

APPENDIX A: PROPOSED ACTION TREATMENT TABLES

Table A-1. Vegetation, Prescribed Burn and Fuel Treatment Summary, (sorted by location # and site #).

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
532	5	11		MB/MB
532	6	0		MB/MB
532	7	1		MB/MB
532	8	115		MB/MB
532	9	59		MB/MB
532	10	91		MB/MB
532	11	10		No treat
532	13	182		MB/MB
532	14	3		MB/MB
532	15	64		No Treat
532	16	9		MB/MB
532	17	105	Thin from Below	MB/RPB,LopScat/MB
532	18	9		MB/MB
532	19	9		MB/MB
532	20	5		BB/MB
532	30	2		BB/MB
532	31	91		MB/MB
532	32	141	Transition Maintenance	MB/RPB,LopScat/MB
532	33	1		MB/MB
532	33	66		No Treat
532	34	9		MB/MB
533	1	46	Thin from Below	MB/RPB,LopScat/MB
533	2	18		BB/MB
533	3	16	PAC 9" Minus	HPB/MB
533	3	27		No Treat
533	4	40		No Treat
533	5	15	Transition Maintenance	MB/RPB,LopScat/MB
533	6	53	Transition Maintenance	MB/RPB,LopScat/MB
533	7	65		No Treat
533	8	55		No Treat
533	9	107		No Treat
533	10	243		No Treat
533	11	38		BB/MB
533	12	48	Transition Maintenance	MB/RPB,LopScat/MB
533	13	33		MB/MB
533	14	67		MB/MB
533	15	19		No Treat
533	16	50		BB/MB
533	17	21	PAC 9" Minus	HPB/MB
533	18	28		MB/MB
533	19	45		MB/MB
533	20	11	Transition Maintenance	BB/RPB,LopScat/MB
533	21	19	Transition Maintenance	MB/RPB,LopScat/MB
533	22	15	Thin from Below	BB/RPB,LopScat/MB
533	23	61		BB/MB
533	24	40	Thin from Below	BB/RPB,LopScat/MB
533	25	27	Transition Maintenance	MB/RPB,LopScat/MB
533	51	3		No Treat
533	52	62	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
533	53	6		MB/MB
533	54	194	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
533	55	115	Transition Maintenance	MB/RPB,LopScat/MB
533	56	20		MB/MB
533	57	3		MB/MB
533	58	8		MB/MB
533	59	2		MB/MB
533	60	5		MB/MB
533	61	147	Transition Maintenance	MB/RPB,LopScat/MB
533	62	4		MB/MB
534	1	35		BB/MB
534	2	35		BB/MB
534	3	1124		MB/MB
534	4	5		MB/MB
534	8	44		MB/MB
534	9	30		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
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Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
534	10	19		BB/MB
534	11	2		BB/MB
534	12	28		BB/MB
534	13	47		BB/MB
534	14	2		BB/MB
534	15	15		BB/MB
534	16	24		BB/MB
534	17	8		BB/MB
534	18	14		BB/MB
535	1	70		BB/MB
535	2	256	Thin from Below	BB/RPB,LopScat/MB
535	3	25		BB/MB
535	4	258	Thin from Below	BB/RPB,LopScat/MB
535	5	34		MB/MB
535	6	154		MB/MB
535	7	1		MB/MB
535	8	22		MB/MB
535	9	54		MB/MB
535	13	292	Meadow Maintenance	MB/LopScat/MB
535	17	52		MB/MB
535	18	45		MB/MB
535	19	5	Meadow Maintenance	MB/LopScat/MB
535	20	25	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
535	21	1	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
535	22	4		MB/MB
535	23	14	Savannah Maintenance	MB/RPB,LopScat/MB
535	24	6	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
535	25	31	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
535	26	3	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
535	27	38	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
536	13	167		MB/MB
536	14	14		MB/MB
536	15	10		MB/MB
536	16	4		MB/MB
537	1	8		MB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
537	2	120	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
537	3	40		MB/MB
537	8	313	Thin from Below	MB/RPB,LopScat/MB
537	9	2		MB/MB
537	10	80		MB/MB
537	11	30		MB/MB
537	12	131	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
537	13	261		MB/MB
537	14	19	Meadow Maintenance	MB/LopScat/MB
537	15	129		MB/MB
537	16	32		MB/MB
537	17	77		MB/MB
537	18	12		BB/MB
537	19	11		BB/MB
537	20	6		BB/MB
539	1	3		BB/MB
539	2	86		BB/MB
539	3	69	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
539	4	59		BB/MB
539	5	36	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
539	6	40	Savannah Maintenance	BB/RPB,LopScat/MB
539	7	53	Meadow Maintenance	LopScat
539	8	39		No Treat
539	9	51		No Treat
539	10	17		No Treat
539	11	57		No Treat
539	12	33		No Treat
539	13	46		No Treat
539	14	36		No Treat
539	15	13		No Treat
539	16	44		No Treat
539	17	30		No Treat
539	18	4		BB/MB
539	19	24	Meadow Maintenance	BB/LopScat/MB
539	20	11		BB/MB
539	21	69		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
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Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
539	22	28	Uneven	BB/RPB,LopScat/MB
539	23	57	Savannah Maintenance	BB/RPB,LopScat/MB
539	24	61	Uneven	BB/RPB,LopScat/MB
539	25	47	Savannah Maintenance	BB/RPB,LopScat/MB
539	26	61	Savannah Maintenance	BB/RPB,LopScat/MB
539	27	28		No Treat
539	28	35		No Treat
539	29	22	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
539	30	14		No Treat
542	1	29		BB/MB
542	2	53		BB/MB
542	3	55		BB/MB
542	4	12		BB/MB
542	5	21	Thin from Below	BB/RPB,LopScat/MB
542	6	58		BB/MB
542	7	71	Thin from Below	BB/RPB,LopScat/MB
542	8	53		BB/MB
542	9	17	Thin from Below	BB/RPB,LopScat/MB
542	10	5		No Treat
542	11	63		No Treat
542	12	98		No Treat
542	13	97		No Treat
542	14	7		No Treat
542	15	32		No Treat
542	16	68		No Treat
542	17	52		No Treat
542	18	64		No Treat
542	19	6		No Treat
542	20	18		No Treat
542	21	4		No Treat
542	25	23		BB/MB
542	26	68	Thin from Below	BB/RPB,LopScat/MB
543	1	35		BB/MB
543	2	94	Savannah Maintenance	BB/RPB,LopScat/MB
543	3	26		BB/MB
543	4	43	Thin from Below	BB/RPB,LopScat/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
543	5	125	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
543	6	87	Savannah Maintenance	BB/RPB,LopScat/MB
543	7	20		BB/MB
543	8	48		BB/MB
543	9	107	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
543	10	53		BB/MB
543	11	56		BB/MB
543	12	25	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
543	13	24		BB/MB
543	14	25		BB/MB
543	15	116	Savannah Maintenance	BB/RPB,LopScat/MB
543	16	62	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
543	17	80		BB/MB
543	18	27		BB/MB
543	19	21	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
543	20	8		BB/MB
543	21	31	Savannah Maintenance	BB/RPB,LopScat/MB
543	22	89		BB/MB
543	23	14		BB/MB
543	24	40		BB/MB
543	25	20		BB/MB
543	26	11		BB/MB
543	27	46		BB/MB
543	28	23	Savannah Maintenance	BB/RPB,LopScat/MB
543	29	35		BB/MB
543	30	90		BB/MB
543	31	70		BB/MB
543	32	34		BB/MB
543	33	23		BB/MB
543	34	18		BB/MB
543	35	23		BB/MB
544	1	136	Uneven	BB/RPB,LopScat/MB
544	2	64		BB/MB
544	3	111	Thin from Below	BB/RPB,LopScat/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
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Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
544	4	3	Uneven Aged Management	BB/RPB,LopScat/MB
544	4	86		BB/MB
544	5	1	Timber Stand Improvement	BB/MB
544	5	43		BB/MB
544	6	32		BB/MB
544	7	7		BB/MB
544	8	20		BB/MB
544	9	45	Thin from Below	BB/MP,LopScat/MB
544	10	22	Uneven Aged - Goshawk	BB/MP,LopScat/MB
544	11	67		BB/MB
544	12	83	Thin from Below	BB/RPB,LopScat/MB
544	13	73	Meadow Maintenance	BB/LopScat/MB
544	14	11		BB/MB
544	15	44		BB/MB
544	16	13	Timber Stand Improvement	BB/MB
544	16	70		BB/MB
544	17	19	Meadow Maintenance	BB/LopScat/MB
544	18	4	Thin from Below	BB/RPB,LopScat/MB
544	19	24	Meadow Maintenance	BB/LopScat/MB
544	20	159		No Treat
544	21	153		No Treat
544	22	11		BB/MB
544	23	28		BB/MB
544	24	45		BB/MB
544	25	42	Thin from Below	BB/RPB,LopScat/MB
544	26	73	Savannah Maintenance	BB/RPB,LopScat/MB
550	1	101		BB/MB
550	2	44		No Treat
550	3	68		BB/MB
550	4	54		BB/MB
550	5	15		BB/MB
550	6	64		BB/MB
550	7	17		No Treat
550	8	78		No Treat
550	9	46		No Treat
550	10	25	PAC 9" Minus	HPB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
550	10	1		No Treat
550	11	13		No Treat
550	11	17		RPB/MB
550	12	83		No Treat
550	12	33		RPB/MB
550	13	78		No Treat
550	14	36	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	15	13	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	16	32	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	17	46	Savannah Maintenance	BB/RPB,LopScat/MB
550	18	55		BB/MB
550	19	79		BB/MB
550	20	13	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	21	35	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	22	58	Thin from Below	BB/RPB,LopScat/MB
550	23	36		BB/MB
550	24	20	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	25	45	Savannah Maintenance	BB/RPB,LopScat/MB
550	26	41	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	27	3		BB/MB
550	28	40	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	29	29		MB/MB
550	30	69	Thin from Below	BB/RPB,LopScat/MB
550	31	24	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	32	22		BB/MB
550	33	17		BB/MB
550	34	18	Savannah Maintenance	BB/RPB,LopScat/MB
550	35	68	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
550	36	56		No Treat
550	37	40		BB/MB
550	38	41		No Treat
550	39	46		BB/MB
550	40	55	Thin from	BB/RPB,LopScat/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
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Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
			Below	
555	1	77		BB/MB
555	2	63		No Treat
555	3	6		No Treat
555	4	45	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
555	5	81	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
555	6	68	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
555	7	46		BB/MB
555	8	34	Thin from Below	BB/RPB,LopScat/MB
555	9	70		No Treat
555	10	92		BB/MB
555	11	6		BB/MB
555	12	47	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
555	13	12	Timber Stand Improvement	bb/HPB/MB
555	14	50	Transition Maintenance	BB/RPB,LopScat/MB
555	15	29	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
555	16	39	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
556	1	57		BB/MB
556	2	4		BB/MB
556	3	20		BB/MB
556	4	48	Thin from Below	BB/RPB,LopScat/MB
556	5	41	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
556	6	29	Thin from Below	BB/RPB,LopScat/MB
556	7	38	Thin from Below	BB/RPB,LopScat/MB
556	8	14		BB/MB
556	9	16		BB/MB
556	10	3		BB/MB
556	11	33		No Treat
556	12	14	Savannah Maintenance	BB/RPB,LopScat/MB
556	13	25		No Treat
556	14	9		No Treat
556	15	30		No Treat
556	16	29		BB/MB
556	17	38	Uneven Aged - Goshawk	BB/RPB,LopScat/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
556	18	54		BB/MB
556	19	13		BB/MB
556	20	24		BB/MB
556	21	4		BB/MB
556	22	22		BB/MB
556	23	16		No Treat
556	24	10		BB/MB
556	25	25		No Treat
557	1	50		BB/MB
557	2	22	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
557	3	39	Meadow Maintenance	BB/LopScat/MB
557	4	32		BB/MB
557	5	36	Savannah Maintenance	BB/RPB,LopScat/MB
557	6	21	Meadow Maintenance	BB/LopScat/MB
557	7	15	Meadow Maintenance	BB/LopScat/MB
557	8	14		BB/MB
557	9	12		BB/MB
557	10	5	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
557	11	56		BB/MB
557	12	17		BB/MB
557	13	50		BB/MB
557	14	27		BB/MB
557	15	16		BB/MB
557	16	10		BB/MB
557	17	25		BB/MB
557	18	23		BB/MB
557	19	32		BB/MB
557	20	29		BB/MB
557	21	58		BB/MB
557	22	85		BB/MB
557	23	48		BB/MB
557	24	33		BB/MB
557	25	9		BB/MB
557	26	14		BB/MB
557	28	9		BB/MB
557	29	17		BB/MB
557	30	194		No Treat
557	31	24		BB/MB
557	32	21		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
557	33	33		BB/MB
557	34	3		BB/MB
557	35	14		BB/MB
557	36	4		BB/MB
557	37	38	Savannah Maintenance	BB/RPB,LopScat/MB
557	38	33		BB/MB
557	39	5		BB/MB
557	40	8		BB/MB
557	41	18		BB/MB
557	42	21	Savannah Maintenance	BB/RPB,LopScat/MB
558	1	105		BB/MB
558	2	34	Meadow Maintenance	BB/LopScat/MB
558	3	92	Meadow Maintenance	BB/LopScat/MB
558	4	41	Savannah Maintenance	BB/RPB,LopScat/MB
558	5	46		BB/MB
558	6	42		BB/MB
558	7	36		BB/MB
558	8	22		BB/MB
558	9	2	Timber Stand Improvement	BB/MB
558	9	131		BB/MB
558	10	30		BB/MB
558	11	107	Uneven Aged Management	BB/RPB,LopScat/MB
558	12	39		BB/MB
558	13	20		No Treat
558	14	46		BB/MB
558	15	70	Savannah Maintenance	BB/RPB,LopScat/MB
558	16	60	Savannah Maintenance	BB/RPB,LopScat/MB
558	17	66	Meadow Maintenance	BB/LopScat/MB
558	18	6		BB/MB
558	19	8		BB/MB
558	20	8	Uneven	BB/RPB,LopScat/MB
558	21	10		BB/MB
558	22	29		BB/MB
558	23	38		BB/MB
558	24	25		No Treat

