

SHU Lightning Complex, 2500-8 Soils info

Part 2N, Acres Burned:

FIRE_NAME	OWNERSHIP (acres)					Total
	NFS	NPS	BLM	BOR	Private	
Motion	5,544	2,450	5,474	214	14,614	28,297
Moon		6,608	1,202		28,050	35,860
Deerlick	605		4,642		8,683	13,929
Noble*	2		3,309		5,569	8,880
Lower			1,236	3	70	1,309
Deck					263	263
Total	6,151	9,059	15,863	218	57,248	88,538

* Not total fire acres - a portion of Noble is in the Lime Complex with separate tracking.

Part 2O, Vegetation Types:

Part 2P, Dominant soils:

Motion Fire

Type: gravelly and stony loams, hydro groups B-D, mostly high EHRs (unburned).

Series: Behemotosh, Goulding family, Chaix, Maymen

Moon Fire

Type: sandy loams and loamy sands, hydro group B, mod to high EHRs (unburned).

Series: Corbett, Chaix, Josephine, Neuns

Deerlick Fire

Type: very stony loams, hydro groups B-D, 10-75% slopes, mod to high EHRs (unburned).

Series: Stonyford, Maymen, Goulding, Sheetiron

Noble Fire

Type: gravelly/very stony loams, hydro groups C-D, 10-75% slopes, mod to high EHRs (unburned).

Series: Parrish, Goulding, Stonyford, Lodo and Maymen

Lower Fire

Type: gravelly sandy loams, hydro groups B-C, 30-75% slopes, moderate EHRs (unburned).

Series: Tallowbox, Valcreek, Minersville, Choop

Deck Fire

Type: Gaviota sandy loams, hydro groups B-C, 5-50% slopes, moderate EHRs (unburned).

Series: Gaviota (83%), Millsholm, Sehorn

Part 2Q, Geologic Types:

Motion Fire:

Moon Fire:

Deerlick Fire:

Noble Fire:

Lower Fire:

Deck Fire:

Part 3A, Burn Severity:

FIRE_NAME	OWNERSHIP	SOIL BURN SEVERITY (acres)				Total
		Unburned	Low	Moderate	High	
Motion	NFS	1,604	1,809	1,832	299	5,544
	NPS	660	786	923	81	2,450
	BLM	1,559	1,726	1,907	282	5,474
	BOR	74	63	61	17	214
	Private	4,292	4,617	5,095	611	14,614
Moon	NPS	2,391	1,652	1,913	653	6,608
	BLM	567	293	173	169	1,202
	Private	6,633	9,026	10,220	2,171	28,050
Deerlick	NFS	240	207	157	2.2	605
	BLM	1,113	919	2,136	474	4,642
	Private	3,283	2,346	2,741	313	8,683
Noble	NFS	0.6	0.8	0.6	0.0	2.0
	BLM	828	948	1,482	51	3,309
	Private	2,278	1,835	1,381	75	5,569
Lower	BLM	477	730	28	1.7	1,236
	BOR	1.3	1.6	0.4		3.3
	Private	35	35	0.3		70
Deck	Private	59	184	21		263
NFS Total		1,844	2,016	1,989	301	6,151
Grand Total		26,093	27,176	30,070	5,199	88,538

Part 3B, Water Repellent Soils:

Some water repellency is present in the high soil burn severity class, approx. 5200 acres (300 acres NFS and 4900 acres non-FS). Repellency is in the top $\frac{3}{4}$ inch of the soil, slight to moderate in severity, and patchy.

Part 3C, Soil Erosion Hazard Rating:

FIRE_NAME	OWNERSHIP	SOIL EROSION HAZARD RATING (acres)				Total
		Low	Moderate	High	Very High	
Motion	NFS	2.0	636	4,582	323	5,544
	NPS	86	514	1,814	36	2,450
	BLM	252	1,252	3,539	432	5,474
	BOR	52	42	118	2.8	214
	Private	1,130	2,791	9,896	798	14,614
Moon	NPS	648	1,792	4,168	1	6,608
	BLM	93	84	960	65	1,202
	Private	1,874	4,698	20,698	779	28,050
Deerlick	NFS		137	407	61.0	605
	BLM	211	376	3,506	548	4,642
	Private	185	1,115	6,726	656	8,683
Noble	NFS		0.3	1.7	0.0	2.0
	BLM	22	520	2,734	34	3,309
	Private		2,767	2,764	38	5,569
Lower	BLM	11	407	818		1,236
	BOR		1.3	2.0		3.3
	Private	0.8	15	54.0		70
Deck	Private		230	33		263
NFS Total		2.0	774	4,991	384	6,151
Grand Total		4,565	17,379	62,821	3,773	88,538

Part 3D, Erosion Potential:

An average winter has the potential to produce **16** tons per acre of hillslope erosion, ranging from 8 to 24 across the fires as a whole. Erosion potential was modeled using FSWEPP-ERMiT.

FIRE_NAME	First Year Erosion Potential (tons/ac)		Second Year Erosion Potential (tons/ac)	
	2-Year Winter	10-Year Winter	2-Year Winter	10-Year Winter
Motion	18.67	46.67	10.49	34.38
Moon	15.62	51.86	7.65	36.32
Deerlick	12.43	29.93	7.87	23.48
Noble	13.05	32.26	8.25	25.15
Lower	13.14	42.62	7.18	30.79
Deck	2.76	38.91	10.56	29.28
Average	15.76	44.61	8.65	32.46

Part 3E, Sediment Potential:

An average winter has the potential to produce **1434** cubic yards per square mile of sediment, ranging from 720 to 2150 across the fires as a whole. Hillslope erosion was determined to have a 19% chance of sediment delivery potential.