. On the George Washington National Forest these include areas such as Sherando Lake throughout most of the summer as well as Bolar Mountain and Trout Pond Recreation Areas on most weekends and holidays. Hotspots of use for developed recreation will broaden over time to other recreation areas and into the shoulder use seasons. Upgrades of

facilities, putting sites on the national reservation service, and implementing visitor use controls may help alleviate problems of overuse at these sites.

Some management actions will effect developed recreation, and effects will depend on the proximity and magnitude of the activity. These activities include construction, reconstruction and maintenance of roads and trails, insect and disease control, prescribed burning and pesticide use. Some activities have short term effects such as prescribed burning or pesticide use that decrease the satisfaction of the visitors in the area for a short time. Other activities such as road construction or major repairs to facilities may influence satisfaction on a longer basis, perhaps up to a year.

The degree to which new roads are constructed could be a factor for Alternative A which includes the development of new developed recreation sites. Roads are needed to access developed recreation areas. The degree to which new roads are constructed is not a significant factor for any of the action alternatives because they propose no new developed recreation areas, only the expansion or reduction of existing sites. The degree to which roads might be closed could potentially be a factor if it would result in closing vehicular access to an existing developed recreation area. Alternative C provides for the most potential miles of road decommissioning. Alternatives A and D provide for the least miles of road to be decommissioned.

Natural causes such as wildfires can greatly affect developed recreation areas long-term or permanently. The use of prescribed burning in the vicinity of developed recreation areas results in the reduction of fuels for wildfires. Alternative E provides the largest prescribed burning program, while Alternative C provides for the least.

37) Page 3-214, Table C1.14, delete row identifying lands unsuitable for timber harvest.

Table C1.14 Estimated Total Acres of Big & Small Game Emphasis Areas by Alternative (in thousands)

Type of Game Habitat (Management Prescription Area)	Rx Area	ALT A	ALT B	ALT C	ALT D	ALT E	ALT F	ALT G
Mix of Successional Habitats	8A1	258	0	0	316.9	0	0	0
	8A1U	69.7	0	0	0	0	0	0
Early Successional Habitat	8B	38.9	0	0	34.0	0	0	0
	8BU	0.8	0	0	0	0	0	0
Bear/Remote Habitat	8C	74.4	0	0	124.8	0	0	0
	8CU	61.2	0	0	0	0	0	0
Mosaic of Habitats	13	0	568.9	0	0	491.8	350.4	507.0
	13U	0	0	245.7	0	3.3	108.8	0
TOTAL ACRES		503.0	568.9	245.7	475.7	495.1	459.3	507.0
% of GWNF (approx.)		47%	53%	23%	45%	46%	43%	48%

38) Page 3-218, Table C3.1:

Table C3.1 Estimated Harvest Acres and Allowable Sale Quantity for Timber Management Activities by Alternative, First Decade

Activity	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Acres **regeneration** harvest, in thousands, first decade	24	30	0	42	18	10	30
Allowable Sale Quantity, in million cubic feet, first decade	47	54.3	0	92	31.1	20.4	54.3

39) Page 3-226, National Scenic Areas, 4th paragraph, last sentence, due to mapping error:

In Alternative F National Scenic Area recommendations include the Virginia portion of Shenandoah Mountain between Highway 33 and Highway 250, Kelley Mountain, and Adams Peak for a total of **107,000** acres.

40) Page 3-234, Table C4.3 Management Prescription Allocations within Potential Wilderness Areas and Inventoried Roadless Areas. In Alternative G all Inventoried Roadless Areas are managed for remote characteristics. Change: Crawford Knob in Alternative G "Other Acres" from 1300 acres to zero and change "Remote Acres" from 8600 to 9900 acres; change Little River "Remote Acres" to 17,900 acres; and change Three Sisters "Remote Acres" to 8200 acres.