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
558	25	30		BB/MB
558	26	22		BB/MB
558	27	17		BB/MB
558	28	7		BB/MB
558	29	2	Timber Stand Improvement	BB/MB
558	29	8		BB/MB
558	30	91	Meadow Maintenance	BB/LopScat/MB
558	31	28		BB/MB
558	32	47		BB/MB
558	33	56		BB/MB
558	34	99		BB/MB
558	35	26		No Treat
558	36	20		BB/MB
558	37	53	Uneven Aged Management	BB/RPB,LopScat/MB
558	38	46		BB/MB
558	39	38		No Treat
558	40	31		BB/MB
558	41	8		BB/MB
558	42	35		BB/MB
565	1	28		No Treat
565	2	82		No Treat
565	3	73		No Treat
565	4	96	PAC 9" Minus	RPB,LopScat/MB
565	5	8		BB/MB
565	6	60	Thin from Below	BB/RPB,LopScat/MB
565	7	40		BB/MB
565	8	16		BB/MB
565	9	45		BB/MB
565	10	9		BB/MB
565	11	16		BB/MB
565	12	137		BB/MB
565	13	40		BB/MB
565	14	99	Thin from Below	BB/RPB,LopScat/MB
565	15	17		BB/MB
565	16	51		BB/MB
565	17	34		BB/MB
565	18	77	Thin from Below	BB/RPB,LopScat/MB
565	19	49		BB/MB
565	20	32		BB/MB
565	21	14	Thin from Below	BB/RPB,LopScat/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
565	22	36	Thin from Below	BB/RPB,LopScat/MB
565	23	40	Thin from Below	BB/RPB,LopScat/MB
565	24	9	Thin from Below	BB/RPB,LopScat/MB
565	25	18		BB/MB
565	26	2		BB/MB
565	27	39	Thin from Below	BB/RPB,LopScat/MB
565	28	24		BB/MB
565	29	63		No Treat
566	1	13		BB/MB
566	2	34		BB/MB
566	3	171		BB/MB
566	4	57		MB/MB
566	5	26		MB/MB
566	6	40		BB/MB
566	7	6		BB/MB
566	8	5		BB/MB
566	9	6		BB/MB
566	10	5		BB/MB
566	11	5		BB/MB
566	12	10		BB/MB
566	13	6		BB/MB
566	14	7		BB/MB
566	15	6		BB/MB
566	16	27		BB/MB
566	17	1		BB/MB
566	18	2		BB/MB
566	19	8		BB/MB
566	20	2		BB/MB
566	21	2		MB/MB
566	22	1		BB/MB
566	23	3		BB/MB
566	24	4		MB/MB
566	25	2		MB/MB
566	26	48		BB/MB
566	27	12		BB/MB
567	1	83		BB/MB
567	2	15		BB/MB
567	3	11		BB/MB
567	4	95		MB/MB
567	5	19		BB/MB
567	6	21		BB/MB
567	7	132		BB/MB
567	8	523		No Treat

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
567	9	80		BB/MB
567	10	34		BB/MB
567	12	32		BB/MB
567	13	42		No Treat
567	14	40	Transition Maintenance	BB/RPB,LopScat/MB
567	15	96	Transition Maintenance	BB/RPB,LopScat/MB
567	16	87		BB/MB
567	17	6		BB/MB
567	18	84	Transition Maintenance	BB/RPB,LopScat/MB
567	19	4		BB/MB
567	20	17	Thin from Below	MB/RPB,LopScat/MB
567	21	42		BB/MB
567	22	12		BB/MB
567	23	34		BB/MB
567	24	9		No Treat
567	25	133		MB/MB
567	26	24		MB/MB
567	27	137		MB/MB
568	1	260	Uneven Aged Management	BB/RPB,LopScat/MB
568	2	75	Uneven Aged Management	BB/RPB,LopScat/MB
568	3	25		BB/MB
568	4	3		BB/MB
568	5	6		BB/MB
568	6	90		BB/MB
568	7	34	Savannah Maintenance	BB/RPB,LopScat/MB
568	8	12		No Treat
568	9	3		No Treat
568	10	14		BB/MB
568	11	25		BB/MB
568	12	44	Transition Maintenance	BB/RPB,LopScat/MB
568	13	128	Thin from Below	BB/RPB,LopScat/MB
568	14	43		BB/MB
568	15	40		BB/MB
568	16	96	Uneven Aged Management	BB/RPB,LopScat/MB
568	17	24		BB/MB
568	18	51		BB/MB
568	19	26		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
568	20	111		BB/MB
568	21	44		BB/MB
568	22	82		BB/MB
568	23	22		BB/MB
568	24	37		BB/MB
568	25	38		BB/MB
569	1	22	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	2	72	Thin from Below	BB/RPB,LopScat/MB
569	3	50	Thin from Below	BB/RPB,LopScat/MB
569	4	21	Thin from Below	BB/RPB,LopScat/MB
569	5	17		No Treat
569	6	50	Uneven Aged Management	BB/RPB,LopScat/MB
569	7	15	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	8	31	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	9	36	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	10	141	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	11	53		No Treat
569	12	156		No Treat
569	13	74		BB/MB
569	14	28		BB/MB
569	15	20		No Treat
569	16	17	Savannah Maintenance	BB/RPB,LopScat/MB
569	17	33		BB/MB
569	18	52	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	19	42		BB/MB
569	20	13		BB/MB
569	21	10		BB/MB
569	22	33		BB/MB
569	23	5	Thin from Below	BB/RPB,LopScat/MB
569	24	46	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	25	5		BB/MB
569	26	56		BB/MB
569	27	23		BB/MB
569	28	27	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	29	31		No Treat

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
569	30	20		BB/MB
569	31	42		No Treat
569	32	34		No Treat
569	33	122		BB/MB
569	34	24	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
569	35	32	Uneven	BB/RPB,LopScat/MB
569	36	1		No Treat
577	1	17		BB/MB
577	2	16		BB/MB
577	3	38		BB/MB
577	4	38		BB/MB
577	5	102	Transition Maintenance	BB/RPB,LopScat/MB
577	6	3		BB/MB
577	7	133	Transition Maintenance	BB/RPB,LopScat/MB
577	8	82		BB/MB
577	9	61		BB/MB
577	10	206	Transition Maintenance	BB/RPB,LopScat/MB
577	11	19		BB/MB
577	12	31		BB/MB
577	13	18		BB/MB
577	14	156	Transition Maintenance	BB/RPB,LopScat/MB
577	15	17		BB/MB
577	16	31		BB/MB
577	17	8		BB/MB
577	18	9		BB/MB
577	19	14		BB/MB
577	20	15		BB/MB
577	21	26	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
577	22	7		BB/MB
577	23	23	Transition Maintenance	BB/RPB,LopScat/MB
577	24	22	Transition Maintenance	BB/RPB,LopScat/MB
577	25	14		BB/MB
577	26	62	Transition Maintenance	BB/RPB,LopScat/MB
577	27	37		BB/MB
577	28	66		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
577	29	78	Transition Maintenance	BB/RPB,LopScat/MB
577	30	17		BB/MB
577	31	69		BB/MB
577	32	38		BB/MB
578	1	54		BB/MB
578	2	335		BB/MB
578	3	131	Savannah Maintenance	BB/RPB,LopScat/MB
578	4	30		BB/MB
578	5	58		BB/MB
578	6	21		BB/MB
578	7	4		BB/MB
578	8	68		BB/MB
578	9	64		BB/MB
578	10	97		BB/MB
578	11	22		BB/MB
578	12	83		BB/MB
578	13	6		BB/MB
578	14	30	Thin from Below	BB/RPB,LopScat/MB
578	15	23	Thin from Below	BB/RPB,LopScat/MB
578	16	83		BB/MB
578	17	124		BB/MB
578	19	37		BB/MB
579	1	11	Thin from Below	MB/RPB,LopScat/MB
579	2	15	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
579	3	66	Thin from Below	MB/MPB/MB
579	4	23		No Treat
579	5	99	Thin from Below	MB/MPB/MB
579	6	30		MB/MB
579	7	95		MB/MB
579	8	35		BB/MB
579	9	32		BB/MB
579	10	19	Thin from Below	MB/MPB/MB
579	11	21	Thin from Below	MB/MPB/MB
579	12	5		No Treat
579	13	27		BB/MB
579	14	6		BB/MB
579	15	15	Thin from Below	MB/RPB,LopScat/MB
579	16	49		BB/MB
579	17	55		BB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
579	18	170		BB/MB
579	19	49		MB/MB
580	1	23	Uneven Aged - Goshawk	MB/MPB/MB
580	2	32	Uneven Aged - Goshawk	MB/MPB/MB
580	3	77	Savannah Maintenance	MB/MPB/MB
580	4	7		MB/MB
580	5	25	Uneven Aged - Goshawk	MB/MPB/MB
580	6	93	Uneven Aged - Goshawk	MB/MPB/MB
580	7	25		MB/MB
580	8	151	Thin from Below	MB/MPB/MB
580	9	38		MB/MB
580	10	40	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
580	11	52		BB/MB
580	12	32	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
580	13	136		MB/MB
580	14	71	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
580	15	46	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
580	16	81		MB/MB
580	17	25	Thin from Below	MB/RPB,LopScat/MB
581	1	23	Savannah Maintenance	BB/RPB,LopScat/MB
581	2	41	Savannah Maintenance	MB/RPB,LopScat/MB
581	3	45	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
581	4	47	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
581	5	30		MB/MB
581	6	67	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
581	7	113		MB/MB
581	8	96		MB/MB
581	9	178		MB/MB
581	10	14		MB/MB
581	11	245		MB/MB
581	12	42		MB/MB
581	13	156		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
581	14	32	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
581	15	51		MB/MB
581	16	14	Thin from Below	MB/RPB,LopScat/MB
581	17	61		BB/MB
581	18	40		MB/MB
581	19	36	Thin from Below	MB/RPB,LopScat/MB
581	20	20		MB/MB
587	1	47		BB/MB
587	2	22		BB/MB
587	3	16		BB/MB
587	4	268	Transition Maintenance	BB/RPB,LopScat/MB
587	5	7	Thin from Below	BB/RPB,LopScat/MB
587	6	117	Transition Maintenance	BB/RPB,LopScat/MB
587	7	45		BB/MB
587	8	21	Thin from Below	BB/RPB,LopScat/MB
587	9	141	Uneven Aged Management	BB/RPB,LopScat/MB
587	10	325		BB/MB
587	11	13		BB/MB
587	12	5		BB/MB
587	13	2		BB/MB
587	14	21		BB/MB
587	15	6		BB/MB
587	16	40		BB/MB
587	17	48		BB/MB
587	18	146	Thin from Below	BB/RPB,LopScat/MB
587	19	35		BB/MB
587	20	20		BB/MB
587	21	48		BB/MB
587	22	54		BB/MB
588	1	50		BB/MB
588	2	44	Thin from Below	BB/RPB,LopScat/MB
588	3	61		BB/MB
588	4	77		MB/MB
588	5	15		MB/MB
588	6	16	Uneven Aged Management	BB/RPB,LopScat/MB
588	7	139		BB/MB
588	8	11		BB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
588	9	204	Savannah Maintenance	MB/RPB,LopScat/MB
588	10	38	Savannah Maintenance	BB/RPB,LopScat/MB
588	11	8	Thin from Below	MB/RPB,LopScat/MB
588	12	192	Thin from Below	BB/RPB,LopScat/MB
588	13	56	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
588	14	31		MB/MB
588	15	49		BB/MB
588	16	138		MB/MB
588	17	22		BB/MB
589	1	24	Uneven Aged Management	MB/RPB,LopScat/MB
589	2	11		MB/MB
589	3	67	Thin from Below	MB/RPB,LopScat/MB
589	4	47		MB/MB
589	5	34	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
589	6	11		MB/MB
589	7	82		MB/MB
589	8	8		MB/MB
589	9	59	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
589	10	42		MB/MB
589	11	5	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
589	12	51		MB/MB
589	13	78	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
589	14	13		MB/MB
589	15	37		MB/MB
589	16	27		MB/MB
589	17	28		MB/MB
589	18	55		MB/MB
589	19	42		MB/MB
589	20	9		MB/MB
589	21	10		MB/MB
589	22	17	Uneven Aged Management	MB/RPB,LopScat/MB
589	23	7	Timber Stand Improvement	main/main
589	23	45		MB/MB
589	24	6		MB/MB
589	25	40		MB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
589	26	45	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
589	27	27		MB/MB
589	28	78	Uneven Aged Management	MB/RPB,LopScat/MB
589	29	37		MB/MB
589	30	14		MB/MB
597	1	112	Thin from Below	BB/RPB,LopScat/MB
597	2	58		BB/MB
597	3	10		BB/MB
597	4	84		BB/MB
597	5	15		BB/MB
597	6	125		BB/MB
597	7	20		BB/MB
597	8	36		BB/MB
597	9	262		BB/MB
597	10	75		BB/MB
597	11	42		BB/MB
597	12	22		BB/MB
597	13	64		BB/MB
597	14	33		BB/MB
597	15	106		BB/MB
597	16	12		BB/MB
597	17	84		BB/MB
597	18	54		BB/MB
597	19	30		BB/MB
597	20	46		BB/MB
597	21	191	Thin from Below	BB/RPB,LopScat/MB
598	1	28	Meadow Maintenance	BB/LopScat/MB
598	2	123		BB/MB
598	3	57		BB/MB
598	4	164	Transition Maintenance	BB/RPB,LopScat/MB
598	5	52		BB/MB
598	6	88	Savannah Maintenance	BB/RPB,LopScat/MB
598	7	109	Savannah Maintenance	BB/RPB,LopScat/MB
598	8	54		BB/MB
598	9	143	Savannah Maintenance	BB/RPB,LopScat/MB
598	10	15		BB/MB
598	11	30		BB/MB
598	12	68		BB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
598	13	22		BB/MB
598	14	45	Thin from Below	BB/RPB,LopScat/MB
598	15	36	Thin from Below	BB/RPB,LopScat/MB
598	16	70		BB/MB
598	17	65		BB/MB
598	18	41		BB/MB
598	19	188	Transition Maintenance	BB/RPB,LopScat/MB
598	20	110		BB/MB
598	21	123		BB/MB
598	22	50	Thin from Below	BB/RPB,LopScat/MB
598	23	55	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
598	24	30		BB/MB
598	25	56		BB/MB
598	26	26		BB/MB
598	27	31		BB/MB
598	28	10	Thin from Below	BB/RPB,LopScat/MB
599	1	40		MB/MB
599	2	36		MB/MB
599	3	9	Meadow Maintenance	MB/LopScat/MB
599	4	37		BB/MB
599	5	50		BB/MB
599	6	83	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
599	7	54	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
599	8	43		BB/MB
599	9	21		BB/MB
599	10	27		BB/MB
599	11	63	Savannah Maintenance	BB/RPB,LopScat/MB
599	12	33		No Treat
599	13	78		BB/MB
599	14	42	Thin from Below	BB/RPB,LopScat/MB
599	15	85	Savannah Maintenance	MB/RPB,LopScat/MB
599	16	55		MB/MB
599	17	67		MB/MB
599	18	39		BB/MB
599	19	20	Thin from Below	BB/RPB,LopScat/MB
599	20	17		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
599	21	43	Savannah Maintenance	MB/RPB,LopScat/MB
599	22	24		MB/MB
599	23	25		MB/MB
599	24	74		BB/MB
599	25	31	Savannah Maintenance	BB/RPB,LopScat/MB
599	26	40		BB/MB
599	27	33		BB/MB
599	28	20		BB/MB
599	29	38		BB/MB
599	30	9		BB/MB
599	31	25		BB/MB
599	32	19		BB/MB
599	33	10		BB/MB
599	34	23		BB/MB
600	1	63		MB/MB
600	2	51		MB/MB
600	3	64		MB/MB
600	4	55		MB/MB
600	5	63		MB/MB
600	6	105		MB/MB
600	7	29		MB/MB
600	8	75		MB/MB
600	9	70		MB/MB
600	10	18		MB/MB
600	11	75		MB/MB
600	12	10	Meadow Maintenance	BB/LopScat/MB
600	13	20	Uneven Aged Management	MB/RPB,LopScat/MB
600	14	52		MB/MB
600	15	43		MB/MB
600	16	79		MB/MB
600	17	26	Thin from Below	MB/RPB,LopScat/MB
600	18	82		BB/MB
600	19	35		BB/MB
600	20	25		BB/MB
600	21	28		MB/MB
600	22	26		MB/MB
600	23	9		MB/MB
600	24	44		MB/MB
600	25	50		MB/MB
600	26	67		MB/MB
600	27	16		MB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
600	28	76		MB/MB
600	29	33		MB/MB
600	30	8		MB/MB
600	31	8		MB/MB
600	32	59		MB/MB
600	33	7		MB/MB
600	34	13		MB/MB
607	1	45		No Treat
607	2	9		BB/MB
607	3	12		BB/MB
607	4	21		BB/MB
607	5	42		BB/MB
607	6	29		BB/MB
607	7	66	Thin from Below	BB/RPB,LopScat/MB
607	8	11		BB/MB
607	9	24		BB/MB
607	10	81		BB/MB
607	11	30	Thin from Below	BB/RPB,LopScat/MB
607	12	42		BB/MB
607	13	16		BB/MB
607	14	29		BB/MB
607	15	58		BB/MB
607	16	25		BB/MB
607	17	48		BB/MB
607	18	27		BB/MB
607	19	50		BB/MB
607	20	13		BB/MB
607	21	13		BB/MB
608	1	49		BB/MB
608	2	33		BB/MB
608	3	21		BB/MB
608	4	50	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
608	5	37	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
608	6	34	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
608	7	4		BB/MB
608	8	17		BB/MB
608	9	71		BB/MB
608	10	15		BB/MB
608	11	30		BB/MB
608	12	59		BB/MB
608	13	35		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
608	14	54		BB/MB
608	15	11	Uneven Aged Management	BB/MB
608	16	66	Thin from Below	MB/RPB,LopScat/MB
608	17	60	Thin from Below	MB/RPB,LopScat/MB
608	18	26		BB/MB
608	19	21		BB/MB
608	20	43		BB/MB
608	21	23		BB/MB
608	22	51		BB/MB
608	23	29		BB/MB
608	24	38	Savannah Maintenance	BB/RPB,LopScat/MB
608	25	25	Savannah Maintenance	BB/RPB,LopScat/MB
608	26	30	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
608	27	10		BB/MB
608	28	67		BB/MB
608	29	42		BB/MB
608	30	20		BB/MB
608	31	50	Thin from Below	BB/RPB,LopScat/MB
608	32	12		BB/MB
608	33	35		BB/MB
608	34	58		MB/MB
608	35	34	Thin from Below	BB/RPB,LopScat/MB
608	36	38		BB/MB
608	37	72	Savannah Maintenance	BB/RPB,LopScat/MB
608	38	39		MB/MB
608	39	8		BB/MB
608	40	29		BB/MB
608	41	16		BB/MB
608	42	35		BB/MB
608	43	80		BB/MB
608	44	50		MB/MB
608	45	9		MB/MB
608	46	23		No Treat
608	47	39		MB/MB
608	48	46		MB/MB
608	49	18		MB/MB
608	50	52		MB/MB
608	51	33		MB/MB
608	52	28		MB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
608	53	36		BB/MB
608	54	21	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
608	55	26		BB/MB
608	56	23	Thin from Below	BB/RPB,LopScat/MB
608	57	24	Uneven Aged - Goshawk	MB/RPB,LopScat/MB
608	58	11		BB/MB
608	59	6		MB/MB
608	60	23		MB/MB
608	61	31		BB/MB
608	62	21		MB/MB
608	63	23		MB/MB
608	64	16	Thin from Below	MB/RPB,LopScat/MB
608	65	56	Thin from Below	MB/RPB,LopScat/MB
616	1	68		BB/MB
616	2	56		BB/MB
616	3	53		BB/MB
616	4	43		BB/MB
616	5	34		BB/MB
616	6	46		BB/MB
616	7	13		BB/MB
616	8	12		BB/MB
616	9	47		BB/MB
616	10	63		BB/MB
616	11	16		BB/MB
616	12	45		BB/MB
616	13	16		BB/MB
616	14	50	Transition Maintenance	BB/RPB,LopScat/MB
616	15	66	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
616	16	30		BB/MB
616	17	26		BB/MB
616	18	49	Thin from Below	BB/RPB,LopScat/MB
616	19	78		BB/MB
616	20	120		BB/MB
616	21	106		BB/MB
616	22	132		MB/MB
616	23	59		BB/MB
616	24	45		BB/MB
616	25	60		BB/MB
616	26	33		BB/MB
616	27	53		BB/MB

