

mod at 3%  
mosaic 3%

m-65  
M-65

CU

Rd.	7757	high	64MD	FC1V		
*	7757	high	64MB	FC2V		
	7873	mod.	64MC	FC3V	1203	sky line
	18546	high	60MD	FC4V	2209	sky line
*	7873	high	30ME	FC5V	2209	sky line
	37122	high	30MB	FC6V		
	540	mosaic	60MA	FC7V		
	47039	mosaic	64MC	FC8V		
	18546	unburned	64ME	FC9V		
	16975	mod.	30MC	FC10V		
	7873	mosaic	245A	FC11V		
	7873	low	32QA	FC12V		
	540	mosaic	64MB	FC13V		
	16976	unburned	245A	FC14V		
	18739	mosaic	64MD	FC15V		

5 high  
2 mod.  
5 mosaic  
2 unburned  
1 low

245A  
30 MB, MC, ME  
32 QA  
60 MA, MD  
64 MB, MC, MD, ME

Slides \* 64MD MB  
for flat  
Johnson 30MB + 64  
50/50 60MA < 1%

14,460  
25,920

245A L-4, m6, mos3, wb7  
41Q0 L-30, m1, wb8  
64MA mod3, mosaic3

Soil Quality Field Evaluation form  
7.01

Region: 1 State: MT Forest: Lolo District: Superior

Project/Area being evaluated: Flat CK Fire FY2000 Flat CK Watershed

Evaluation Date: 8.3.01 Evaluating person/crew: Laura Hadwell + Brian

Areal extent method: Visual -  Transect- FC1

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed -  Measured - yes OM + rutting

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
64MD	NO	NO	NO	yes	2.5	shut	NO
64MD	NO	NO	NO	yes	2.5	shut	NO
64MD	NO	NO	NO	charry	2.5	shut	NO
"	NO	?	?	yes	.5	shut	NO
"	NO	"	"	"	2.5	partial	NO
"	"	"	"	"	2.5	slightly	NO
"	"	"	"	"	.5	some cracks	NO
"	"	"	"	"	.5	NO	NO
"	"	"	"	"	2.5	shut	NO
"	"	"	"	"	.5	shut	NO

off rd 7757 just passed junction of 18739 (check ref)  
 a little off the rd. where a tire track was.  
 SEVERE burn area LSI 64MD. little or no OM. though  
 some churning of soil. ~1" a so depth. very steep <sup>55-60%</sup> will need  
 some control fell for erosion control.  
 Soil medium CT. granular loam at 3". OM 2.5  
 surface layer gone, seems to fit 64MD @ subsoil. a gk.  
 ~ 20+11 Mostly the Andic Dystric Entrochlepts, L-5k, AX  
 no SIL found.

Soil Quality Field Evaluation Form

7.01

Region: 1 State: MT Forest: Lolo District: Superior

Project/Area being evaluated: Flatck Fire FY2000 Flatck H2oshed.

Evaluation Date: 8-3-01 Evaluating person/crew: Laura Hudnell + Beau (incan)

Areal extent method: Visual -  Transect- FC2 LSI, U4MB

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed -  Measured - om + rats

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
64MB	NO	NO	NO	yes	L.5	shaded	* NO
64MB	"	"	NO	yes	L.5	shaded	NO
64MB	"	"	"	yes	L.5	"	NO
	"	"	"	yes	L.5	"	NO
	"	"	"	yes	"	"	"
"	"	"	"	yes	"	"	"
"	"	"	"	yes	"	"	"
"	"	"	"	yes	"	shaded	"
"	"	"	"	"	"	shaded	"
"	"	"	"	"	"	shaded	"

Rd 7757: very steep to ~~steep~~ sheet & gully erosion off rd here  
 Prob. to steep for logs & is a severe burn. some char noted  
 along stop 6 & 7

No surface lit. mostly ash. \* to the west on the side of Rd  
 may have potential for slumping. In mosaic area.

Subsoil ~ 4/3 4/20 yr dry. more loams. at ~ 8" - 10"

Stops to steep for vehicles, no rutting or displacement.