41) Page 3-251, Tables C5.2 and C5.3, and replace the paragraph following Table C5.3 with the following narrative:

Table C5.2 SMS Inventory

Scenic Integrity Objectives	Acres	% of GWNF Land
Very High	46,000	4%
High	379,000	36%
Medium	548,000	52%
Low	88,000	8%

Table C5.3 Scenic Integrity Objectives (SIOs) by Alternative (Acres)

SIO	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
VH	46,000	45,028	44,972	44,972	44,972	44,970	44,971
H	379,000	374,408	594,472	379,210	450,269	499,890	432,963
M	548,000	199,216	237,678	196,132	178,843	160,927	182,157
L	88,000	446,776	188,343	445,151	391,381	359,676	405,374

Alternatives that receive the most acres assigned SIOs of Very High and High would result in more protection of the scenic resources than alternatives having fewer acres assigned to the higher SIOs.

Alternative A assigns the most acres to the Very High SIO, but the difference between alternatives with regards to acres assigned to the Very High SIO is negligible.

Alternative C assigns the most acres to the High SIO. The majority of those, 386,786 acres, are in the Recommended Wilderness Study prescription. For those acres that Congress designates Wilderness, the SIO would change to Very High. Alternative C provides the best protection of the current scenic integrity with primarily intact forest canopies. Alternatives F, E and G, in that order, assign the next most acres to the High SIO.

Alternative A assigns the most acres to the Moderate SIO, followed by Alternatives B, C and D.

Alternatives B, D and G assign the most acres to the Low SIO and provide the least protection for the current scenic integrity of primarily intact forest canopies. However, two of these alternatives, B and G, contain prescription area 13 that includes a landscape character goal of restoring the role that fire once played in the ecosystem, including the

influence it had on scenery. This landscape was characterized by open woodlands which retained a natural, forested appearance interspersed with a mosaic of natural openings. Fire suppression has largely altered these once natural occurring openings, but lands assigned to prescription area 13 in Alternatives B and G would restore them to some degree.

42) Page 3-254, Table C5.6:

Table C5.6 Estimated Harvest Acres and Allowable Sale Quantity for Timber Management Activities by Alternative, First Decade

	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Acres regeneration harvest, in thousands, first decade	24	30	0	42.5	18	10	30
Allowable Sale Quantity, in million cubic feet, first decade	47	54.3	0	92	31.1	20.4	54.3

43) Page 3-257, Table C6.2:

Table C6.2 Stage I Acres Tentatively Suitable for Timber Production

Category of Stage I Lands	Acres
Total GWNF Acres	1,065,000
Non-Forest Land	(7,000)
Forest Land	1,058,000
Withdrawn for Existing Wilderness	(43,000)
Withdrawn for Existing National Scenic Area	(8,000)
Withdrawn for Research Natural Areas	(2,000)
Irreversible Damage & Not Restockable	(29,000)
Incapable of Producing Industrial Wood	(65,000)
Stage I Tentatively Suitable for Harvest	911,000
Stage I Unsuitable for Harvest	155,000

44) Page 3-258, Table C6.4, should have used a common conversion factor:

Table C6.4 Total Timber Volume Sold

FY	CCF	MBF
1993	68,118	34,059
1994	58,550	29,275
1995	52,122	26,061
1996	41,074	20,537
1997	38,436	19,218
1998	16,876	8,438

FY	CCF	MBF
1999	30,086	15,043
2000	20,202	10,101
2001	24,886	12,443
2002	26,994	13,497
2003	24,210	12,105
2004	36,814	18,407
2005	23,550	11,775
2006	22,047	11,023
2007	16,362	8,181
2008	22,416	11,208
2009	16,403	8,201

45) Page 3-261, Suitability, 1st paragraph, 4th sentence:
Alternative **B** contains the most lands suitable for timber production. Suitable acres vary from 0 to **486,000** acres.

46) Page 3-261, Allowable Sale Quantity, 3rd paragraph, 1st sentence:
These alternatives have ASQs ranging from 0 to **92** mmcf per decade.