**Upper Beaver Creek Watershed Fuel Reduction Project
Environmental Assessment**

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
616	28	28		BB/MB
616	29	26		BB/MB
616	30	12		BB/MB
616	31	28		BB/MB
616	32	26		BB/MB
616	33	36		BB/MB
616	34	16		BB/MB
616	36	40		BB/MB
617	1	33		BB/MB
617	2	28		BB/MB
617	3	65		BB/MB
617	4	53		BB/MB
617	5	142		BB/MB
617	6	31		BB/MB
617	7	24		BB/MB
617	8	97	Thin from Below	BB/RPB,LopScat/MB
617	9	58		BB/MB
617	10	76	Thin from Below	BB/RPB,LopScat/MB
617	11	23		BB/MB
617	12	34	Thin from Below	BB/RPB,LopScat/MB
617	13	77	Thin from Below	BB/RPB,LopScat/MB
617	14	20		BB/MB
617	15	9		BB/MB
617	16	29		BB/MB
617	17	32		BB/MB
617	18	37		BB/MB
617	19	20		BB/MB
617	20	39		BB/MB
617	21	32		BB/MB
617	22	48	Transition Maintenance	BB/RPB,LopScat/MB
617	23	22		BB/MB
617	24	12		BB/MB
617	25	10		BB/MB
617	26	15		BB/MB
617	27	18	Transition Maintenance	BB/RPB,LopScat/MB
617	28	35		BB/MB
617	29	37	Transition Maintenance	BB/RPB,LopScat/MB
617	30	33		BB/MB
617	31	13		BB/MB
617	32	37	Transition Maintenance	BB/RPB,LopScat/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
617	33	9		BB/MB
617	34	16		BB/MB
617	35	17		BB/MB
617	36	47		BB/MB
617	37	31	Transition Maintenance	BB/RPB,LopScat/MB
617	38	28	Transition Maintenance	BB/RPB,LopScat/MB
617	39	22		BB/MB
617	40	19		BB/MB
617	41	20	Transition Maintenance	BB/RPB,LopScat/MB
617	42	30		BB/MB
617	43	32		BB/MB
617	44	52		BB/MB
923	8	14		MB/MB
923	16	13		MB/MB
939	1	24		No Treat
939	2	50		No Treat
939	3	54		No Treat
939	4	13		No Treat
939	5	40		No Treat
939	6	9		No Treat
939	7	61		No Treat
939	8	7		No Treat
939	9	16		No Treat
939	10	28		No Treat
939	11	23		No Treat
939	12	6		No Treat
939	13	7		No Treat
939	14	25		No Treat
939	15	20		No Treat
939	16	78		No Treat
939	17	92		No Treat
939	18	43		No Treat
939	19	22		No Treat
939	20	27		No Treat
939	21	9		No Treat
939	22	19		No Treat
939	23	29		No Treat
939	24	33		No Treat
939	25	5		No Treat
939	26	21		No Treat
939	27	32		No Treat
939	28	41		No Treat

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Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
939	29	14		No Treat
939	30	30		No Treat
939	31	10		No Treat
940	1	478		BB/MB
941	1	220		BB/MB
941	2	12		BB/MB
941	3	78	Thin from Below	BB/RPB,LopScat/MB
941	4	55	Uneven Aged - Goshawk	BB/RPB,LopScat/MB
941	5	18	Thin from Below	MB/RPB,LopScat/MB
941	6	102		MB/MB
941	7	3		BB/MB
941	8	4		BB/MB
941	9	15		MB/MB
941	10	7	Thin from Below	MB/RPB,LopScat/MB
1100	5	23		BB/MB
1100	9	73		MB/MB
1100	10	20		BB/MB
1100	11	102		BB/MB
1100	12	5		MB/MB
1100	13	5		MB/MB

Location#	Site#	GIS Acres	Vegetation Treatment	Prescribed Burn Fuel Treatment
1100	14	9		MB/MB
1100	15	134		MB/MB
1100	16	2		MB/MB
1100	18	21		MB/MB
1100	19	4		MB/MB
1100	20	3		MB/MB
1100	21	1		BB/MB
1102	1	29		BB/MB
1104	1	5		MB/MB
1104	2	55		MB/MB
1104	3	27		MB/MB
1104	5	27		MB/MB
1104	8	47		MB/MB
1104	9	12		MB/MB
		49,124 acres		

Coding Notes:

Vegetation Treatments: Thinning treatments may include group selection, and individual tree selection harvest as well as thinning from below – see vegetation treatment descriptions for information.

Fuel Treatment Codes: BB = Broadcast Burn, MB = Maintenance Burn, RPB = Rough pile and burn; HPB = Hand pile and burn; MPBB = Machine Pile and Burn; LopScat = Lop and Scatter limbs and tree boles. Fuel treatments assume conventional logging on savannah maintenance, transition maintenance, thin from below, uneven-aged, and uneven-aged goshawk treatments. If treatment on these sites are mechanical thinned, fuel treatment will be pile landings and then the associated prescribed fire treatment. Thinning treatments may include group selection, and individual tree selection harvest as well as thinning from below – see vegetation treatment descriptions for information.

Table A-2. Vegetation Treatments, Upper Diameter Objective of Thinning and Estimated Number of Trees in the Larger Size Class to be Cut

Stand ID	Vegetation Treatment	Upper Diameter. Objective.	Est. # Trees Cut 16-18"	GIS Acres
535001304	meadow maintenance	9"		292
535001904	meadow maintenance	9"		5
537001404	meadow maintenance	9"		19
539000704	meadow maintenance	9"		53

Stand ID	Vegetation Treatment	Upper Diameter. Objective.	Est. # Trees Cut 16-18"	GIS Acres
539001904	meadow maintenance	9"		24
544001304	meadow maintenance	9"		72
544001704	meadow maintenance	9"		19
544001904	meadow maintenance	9"		24

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Stand ID	Vegetation Treatment	Upper Diam-eter. Obect-ive.	Est. # Trees Cut 16-18"	GIS Acres
557000304	meadow maintenance	9"		39
557000604	meadow maintenance	9"		21
557000704	meadow maintenance	9"		15
558000204	meadow maintenance	9"		34
558000304	meadow maintenance	9"		93
558001704	meadow maintenance	9"		66
558003004	meadow maintenance	9"		91
598000104	meadow maintenance	9"		28
599000304	meadow maintenance	9"		9
600001204	meadow maintenance	9"		10
				913
533000304	pac 9" minus	9"		16
533001704	pac 9" minus	9"		21
550001004	pac 9" minus	9"		25
565000404	pac 9" minus	9"		96
				159
543000204	savannah maintenance	16"		94
543002804	savannah maintenance	16"		23
543003004	savannah maintenance	16"		90
578000304	savannah maintenance	16"		131
598000604	savannah maintenance	16"		88
599001104	savannah maintenance	16"		63
599001504	savannah maintenance	16"		85
608002404	savannah maintenance	16"		38
535002304	savannah maintenance	18"	132	14
539000604	savannah maintenance	18"	172	40
539002304	savannah maintenance	18"	532	57
539002504	savannah maintenance	18"	132	47
539002604	savannah maintenance	18"	425	61
543000604	savannah maintenance	18"	526	87
543001504	savannah maintenance	18"	503	116
543002104	savannah maintenance	18"	117	31
544002604	savannah maintenance	18"	445	73
550001704	savannah maintenance	18"	199	46
550002504	savannah maintenance	18"	423	45
550003404	savannah maintenance	18"	110	18
556001204	savannah maintenance	18"	103	14
557000504	savannah maintenance	18"	123	36
557003704	savannah maintenance	18"	358	38
557004204	savannah maintenance	18"	66	21
558000404	savannah maintenance	18"	171	41
558001504	savannah maintenance	18"	400	70
558001604	savannah maintenance	18"	489	60
568000704	savannah maintenance	18"	122	34
569001604	savannah maintenance	18"	138	17
580000304	savannah maintenance	18"	374	78
581000104	savannah maintenance	18"	98	24
581000204	savannah maintenance	18"	533	41
588000904	savannah maintenance	18"	834	204
588001004	savannah maintenance	18"	241	38
598000704	savannah maintenance	18"	664	109
598000904	savannah maintenance	18"	892	143
599002104	savannah maintenance	18"	283	43
599002504	savannah maintenance	18"	138	31
608003704	savannah maintenance	18"	526	72
608002504	savannah maintenance	24"	378	25
	SubTotals		10,647	2,294
544001804	thin from below	10"		4
599001904	thin from below	12"		20
537000804	thin from below	14"		313
550002204	thin from below	14"		58

Stand ID	Vegetation Treatment	Upper Diam-eter. Obect-ive.	Est. # Trees Cut 16-18"	GIS Acres
550004004	thin from below	14"		55
565001804	thin from below	14"		77
567002004	thin from below	14"		17
588001104	thin from below	14"		8
608001704	thin from below	14"		60
608006404	thin from below	14"		16
532001704	thin from below	16"		105
533002404	thin from below	16"		40
535000204	thin from below	16"		256
535000404	thin from below	16"		258
542000704	thin from below	16"		71
543000404	thin from below	16"		43
544000304	thin from below	16"		111
544002504	thin from below	16"		42
555000804	thin from below	16"		34
556000704	thin from below	16"		38
565000604	thin from below	16"		60
565002404	thin from below	16"		9
568001304	thin from below	16"		128
569000204	thin from below	16"		72
579000304	thin from below	16"		66
579001504	thin from below	16"		15
580000804	thin from below	16"		151
581001604	thin from below	16"		14
589000304	thin from below	16"		67
598001404	thin from below	16"		45
598001504	thin from below	16"		36
598002204	thin from below	16"		50
598002804	thin from below	16"		10
599001404	thin from below	16"		42
600001704	thin from below	16"		26
608001604	thin from below	16"		66
608003104	thin from below	16"		50
608005604	thin from below	16"		23
608006504	thin from below	16"		56
617000804	thin from below	16"		97
617001004	thin from below	16"		76
617001204	thin from below	16"		34
617001304	thin from below	16"		77
533000104	thin from below	18"	104	46
542000504	thin from below	18"	91	21
542002604	thin from below	18"	240	68
544000904	thin from below	18"	128	45
544001204	thin from below	18"	198	83
550003004	thin from below	18"	260	69
556000404	thin from below	18"	172	48
556000604	thin from below	18"	127	29
565001404	thin from below	18"	305	99
565002104	thin from below	18"	61	14
565002204	thin from below	18"	112	36
565002304	thin from below	18"	216	40
569000304	thin from below	18"	310	50
569000404	thin from below	18"	110	21
569002304	thin from below	18"	34	5
578001404	thin from below	18"	78	30
578001504	thin from below	18"	71	23
579000104	thin from below	18"	50	12
579000504	thin from below	18"	298	99
579001004	thin from below	18"	82	19
579001104	thin from below	18"	56	21
580001704	thin from below	18"	123	25
581001904	thin from below	18"	102	36