Soil Quality Field Evaluation Form

7.01

Region: 1 State: MT Forest: Lolo District: Superior

Project/Area being evaluated: Flat Ck Fire FY2000 Johnson Ck Watershed

Evaluation Date: 8.3.01 Evaluating person/crew: Laura Hadrell + Bear

Areal extent method: Visual - ✓ Transect: FC3 6SI 64MC mod soil burn

Monitoring method: Visual - NA Measured - ~~NA~~

Sampling Technique: Observed - yes Measured - OM + NUTS

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
1/4M	NO	* NO	* NO	NO	~ 1"	slight	NO
"	NO	NO	NO	NO	1	"	"
"	NO	NO	NO	NO	.5	"	"
"	"	"	"	"	1	NO	"
"	"	"	"	"	1	NO	"
"	"	"	"	"	1	"	"
"	"	"	"	"	.75	"	"
"	"	"	"	"	.50	"	"
"	"	"	"	"	1	"	"
"	"	"	"	"	.75	slight	"

\* Some tracks on side of rd but not off into the woods  
 off rd. 7873 just up from intersection of 18547 + 7873.  
 off rd to left

slope .45 - .55%. mod. burn still ~ 1" of litter. some root wads  
 visible but most intact and holding.  
 rock about 2.25"

soils at 2 to 12" 10YR 4/2 - 4/3 dry sil at soil steps but  
 3. I was more L. with ~ 40% gr. surface rock ~ 30%.

Some unburned trees. some scorched. still too steep for trace.  
 10/1.

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: 1010 District: Superior

Project/Area being evaluated: Flat CK Fire FY2000 Johnson CK

Evaluation Date: 8.3.01 Evaluating person/crew: Laura Hadnell + Ben

Areal extent method: Visual -  Transect: FC4 LSI 60 MD high burn

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed - YES Measured - om + rat

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
1000	NO	NO	*NO	**NO	2.5 <sup>1st com</sup> <sub>60% ash</sub>	*NO	NO
106	''	''	''	''	2.5 <sup>consective</sup>	''	''
11	''	''	''	''	''	''	''
	''	''	''	''	''	''	''
	''	''	''	''	.5	''	''
11	''	''	''	''	.5	''	''
11	''	''	''	''	1.5	''	''
11	''	''	''	?	2.5	''	''
11	''	''	''	NO	''	''	''
11	''	''	''	''	''	''	''

off rd. 18546. Sever burn. little duff or litter. ~ .75" ash.  
3-12" sil with ~ 20-25% gravel. 10/yr 3/4 to 3/4 big  
very steep ~ 55-60% slope. 20 ~ 5%.

\* Some small areas of sheet but not much evidence of ped or gullies  
on sheet. very sooty. m

Most of the transects had more mod appearance. still some  
surface litter (twigs + needles), roots not exposed. No chert  
noted.

\*\* maybe some "g" rooting but not pronounced.

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT. Forest: 2010 District: Superior

Project/Area being evaluated: Flat ck Fire Fy2000 Johnson ck H20 shed.

Evaluation Date: 8-3-01 Evaluating person/crew: Laura Hudnell + Brad

Areal extent method: Visual - ✓ Transect: FCS BSI 30m high burn

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed - ✓ Measured - OM + Rut

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
30m	NO	NO	YES/NO	YES	L.S	Sheet	NO
	NO	NO	YES	YES	L.S	Sheet	NO
	"	"	YES	"	L.S	"	"
	"	"	NO	"	L.S	Sheet	"
	"	"	NO	"	"	"	"
	"	"	"	"	"	Sheet	"
	"	"	"	"	"	NO	"
	"	"	"	"	L.S	NO	"
	"	"	"	"	L.S	NO	"
	"	"	"	"	L.S	NO	"

off rd 18684 at intersection of 7873 gentler slope ~35-40. some areas (steps 8-10) L 35%

some churning noted at steps 4+5. litter gone. ash 1.5-2"

mineral soil at surface 10cm ~ 40% 95 10YR 3/3 dry.

\* Some 15" rooting along slope 2+3. could be where people were OR riding before fire.

gentle enough for tractor. lots of salvage trees. soils may have compaction concerns though.

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: 1010 District: Superior

Project/Area being evaluated: Flat ck Fire FY 2000 Johnson ck. Hoosier

Evaluation Date: 8.4.01 Evaluating person/crew: Laura Hudnell + Blas

Areal extent method: Visual - ✓ Transect: FC6 30MB high

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed - ✓ Measured - OM + Rts

Photos: n/a

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
30MB	NO	NO	NO	Yes	2.5	Sheet	Yes
"	"	"	NO	"	2.5	"	No
"	"	"	"	"	2.5	"	
"	"	"	"	"	2.5	"	
"	"	"	"	"	2.5	"	
"	"	"	"	"	2.5	"	
"	N/A	N/A	Yes <sup>root</sup>	No	N/A	N/A	
"	N/A	N/A	" <sup>root</sup>	No	N/A	N/A	
"	NO	NO	NO	Yes	2.5	NO	NO

off Rd 37122. mod. Slops 30-45%. Some areas where soils seem to be sat (PI > 25). \*Some cracks in soil. may move. easily compacted.