47) Page 3-262, Table C6.7:

Table C6.7 Allowable Sale Quantity for all Products (MMCF) **for 1st Decade**

Alternative	MMCF	MMBF
A*	47	235
B	54.3	271
C	0	0
D	91.8	459
E	31.1	155
F	20.4	102
G	54.3	271

48) Page 3-263, Table C6.9:

Table C6.9 Long-Term Sustained Yield Capacity, Inventory Volume, Allowable Sale Quantity, and Acres Regenerated by Alternative

Unit of Measure	Alternative						
	A	B	C	D	E	F	G
	MMCF/Year						
Long Term Sustained Yield Capacity	5.8	6.2	0	10.7	4.9	3.4	6.2
Inventory Volume, Decade 1	21.58	23.59	0	40.16	15.64	9.48	23.59
Allowable Sale Quantity	4.7	5.4	0	9.2	3.1	2.0	5.4
	Acres/Year						
Acres Regenerated, Decade 1	24,000	30,000	0	42,500	18,000	10,000	30,000

49) Page 3-265, Age Class Distribution, 1st paragraph and Table C6.12:

Table C6.12 displays expected age class distribution in **2040**, by alternative, following 30 years of plan implementation.

Table C6.12 Estimated Percentage of Forest by Age Class and Alternative on the GWNF Base Year 2040

Age Class	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
1-10	2	3	0	5	2	1	3
11-20	2	3	0	5	2	1	3
21-30	2	3	0	4	2	1	3
31-40	1	1	1	1	1	1	1
41-50	3	3	3	3	3	3	3
51-60	2	2	2	2	2	2	2
61-70	4	4	4	3	4	4	4
71-80	1	1	1	1	1	1	1
81-90	0	0	0	0	0	0	0
91-100	1	1	1	1	1	1	1
101-110	4	4	5	4	4	4	4
111-120	11	11	14	11	11	13	11
121-130	20	19	22	19	20	21	19
131-140	17	17	18	18	18	18	17
141-150	8	8	8	8	8	8	8
151+	20	20	21	19	21	21	20
Total	100	100	100	100	100	100	100

50) Page 3-266, Table C6.13:

Table C6.13 Acres by Method of Harvest for the First 10 Years for all Harvest Methods

Alternative	GS	CC	SWR	SW-2 Stage	Thin	Total
A	800	3,000	20,000	0	1,740	25,540
B	500	900	21,300	7,300	4,000	34,000
C	0	0	0	0	0	0
D	500	8,500	6,900	26,600	2,000	44,500
E	500	900	14,600	2,000	4,000	22,000
F	500	500	4,500	4,500	2,000	12,000
G	500	900	21,300	7,300	4,000	34,000

51) Page 3-272, Table C8.1:

Table C8.1 Road Construction and Decommissioning, miles

	Alternative						
	A	B	C	D	E	F	G
Current Roads	1,823	1,823	1,823	1,823	1,823	1,823	1,823
Special Use Roads – Not part of Minimum Roads System	50	50	50	50	50	50	50
Potential Forest Highways – Not part of Minimum Roads System	107	107	107	107	107	107	107
Roads to be Decommissioned		160	160	80	160	160	160
Potential Additional Decommissioning from future wilderness designation	0	0	124	3	1	17	1
Acres Timber **Regenerated**	2,400	3,000	0	4,250	1,800	1,000	3,000
Road Construction (miles during decade)	29	15	0	41	9	5	15
Minimum road system at end of 10 years	1,695	1,521	1,382	1,624	1,514	1,494	1,520

52) Page 3-273, Table C8.3:

Table C8.3 Maintenance Levels and Road Status, miles

	Alternative						
	A	B	C	D	E	F	G
Maintenance Level 1 - Closed in storage for future use	245	140	105	155	146	140	155
Maintenance Level 2 - High Clearance, seasonal or admin	987	1,042	943	1,119	1,029	1,015	1,029
Maintenance Level 3 - Passenger Car	408	301	297	313	301	302	301
Maintenance Level 4 - Passenger	47	33	33	33	33	33	33

Car, collector							
Maintenance Level 5 - Passenger Car, 2-lane, paved, arterial	8	5	5	5	5	5	5

53) Page 3-297, Table C12.19, added overhead costs to all program costs for all alternatives and re-evaluated costs for Alt A. The changes in the program costs for all alternatives will also affect the Employment and Labor Income estimates in Tables C12.14, C12.15, C12.16 and C12.17 since part of the those estimates are based on Forest Service Expenditures. These tables will be updated in the Final EIS since the Forest Service economist who models these effects through the IMPLAN model is currently unavailable.