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Stand ID	Vegetation Treatment	Upper Diameter. Objective.	Est. # Trees Cut 16-18"	GIS Acres
587000504	thin from below	18"	33	7
587000804	thin from below	18"	45	21
587001804	thin from below	18"	673	146
588000204	thin from below	18"	100	44
588001204	thin from below	18"	454	192
597000104	thin from below	18"	784	112
597002104	thin from below	18"	515	191
607000704	thin from below	18"	202	66
607001104	thin from below	18"	140	30
608003504	thin from below	18"	72	34
616001804	thin from below	18"	152	49
941000304	thin from below	18"	547	78
941000504	thin from below	18"	136	18
941001004	thin from below	18"	41	7
533002204	thin from below	24"	45	15
542000904	thin from below	24"	45	17
565002704	thin from below	24"	332	39
	SubTotals		7,644	4,900
598000404	transition maintenance	12"		164
577000704	transition maintenance	16"		133
577002304	transition maintenance	16"		23
577002404	transition maintenance	16"		22
577002904	transition maintenance	16"		78
587000604	transition maintenance	16"		117
616001404	transition maintenance	16"		50
617002204	transition maintenance	16"		48
617002704	transition maintenance	16"		18
617003204	transition maintenance	16"		37
617003704	transition maintenance	16"		31
617003804	transition maintenance	16"		28
617004104	transition maintenance	16"		20
532003204	transition maintenance	18"	937	141
533000504	transition maintenance	18"	25	15
533000604	transition maintenance	18"	340	53
533001204	transition maintenance	18"	808	48
533002004	transition maintenance	18"	43	11
533002504	transition maintenance	18"	400	27
533005504	transition maintenance	18"	284	115
533006104	transition maintenance	18"	542	147
555001404	transition maintenance	18"	340	50
567001404	transition maintenance	18"	275	40
567001504	transition maintenance	18"	583	96
567001804	transition maintenance	18"	205	84
568001204	transition maintenance	18"	184	44
577000504	transition maintenance	18"	1349	102
577001004	transition maintenance	18"	956	206
577001404	transition maintenance	18"	784	156
577002604	transition maintenance	18"	393	62
587000404	transition maintenance	18"	1020	268
598001904	transition maintenance	18"	1336	188
617002904	transition maintenance	18"	153	37
533002104	transition maintenance	24"	591	19
	SubTotals		11,549	2,680
544000504	tsi	9"		1
544001604	tsi	9"		13
555001304	tsi	9"		12
558000904	tsi	9"		2
558002904	tsi	9"		2
589002304	tsi	9"		7
				37
539002204	uneven	18"	50	28
539002404	uneven	18"	100	61

Stand ID	Vegetation Treatment	Upper Diameter. Objective.	Est. # Trees Cut 16-18"	GIS Acres
544000104	uneven	18"	150	136
544000404	uneven	16"		3
558001104	uneven	16"		107
558003704	uneven	16"		53
558002004	uneven	18"	53	8
568000104	uneven	16"		260
568001604	uneven	16"		96
569000604	uneven	16"		50
569003504	uneven	18"		26
587000904	uneven	16"		141
588000604	uneven	16"		16
589002204	uneven	16"		17
600001304	uneven	16"		20
608001504	uneven	16"		11
568000204	uneven	18"	111	75
589000104	uneven	18"	57	24
589002804	uneven	18"	244	78
	SubTotals		765	1,215
550002104	uneven-gos	10"		35
533005204	uneven-gos	16"		62
533005404	uneven-gos	16"		194
535002104	uneven-gos	16"		1
535002404	uneven-gos	16"		6
535002504	uneven-gos	16"		31
535002604	uneven-gos	16"		3
537001204	uneven-gos	16"		131
539000304	uneven-gos	16"		69
539000504	uneven-gos	16"		36
539002904	uneven-gos	16"		22
543000504	uneven-gos	16"		125
543000904	uneven-gos	16"		107
544001004	uneven-gos	16"		22
555001204	uneven-gos	16"		36
550001404	uneven-gos	16"		20
550002404	uneven-gos	16"		40
550002804	uneven-gos	16"		24
550003104	uneven-gos	16"		68
550003504	uneven-gos	16"		81
555000504	uneven-gos	16"		22
569000104	uneven-gos	16"		36
569000904	uneven-gos	16"		141
569001004	uneven-gos	16"		52
569001804	uneven-gos	16"		46
569002404	uneven-gos	16"		27
569002804	uneven-gos	16"		24
569003404	uneven-gos	16"		32
577002104	uneven-gos	16"		15
579000204	uneven-gos	16"		32
580000204	uneven-gos	16"		93
580000604	uneven-gos	16"		40
580001004	uneven-gos	16"		32
580001204	uneven-gos	16"		71
580001404	uneven-gos	16"		67
581000604	uneven-gos	16"		32
581001404	uneven-gos	16"		56
588001304	uneven-gos	16"		59
589000904	uneven-gos	16"		5
589001104	uneven-gos	16"		78
589001304	uneven-gos	16"		45
589002604	uneven-gos	16"		83
599000604	uneven-gos	16"		54
599000704	uneven-gos	16"		50

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Stand ID	Vegetation Treatment	Upper Diam-eter. Obect-ive.	Est. # Trees Cut 16-18"	GIS Acres
608000404	uneven-gos	16"		37
608000504	uneven-gos	16"		34
608000604	uneven-gos	16"		21
608005404	uneven-gos	16"		24
608005704	uneven-gos	16"		66
616001504	uneven-gos	16"		55
941000404	uneven-gos	16"		25
535002004	uneven-gos	18"	81	38
535002704	uneven-gos	18"	94	120
537000204	uneven-gos	18"	457	61
543001204	uneven-gos	18"	87	25
543001604	uneven-gos	18"	210	62
550002004	uneven-gos	18"	28	21
555000404	uneven-gos	18"	204	13
555000604	uneven-gos	18"	148	32
555001504	uneven-gos	18"	63	13
555001604	uneven-gos	18"	129	41
556000504	uneven-gos	18"	147	45
556001704	uneven-gos	18"	88	68
557000204	uneven-gos	18"	57	47
557001004	uneven-gos	18"	38	29

Stand ID	Vegetation Treatment	Upper Diam-eter. Obect-ive.	Est. # Trees Cut 16-18"	GIS Acres
569000704	uneven-gos	18"	39	39
569000804	uneven-gos	18"	66	41
580000104	uneven-gos	18"	80	38
580000504	uneven-gos	18"	77	22
580001504	uneven-gos	18"	115	5
581000304	uneven-gos	18"	125	15
581000404	uneven-gos	18"	176	31
589000504	uneven-gos	18"	137	23
598002304	uneven-gos	18"	118	25
608002604	uneven-gos	18"	63	46
539002404	uneven-gos	24"	180	45
543001904	uneven-gos	24"	56	47
550001504	uneven-gos	24"	0	34
550001604	uneven-gos	24"	116	55
550002604	uneven-gos	24"	208	30
	SubTotals		3,390	3,609
	TOTALS		33,995	15,807

Table A-3 Stands with Mechanized Harvest Slope Limitations

The following stands have mechanized harvest slope restrictions to <than 25% to protect soil and water resources.

Location/Site	Location/Site
5320032	5790011
5440012	5800001
5550005	5800002
5550006	5800003
5560005	5800005
5570005	5800006
5680002	5800017
5680007	5810003
5680013	5810004
5680016	5890013
5690016	5890022
5690023	5890028
5790001	5980009
5790002	5980014
5790003	5980015
5790005	6080016
5790010	

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Table A-4. Estimated Number of Trees Cut 16-18" dbh in Restricted and Target Threshold Stands.

Stands are sorted by Stand ID.

Stand ID	Vegetation Treatment	Est. Trees Cut 16-18"	Acres	Stand ID	Vegetation Treatment	Est. Trees Cut 16-18"	Acres
533000604	transition maintenance	340	53	568000704	savannah maintenance	122	34
533001204	transition maintenance	808	48	569000304	thin from below	310	50
533002204	thin from below	45	15	569000404	thin from below	110	21
535002304	savannah maintenance	132	14	569000704	uneven-gos	39	15
537000204	uneven-gos	457	120	569000804	uneven-gos	66	31
539000604	savannah maintenance	172	40	569001604	savannah maintenance	138	17
539002304	savannah maintenance	532	57	569002304	thin from below	34	5
539002504	savannah maintenance	132	47	577001004	transition maintenance	956	206
542000504	thin from below	91	21	577001404	transition maintenance	784	156
542000904	thin from below	45	17	578001404	thin from below	78	30
542002604	thin from below	240	68	578001504	thin from below	71	23
543000604	savannah maintenance	526	87	579000104	thin from below	50	12
543001204	uneven-gos	87	25	579000504	thin from below	298	99
543001504	savannah maintenance	503	116	579001004	thin from below	82	19
543001604	uneven-gos	210	62	579001104	thin from below	56	21
543001904	uneven-gos	56	21	580000104	uneven-gos	80	23
543002104	savannah maintenance	117	31	580000304	savannah maintenance	374	78
544000104	uneven	150	136	580000504	uneven-gos	77	25
544000904	thin from below	128	45	580001504	uneven-gos	115	46
544001204	thin from below	198	83	580001704	thin from below	123	25
544002604	savannah maintenance	445	73	581000104	savannah maintenance	98	24
550001504	uneven-gos	0	13	581000204	savannah maintenance	533	41
550001604	uneven-gos	116	32	581000304	uneven-gos	125	45
550001704	savannah maintenance	199	46	581000404	uneven-gos	176	47
550002004	uneven-gos	28	13	581001904	thin from below	102	36
550002504	savannah maintenance	423	45	587000404	transition maintenance	1,020	268
550002604	uneven-gos	208	41	587001804	thin from below	673	146
550003004	thin from below	260	69	588000204	thin from below	100	44
550003404	savannah maintenance	110	18	588000904	savannah maintenance	834	204
555000404	uneven-gos	204	45	588001004	savannah	241	38

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Stand ID	Vegetation Treatment	Est. Trees Cut 16-18"	Acres	Stand ID	Vegetation Treatment	Est. Trees Cut 16-18"	Acres
					maintenance		
555000604	uneven-gos	148	68	588001204	thin from below	454	192
555001204	uneven-gos	511	47	589000504	uneven-gos	137	34
555001404	transition maintenance	340	50	589002804	uneven	244	78
555001504	uneven-gos	63	29	597002104	thin from below	515	191
555001604	uneven-gos	129	39	598000704	savannah maintenance	664	109
556000404	thin from below	172	0	598000904	savannah maintenance	892	143
556000504	uneven-gos	147	41	598001904	transition maintenance	1,336	188
556001204	savannah maintenance	103	14	598002304	uneven-gos	118	55
556001704	uneven-gos	88	38	599002104	savannah maintenance	283	43
557000504	savannah maintenance	123	36	599002504	savannah maintenance	138	31
565001404	thin from below	305	99	607000704	thin from below	202	66
565002204	thin from below	112	36	607001104	thin from below	140	30
565002304	thin from below	216	40	608002504	savannah maintenance	378	25
565002704	thin from below	332	39	608002604	uneven-gos	63	30
567001404	transition maintenance	275	40	608003504	thin from below	72	34
567001504	transition maintenance	583	96	608003704	savannah maintenance	526	72
567001804	transition maintenance	205	84	616001804	thin from below	152	49
568000204	uneven	111	75				
						25,104	5,571

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Table A-5. Location/sites where ¼ protection buffer for Chiricauha and northern leopard frogs

Harvest Sites- Acres are approximate acres of buffer in the stand, not the entire stand acreage

LOCATION/SITE	RX	acres
5350002	thin from below	20
5350004	thin from below	3
5350013	meadow maintenance	3
5350019	meadow maintenance	5
5350020	uneven-gos	25
5350021	uneven-gos	1
5350023	savannah maintenance	1
5350025	uneven-gos	5
5350027	uneven-gos	29
5370002	uneven-gos	8
5390007	meadow maintenance	18
5430015	savannah maintenance	16
5430016	uneven-gos	58
5440013	meadow maintenance	1
5500010	pac 9" minus	13
5500014	uneven-gos	9
5500015	uneven-gos	6
5500016	uneven-gos	15
5500017	savannah maintenance	17
5500026	uneven-gos	2
5500030	thin from below	6
5500034	savannah maintenance	5
5570003	meadow maintenance	2
5570010	uneven-gos	2
5980023	uneven-gos	36
6080015	uneven	7
6080016	thin from below	47

LOCATION/SITE	RX	acr	LOCATION/SITE	BURN_RX2	acres
6080017	thin from below	30	5500014	bb/rp_lop/main	9
9410010	thin from below	7	5500015	bb/rp_lop/main	6
Grand Total		398	5500016	bb/rp_lop/main	15

Burn Sites- Acres are approximate acres of buffer in the stand, not the entire stand acreage

LOCATION/SITE	BURN_RX2	acres
5340003	main/main	40
5350002	bb/rp_lop/main	20
5350004	bb/rp_lop/main	3
5350013	main/lop/main	3
5350018	main/main	19
5350019	main/lop/main	5
5350020	main/rp_lop/main	25
5350021	main/rp_lop/main	1
5350023	main/rp_lop/main	1
5350025	main/rp_lop/main	5
5350027	main/rp_lop/main	29
5360015	main/main	2
5360016	main/main	1
5370001	main/main	4
5370002	main/rp_lop/main	8
5390007	lop and scatter	18
5430015	bb/rp_lop/main	16
5430016	bb/rp_lop/main	58
5430017	bb/main	26
5430022	bb/main	2
5430031	bb/main	34
5430032	bb/main	3
5440013	bb/lop/main	1
5500001	bb/main	35
5500004	bb/main	26
5500010	hp/main	13
5500011	rp/main	5

5500017	bb/rp_lop/main	17
5500026	bb/rp_lop/main	2
5500030	bb/rp_lop/main	6
5500034	bb/rp_lop/main	5
5570003	bb/lop/main	2
5570009	bb/main	2
5570010	bb/rp_lop/main	2
5570011	bb/main	4
5570020	bb/main	1
5570031	bb/main	1
5970006	bb/main	17
5970018	bb/main	1
5970019	bb/main	3
5980021	bb/main	34
5980023	bb/rp_lop/main	36
5980024	bb/main	5
5980025	bb/main	43
6000021	main/main	2
6000024	main/main	29
6000025	main/main	1
6000026	main/main	21
6070015	bb/main	12
6070017	bb/main	5
6070018	bb/main	18
6070021	bb/main	13
6080014	bb/main	1
6080015	bb/main	7
6080016	main/rp_lop/main	47
6080017	main/rp_lop/main	30
9410010	main/rp_lop/main	7
Grand Total		809

Table A-6. Location/sites where timing restrictions occur for Chiricauha and northern leopard frogs

Harvest sites---200 foot buffer around tanks with timing restriction

LOCATION/SITE	RX
5330052	uneven-gos
5330054	uneven-gos
5390007	meadow maintenance
5390025	savannah maintenance
5580003	meadow maintenance
Grand Total	