Some Chert at stops 4 with no om. Ash lay ~1" 1.5" 3" at stop 5. 2.5y 5/2 - 1/4 day 3-12" s.l

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: 1010 District: Superior

Project/Area being evaluated: Flatck Fire FY2000 Johnson dc H2shed

Evaluation Date: 8, 4, 01 Evaluating person/crew: Laura Hudnell

Areal extent method: Visual -  Transect- FC7 60 MA mosaic

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed - yes Measured - OM + Rt.

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
2000	N	N	N	N	~.5	nil	N
11					1	sh	
11					1	sh	
					.5		
					1		
15					1		
15					.5		
15					.5	↓	↓
11					.5	↓	↓
15					.5	nil	

cal.

adj rd. 540. Steep 75%. Not for trac. log.

most of the area is more mod & lower. and small areas of hydrophobic part < 2". Some unburned. Soils are mod deep - deep most are typ. Haptoxerolls with 10% 3/3 + 3/4. Also some > 40% sp & cb. Stop 7 showed some white nod. cel.



Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: Lolo District: Superior

Project/Area being evaluated: Flat ck Fire FY2000 Idaho gulch Watershed

Evaluation Date: 8.4.01 Evaluating person/crew: Laura Hudnell + Bear

Areal extent method: Visual - ✓ Transect- FCB LSI 64MC mosaic

Monitoring method: Visual - NA Measured - NA

Sampling Technique: Observed - gbs Measured - OM + roots

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
NA	NO	NO	NO	N	1.5	sh	NO
					1	sh	
					1	sh	
					.5		
					.5		
					1		
					1.5		
					1	rill	

off rd. 47039. Slope up to 65% or 7 not for trac.

mod. with some severe (43%) and aburned. No hydrophobic found on tran. deep ash ~ 1.5"

possible old jam at stop 4. more likely just small roots. no templates

Soil Quality Field Evaluation Form  
7.01

Region: / State: MT Forest: 1010 District: Superior  
 Project/Area being evaluated: Flat ck Fire FY2000 Johnson ck Watershed  
 Evaluation Date: 8-4-01 Evaluating person/crew: Laura Hudnall  
 Areal extent method: Visual - ✓ Transect: FCQ 64ME unburned  
 Monitoring method: Visual - NA Measured - NA  
 Sampling Technique: Observed - ✓ Measured - om + Ruts  
 Photos: ~~see~~ see photo 7-10-01

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
NA							

off. rd. 18546. wheel unburned for pm rd. + sk. trail.  
 to step - unburned but no trac. log. to step. ~60%  
 slope. most veg ok + some singly. grass growing  
 can't redy use

NA + NA  
 see photo 7-10-01

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: lolo District: Superior  
 Project/Area being evaluated: Flat ck Fire FY2000 Welch Gulch Watershed  
 Evaluation Date: 8.7.01 Evaluating person/crew: L. Hudnell  
 Areal extent method: Visual -  Transect: FCI 30MC mod. beam  
 Monitoring method: Visual - NA Measured - NA  
 Sampling Technique: Observed - yes Measured - OM & Nut.  
 Photos: N/A

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
30MC	N	N	N	N	1	rill	NA
	N				1	"	
	N				1.5	"	
	N		some J root		1.5	"	
	N		J root		1	sheet	
	N		N		1	rill	
	N		N		1	"	
	N				1.5	"	
	N				1	sheet	
	N				1	sheet	

off Rd. 16975 at end heading down toward stream. some erosion & some rills. Nothing large enough to fit gully. gentle slopes towards slope 8-10. Steeper at 3-6. Cold st. da Jam. Neg. 6 times.  
 most soils are mod deep to 3/4 10yr colas in subsoil. small ~ .5-.75" of ash.

