

**ERMiT Mitigation Treatment Comparisons for
Howash Soil Mapping Unit (#47) in the
High Soil Burn Severity Units in Shitike Creek Watershed:
Sandy Loam, 50% Rock Content, 50% Slopes
With Length of 1,000 Feet or Longer**

Probability that sediment yield will be exceeded: <u>20%</u>	Event sediment delivery (ton ac⁻¹)				
	Year Following Waterfall-2 Fire:				
	1st year (2012)	2nd year (2013)	3rd year (2014)	4th year (2015)	5th year (2016)
Untreated	30.93	14.28	5.59	2.99	0.68
Seeding	30.93	10.51	3.58	2.16	0.68
Mulch (0.5 ton ac⁻¹)	8.67	6.91	5.59	2.99	0.68
Mulch (1 ton ac⁻¹)	3.56	5.15	5.59	2.99	0.68
Mulch (1.5 ton ac⁻¹)	3.54	3.62	5.59	2.99	0.68
Mulch (2 ton ac⁻¹)	3.52	3.57	5.59	2.99	0.68

**Table XX:
Low and High Predicted Ranges of Peak Flow Response to post-fire:
Waterfalls-2 Fire, Shitike Creek, Warm Springs, OR**

Peak Flow Recurrence (years)	Pre-fire Peak Stream Flow¹ (cfs)	Post-fire Predicted Peak Stream Flows² (cfs)	
<i>Shitike Creek, near town of Warm Springs</i>		Low prediction	High prediction
2	643	684	787
5	1090	1160	1334
10	1480	1575	1812
25	2040	2171	2498
50	2490	2650	3048
100	2960	3150	3624
Peak Flow Recurrence (years)	Pre-fire Peak Stream Flows¹ (cfs)	Post-fire Predicted Peak Stream Flows² (cfs)	
<i>Shitike Creek, at Peter's Pasture</i>		Low prediction	High prediction
2	637	862	1313
5	1060	1435	2184
10	1380	1868	2844
25	1850	2504	3813
50	2250	3046	4637
100	3183	4309	6560

1. Weighted Peak Flows derived from OWRD Peak Discharge Estimator from gaged sites.
2. Post-fire predicted peak stream flows calculated using USGS Regression Equations and peak flow predictions derived from stream gauge data.