Burning Sites---200 foot buffer around tanks timing restriction

LOCATION/SITE	BURN_RX2
5330052	main/rp_lop/main
5330054	main/rp_lop/main
5390002	bb/main
5390007	lop and scatter
5390025	bb/rp_lop/main
5570014	bb/main
5580003	bb/lop/main
5580006	bb/main
5580040	bb/main
Grand Total	

Table A-7. Location/sites of stream buffers along protected streamcourses for Chiricauha and northern leopard frogs

Harvest Sites—Acres are approximate acres of buffer in the stand, not the entire stand acreage—100 feet either side of protected streamcourse

LOCATION/SITE	RX
5320017	thin from below
5320032	transition maintenance
5330003	pac 9" minus
5330017	pac 9" minus
5330055	transition maintenance
5330061	transition maintenance
5350002	thin from below
5350004	thin from below
5350013	meadow maintenance
5350019	meadow maintenance
5350020	uneven-gos
5350023	savannah maintenance
5350024	uneven-gos
5370002	uneven-gos
5370008	thin from below
5370012	uneven-gos
5370014	meadow maintenance
5390003	uneven-gos
5390005	uneven-gos
5390006	savannah maintenance
5390007	meadow maintenance
5390023	savannah maintenance
5420005	thin from below

LOCATION/SITE	RX
5420007	thin from below
5430015	savannah maintenance
5430016	uneven-gos
5440001	uneven
5440003	thin from below
5440016	tsi
5440017	meadow maintenance
5440019	meadow maintenance
5440026	savannah maintenance
5500014	uneven-gos
5500016	uneven-gos
5500024	uneven-gos
5500030	thin from below
5500034	savannah maintenance
5500040	thin from below
5550004	uneven-gos
5550012	uneven-gos
5550013	tsi
5550014	transition maintenance
5550016	uneven-gos
5560012	savannah maintenance
5570002	uneven-gos
5570003	meadow maintenance
5570007	meadow maintenance
5570037	savannah maintenance
5580003	meadow maintenance
5580004	savannah maintenance
5580009	tsi
5580030	meadow maintenance
5650004	pac 9" minus
5650014	thin from below
5650018	thin from below

LOCATION/SITE	RX
5650022	thin from below
5650023	thin from below
5650024	thin from below
5680007	savannah maintenance
5680016	uneven
5690004	thin from below
5690008	uneven-gos
5690016	savannah maintenance
5690024	uneven-gos
5690028	uneven-gos
5690035	uneven
5770010	transition maintenance
5770014	transition maintenance
5770029	transition maintenance
5780003	savannah maintenance
5780015	thin from below
5790002	uneven-gos
5790003	thin from below
5800006	uneven-gos
5800008	thin from below
5800010	uneven-gos
5800014	uneven-gos
5800015	uneven-gos
5810003	uneven-gos
5810004	uneven-gos
5870004	transition maintenance
5870018	thin from below
5880006	uneven
5880009	savannah maintenance
5880010	savannah maintenance
5880012	thin from below
5880013	uneven-gos

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LOCATION/SITE	RX
5970001	thin from below
5980019	transition maintenance
5980022	thin from below
5980023	uneven-gos
5980028	thin from below
5990011	savannah maintenance
5990019	thin from below
6080004	uneven-gos
6080005	uneven-gos
6080015	uneven
6080016	thin from below
6080017	thin from below
6080024	savannah maintenance
6080031	thin from below
6080037	savannah maintenance
6080065	thin from below
6160014	transition maintenance
6160018	thin from below
6170022	transition maintenance
6170029	transition maintenance
9410003	thin from below
9410004	uneven-gos
9410005	thin from below
9410010	thin from below

stand, not the entire stand acreage -100 foot either side of protected stands

LOCATION/SITE	BURN_RX2
5320008	main/main
5320009	main/main
5320010	main/main
5320016	main/main
5320017	main/rp_lop/main
5320018	main/main
5320031	main/main
5320032	main/rp_lop/main
5330003	hp/main
5330017	hp/main
5330055	main/rp_lop/main
5330056	main/main
5330057	main/main
5330061	main/rp_lop/main
5340001	bb/main
5340003	main/main
5340004	main/main
5340008	main/main
5340009	bb/main
5340012	bb/main
5340013	bb/main
5340015	bb/main
5340018	bb/main
5350002	bb/rp_lop/main
5350004	bb/rp_lop/main
5350005	main/main
5350006	main/main
5350013	main/lop/main
5350019	main/lop/main

LOCATION/SITE	BURN_RX2
5350020	main/rp_lop/main
5350022	main/main
5350023	main/rp_lop/main
5350024	main/rp_lop/main
5360013	main/main
5360015	main/main
5360016	main/main
5370001	main/main
5370002	main/rp_lop/main
5370003	main/main
5370008	main/rp_lop/main
5370010	main/main
5370011	main/main
5370012	main/rp_lop/main
5370014	main/lop/main
5390002	bb/main
5390003	bb/rp_lop/main
5390004	bb/main
5390005	bb/rp_lop/main
5390006	bb/rp_lop/main
5390007	lop and scatter
5390023	bb/rp_lop/main
5420003	bb/main
5420004	bb/main
5420005	bb/rp_lop/main
5420007	bb/rp_lop/main
5420008	bb/main
5430003	bb/main
5430015	bb/rp_lop/main
5430016	bb/rp_lop/main
5430020	bb/main
5430022	bb/main

Burn Sites—No Light zones, acres are approximate acres of buffer in the

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LOCATION/SITE	BURN_RX2
5430026	bb/main
5440001	bb/rp_lop/main
5440003	bb/rp_lop/main
5440005	bb/main
5440006	bb/main
5440014	bb/main
5440015	bb/main
5440016	bb/main
5440017	bb/lop/main
5440019	bb/lop/main
5440024	bb/main
5440026	bb/rp_lop/main
5500001	bb/main
5500003	bb/main
5500005	bb/main
5500006	bb/main
5500012	rp/main
5500014	bb/rp_lop/main
5500016	bb/rp_lop/main
5500018	bb/main
5500019	bb/main
5500024	bb/rp_lop/main
5500027	bb/main
5500030	bb/rp_lop/main
5500034	bb/rp_lop/main
5500040	bb/rp_lop/main
5550001	bb/main
5550004	bb/rp_lop/main
5550010	bb/main
5550011	bb/main
5550012	bb/rp_lop/main
5550013	bb/hp/main

LOCATION/SITE	BURN_RX2
5550014	bb/rp_lop/main
5550016	bb/rp_lop/main
5560008	bb/main
5560012	bb/rp_lop/main
5570002	bb/rp_lop/main
5570003	bb/lop/main
5570007	bb/lop/main
5570008	bb/main
5570011	bb/main
5570012	bb/main
5570037	bb/rp_lop/main
5580001	bb/main
5580003	bb/lop/main
5580004	bb/rp_lop/main
5580006	bb/main
5580009	bb/main
5580012	bb/main
5580014	bb/main
5580025	bb/main
5580027	bb/main
5580029	bb/main
5580030	bb/lop/main
5580032	bb/main
5580038	bb/main
5580041	bb/main
5650004	rp_lop/main
5650009	bb/main
5650012	bb/main
5650014	bb/rp_lop/main
5650016	bb/main
5650017	bb/main
5650018	bb/rp_lop/main

LOCATION/SITE	BURN_RX2
5650022	bb/rp_lop/main
5650023	bb/rp_lop/main
5650024	bb/rp_lop/main
5650025	bb/main
5660004	main/main
5660019	bb/main
5670004	main/main
5670025	main/main
5670027	main/main
5680007	bb/rp_lop/main
5680011	bb/main
5680014	bb/main
5680016	bb/rp_lop/main
5680020	bb/main
5680025	bb/main
5690004	bb/rp_lop/main
5690008	bb/rp_lop/main
5690016	bb/rp_lop/main
5690022	bb/main
5690024	bb/rp_lop/main
5690025	bb/main
5690026	bb/main
5690028	bb/rp_lop/main
5690030	bb/main
5690033	bb/main
5690035	bb/rp_lop/main
5770001	bb/main
5770003	bb/main
5770008	bb/main
5770009	bb/main
5770010	bb/rp_lop/main
5770013	bb/main

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LOCATION/SITE	BURN_RX2
5770014	bb/rp_lop/main
5770015	bb/main
5770016	bb/main
5770017	bb/main
5770018	bb/main
5770019	bb/main
5770025	bb/main
5770028	bb/main
5770029	bb/rp_lop/main
5770030	bb/main
5770031	bb/main
5770032	bb/main
5780002	bb/main
5780003	bb/rp_lop/main
5780008	bb/main
5780010	bb/main
5780012	bb/main
5780015	bb/rp_lop/main
5780017	bb/main
5790002	main/rp_lop/main
5790003	main/mp/main
5790008	bb/main
5790016	bb/main
5790018	bb/main
5790019	main/main
5800006	main/mp/main
5800007	main/main
5800008	main/mp/main
5800010	bb/rp_lop/main
5800011	bb/main
5800014	main/rp_lop/main
5800015	main/rp_lop/main

LOCATION/SITE	BURN_RX2
5800016	main/main
5810003	main/rp_lop/main
5810004	main/rp_lop/main
5810005	main/main
5810007	main/main
5810008	main/main
5810009	main/main
5810010	main/main
5810017	bb/main
5810018	main/main
5870001	bb/main
5870003	bb/main
5870004	bb/rp_lop/main
5870010	bb/main
5870017	bb/main
5870021	bb/main
5870022	bb/main
5880001	bb/main
5880003	bb/main
5880006	bb/rp_lop/main
5880007	bb/main
5880009	main/rp_lop/main
5880010	bb/rp_lop/main
5880012	bb/rp_lop/main
5880013	bb/rp_lop/main
5880015	bb/main
5880016	main/main
5890006	main/main
5890018	main/main
5890025	main/main
5970001	bb/rp_lop/main
5970002	bb/main

LOCATION/SITE	BURN_RX2
5970006	bb/main
5970007	bb/main
5970008	bb/main
5970010	bb/main
5970011	bb/main
5970012	bb/main
5970018	bb/main
5970019	bb/main
5970020	bb/main
5980002	bb/main
5980008	bb/main
5980016	bb/main
5980017	bb/main
5980018	bb/main
5980019	bb/rp_lop/main
5980020	bb/main
5980022	bb/rp_lop/main
5980023	bb/rp_lop/main
5980024	bb/main
5980025	bb/main
5980028	bb/rp_lop/main
5990009	bb/main
5990011	bb/rp_lop/main
5990013	bb/main
5990019	bb/rp_lop/main
5990020	bb/main
5990027	bb/main
5990029	bb/main
5990030	bb/main
5990033	bb/main
5990034	bb/main
6070002	bb/main

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LOCATION/SITE	BURN_RX2
6070004	bb/main
6070005	bb/main
6070006	bb/main
6070009	bb/main
6070018	bb/main
6070021	bb/main
6080004	bb/rp_lop/main
6080005	bb/rp_lop/main
6080009	bb/main
6080011	bb/main
6080012	bb/main
6080014	bb/main
6080015	bb/main
6080016	main/rp_lop/main
6080017	main/rp_lop/main
6080018	bb/main
6080019	bb/main
6080023	bb/main
6080024	bb/rp_lop/main
6080031	bb/rp_lop/main
6080036	bb/main
6080037	bb/rp_lop/main
6080038	main/main
6080047	main/main
6080053	bb/main
6080055	bb/main
6080058	bb/main
6080061	bb/main
6080062	main/main
6080063	main/main
6080065	main/rp_lop/main
6160005	bb/main

LOCATION/SITE	BURN_RX2
6160006	bb/main
6160007	bb/main
6160008	bb/main
6160012	bb/main
6160014	bb/rp_lop/main
6160016	bb/main
6160017	bb/main
6160018	bb/rp_lop/main
6160020	bb/main
6160025	bb/main
6160028	bb/main
6160030	bb/main
6160031	bb/main
6160032	bb/main
6170019	bb/main
6170022	bb/rp_lop/main
6170026	bb/main
6170028	bb/main
6170029	bb/rp_lop/main
6170030	bb/main
6170031	bb/main
6170034	bb/main
6170035	bb/main
6170039	bb/main
9230016	main/main
9400001	bb/main
9410001	bb/main
9410003	bb/rp_lop/main
9410004	bb/rp_lop/main
9410005	main/rp_lop/main
9410010	main/rp_lop/main
11000005	bb/main

LOCATION/SITE	BURN_RX2
11000009	main/main
11000010	bb/main
11000011	bb/main
11000015	main/main
11000018	main/main
11000019	main/main
11040008	main/main

Table A-8. Location/sites of known leafy spurge infestations that require chemical treatment prior to implementation

Design feature—treat prior to implementation on these sites.

Species	Location	Site	Prescription	Burning prescription
Leafy spurge	000539	0002	no treat	bb/main
Leafy spurge	000539	0003	uneven goshawk	bb/rp_lop/main
Leafy spurge	000539	0013	no treat	no treat
Leafy spurge	000539	0016	no treat	no treat
Leafy spurge	000539	0023	savannah maintenance	bb/rp_lop/main
Leafy spurge	000539	0026	savannah maintenance	bb/rp_lop/main
Leafy spurge	000539	0028	no treat	no treat
Leafy spurge	000542	0016	no treat	no treat
Leafy spurge	000542	0018	no treat	no treat
Leafy spurge	000543	0002	savannah maintenance	bb/rp_lop/main
Leafy spurge	000550	0011	no treat	rp/main

Table A-9. Location/sites of proposed treatments in existing and developing old growth stands

Old growth attributes for stands are outlined in pages 70-1 through 70-3 in the Coconino National Forest Plan. Design feature is to maintain old growth characteristics that exist and improve growth in these sites.

Existing Old Growth

Location/Site	Rx	Acres
5330022	thin from below	15
5390005	uneven-gos	36
5390022	uneven	28
5390024	uneven	61
5390029	uneven-gos	22
5420009	thin from below	17
5430016	uneven-gos	62
5440018	thin from below	4
5500010	pac 9" minus	25
5500015	uneven-gos	13
5500021	uneven-gos	35
5500026	uneven-gos	41
5580020	uneven	8
5690007	uneven-gos	15
5690023	thin from below	5
5790001	thin from below	12
5800002	uneven-gos	32
5800017	thin from below	25
5810004	uneven-gos	47
6080035	thin from below	34
Grand Total		537

Developing Old Growth

Loc/Site	Rx	Acres
5350020	uneven-gos	25
5350025	uneven-gos	31
5390023	savannah maintenance	57
5390026	savannah maintenance	61
5430002	savannah maintenance	94
5430005	uneven-gos	125
5430009	uneven-gos	107
5430012	uneven-gos	25
5430028	savannah maintenance	23

Loc/Site	Rx	Acres
5440001	uneven	136
5440003	thin from below	111
5440009	thin from below	45
5440016	tsi	13
5440025	thin from below	42
5440026	savannah maintenance	73
5500014	uneven-gos	36
5500025	savannah maintenance	45
5550004	uneven-gos	45
5550012	uneven-gos	47
5560004	thin from below	48
5560006	thin from below	29
5560007	thin from below	38
5560012	savannah maintenance	14
5570002	uneven-gos	22
5570037	savannah maintenance	38
5570042	savannah maintenance	21
5580015	savannah maintenance	70
5680002	uneven	75
5680007	savannah maintenance	34
5690001	uneven-gos	22
5690003	thin from below	50
5690008	uneven-gos	31
5690034	uneven-gos	24
5690035	uneven	32
5780015	thin from below	23
5790005	thin from below	99
5790011	thin from below	21
5800001	uneven-gos	23
5800003	savannah maintenance	78
5800005	uneven-gos	25
5800014	uneven-gos	71
5800015	uneven-gos	46
5810001	savannah maintenance	24
5810003	uneven-gos	45
5810006	uneven-gos	67
5810016	thin from below	14
5810019	thin from below	36
5870008	thin from below	21
5870009	uneven	141
5890009	uneven-gos	59
5970001	thin from below	112
5990007	uneven-gos	54
6080025	savannah maintenance	25
6080026	uneven-gos	30
6080037	savannah maintenance	72
6160018	thin from below	49

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Loc/Site	Rx	Acres
9410003	thin from below	78
9410005	thin from below	18
Grand Total		2,919

Appendix B. Design Features For The Upper Beaver Creek Watershed Fuel Reduction Project

Integrated project design features are elements of the project that reflect applicable Coconino Forest Plan, Best Management Practices, Regional guidance and Forest Service Manual and Handbook direction. The following are standard design features and are grouped by resource area and project activity.