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: Lolo District: Scappara  
 Project/Area being evaluated: Flat CK Fire, FY2000 Flat CK Watershed  
 Evaluation Date: 8.11.01 Evaluating person/crew: Laura Hudnell + Beer  
 Areal extent method: Visual - ✓ Transect: FCN 245A mosaic  
 Monitoring method: Visual - WA Measured: ~~FCN A~~  
 Sampling Technique: Observed - yes Measured - GM + ruts  
 Photos: see photos from 7.20.01

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
245A	N	N	N	N?	1.5	shut	N
	Y	Y	Y	Y?	1.5-1	shut	N
	N	N	N	N	1.5-1	fill	cracks
	N/A	N	N		1	shut	cracks
	N	N	N		1	shut	N
	N	N	N		1	N	N
					1-1.5		

off rd. 7873. very gentle slopes 15 - 25%.  
 some cracking noted on slopes; stabs 1 + 2 are closer to  
 sewer to ash and some chain of roots but most is low to contained  
 nice clay pick up at ~ 12" mostly sil + sil little no  
 OF. very compact able. root have been logging as seen ruts  
 at stabs 2 + 3

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: MT Forest: 1010 District: Superior  
 Project/Area being evaluated: Flat ck Fire, FY2000 Johnson ck H20 shed.  
 Evaluation Date: 8.11.01 Evaluating person/crew: Laura Hadnall & Beau.  
 Areal extent method: Visual - ✓ Transect: FC12 32QA low burn  
 Monitoring method: Visual - NA Measured - NA  
 Sampling Technique: Observed - ✓ Measured - OM + roots  
 Photos: SW photos 7-20-02. ?

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
32QA	✓	N	✓ root	N	.5	shrt	N
	✓	N	✓ root	N	.5	sl	N
	✓	N	✓ root	N	.5	sl	F
			✓ root				

off. rd. 7873 lock:ty for low burn - this is more cont. med.  
 100% soil. some skins - prob. not usable for low burn.  
 soils stable.  
 Very rocky may be inclusion. 1-sil to 4/5 10% rd as  
 not a sd. 32QA

Soil Quality Field Evaluation Form  
7.01

Region: 1

State: MT

Forest: 1010

District: Superior

Project/Area being evaluated: Flat ck Fire, FY 2000 Johnson ck H2 shed.

Evaluation Date: 8.11.01 Evaluating person/crew: Laura Hadnell + Bear

Areal extent method: Visual - ✓

Transect- FC 13 64m B mosaic

Monitoring method: Visual - N/A

Measured - N/A

Sampling Technique: Observed - GIS

Measured - OM + Ruts

Photos:

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
1/12/01	N?	N	Y rd	N	.5-1	sheet	NO
	N?	N	rd		.5	N	
	?		rd		1	N	
	N		N		1	sheet	
	N		N		.5	sheet	
					.5		
					1		
					.5		

off rd. 540. main rd. lots of 5 yst. rds. 200 ft. lanes or 5 ft's  
vegd. lot of mod + low burn. no sever. on this tran, but  
noticed off tran.

↳ why sleep not trac. log. Lams. 16 yr 4/4 + 4/3 dry. no cracks  
to my rds to say if old years or 5 yst

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: Montana Forest: Lolo District: Superior Ninemile

Project/Area being evaluated: Flat Creek Fire, FY2000 Idaho gulch watershed

Evaluation Date: 8.11.01 Evaluating person/crew: L. Hudnell

Areal extent method: Visual -  Transect- FC 14 245A unburned

Monitoring method: Visual - *NA* Measured - *NA*

Sampling Technique: Observed -  Measured - *OM & roots*

Photos: *no*

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
<i>245A</i>							

- have to drop all on private off rd. 16976. 18575 takes me out of 245A. try rd. 47035. st. 11 priv.  
Ddop

Soil Quality Field Evaluation Form  
7.01

Region: 1 State: Montana Forest: Lolo District: Superior Ninemile

Project/Area being evaluated: Flat Creek Fire, FY 2000 Flat Creek Watershed

Evaluation Date: 8.11.01 Evaluating person/crew: L. Hutchins

Areal extent method: Visual -  Transect: FC15 LSI 64MD mosaic

Monitoring method: Visual -  Measured - NA

Sampling Technique: Observed -  Measured - OM + rain

Photos: NO

Soil Quality Disturbance Evaluation Criteria							
LSI	Displacement	Rutting	Compaction	Severely Burned	Above Ground Organic Matter	Surface Erosion Hazard	Mass Movement Hazard
<del>WMB</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>1</del>	<del>Sheet</del>	<del>N</del>
<del>WMB</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>1</del>	<del>Sheet</del>	<del>N</del>
<del>WMB</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>N</del>	<del>1</del>	<del>Sheet</del>	<del>N</del>
	N	N	N	N	1.5	fill	
	N	N	N	N	1	Sheet	
					1.5		
					1.5		
					1		
					1		

off rd. 15739. trying to pick up unburned + mosaic. c in the  
1 soil delin. stops 1 + 2 mostly WMB all not WMB  
stop 1 + 2 are 64R 3/3 : stop not gd. for soils drop stops 1 + 2