Table C12.19 Cumulative Decadal Present Net Values of Benefits and Costs (millions of dollars, 4% discount rate cumulative to midpoint of 5th decade)

Present Value Benefits by Program:	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Range	<$1	<$1	<$1	<$1	<$1	<$1	<$1
Timber	$36	$68	$0	$123	$38	$22	$68
Minerals	$24	$19	$4	$20	$6	$16	$6
Recreation	$1,163	$1,181	$1,007	$1,242	$1,111	$1,244	$1,205
Wildlife	$661	$669	$562	$713	$640	$698	$684
Total Present Value Benefits	$1,884	$1,937	$1,573	$2,098	$1,795	$1,980	$1,963
Present Value Costs by Program:							
Range	<$1	<$1	<$1	<$1	<$1	<$1	<$1
Timber	**$68**	**$67**	**$0**	**$104**	**$45**	**$33**	**$67**
Roads/Engineering	**$73**	**$46**	**$43**	**$48**	**$46**	**$45**	**$46**
Minerals	**$5**	**$5**	**$5**	**$6**	**$5**	**$5**	**$5**
Recreation	**$151**	**$112**	**$114**	**$102**	**$90**	**$104**	**$95**
Wildlife	**$38**	**$16**	**$10**	**$17**	**$16**	**$16**	**$16**
Soil, Water and Air	**$38**	**$19**	**$18**	**$19**	**$21**	**$20**	**$20**
Protection/Forest Health	**$27**	**$48**	**$32**	**$38**	**$55**	**$49**	**$49**
Lands	**$37**	**$11**	**$11**	**$10**	**$11**	**$11**	**$11**
Planning/Inventory/Monitoring	**$9**	**$10**	**$11**	**$10**	**$12**	**$10**	**$10**
Total Present Value Costs	**$433**	**$335**	**$244**	**$354**	**$300**	**$294**	**$320**
Cumulative Total Present Net Value	**$1,451**	**$1,602**	**$1,329**	**$1,744**	**$1,495**	**$1,686**	**$1,643**

APPENDICES

Appendix C, DEIS

54) Page C-13, Table C-1 Capability and Availability Evaluation by Potential Wilderness Areas, was omitted. This table printed in its entirety is 20 pages and is Errata Version 2 (June 17, 2011).

Appendix E, DEIS

55) Page E-40, Table 8, change acres of regenerating forest in Alternative A

Table 8. –Condition of Indicators of Ecosystem Characteristics after Ten Years of Implementation

Ecosystem	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Mafic Glade and Barrens and Alkaline Glades and Woodlands	933	933	933	933	933	933	933	933
Acres Burned at Desired Frequency	0	176	360	0	187	360	360	360
Compliance with Invasive Species Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Acres of Open Canopy	0	176	360	0	187	360	360	360
Caves and Karstlands	119,000							
Total Occurrences at Desired Condition	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with cave, karst guidelines	No	No	Yes	Yes	Yes	Yes	Yes	
Cliff, Talus and Shale Barrens	23,401	23,401	23,401	23,401	23,401	23,401	23,401	23,401
Compliance with Invasive Species Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Acres of Open and Open Canopy	1,022	2,112	5,758		2,996	5,758	5,758	5,758
Cove Forest	60,296	60,296	60,296	60,296	60,296	60,296	60,296	60,296
Acres in mid to late	59,309	58,928	58,928	60,296	58,737	59,876	59,027	58,928