Thinning and Timber Harvest

The following measures are designed to minimize disturbance to vegetation during logging and thinning activities, and to reduce the potential for and monitor for insect infestations.

- Identify staging areas for heavy equipment to protect existing vegetation surrounding project sites from damage from logging activities.
- The Timber Stand Improvement, Meadow Maintenance and PAC 9” minus thinning will be scheduled between July and December. Minimize creation of green slash between January and June, and monitor the green slash left on site so that if a serious bark beetle (*ips spp.*) infestation develops it can be treated.
- Silvicultural prescriptions would be developed on a site specific basis prior to implementation following guidance provided in the treatment descriptions of the Proposed Action alternative and to promote desired conditions as outlined in Chapter 1 of the EA.
- Existing Gambel oak and alligator juniper trees will not be thinned, thus maintaining these clumps and groups of trees within the stands.

Slash Treatment

This measure is to minimize potential damage to roots, stems, and crowns of retained trees from pile burning.

- In thin and pile areas, pile slash in openings, outside drip lines of retained trees whenever possible.

Soil and Watershed Protection

Best Management Practices (BMPs) are designed prior to project implementation to minimize impacts to soil and water resources, to minimize non-point source pollution, to adhere to the Clean Water Act, and to adhere to the intergovernmental agreement between Region 3 of the Forest Service and the Arizona Department of Environmental Quality. BMPs will be incorporated in applicable thinning harvest, prescribed burning and road use and maintenance activities. The authority and guidance to prescribe and implement BMPs are defined in FMS 2501 and 2530, FHS 2509.22. Where applicable, standard timber sale contract provisions, such as BT and CT clauses, will be used to implement BMPs.

Thinning and Timber Harvest

- Do not operate equipment when ground conditions are such that soil compaction can occur (BMP 24.13, 41.27). Timber Sale Contract Provision BT6.6 can be used to suspend operations because of wet or saturated soils in order to protect soil and water resources.
- Designated skid trails and log landings will be required within the Timber Sale Contract on all cutting units (BT6.422, CT6.4# and BMP 24.18). Skid trail design should not have long, straight skid trails that would direct water flow. Skid trails should also be located out of filter strips (exceptions are at approved channel crossings).
- Felling to the lead will be required within the Timber Sale Contract to minimize ground disturbance from skidding operations (CT6.4# and BMP 24.18).
- The designation of filter strips minimizes on-site soil movement from timber harvest activities along stream courses (BMP 24.16). These stream reaches will be designated as protected stream courses. Locations of protected stream courses are included in the **Sale Area Map (SAM)** and will be designated with a protected stream course designation (BT6.5). The following are recommendations to protect stream courses within the proposed tree thinning harvest units. The guidelines for filter strip designation are as follows:

Riparian stream course: 1 chain (66 feet) on each side of stream course.

Non-riparian stream course: ½ chains (33 feet) on each side of stream course.

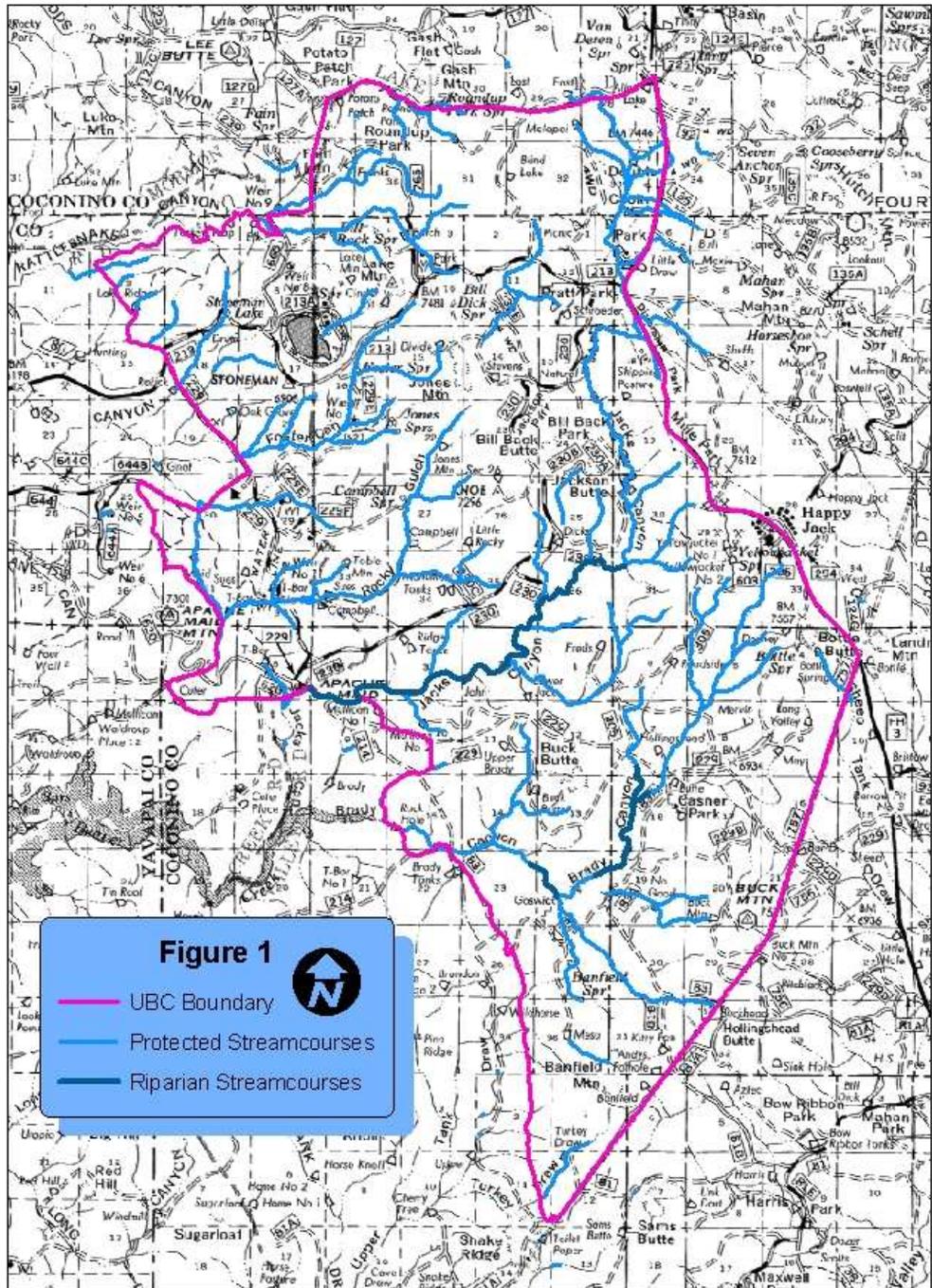
Accepted harvest activities within riparian and non-riparian filter strips include limited skidding and mechanized tree felling. Landings, decking areas, machine piles, skid trails, and roads (except at designated crossings) will be designated outside of riparian and non-riparian filter strips (see map below of locations) contains maps showing the protected stream courses for the project. Note: the distance of buffers and allowed activities within the buffers have been expanded under the protection measures for the Chiricahua and Northern Leopard Frog.

- The Timber Sale Contract outlines the timing and application of erosion control methods (clauses BT6.31, BT6.6, BT6.63, BT6.64, BT6.65, CT6.6, CT6.601#, and CT6.602, and BMP 24.23) to minimize soil loss and sedimentation to stream courses. Seed mix can include any of the following certified weed free native species at a minimum of 5 lbs/acre pure live seed:
 - Arizona fescue (*Festuca arizonica*)
 - Screwleaf muhly (*Muhlenbergia virescens*)
 - Western wheatgrass (*Elymus smithii*)
 - Mountain muhly (*Muhlenbergia Montana*)
 - Purple geranium (*Geranium caespitosum*)
 - Western yarrow (*Achillea millefolium*)
 - Pussytoes (*Antennaria marginata*)
 - Arizona peavine (*Lathyrus arizonicus*)
 - Fringed sagebrush (*Artemisia frigida*)

The seed mix can contain a mixture of all or some of these suggested species, but should not contain all of these species and should include at least 1 grass species. The seed mix depends on the availability of these species.

Corresponding BMP's to minimize soil loss and sedimentation of include 24.21, 24.22, 24.23, 24.24, and 24.25. Erosion control on the skid trails in the harvest areas primarily will be by spreading slash. Other acceptable erosion control measures include, but are not limited to, water barring (water bars should not be more than two feet deep and need at least a ten foot

Protected Streamcourses



leadout), removing berms, seeding, mulching and cross-ripping. Erosion control after skidding operations must be timely to minimize the effects of log skidding.

- All fueling of vehicles will be done on a designated protected, upland site (BMP 41.18).
- For any storage facilities for oil or oil products in the Timber Sale Area, the purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States (**BT6.341 Prevention of Oil Spills**)
- If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, a Spill Prevention Control and Countermeasures Plan will be prepared by the purchaser. Such plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.
- The purchaser shall notify Contracting Officer and appropriate agencies of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of Sale Area that are caused by Purchaser's employees agents, contractors, Subcontractors, or their employees or agents directly or indirectly, as a result of Purchaser's Operations. Purchaser will take whatever initial action may be safely accomplished to contain all spills.
- If logging or construction crews are to live on-site, then an approved camp and suitable sanitation facilities must be provided.

Fuel Treatments and Prescribed Burning

- Mechanical fuel treatments will not occur on slopes greater than 25% slope (BMPs 24.17, 25.17). To accomplish this, fuel treatments will be designated within the Timber Sale Contract through #CT6.7 and on the Sale Area Map with the "Mpile/lop" (machine pile/lop and scatter) designation.
- On areas to be prescribed burned, fire prescriptions should be designed to minimize soil temperatures over the entire area. Fire prescriptions should be designed so that soil and fuel moisture temperatures are such that fire intensity is minimized and soil health and productivity are maintained (BMPs 31.11 and 31.12).
- On areas to be prescribed burned, establish filter strips averaging 1 chain (66 feet) buffer on each side of riparian stream courses and an average of ½ chain (33 feet) buffers on each side of non-riparian stream courses to filter sediments that may be mobilized from the burn (BMP 31.12). Do not ignite fuels within this buffer area. Some burning may creep into the buffer strip, but an average buffer width by stream type will be maintained.

Road Maintenance

- Do not blade roads when the road surface is too dry. If the road surface is too dry, a water truck can apply water, or the project can be scheduled for when adequate moisture occurs to complete the project (BMP 41.1).
- Road drainage is controlled by a variety of methods (BMP 41.14), including rolling the grade, insloping, outsloping, crowning, water spreading ditches, and contour trenching. Sediment loads at drainage structures can be reduced by installing sediment filters, rock and vegetative energy dissipaters, and settling ponds. Design

of roads is included in the transportation plan of the Timber Sale Contract, and T-specs.

- Road maintenance (BMP 41.25 and BT5.4) through the Timber Sale Contract will require pre- and post-haul maintenance on all roads to be used for haul.

Wildlife

Project design features have been developed to reduce impacts to wildlife from project activities and to benefit wildlife habitat through project design and implementation. Other measures are designed to mitigate effects to Threatened, Endangered and R3 Sensitive wildlife (TES) species and their habitat. Many of the following design features will protect fisheries resources.

General Wildlife (Common to all species and habitats)

- New locations of T&E, Sensitive species, and nesting sites within the project area or in an activity area, burn block, thinning area, will be reported to the wildlife biologist when found and apply appropriate design features for the species.
- In PAC 9” minus thinning, timber stand improvement and meadow maintenance units, cut trees and slash will be placed away from large oak and yellow pine and clumps of oak trees prior to burning.
- Direct ignition of logs and snags will be avoided during prescribed burning.
- Retain and emphasize in silvicultural prescriptions and during prescribed burning the clumpy nature of pine stands interlocking crowns for trees >12” dbh during thinning treatments.
- Thin developing old growth using a prescription to promote increased growth rates and maintain and promote old-growth characteristics.

Mexican Spotted Owl

- When implementing sale and prescribed burning preparation activities, minimize noise disturbance in the PAC’s during the breeding season.
- Designate a 100 acre “no treatment buffer” around known core nest areas within protected activity center (PACs).
- Trees to be thinned in PACs will be < 9”dbh to reduce ladder fuels and abate fire risk in the PAC and WUI.
- Within a PAC, thinning slash will be located in openings away from down logs > 12” dbh where possible.
- Hand piles will be burned when potential for creep is minimal.
- Snags > 18” dbh in PACs will be emphasized for protection. Protection measures could include lining, or not igniting near the snag.
- Prior to burning in the PAC, down logs (>12”dbh), snags (>18”dbh), oak trees (>10”drc), and yellow pine will be lined to prevent their loss where possible.
- Retain large downed logs, woody debris > than 12” dbh, clumps of broad leafed woody vegetation and hardwood trees larger than 10” drc in PACs 040402, 040411, and 040429 and should be emphasized in entire project area.

- Aim to not burn more than 200 acres in a PAC per year to minimize disturbance. Test burning will be conducted prior to burning within PACs and restricted habitat, including target/threshold habitat to ensure that conditions are adequate to meet the following objectives where they occur:
 - Retain 80% of conifers greater than 18” and Gambel oaks >14” drc in all habitats
 - Retain 80% of snags and 70% downed logs in protected, restricted and target/threshold habitat
 - Retain 70% of small oaks (5”drc up to 14”drc) in all habitats
 - Retain 70% snags and 60% of downed logs in unrestricted habitat
- If prescribed burning occurs within a ½ mile of a PAC during the breeding season, the days selected for ignition should have good or better ventilation to limit heavy concentrations of smoke for extended periods of time in the PAC(s).
- Core nest areas have not been delineated in Weir, Roundup, and Gash Mountain PAC’s. No treatments may occur within ½ mile of PAC boundaries during the breeding season until the core nest sites are delineated in these PACs.
- See also the design features for snags, logs, old growth, cover, mice, voles, shrews, and frogs and clumpy-groupy silvicultural prescription.