Ecosystem	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
successional stages								
Acres of Late Successional	27,788	32,856	32,856	33,478	32,715	33,255	32,652	32,856
Acres of Regenerating Forest	987	1,094	1,368	0	1,559	420	1,269	1,368
Acres of open canopy in mid to late successional stages	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001
Northern Hardwood Forest	10,723	10,723	10,723	10,723	10,723	10,723	10,723	10,723
Acres in mid to late successional stages	10,542	10,568	10,568	10,557	10,557	10,547	10,545	10,568
Acres of Late Successional	10,016	10,066	10,066	9,855	10,088	10,083	10,049	10,066
Acres of Regenerating Forest	141	155	155	166	166	176	178	155
Acres of open canopy in mid to late successional stages	411	518	518	518	518	518	518	518
Oak Forests and Woodlands	756,267	756,267	756,267	756,267	756,267	756,267	756,267	756,267
Acres Burned at Desired Frequency	14,421	27,874	74,583		49,894	74,583	74,583	74,583
Acres in mid to late successional stages	725,441	709,701	709,701	735,505	696,279	720,716	732,379	709,701
Acres of Mature Forest	652,219	626,690	626,690	652,236	613,267	637,705	632,362	626,690
Acres of Regenerating Forest	25,433	35,769	40,929	15,125	54,351	29,914	18,251	40,929

Ecosystem	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Acres of open canopy in mid to late successional stages	14,652	42,999	89,708	15,125	65,019	89,708	89,708	89,708
Acres of open grasslands or forbs	4,861	5,697	7,098	4,861	6,358	7,098	7,098	7,098
Pine Forests and Woodlands	159,660	159,660	159,660	159,660	159,660	159,660	159,660	159,660
Acres Burned at Desired Frequency	2,933	5,693	18,328		11,422	18,328	18,328	18,328
Acres in mid to late successional stages	155,536	155,181	155,181	157,961	156,726	155,180	152,427	155,181
Acres of Regenerating Forest	3,978	3,821	4,377	1,597	2,832	4,378	7,131	4,377
Acres of open canopy in mid to late successional stages	3,136	7,290	19,925	1,597	13,019	19,925	19,925	19,925
Floodplains, Wetlands and Riparian Areas	53,560	53,560	53,560	53,560	53,560	53,560	53,560	53,560
Compliance with Riparian Guidelines	Yes	Yes - 1993	Yes	Yes	Yes	Yes	Yes	Yes
Spruce Forest	526	526	526	526	526	526	526	526
Total System Acres at Desired Condition	526	526	526	526	526	526	526	526

56) Page E-42, Table 9, change acres of regenerating forest in Alternative A

Table 9. –Condition of Indicators of Ecosystem Characteristics after Fifty Years of Implementation

Ecosystem	Current	Condition of Indicator at end of 50 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Mafic Glade and Barrens and Alkaline Glades and Woodlands	933	933	933	933	933	933	933	933
Acres Burned at Desired Frequency	0	313	885	0	408	885	885	885
Compliance with Invasive Species Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Acres of Open Canopy	0	313	885	0	408	885	885	885
Caves and Karstlands	119,000							
Total Occurrences at Desired Condition	100%	100%	100%	100%	100%	100%	100%	100%
Compliance with cave, karst guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Cliff, Talus and Shale Barrens	23,401	23,401	23,401	23,401	23,401	23,401	23,401	23,401
Compliance with Invasive Species Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Acres of Open and Open Canopy	1,022	3,760	11,500		6,530	11,500	11,500	11,500
Cove Forest	60,296	60,296	60,296	60,296	60,296	60,296	60,296	60,296
Acres in mid to late successional stages	59,309	58,990	58,990	60,296	57,892	59,876	58,261	58,990
Acres of Late Successional	27,788	46,806	46,806	49,672	43,273	47,935	47,028	46,806
Acres of Regenerating Forest	987	1,045	1,306	0	2,404	420	2,035	1,306
Acres of open canopy in mid to late successional stages	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001
Northern Hardwood Forest	10,723	10,723	9,882	10,723	9,882	9,882	10,723	9,882
Acres in mid to late successional stages	10,542	10,542	9,709	10,616	7,956	9,783	10,592	9,709
Acres of Late Successional	10,016	10,313	9,480	10,529	7,379	9,688	10,446	9,480
Acres of Regenerating Forest	141	181	173	107	1,926	99	131	173
Acres of open canopy in mid to late successional stages	411	518	510	518	510	510	518	510

Ecosystem	Current	Condition of Indicator at end of 50 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Oak Forests and Woodlands	756,267	756,267	756,267	756,267	756,267	756,267	756,267	756,267
Acres Burned at Desired Frequency	14,421	31,581	125,739		81,484	125,739	125,739	125,739
Acres in mid to late successional stages	725,441	710,049	710,049	735,505	695,332	720,706	728,843	710,049
Acres of Mature Forest	652,219	625,470	625,470	723,901	558,694	654,172	694,015	625,470
Acres of Regenerating Forest	25,433	35,490	40,581	15,125	55,298	29,924	21,787	40,581
Acres of open canopy in mid to late successional stages	14,652	46,706	140,864	15,125	96,609	140,864	140,864	140,864
Acres of open grasslands or forbs	4,861	5,808	8,633	4,861	7,306	8,633	8,633	8,633
Pine Forests and Woodlands	159,660	159,660	159,660	159,660	159,660	159,660	159,660	159,660
Acres Burned at Desired Frequency	2,933	7,066	32,684		20,258	32,684	32,684	32,684
Acres in mid to late successional stages	155,536	155,181	155,181	157,961	151,285	155,180	156,682	155,181
Acres of Regenerating Forest	3,978	3,821	4,377	1,597	8,273	4,378	2,876	4,377
Acres of open canopy in mid to late successional stages	3,136	8,663	34,281	1,597	21,855	34,281	34,281	34,281
Floodplains, Wetlands and Riparian Areas	53,560	53,560	53,560	53,560	53,560	53,560	53,560	53,560
Compliance with Riparian Guidelines	Yes	Yes-1993	Yes	Yes	Yes	Yes	Yes	Yes
Spruce Forest	526	526	1,367	526	1,367	1,367	526	1,367
Total System Acres at Desired Condition	526	526	1,367	526	1,367	1,367	526	1,367

Appendix F, DEIS

57) Page F-71, Table 9, change acres of shrubland and regenerating forest in Alternative A

Table 9. Current Condition and Expected Condition of Indicators at End of First Decade

Species Group	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Alkaline glades and barrens		See mafic and alkaline grades ecological system						
Area Sensitive Grassland and Shrubland and Open Woodlands								
Total acres of area sensitive grasslands, shrublands or open woodlands	24,341	58,215	121,389	22,360	86,859	121,389	121,389	121,389
Shrublands > 40 acres	367	367	367	367	367	367	367	367
Area Sensitive Grasslands.								
Area sensitive open Habitat grasslands greater than 100 ac	2,358	2,358	2,358	2,358	2,358	2,358	2,358	2,358
Area Sensitive Grasslands.								
Area sensitive open habitat grasslands greater than 40 ac	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744
Area Sensitive Shrubland and Open Woodlands								
Area sensitive open habitat shrubland and open woodland greater than 100 ac	21,339	55,213	118,387	19,358	83,857	118,387	118,387	118,387
Shrublands > 100 acres	109	109	109	109	109	109	109	109
Area Sensitive Mature Coniferous, Deciduous, and/or Mixed Forest Associates								
Cove, spruce, pine, oak, northern hardwood and riparian ecological systems	899,645	878,879	878,879	907,616	866,882	890,309	881,576	890,309
Calciphiles								
Total High-Quality Habitat Type Acres	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
Caves		See caves and karstlands ecological system						
Cavity Trees, Den Trees and Snags								
Compliance with den/cavity tree and snag guidelines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cliff and Talus and large rock outcrops								
Compliance with cliff, talus and large rock outcrop guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Cove Forests		See cove forests ecological system						
Fire Dependent and Fire Enhanced								