Bald Eagle

- A 300 foot no action area buffer would be designated around known nests and roosts. A no action buffer would be designated around any new roosting area or nest.
- Road developments, including temporary roads will avoid known nests, roosts and the 300 foot no action area buffer.
- Maintain to the greatest extent possible large snags > 18” dbh for roosting on slopes and near water bodies, roads or big game migration areas.
- See also the design features for snags, logs, old growth, cover, mice, voles, shrews, frogs and clumpy prescription.

Northern Goshawk

- Prescribed burning may occur during the breeding season in Brady Butte and Bottle Butte PFAs. No more than 200 acres within a PFA may be burned in a given year.
- Thinning may occur within PFA Bottle Butte if the PFA is called (surveyed using R-3 protocol) prior to proposed thinning and no birds respond within the PFA. If birds are found, there will be no thinning in the respective PFAs during the breeding season (March 1 to September 30).
- In Lake Mountain PFA, the MSO design feature that limits burning and thinning will take precedence over the Northern Goshawk design features. There will be no prescribed burning or thinning in Lake Mountain PFA from September 1 to September 30 (outside of the MSO breeding season).
- If prescribed burning occurs inside a PFA or within a ½ mile of a PFA during the breeding season, the days selected for ignition should have good or better ventilation to limit heavy concentrations of smoke for extended periods of time in the PFAs.

- Snags and down logs in PFAs will be emphasized for protection during prescribed burning. Protection measures could include lining, or not igniting near the snag or log.
- See also the design features for snags, logs, old growth, cover, mice, voles, shrews, frogs and clumpy prescription.

Common Blackhawk and Ferruginous Hawk

- If a nest is found during project implementation, leave 50 feet around active nest uncut.
- Design features for frogs, cinnamon teal, shrews, voles and mice will afford protection to species and habitat for the common blackhawk and ferruginous hawk.
- See also the design features for snags.

American Peregrine Falcon

- Thinning and burning will not be allowed within 0.6 miles of a peregrine eyrie from March 1-August 15.

Location/site	RX	ACRES	Location/site	BURN_RX2	ACRES
5330001	thin from below	0	5330021	main/rp_lop/main	19
5330003	pac 9" minus	1	5330023	bb/main	1
5330005	transition maintenance	2	5330024	bb/rp_lop/main	9
5330006	transition maintenance	50	5330025	main/rp_lop/main	27
5330012	transition maintenance	48	5330055	main/rp_lop/main	31
5330017	pac 9" minus	17	5330060	main/main	5
5330020	transition maintenance	11	5330061	main/rp_lop/main	79
5330021	transition maintenance	19	5330062	main/main	4
5330024	thin from below	9	5340003	main/main	88
5330025	transition maintenance	27	5340004	main/main	5
5330055	transition maintenance	31	5340018	bb/main	5
5330061	transition maintenance	79	5550001	bb/main	29
5650018	thin from below	44	5550010	bb/main	39
Grand Total		338	5550011	bb/main	6
5330001	main/rp_lop/main	0	5650007	bb/main	5
5330003	hp/main	1	5650008	bb/main	0
5330005	main/rp_lop/main	2	5650016	bb/main	17
5330006	main/rp_lop/main	50	5650017	bb/main	24
5330011	bb/main	37	5650018	bb/rp_lop/main	44
5330012	main/rp_lop/main	48	Grand Total		765
5330013	main/main	33			
5330014	main/main	67			
5330016	bb/main	50			
5330017	hp/main	17			
5330019	main/main	13			
5330020	bb/rp_lop/main	11			

- Design features for frogs, cinnamon teal, shrews, voles and mice will afford protection to species and habitat for the American peregrine falcon.

Burrowing Owl (western)

- Design features for shrews, voles and mice will afford protection to species and habitat for the burrowing owl.

Merriams's Shrew, Dwarf Shrew, Wupatki Arizona Pocket Mouse, Navajo Mogollon Vole, Long Tailed Vole and Butterflies: Four Spotted Skipperling, Nokomis Fritillary, and Nitocris Fritillary

- Implement prescribed burning to obtain a patchy mosaic of burned and unburned areas in habitat. Aim to achieve roughly a 30% to 70% burned/unburned ratio per entry in grassland and meadow areas.
- Implement soil and water BMPs, designated skid trails and landings for equipment in ephemeral channels. No motorized equipment in meadows.
- Thinning will target conifer encroachment along edges of meadows and grasslands.
- Design Features for leopard frogs regarding soils will also afford protection.

Allen's Lappet-browed Bat, Pale Townsend's Big-Eared Bat, Greater Western Mastiff Bat

- Retain snags > 18" dbh that have sloughing bark; do not cut – line snags if possible.
- Emphasize retention of snags > 18" around water sources and also at tops of slopes and ridges unless a human safety risk.

Aberts squirrel

- Silvicultural prescriptions will strive to retain interlocking crowns in clumps and groups where current stand structure allows.

Pygmy Nuthatch

- See the design features for bats, voles, shrews and mice, Aberts squirrel and snag retention.

Turkey

- Retention of 5-10 tons/acre of course woody debris on-site after the prescribed burns (outside of the ¼ mile buffer around private lands) to provide for habitat.
- See also the design features for cover, logs, and the Chiricahua leopard frog.

Elk and Mule Deer

- See the design features for cover, logs, and Chiricahua leopard frog.

Hairy Woodpecker

- See the design features for bats, old growth and snags.

Juniper (Plain) Titmouse

- No snags will be directly ignited in prescribed fire treatments in pinyon-juniper woodlands.
- See also the design features for mice, voles and shrews.

American Pronghorn

- Design features for elk and mule deer apply.
- See also the design features for frogs, cover, mice, voles and shrews

Lincoln's Sparrow

- See design features for shrews, voles and mice.

Cinnamon Teal

- See design features for leopard frogs (Chiricahua and Northern)

Coopers Hawk

- Known nests will be protected by a no thinning harvest buffer of 15 acres.

Location/Site	RX	BURN_RX2	Acres
5780004		bb/main	3
5780012		bb/main	13
Grand Total			16

- If a nest is found during project implementation or from surveys, a 15 acre no treatment buffer will be designated by the project wildlife biologist.

Habitat Components

Cover

- Thermal and hiding cover Forest Plan requirements will be met in all alternatives through project design and implementation of silvicultural and prescribed prescriptions to maintain effective cover in wildlife corridors and drainages.

Snags

- Snags will be emphasized for retention during implementation along stringers, dependable water sources, and the pinyon-juniper woodland interface.
- Future snags will be identified for retention during timber sale layout using the following guidelines:
 - obvious culls with conks and cavities present,

- less than one-third merchantable tree including wolfy and crooked trees,
 - spiketops less than one-half merchantable,
 - any tree expected to die before expected harvest of the sale being marked,
 - mistletoe and genetically poor trees will not be left unless they are planned to be killed
 - Apply Forest Plan snag definitions for ponderosa pine/mixed conifer, aspen and oak.
 - Trees identified as future snags will be designated for retention within the Timber Sale or Stewardship contract either through marking the tree or designation in the AT and BT clauses.
- Snags will not be directly ignited during prescribed burns.
 - Hazard trees along Forest roads must meet the following criteria: a snag must lean toward the road and must be tall enough to reach the road if the snag fell. Any snag not meeting both requirements will not be marked for removal as a hazard snag.
 - Design features for bats, MSO and northern goshawk and MSO/goshawk will also maintain the snag component.

Aquatic Habitat

- Design features for leopard frogs and cinnamon teal will be protective for aquatic habitat.

Grassland/Savannah

- Design features for voles, mice, shrews will be protective for grasslands and savannahs.

Fisheries

- The design features for soil and water and wildlife will protect fish and aquatic habitat.

Sensitive Plants

The following measures will mitigate effects to known and potential habitat for Arizona sneezeweed and Flagstaff beardtongue. Use of BMPs for soil and watershed protection during project design and implementation will also mitigate effects to sensitive plant populations.

- Mitigate loss of individuals and groups of Flagstaff beardtongue and Arizona sneezeweed during management activities by avoiding known locations. See Table below for location and sites of known locations that need to be protected.

Species	Location	Site	Harvest Prescription	Burning prescription
Flagstaff beardtongue	532	19		main/main
Flagstaff beardtongue	533	6	transition maintenance	main/rp_lop/main
Flagstaff beardtongue	533	54	uneven goshawk	main/rp_lop/main

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Species	Location	Site	Harvest Prescription	Burning prescription
Flagstaff beardtongue	533	61	transition maintenance	main/rp_lop/main
Flagstaff beardtongue	534	3		main/main
Flagstaff beardtongue	534	12		bb/main
Flagstaff beardtongue	534	14		bb/main
Flagstaff beardtongue	535	1		bb/main
Flagstaff beardtongue	535	2	thin from below	bb/rp_lop/main
Flagstaff beardtongue	565	4	pac 9" minus	rp_lop/main
Flagstaff beardtongue	565	7		bb/main
Flagstaff beardtongue	565	13		bb/main
Flagstaff beardtongue	565	15		bb/main
Flagstaff beardtongue	565	17		bb/main
Flagstaff beardtongue	565	18	thin from below	bb/rp_lop/main
Flagstaff beardtongue	565	20		bb/main
Flagstaff beardtongue	565	23	thin from below	bb/rp_lop/main
Flagstaff beardtongue	578	3	savannah maintenance	bb/rp_lop/main
Flagstaff beardtongue	587	9	uneven	bb/rp_lop/main
Flagstaff beardtongue	597	10		bb/main
Flagstaff beardtongue	598	5		bb/main
Flagstaff beardtongue	598	8		bb/main
Flagstaff beardtongue	598	12		bb/main
Flagstaff beardtongue	598	14	thin from below	bb/rp_lop/main
Flagstaff beardtongue	598	20		bb/main
Flagstaff beardtongue	598	21		bb/main
Flagstaff beardtongue	598	26		bb/main
Flagstaff beardtongue	599	4		bb/main
Flagstaff beardtongue	599	5		bb/main
Flagstaff beardtongue	599	7	uneven goshawk	bb/rp_lop/main
Flagstaff beardtongue	599	14	thin from below	bb/rp_lop/main
Flagstaff beardtongue	599	24		bb/main
Flagstaff beardtongue	599	26		bb/main
Flagstaff beardtongue	600	16		main/main
Flagstaff beardtongue	600	26		main/main
Flagstaff beardtongue	607	10		bb/main
Flagstaff beardtongue	608	5	uneven goshawk	bb/rp_lop/main
Flagstaff beardtongue	608	20		bb/main
Flagstaff beardtongue	608	23		bb/main
Flagstaff beardtongue	608	27		bb/main
Flagstaff beardtongue	608	28		bb/main
Flagstaff beardtongue	608	31	thin from below	bb/rp_lop/main
Flagstaff beardtongue	608	35	thin from below	bb/rp_lop/main
Flagstaff beardtongue	608	36		bb/main
Flagstaff beardtongue	608	37	savannah maintenance	bb/rp_lop/main
Flagstaff beardtongue	608	40		bb/main
Flagstaff beardtongue	608	43		bb/main
Flagstaff beardtongue	608	51		main/main
Flagstaff beardtongue	608	55		bb/main
Flagstaff beardtongue	608	65	thin from below	main/rp_lop/main

Species	Location	Site	Harvest Prescription	Burning prescription
Flagstaff beardtongue	616	2		bb/main
Flagstaff beardtongue	616	3		bb/main
Flagstaff beardtongue	616	6		bb/main
Flagstaff beardtongue	616	9		bb/main
Flagstaff beardtongue	616	11		bb/main
Flagstaff beardtongue	616	15	uneven goshawk	bb/rp_lop/main
Flagstaff beardtongue	616	19		bb/main
Flagstaff beardtongue	617	4		bb/main
Flagstaff beardtongue	617	10	thin from below	bb/rp_lop/main
Flagstaff beardtongue	617	19		bb/main
Flagstaff beardtongue	617	20		bb/main
Flagstaff beardtongue	617	21		bb/main
Flagstaff beardtongue	617	22	transition maintenance	bb/rp_lop/main
Flagstaff beardtongue	617	29	transition maintenance	bb/rp_lop/main
Flagstaff beardtongue	617	30		bb/main
Flagstaff beardtongue	617	32	transition maintenance	bb/rp_lop/main
Flagstaff beardtongue	617	34		bb/main
Flagstaff beardtongue	617	44		bb/main
Flagstaff beardtongue	941	1		bb/main

- Restrict management activities in drainages through contract language during commercial activities. This will mitigate effects to Arizona sneezeweed potential habitat.
- Thinning slash and burn control lines should not be placed within plant populations. Appropriate firing techniques to keep the fire intensity low and the use of no mechanized control lines should be used to minimize the effect of burning on known populations.
- Prohibit slash pile construction within populations of Flagstaff beardtongue and Arizona sneezeweed. Construct slash piles at least 10 to 20 feet away from populations of Flagstaff beardtongue and Arizona sneezeweed.
- Prohibit temporary road construction or road reconstruction within populations of Flagstaff beardtongue and Arizona sneezeweed.

Noxious or Invasive Weeds

The following measures are designed to reduce the potential for introduction or spread of invasive or noxious weeds. Best Management Practices and Recommended Activities for management of noxious and invasive weeds prior to and during implementation of the Upper Beaver Creek Watershed Fuel Reduction Project are described in Appendix B of the EA.

- Place slash piles on previously used locations such as old piling sites, old log deck sites, or other disturbed sites to avoid severe disturbance to additional locations where possible.
- Treat weed infestations within stands before implementing treatments. See Table A-8 in Appendix A for known location and sites of leafy spurge. Inspect areas

proposed to be treated with herbicides to ensure that surface or ground water contamination does not occur.

- Avoid known populations of noxious or invasive weed during project activities.
- Prevent the spread of potential and existing noxious or invasive weeds by vehicles used in management activities by incorporating weed prevention and control into project layout, design, and implementation.
- Fully incorporate the BT6.35 Equipment Cleaning clause into the timber sale contract to prevent the introduction or spread of noxious or invasive weeds. The key provisions of this clause are listed below. The full clause is contained in Appendix B, “Noxious or Invasive Weeds Best Management Practices and Recommended Activities for the Upper Beaver Creek Watershed Fuel Reduction Project”.
 - **BT6.35** Areas, known by Forest Service prior to timber sale advertisement, that are infested with invasive species of concern are shown on Sale Area Map. A current list of invasive species of concern and a map showing the extent of known infestations is available at the Forest Supervisor’s Office. For purposes of this provision, “Off-Road Equipment” includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.
 - Purchaser shall adhere to the following requirements with regard to cleaning “Off-Road Equipment”:
 - (i) Prior to moving Off-Road Equipment onto the Sale Area, Purchaser shall identify the location of the equipment's most recent operation. Purchaser shall not move any Off-Road Equipment that last operated in an area infested with one or more invasive species of concern onto Sale Area without having cleaned such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and having notified Forest Service, as provided in (iii). If the location of prior operation cannot be identified, then Purchaser shall assume that the location is infested with invasive species of concern. See Appendix B for the rest of the text for the BT6.35 clause.
- When in areas where known noxious weeds exist, designate turnaround sites for log trucks that are weed free.
- For Forest Service implementation crews, clean off-road equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds before entry into a project area. Clean vehicles, machinery and tools before moving from infested areas into uninfested areas.
- Incorporate equipment-cleaning clauses, such as BT6.35 that is used in timber sale contracts, into all implementation contracts.
- Manage prescribed fires as an aid to control of existing weed infestations and to prevent the spread of existing weeds.

Recreation and Special Uses

The following measures are designed to prevent impacts or damage to trails, developed recreation sites, and physical infrastructure associated with lands special use permits, such as pipelines or other facilities.

- Protect developed sites during vegetation and prescribed fire/fuels treatments.
- Coordinate with Lowell Observatory prior to and during scheduled prescribed fire/fuels treatments in the project area.

Public Health and Safety

The following measures are designed to: minimize impacts to campers and hunters during prescribed burns that coincide with hunting seasons; provide public information and notification about prescribed fire implementation; prevent injury or damage to private citizens, agency personnel, and or private property; and to prevent electrical power outages caused by management activities

- Notify the public by placing signs in conspicuous locations at least one week prior to and during prescribed burning. This would include maps of the boundaries of the scheduled burns.
- Notify smoke-sensitive individuals and other private landowners in the area through the media (signs, newsletters, personal communication etc.) prior to prescribed burns.
- Hazard trees resulting from prescribed burning operations would be felled if they are leaning towards and are within one and one half tree lengths of open roads or established dispersed recreation sites.
- Coordination with Arizona Public Service will occur when vegetation treatments and prescribed burning/fuels treatments are scheduled to take place adjacent to the Flagstaff to Happy Jack power line that is in the analysis area.
- Coordination with the Western Power Administration will occur when vegetation treatments and prescribed burning/fuels treatments are scheduled to take place adjacent to the 345 KW power line that forms the southeastern boundary of the analysis area.

Air Quality

The following measures are designed to minimize impacts to the Verde Valley, local residents, the Discovery Channel Telescope, and to forest visitors caused by heavy smoke conditions from prescribed burning.

- All burning will be coordinated daily with the Arizona Department of Environmental Quality (ADEQ). Burning will not take place on any portion of the project without prior approval from ADEQ. Coordination with ADEQ will take place through the Coconino National Forest Zone Dispatch Center and the Prescribed Burning Boss.
- Control the duration of heavy smoke conditions. The following guidelines will be initiated when heavy smoke conditions are occurring.
 - New ignitions should not occur for more than three concurrent days within the project area unless overnight smoke conditions in affected populated areas are known to be minimal.
 - Burning will be conducted early in the day or at night to allow heavy materials time to be consumed, and give smoke most of the day to disperse.

- Smoke from prescribe burning activities of adjacent districts and Forests will be considered in scheduling prescribe burn ignitions in the analysis area.
- Avoid burning on Saturday and/or Sunday unless ventilation is very good to excellent.
- Burn with winds that will carry smoke away from the Verde River Airshed or reduce acreage burned when adverse winds occur unless there is a safety concern in the urban interface or near FH-3.
- Take advantage of spring burning where possible to minimize impacts to local air quality.

Scenery and Visual Quality

This measure is to minimize visual impacts along public travel corridors and adjacent to private property.

- Stumps would be cut 6 inches or less from the ground within 50 feet of FH3, and FR213, FR305, and FR229. Stumps would be cut 6 inches or less from the ground 100 feet from developed private lands.

Cultural and Historical Resource Protection

The purposes of the following measures are to protect significant, documented or undocumented archaeological sites in the project area and to minimize potential damage from ground disturbing activities. Measures are also designed to protect flammable components of sites and to protect sites from damage from high intensity prescribed burning.

- The project administrator is responsible for coordinating with the District or Forest Archaeologist in advance of project activity implementation in order to comply with the conditions of the cultural resources clearance. Enough lead time will be provided to conduct pre-implementation survey or site marking work if needed.
- Archaeological sites will be marked for avoidance in the field prior to implementation of activities. Sites will be lined and monitored as needed during prescribed burning operations.
- Report previously undocumented archaeological sites if discovered during project activities to the District or Forest Archaeologist. Such sites will be avoided and protected from project activities. Should sites be damaged by project activities, it must be reported to the District or Forest Archaeologist and all work in the vicinity of the site must cease.
- Provisions for the protection of Cultural Resources will be included in any contract implemented for the project.

Range

The following measures are designed to: minimize disturbance to grazing management activities during project implementation; avoid damage to range fences; and to provide for repair of damaged fences to keep livestock in their proper pastures.

- Coordinate vegetation management and prescribed burning activities with the District Rangeland Management Specialist and range permittees to allow for livestock grazing deferment of prescribed burn sites for a minimum of one growing season (approximately 1 year).
- Avoid fences, if possible, while implementing thinning activities. If this is not possible, remove portion of fences affected and reconstruct immediately, to proper standards, following project activities.
- Avoid fences, if possible, while implementing prescribed burning activities. Damaged portions of fence will be reconstructed immediately, to proper standards, following project activities.

list of invasive species of concern.

APPENDIX C: LITERATURE CITED

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APPENDIX D. ABBREVIATIONS, ACRONYMS AND GLOSSARY

ABBREVIATIONS and ACRONYMS

cbh	Crown base height
dbh	Diameter of the tree at breast height
ADEQ	Arizona Department of Environmental Quality
AZGFD	Arizona Game and Fish Department
BCEW	Beaver Creek Experimental Watershed
BpS	Biophysical Setting
FRCC	Fire Regime Condition Class
FSVeG	Field Sampled Vegetation, a national database
FVS	Forest Vegetation Simulator
FSVeG	Field Sampled Vegetation
GIS	Geographic Information Systems
INFORMS	Integrated Forest Resource Management System
JUPI1	Pinyon-Juniper type
KV	Kilovolt
K-V	Knutson-Vandenburg
MA	Management Area
MGRA2	Mountain Grassland type with trees
MIS	Management Indicator Species
MSN	Most Similar Neighbor
MSO	Mexican spotted owl
NFP	National Fire Plan
NEPA	National Environmental Policy Act
NFP	National Fire Plan
PAC	Protected Activity Center, Mexican spotted owl
PFA	Northern goshawk post fledging area
PPIN5	Colorado Plateau Ponderosa pine type
PPIN7	Southwest Ponderosa pine type
RFSS	Regional Forester's Sensitive Species
SAM	Sale Area Map
SAV	Submergent aquatic vegetation
SDI	Stand Density Index
TPA	Trees Per Acre
TMDL	Total Maximum Daily Load

QMD Quadratic Mean Diameter
WUI Wildland Urban Interface

Glossary

Active Crown Fire: Active crown fire—A **crown fire** in which the entire **fuel complex** becomes involved, but the crowning phase remains dependent on heat released from the **surface fuels** for continued spread. Also called **running** and **continuous crown fire**.

Canopy Closure: Canopy closure is the degree to which the forest canopy blocks sunlight or obscures the sky. It is related to the number and size of trees. High degrees of canopy closure result in a higher potential to sustain active crown fire. Canopy closures of 50% and greater have a *very high* potential for sustaining active crown fire while canopy closures of 40-50% have a *high* potential for sustaining active crown fire.

Conditional crown fire—A potential type of fire in which conditions for sustained active crown fire spread are met but conditions for crown fire initiation are not. If the fire begins as a surface fire then it is expected to remain so. If it begins as an **active crown fire** in an adjacent stand, then it may continue to spread as an active crown fire.

Crown base height: Crown base height, (cbh) is the distance from the ground to the lowest green limb. The general rule of thumb is, the lower the crown base height, the easier it is for a crown fire to be initiated.

Critical habitat: refers to specific geographic areas that are essential for the conservation of a threatened or endangered species and that may require special management considerations. Critical habitat is made up of the physical and biological features necessary for the species' survival; these features are found in restricted and protected habitats.

Crown bulk density: Crown Bulk Density is a measure of canopy fuels used in fire behavior modeling applications. Typically it is the weight of fine canopy fuels (leaves, needles, smaller branches, etc.) divided by the total canopy volume.

FARSITE: FARSITE is a fire growth simulation model. It uses spatial information on topography and fuels along with weather and wind files. FARSITE incorporates the existing models for surface fire, crown fire, spotting, post-frontal combustion, and fire acceleration into a 2-dimensional fire growth model.

Fire Regime Condition Class

Fire regime is a general description of fire's role in the ecosystem. Fire regime is characterized by fire frequency, seasonality, intensity, duration, scale and regularity/variability (Agee 1993)

Characteristic vegetation and fuel conditions are considered to be those that occurred within the natural (historical) fire regime. Uncharacteristic conditions are considered to be those that did not occur within the natural (historical) fire regime, such as invasive species (e.g. weeds, insects, and diseases), "high graded" forest composition and structure (e.g. large trees removed in a frequent surface fire regime), or repeated annual grazing that maintains grassy fuels across relatively large areas at levels that will not carry a surface fire. Determination of the amount of departure is based on comparison of a composite measure of fire regime attributes (vegetation characteristics; fuel composition; fire frequency, severity and pattern)

to the central tendency of the natural (historical) fire regime. The amount of departure is then classified to determine the fire regime condition class. A simplified description of the fire regime condition classes and associated potential risks are shown in the table below (Hann, Wendel, Havlina, Doug, Shlisky, Ayn, et al. 2003. Interagency and The Nature Conservancy fire regime condition class website, USDA Forest Service, US Department of the Interior, The Nature Conservancy, and Systems for Environmental Management) [frcc.gov].

Fire Regime Condition Class	Description	Potential Risks
Condition Class 1	Within the natural (historical) range of variability of vegetation characteristics, fuel composition, fire frequency, severity and pattern, and other associated disturbances.	Fire behavior, effects, and other associated disturbances are similar to those that occurred prior to fire exclusion (suppression) and other types of management that do not mimic the natural fire regime and associated vegetation and fuel characteristics. Composition and structure of vegetation and fuels are similar to the natural (historical) regime. Risk of loss of key ecosystem components (e.g. native species, large trees, and soil) are low.
Condition Class 2	Moderate departure from the natural historical regime of vegetation characteristics, fuel composition, fire frequency, severity and pattern, and other associated disturbances.	Fire behavior, effects and other associated disturbances are moderately departed (more or less severe). Composition and structure of vegetation and fuel are moderately altered. Uncharacteristic conditions range from low to moderate.
Condition Class 3	High departure from the natural (historical) regime of vegetation characteristics, fuel composition, fire frequency, severity and pattern, and other associated disturbances	Fire behavior, effects and other associated are highly departed (more or less severe). Composition and structure of vegetation and fuel are highly altered. Uncharacteristic conditions range from moderate to high. Risk of loss of key ecosystem components are high.

FSVeg: Field sampled vegetation, a national database.

Hiding cover: Hiding cover is defined as “vegetation capable of hiding 90% of a standing deer or elk from human view at a distance of 200 feet or less”. High tree crown closure also provides hiding cover from aerial predators.

INFORMS: Integrated Forest Management System is a software program designed to help support project-level NEPA and landscape-level planning. INFORMS was used on this project to perform nearest neighbor analysis of stand data and to model treatment prescriptions for vegetation thinning and prescribed burning.

Juniper-Pinyon Frequent Fire Type (JUPI1): The Juniper-Pinyon setting is also referred to as Pinyon-Juniper, or P-J. Pinyon and Juniper tree species are the dominant overstory vegetation, while grass and forbs are found in the understory. Oak species are also commonly present, either in tree form or shrub form. This vegetation type follows a middle

elevation range that runs between the ponderosa pine forest and the desert. The type of P-J found in the UBC project area is a frequent fire type, meaning that fire occurs every 30 to 100 years, which is a short to moderate time interval for this vegetation type. Fire severity varies, meaning that in some places only grass will burn and in others the trees themselves will burn.

Mountain Grassland With Trees (MGRA2): Areas classified as Mountain Grassland in the project area are generally small in size. Grass and forbs are the dominant vegetation in these areas, historically allowing fire to burn every 5 to 20 years. Some of these areas have larger trees scattered across the meadow.

NEXUS: NEXUS 2.0 is crown fire hazard analysis software that links separate models of surface and crown fire behavior to compute indices of relative crown fire potential. Use NEXUS to compare crown fire potential for different stands, and to compare the effects of alternative fuel treatments on crown fire potential. NEXUS includes several visual tools useful in understanding how surface and crown fire models interact.

Passive Crown Fire: **Passive crown fire**—A crown fire in which individual or small groups of trees torch out, but solid flaming in the canopy cannot be maintained except for short periods. Passive crown fire encompasses a wide range of crown fire behavior from the occasional torching of an isolated tree to a nearly active crown fire. Also called torching and candling. See also **intermittent crown fire**.

Ponderosa Pine Colorado Plateau (PPIN5): The Ponderosa Pine Colorado Plateau setting is the most common and dominant system in the project area. This setting is heavily dominated by ponderosa pine in the overstory, however an oak component is present. The understory is composed mainly of grass, with forbs and oak as well. These areas tend to be slightly higher in elevation and wetter than the Southwest Ponderosa Pine, making them more productive vegetatively. This setting is also defined geographically by the Colorado Plateau itself, which exists in northern Arizona. Colorado Plateau Ponderosa Pine is also highly dependent on surface fires every 2 to 10 years with an occasional isolated crown fire.

Ponderosa Pine Southwest (PPIN7): The Southwest Ponderosa Pine vegetation type is sometimes called the ‘transition zone’, meaning the area between the pure ponderosa pine forest and the pinyon-juniper forest/woodland. Ponderosa pine generally dominates the overstory, but oak and juniper are commonly present. The understory is grass, with some forbs and lots of oak. Areas classified as having a Southwest Ponderosa Pine setting tend to be drier, rockier and generally less vegetatively productive than the pure ponderosa setting. This is a system which depends on surface fires every 2 to 10 years and occasionally fire will reach the trees themselves.

Post Fledging Area : area around the nest used by the adults and young from time of fledging the nest to the time when fledglings are no longer dependent upon the adults for food. It also includes a foraging area that comprises the balance of the goshawk’s home range.

Surface fire: A fire spreading through **surface fuels**.

Surface fuels—Needles, leaves, grass, forbs, dead and down branches and boles, stumps, shrubs, and short trees.

Stand Density Index: Stand density index (SDI) is a relative measure of stand density that converts a stand's current density into a density at a reference size. Stand density index was first presented by Reineke (1933) and can be defined as:

$$SDI = TPA \left[\frac{D_q}{10} \right]^{1.605}$$

where **SDI** is Stand Density index, **D_q** is the quadratic mean diameter.

Quadratic mean diameter: is the diameter of average basal area per tree.

Target/Threshold Habitat: stand conditions that represent define “target conditions to be achieved with time and management, and “threshold conditions that define minimal levels that must be maintained”. Conditions for the Upper Gila Mountains recovery unit is described in Table III.B. 1 of the Recovery Plan for the Mexican spotted owl.

Thermal Cover: “a stand of coniferous trees tall enough to allow animal movement and bedding with a high degree of crown closure”. Thermal cover offers protection from the heat and cold.

Wildland Urban Interface (WUI) : WUI includes those areas of resident human populations at imminent risk from wildfire, and human developments having special significance. These areas may include critical communications sites, municipal watersheds, high voltage transmission lines, observatories, church camps, scout camps, research facilities, and other structures that if destroyed by fire would result in hardship to communities. These areas encompass not only the sites themselves, but also the continuous slopes and fuels that lead directly to the sites, regardless of the distance involved.