Species Group	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Acres burned at desired frequency in all systems	18,376	35,855	99,029	0	64,499	99,029	99,029	99,029
Grasslands								
Existing grasslands in open conditions	4,861	4,861	4,861	2,431	4,861	4,861	4,861	4,861
Total grasslands acres	4,861	5,963	7,227	2,815	6,536	7,227	7,227	7,227
Hard and Soft Mast Dependent								
Total shrubland acres	15,213	25,513	31,503	1,562	43,582	19,562	11,503	31,503
Regenerating forest, pine + oak	29,411	39,589	45,306	16,722	57,183	34,292	25,382	45,306
Mature Oak	652,219	626,690	626,690	652,236	613,267	637,705	632,362	626,690
Open canopy pine + oak	17,788	50,289	109,633	16,722	78,038	109,633	109,633	109,633
High Elevation Coniferous, Deciduous and/or Mixed Forests								
Total acres of oak, cove or pine ecosystems in mid-late succession at elvevations >3000 feet	156,312	156,312	156,312	156,312	156,312	156,312	156,312	156,312
High Elevation Openings, grassy or shrubby or open woodlands								
Total High Elevation Grassland acres	891	891	891	891	891	891	891	891
Total high elevation shrubland acres	151	151	151	151	151	151	151	151
Regeneration at high elevation	1,018	1,361	1,561	563	1,964	1,163	894	1,561
Late Successional Hardwood Dominated Forest								
Mature and late successional oak, cove and northern hardwoods	690,022	669,611	669,611	695,568	656,069	681,042	675,062	669,611
Lepidopterans -								
Compliance with lepidopteran guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Mafic Rocks		See mafic and alkaline grades ecological system						
Occurrence Protection								
Compliance with Species Occurrence Guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Open Woodlands								
Open canopy pine, oak, mafic, cliff, riparian, cove, northern hardwood systems	21,230	55,104	118,278	19,249	83,748	118,278	118,278	118,278
Regenerating Forests								
Regenerating forest, pine, oak, cove, northern hardwood systems	30,539	40,839	46,829	16,888	58,908	34,888	26,829	46,829

Species Group	Current	Condition of Indicator at end of 10 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Riparian		See riparian ecological system						
Ruderal								
Compliance with ruderal species guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sandstone Glades and Barrens								
Compliance with sandstone glades species guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Over-Collection								
Compliance with guidelines for over collection	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Recreation Traffic								
Compliance with recreation traffice guidelines	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Shale Barrens		See cliff, talus and shale barrens ecological system						
Shrublands								
Total shrubland acres	15,213	25,513	31,503	1,562	43,582	19,562	11,503	31,503
Total maintained Shrubland acres	1,503	1,503	1,503	1,503	1,503	1,503	1,503	1,503
Species in a Special Biologic Area								
Special Biological Area Managed for the habitat needed by the species	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

58) Page F-73, Table 10, change acres of shrubland and regenerating forest in Alternative A

Table 10. Current Condition and Expected Condition of Indicators at End of Fifth Decade

Species Group	Current	Condition of Indicator at end of 50 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Alkaline glades and barrens	See mafic and alkaline grades ecological system							
Area Sensitive Grassland and Shrubland and Open Woodlands								
Total acres of area sensitive grasslands, shrublands or open woodlands	24,341	65,080	193,160	22,360	131,032	193,160	193,168	193,160
Shrublands > 40 acres	367	367	367	367	367	367	367	367
Area Sensitive Grasslands.								
Area sensitive open Habitat grasslands greater than 100 ac	2,358	2,358	2,358	2,358	2,358	2,358	2,358	2,358
Area Sensitive Grasslands.								
Area sensitive open habitat grasslands greater than 40 ac	2,744	2,744	2,744	2,744	2,744	2,744	2,744	2,744
Area Sensitive Shrubland and Open Woodlands								
Area sensitive open habitat shrubland and open woodland greater than 100 ac	21,339	62,078	190,158	19,358	128,030	190,158	190,166	190,158
Shrublands > 100 acres	109	109	109	109	109	109	109	109
Area Sensitive Mature Coniferous, Deciduous, and/or Mixed Forest Associates								
Cove, spruce, pine, oak, northern hardwood and riparian ecological systems	899,645	891,856	891,864	996,149	815,558	922,743	962,257	921,827
Calciphiles								
Total High-Quality Habitat Type Acres	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
Caves	See caves and karstlands ecological system							
Cavity Trees, Den Trees and Snags								
Compliance with den/cavity tree and snag guidelines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cliff and Talus and large rock outcrops								
Compliance with cliff, talus and large rock outcrop guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cove Forests	See cove forests ecological system							
Fire Dependent and Fire Enhanced								
Acres burned at desired frequency in all systems	18,376	42,720	170,808	0	108,680	170,808	170,808	170,808

Species Group	Current	Condition of Indicator at end of 50 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Grasslands								
Existing grasslands in open conditions	4,861	4,861	4,861	2,431	4,861	4,861	4,861	4,861
Total grasslands acres	4,861	6,100	8,662	2,815	7,419	8,662	8,662	8,662
Hard and Soft Mast Dependent								
Total shrubland acres	15,213	25,211	31,119	1,503	52,583	19,503	11,503	31,119
Regenerating forest, pine + oak	29,411	39,711	44,958	16,722	63,571	34,302	24,663	44,958
Mature Oak	652,219	625,470	625,470	723,901	558,694	654,172	694,015	625,470
Open canopy pine + oak	17,788	55,369	175,145	16,722	118,464	175,145	175,145	175,145
High Elevation Coniferous, Deciduous and/or Mixed Forests								
Total acres of oak, cove or pine ecosystems in mid-late succession at elvevations >3000 feet	156,312	156,312	156,312	156,312	156,312	156,312	156,312	156,312
High Elevation Openings, grassy or shrubby or open woodlands								
Total High Elevation Grassland acres	891	891	891	891	891	891	891	891
Total high elevation shrubland acres	151	151	151	151	151	151	151	151
Regeneration at high elevation	1,018	1,351	1,548	561	2,263	1,161	894	1,548
Late Successional Hardwood Dominated Forest								
Mature and late successional oak, cove and northern hardwoods	690,022	682,588	681,756	784,101	609,346	711,795	751,488	681,756
Lepidopterans -								
Compliance with lepidopteran guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mafic Rocks	See mafic and alkaline grades ecological system							
Occurrence Protection								
Compliance with Species Occurrence Guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Open Woodlands								
Open canopy pine, oak, mafic, cliff, riparian, cove, northern hardwood systems	21,230	61,969	190,049	19,249	127,921	190,049	190,057	190,049
Regenerating Forests								
Regenerating forest, pine, oak, cove, northern hardwood systems	30,539	40,537	46,437	16,829	67,901	34,821	26,829	46,437
Riparian	See riparian ecological system							

Species Group	Current	Condition of Indicator at end of 50 years						
Indicator	Condition	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F	Alt G
Ruderal								
Compliance with ruderal species guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sandstone Glades and Barrens								
Compliance with sandstone glades species guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Over-Collection								
Compliance with guidelines for over collection	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sensitive to Recreation Traffic								
Compliance with recreation traffice guidelines	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shale Barrens	See cliff, talus and shale barrens ecological system							
Shrublands								
Total shrubland acres	15,213	25,211	31,119	1,503	52,583	19,503	11,503	31,119
Total maintained Shrubland acres	1,503	1,503	1,503	1,503	1,503	1,503	1,503	1,503
Species in a Special Biologic Area								
Special Biological Area Managed for the habitat needed by the species	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes