Mainstem Trail Creek & Sub-Watershed Summaries

The Trail Creek Watershed was delineated into 59 sub-watersheds along 2nd to 4th order drainages as identified by the number IDs in **Figures 75–78**. **Appendix D** summarizes the morphological, hydrologic and sedimentological relations to identify the hillslope, hydrology and channel processes contributing to sediment yields for the mainstem Trail Creek and sub-watersheds. The summaries for each sub-watershed and the mainstem Trail Creek include:

1. ***Watershed Characteristics:***
   a) Drainage area
   b) Drainage density
   c) Wildfire burn intensity
   d) A vicinity map identifying stream types and conditions
   e) Percent of area by aspect
2. ***Streambank Erosion:***
   a) Percent of stream reach by annual erosion rate category and stream condition
   b) Total streambank erosion in tons/yr
   c) A vicinity map with the spatial location of erosion rates in tons/yr/ft
3. ***Hillslope Processes:***
   a) Length of roads
   b) Total sediment from roads (tons/yr)
   c) Delivered sediment from surface erosion (tons/yr)
   d) Total sediment from introduced hillslope sources
4. ***Hydrology:***
   a) Bankfull discharge
   b) Pre- and post-fire water yield
   c) Pre- and post-fire flow-related sediment yield
   d) Potential restoration reduction in flow-related sediment increases
5. ***Erosion Summary:***
   a) Existing, post-fire flow-related sediment
   b) Streambanks, roads, surface erosion and streambed sediment yields
   c) Percent of total yield by erosion source
   d) Overall bed stability direction (aggradation, degradation or stable)

The main purpose for the mainstem Trail Creek and sub-watershed analyses is to prioritize disproportionate sediment yields by land use, location and erosional/depositional processes to help direct potential restoration and stabilization projects.

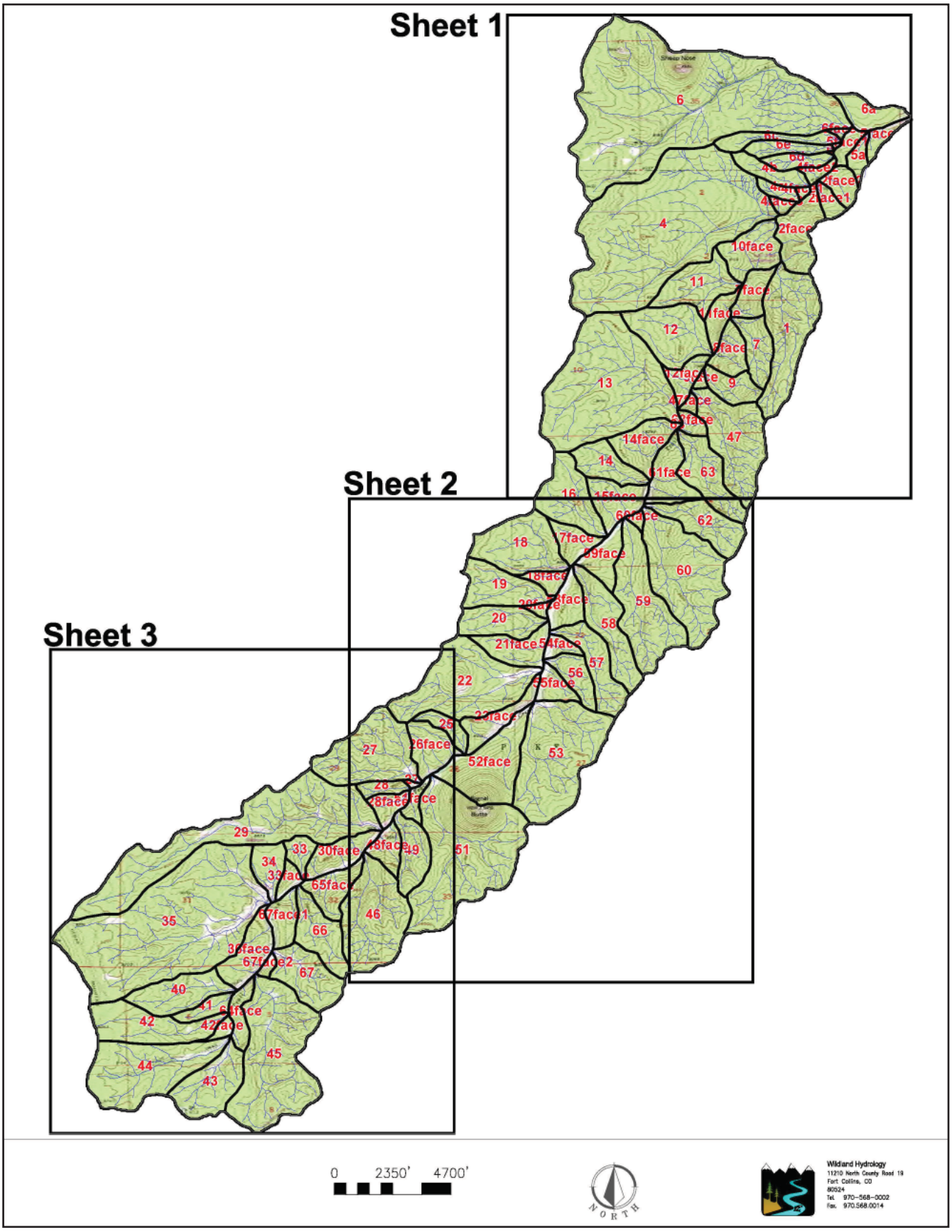


Figure 75. The sub-watershed delineation of the Trail Creek Watershed; the area in "Sheet 1" is depicted in **Figure 76**, the area in "Sheet 2" is depicted in **Figure 77**, and the area in "Sheet 3" is depicted in **Figure 78**.

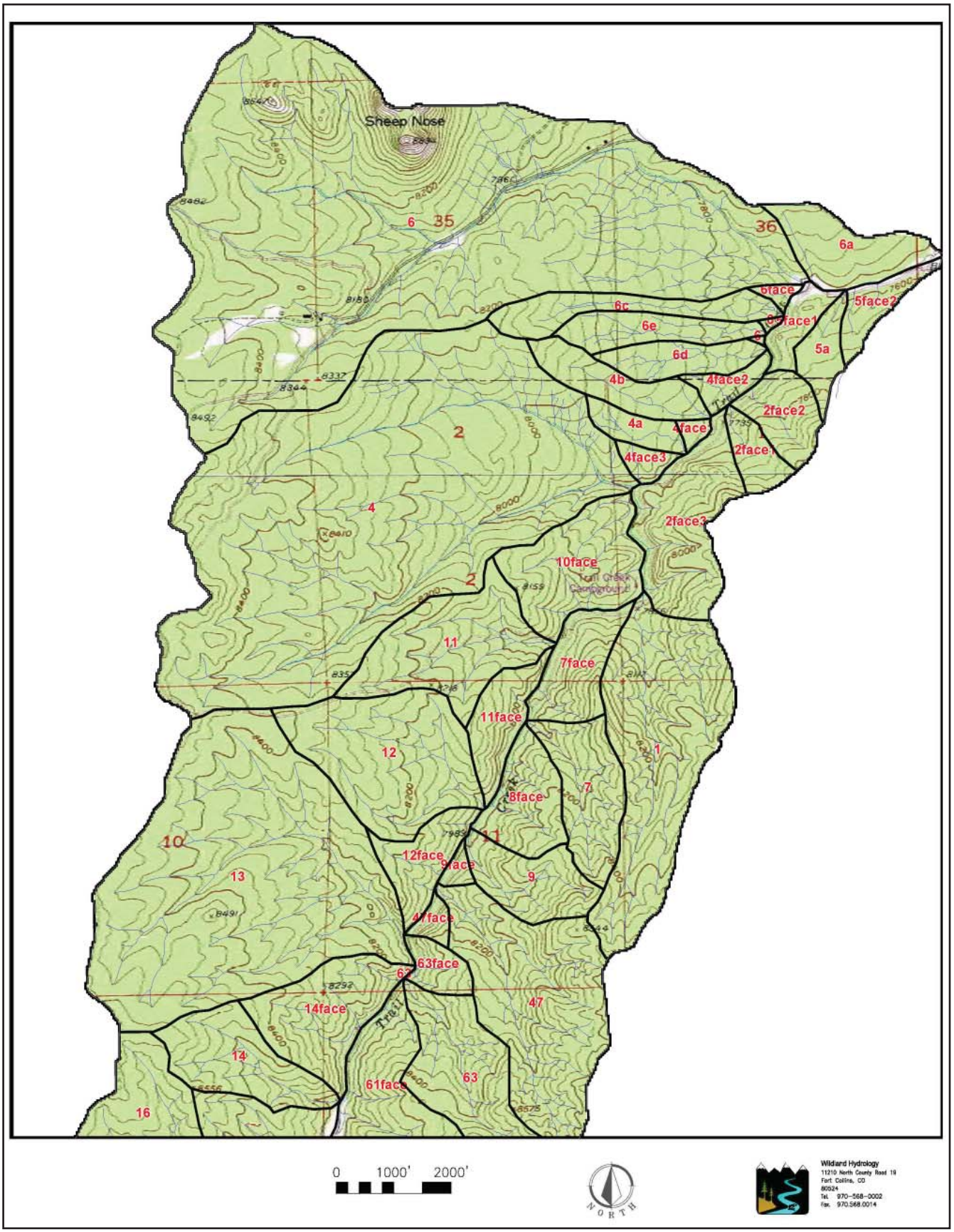


Figure 76. The sub-watershed delineation of the Trail Creek Watershed illustrating the area in "Sheet 1" in **Figure 75**.

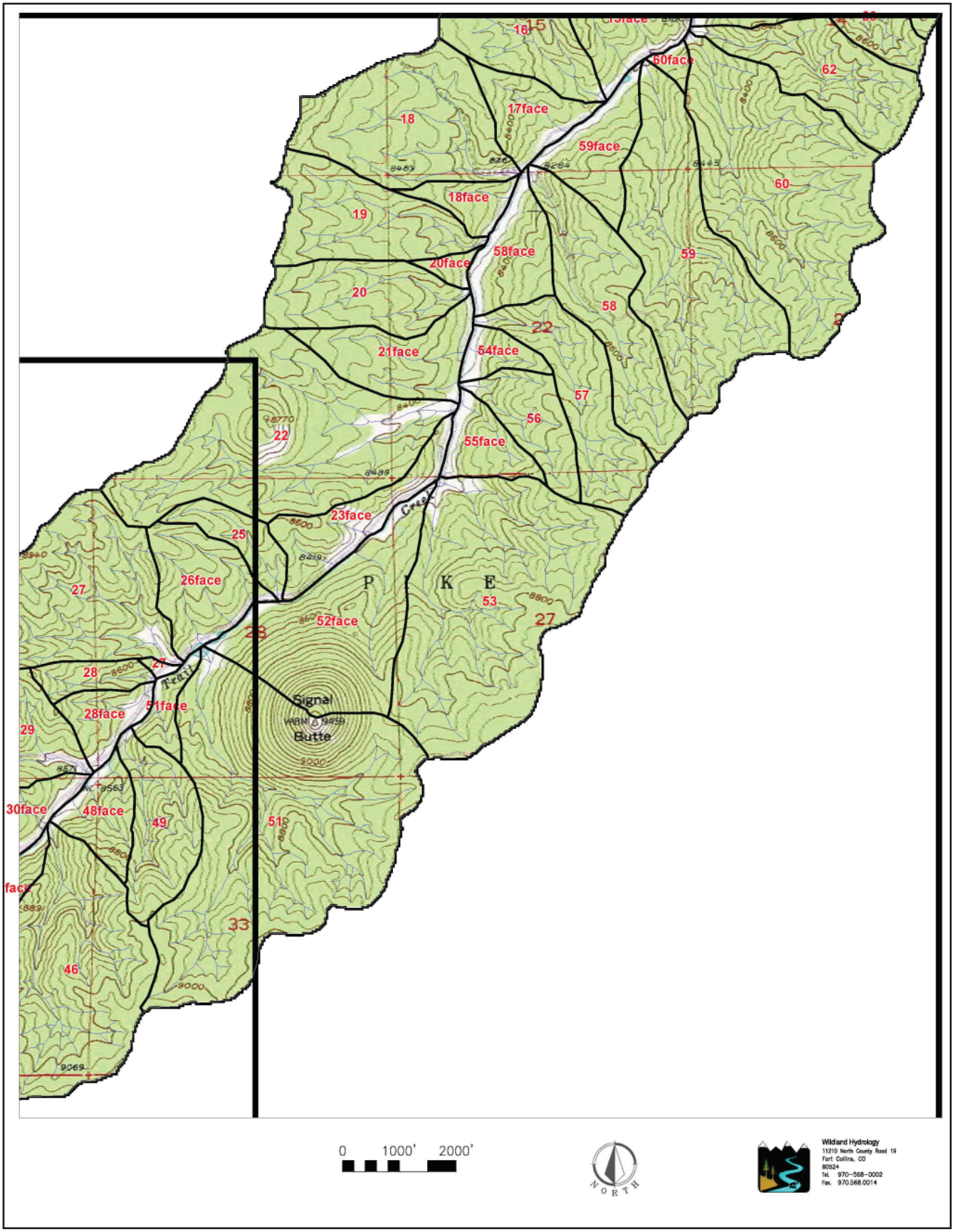


Figure 77. The sub-watershed delineation of the Trail Creek Watershed illustrating the area in "Sheet 2" in **Figure 75**.

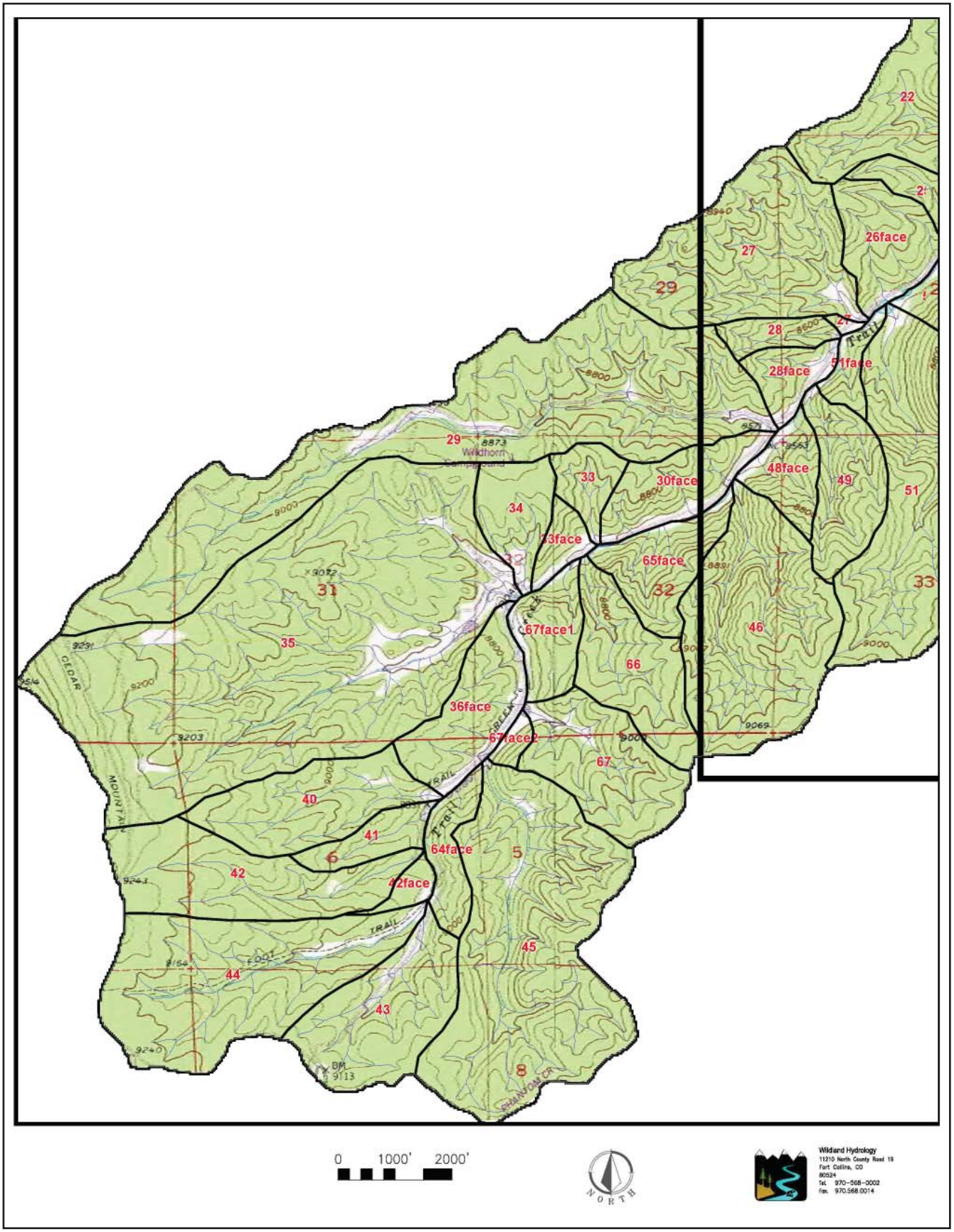


Figure 78. The sub-watershed delineation of the Trail Creek Watershed illustrating the area in "Sheet 3" in **Figure 75**.

Trail Creek Watershed

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed:

Watershed Characteristics

Drainage Area (mi^2)	16.70
Drainage Density	13.4

Burn Severity (%)	High	Moderate	Low	Unburned
	8.7%	32.1%	34.3%	24.9%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	13%	12%	25%	16%	6%	2%	9%	15%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	40%	21%	4%	1%	4%	12%	2%	4%	7%	3%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	32%	50%	17%

Total Erosion (tons/yr): 18,118

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		4%	6%	41%	15%	13%	8%	9%	3%	1%

Hillslope

Length of Road (ft)	64,722	Sediment from Surface Erosion (tons/yr)	2,542.4
Total Sediment from Roads (tons/yr)	848	Total Introduced Sediment (tons/yr)	3,390

Hydrology

Trail Creek Watershed				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 33.76	DA (mi^2)	16.7	Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf}(cfs)	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	3,689	6,560	6,560	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	1,250	20,838	5,917	Flow-Related Sediment (tons)				Flow-Related Sediment (tons)				Flow-Related Sediment (tons)				Flow-Related Sediment (tons)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	3,689	6,560	2,871	6,560	
Flow-Related Sediment (tons)	1,250	20,838	19,588	5,917	-14,921

Erosion Summary

Total Existing Water Yield (ac-ft)	6,560
Total Existing Sediment Yield (tons/yr)	20,838

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	18,118	848	2,542	-670
Percent of Total Yield	84%	4%	12%	-3%

Deposition or Scour: Deposition

Mainstem Trail Creek

Watershed Summary Stream: **Mainstem Trail Creek** Sub-Watershed:

Watershed Characteristics

Drainage Area (mi^2)	N/A
Drainage Density	N/A

Burn Severity (%)	High	Moderate	Low	Unburned
	N/A	N/A	N/A	N/A

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	2%	5%	29%	8%	4%	0%	16%	14%	1%	23%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	37%	56%	7%

Total Erosion (tons/yr): 4,112

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	3%	29%	6%	23%	15%	18%	6%	0%

Hillslope

Length of Road (ft)	47,000	Sediment from Surface Erosion (tons/yr)	634.3
Total Sediment from Roads (tons/yr)	589.9	Total Introduced Sediment (tons/yr)	1,224.20

Hydrology

N/A																							
Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{BKF}(cfs)		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons)					Flow-Related Sediment (tons)					Flow-Related Sediment (tons)					Flow-Related Sediment (tons)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	N/A	N/A	N/A	N/A	
Flow-Related Sediment (tons)	N/A	N/A	N/A	N/A	N/A

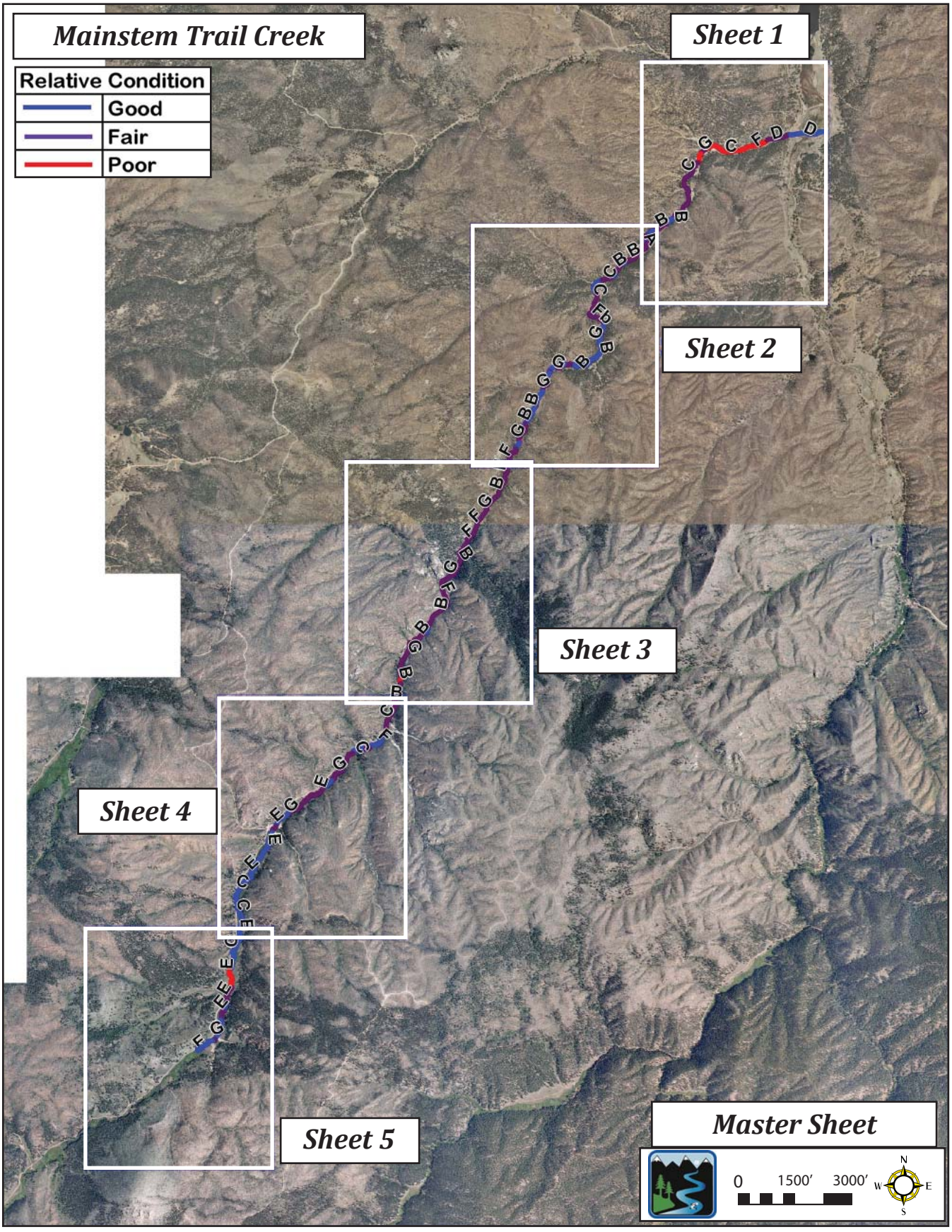
Erosion Summary

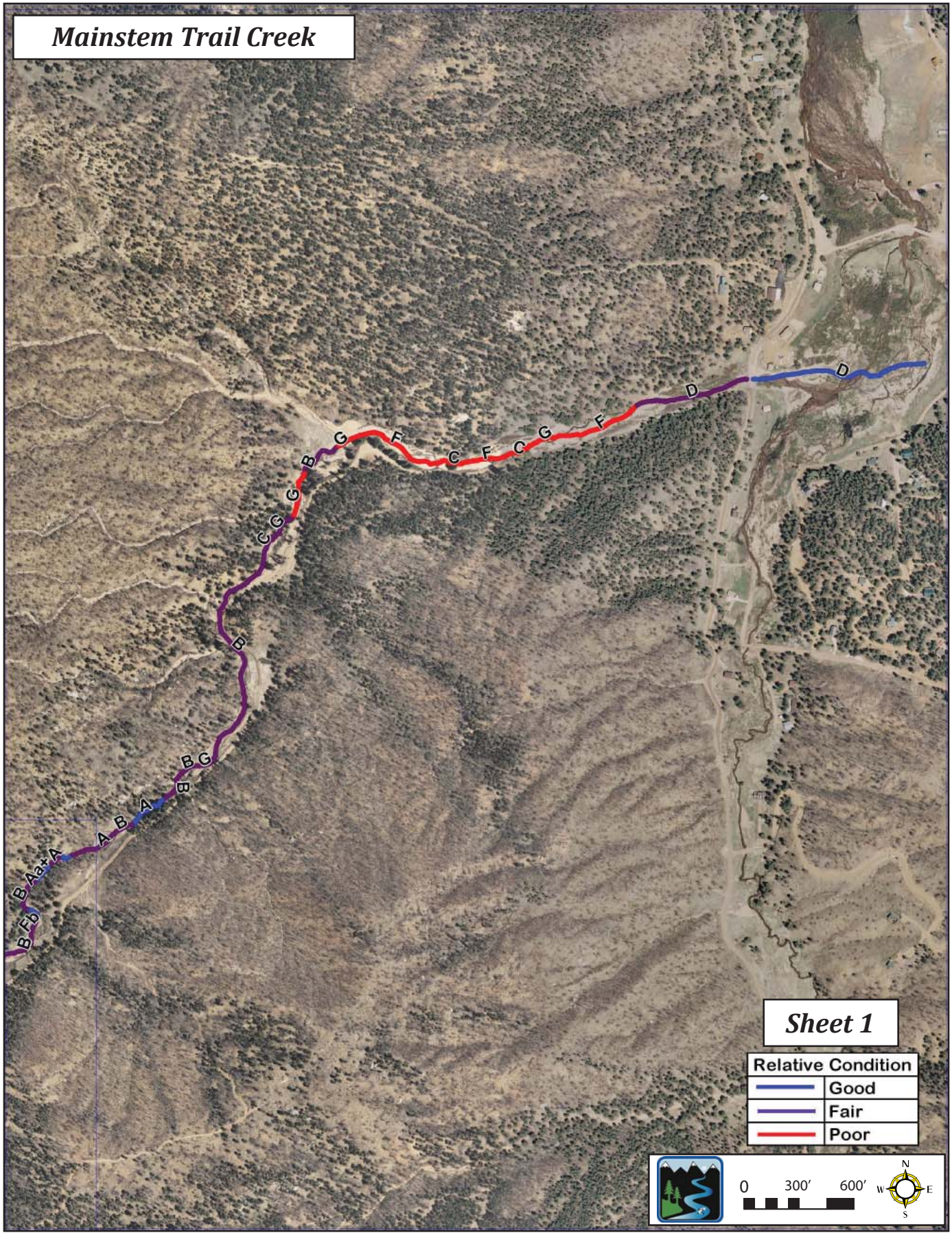
Total Existing Water Yield (ac-ft)	N/A
Total Existing Sediment Yield (tons/yr)	N/A

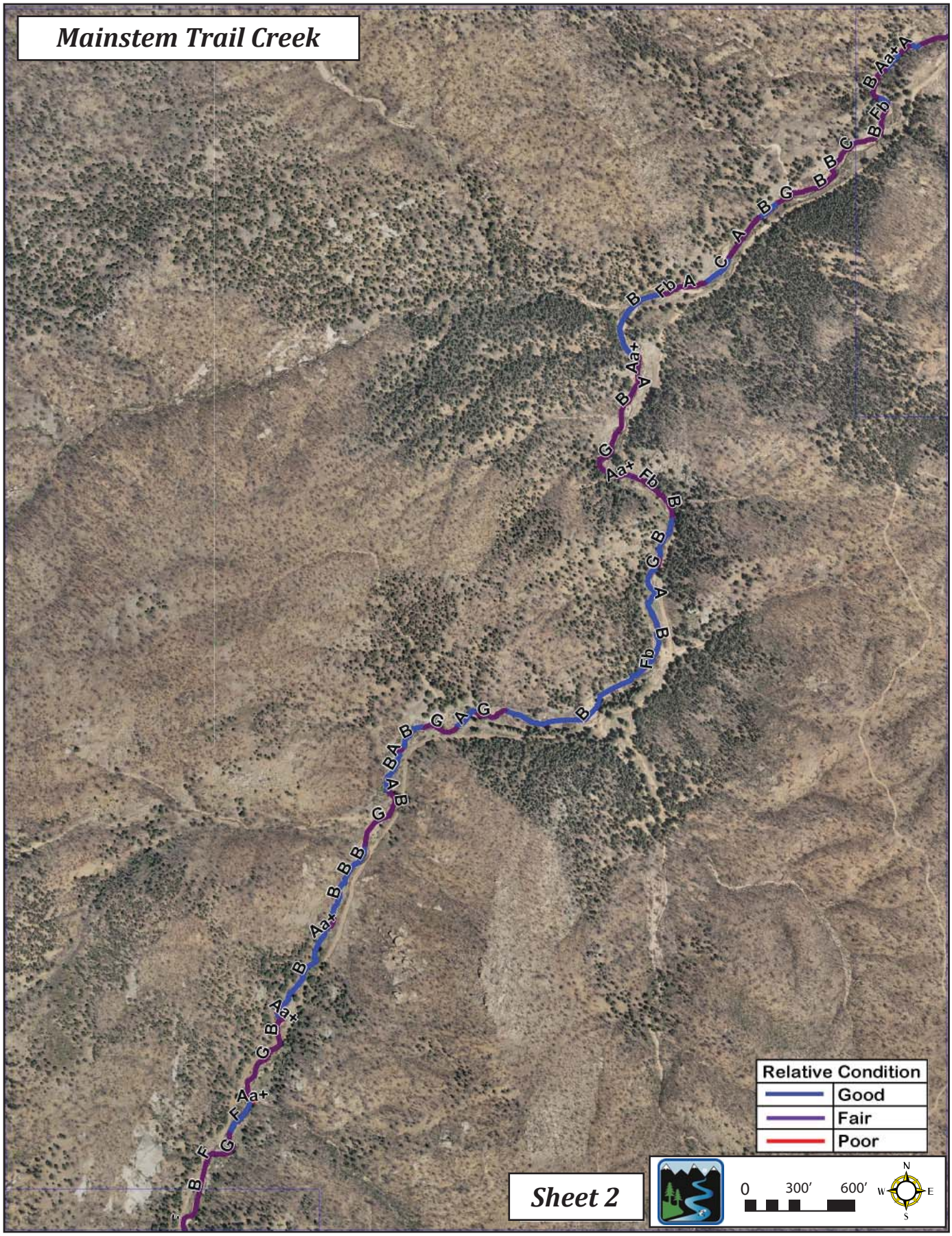
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	4,031	589.9	634	N/A
Percent of Total Yield	77%	11%	12%	N/A

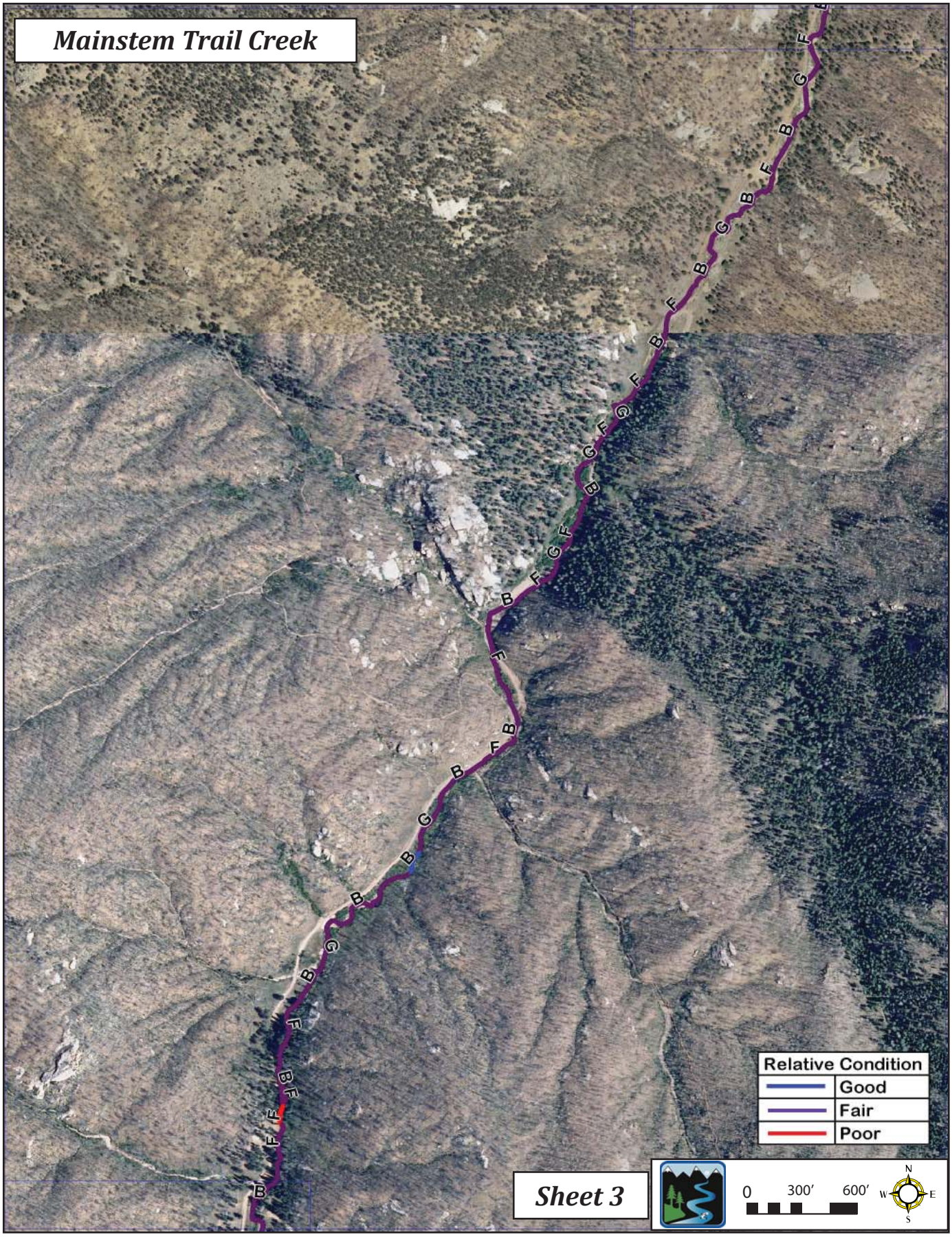
Deposition or Scour
N/A

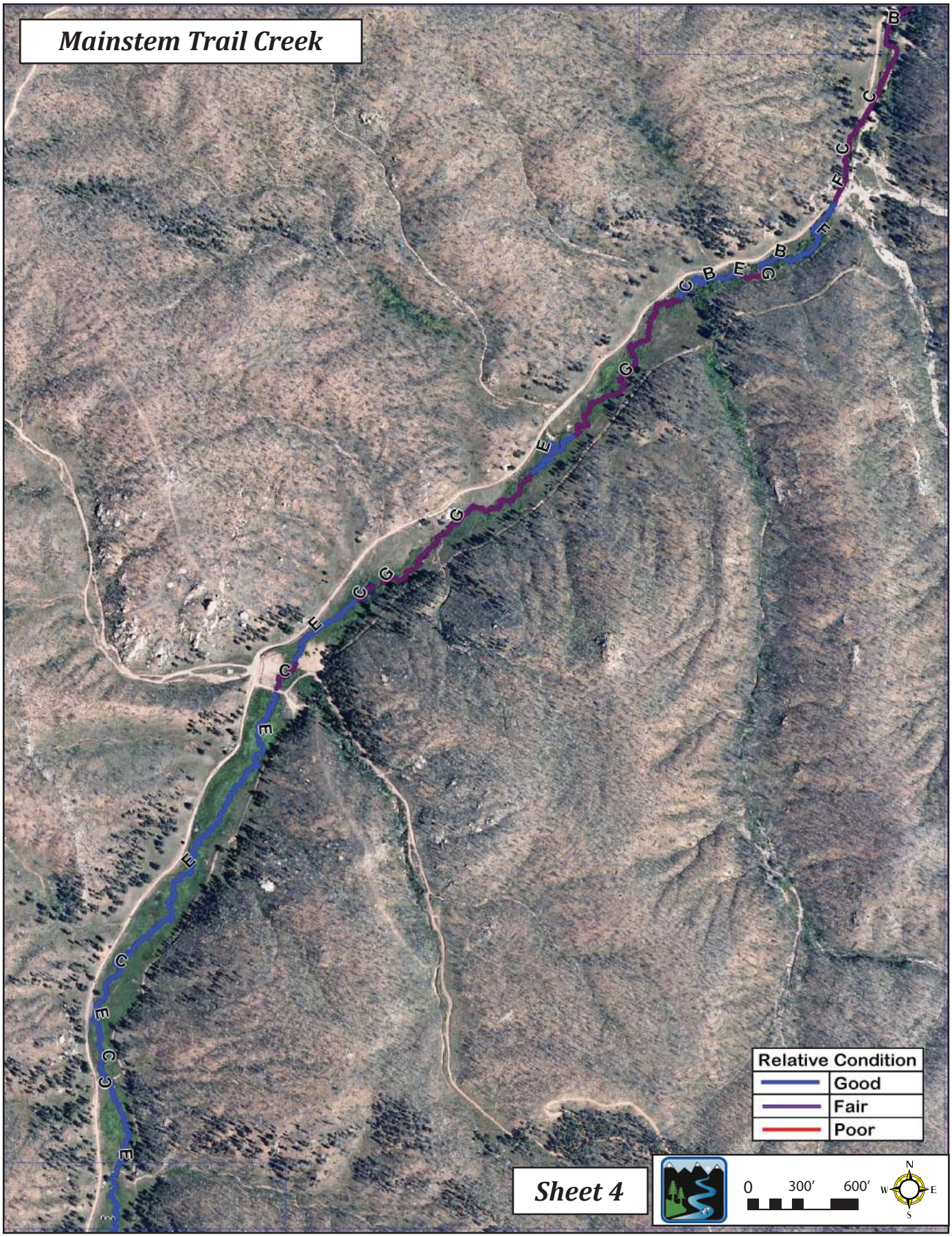
Stream Types & Relative Condition

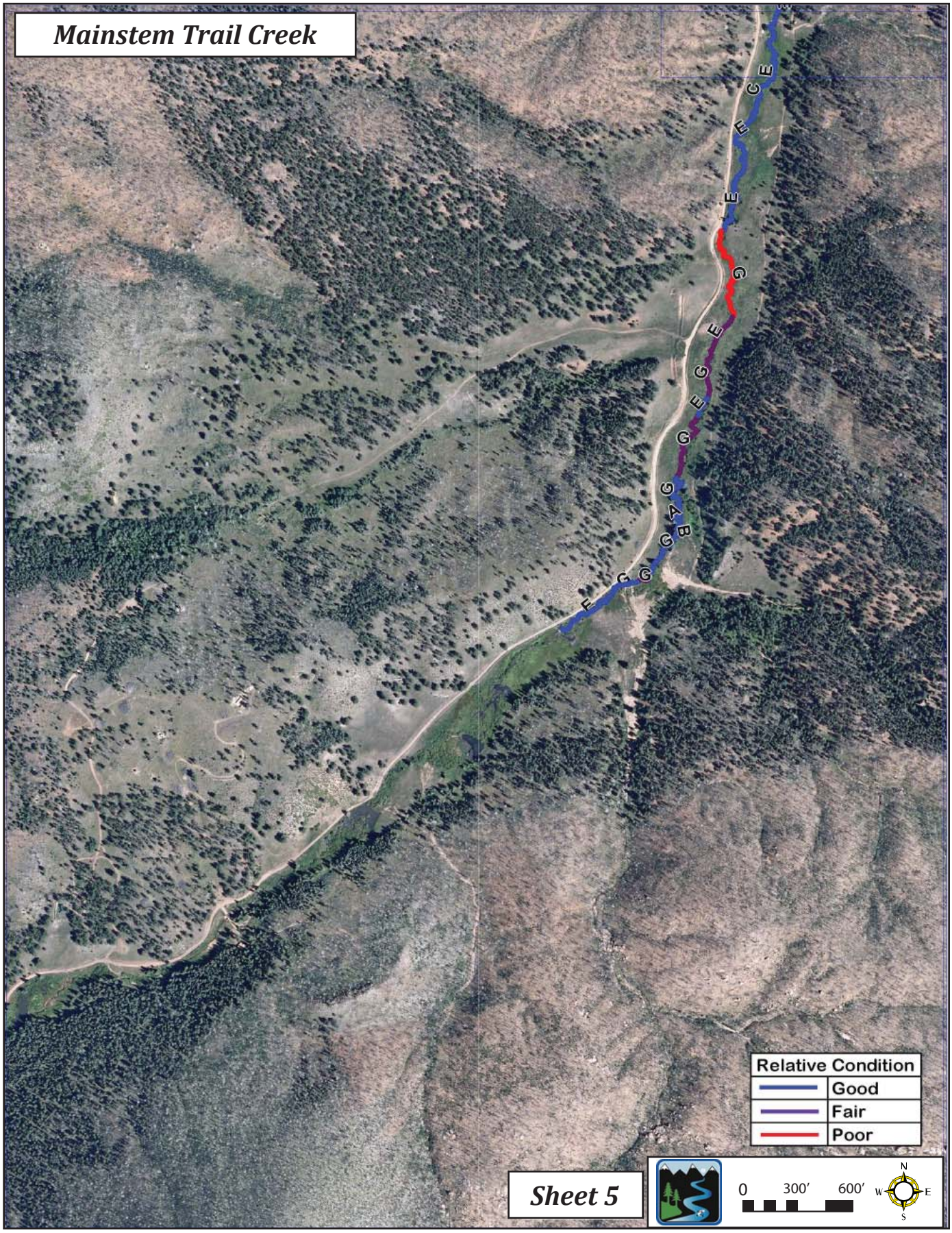



Mainstem Trail Creek
B Fb
B Aa+ A
A B
A B
B G
B
C G G B
G F C F C G F D D
Sheet 1
Relative Condition
Good
Fair
Poor
0
300'
600'
N
W
E
S

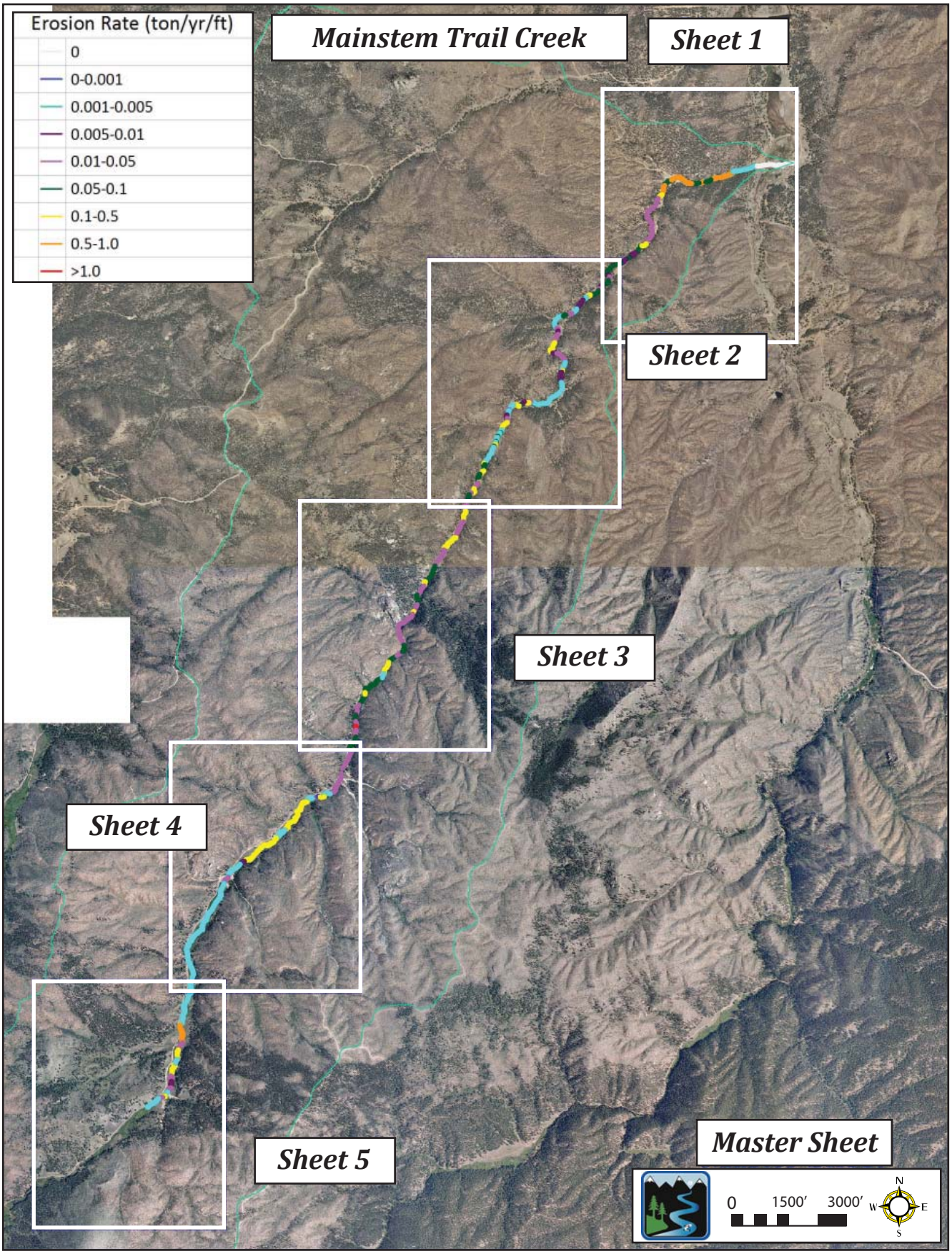

Mainstem Trail Creek
Relative Condition
Good
Fair
Poor
Sheet 2
0
300'
600'
N
W
E
S

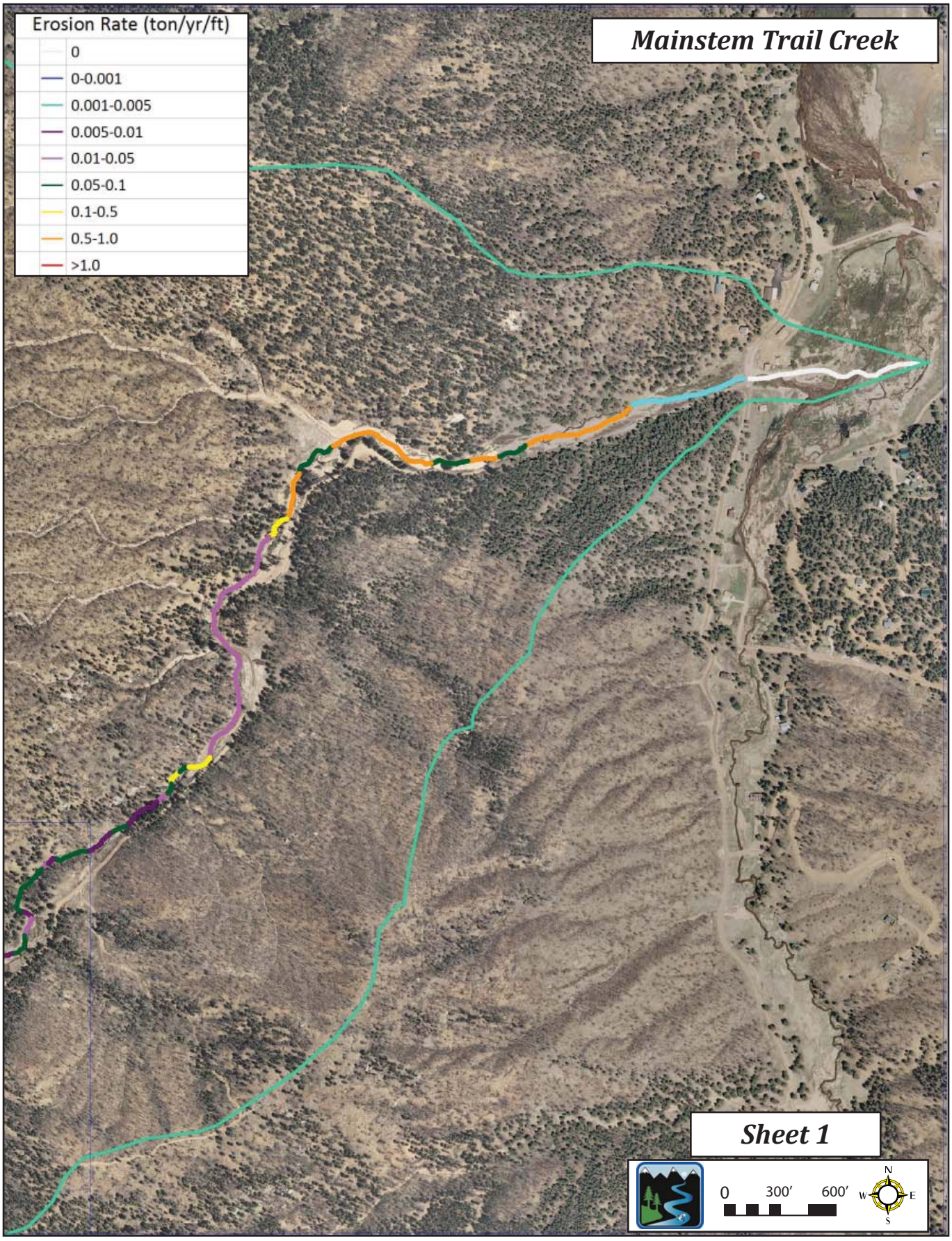

Mainstem Trail Creek
Relative Condition
Good
Fair
Poor
Sheet 3
0
300'
600'
N
W
E
S

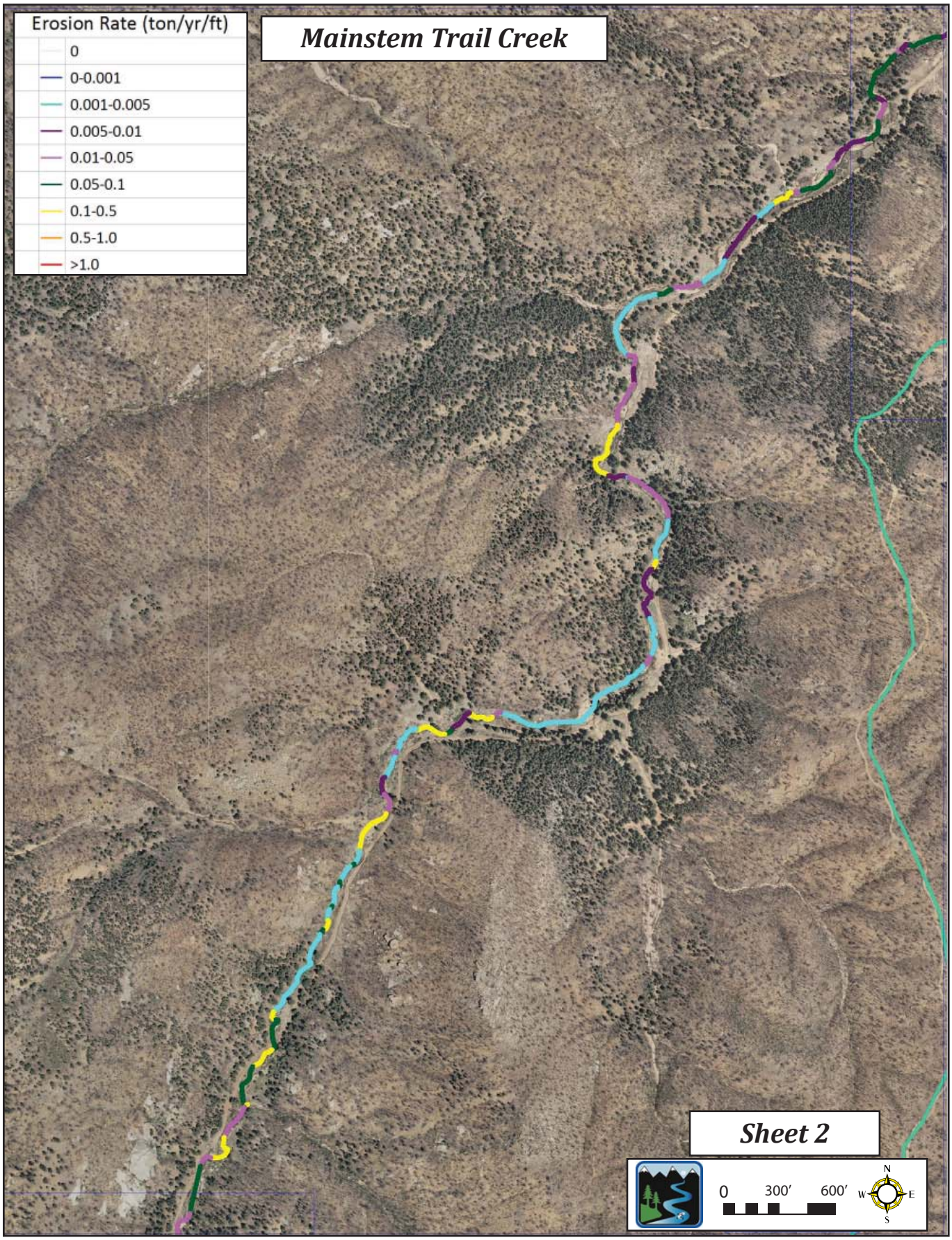

Mainstem Trail Creek
Relative Condition
Good
Fair
Poor
Sheet 4
0
300'
600'
N
W
E
S

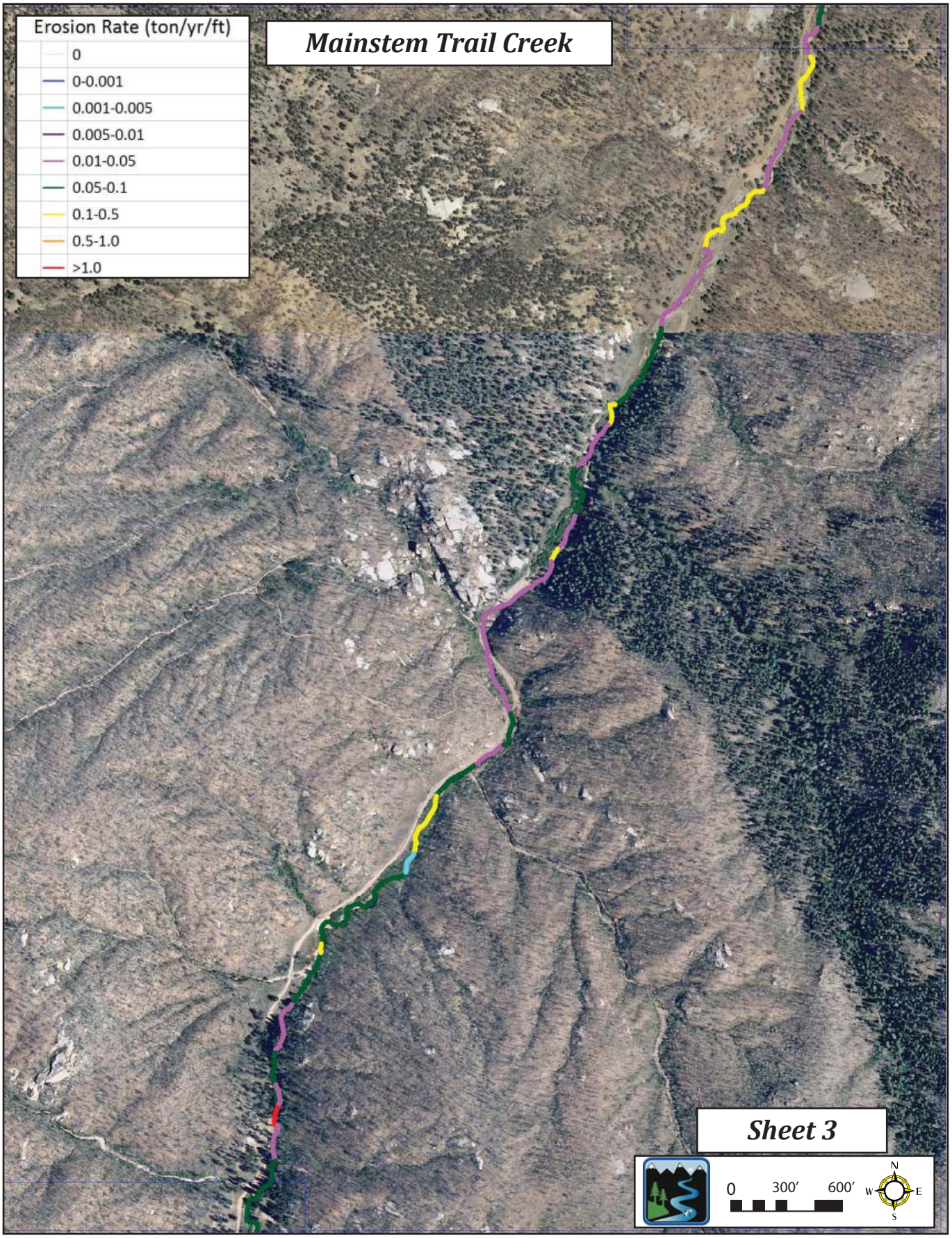

Mainstem Trail Creek
E
C
E
E
G
E
G
G
E
G
G
G
A
B
G
G
G
F
Relative Condition
Good
Fair
Poor
Sheet 5
0
300'
600'
N
W
E
S

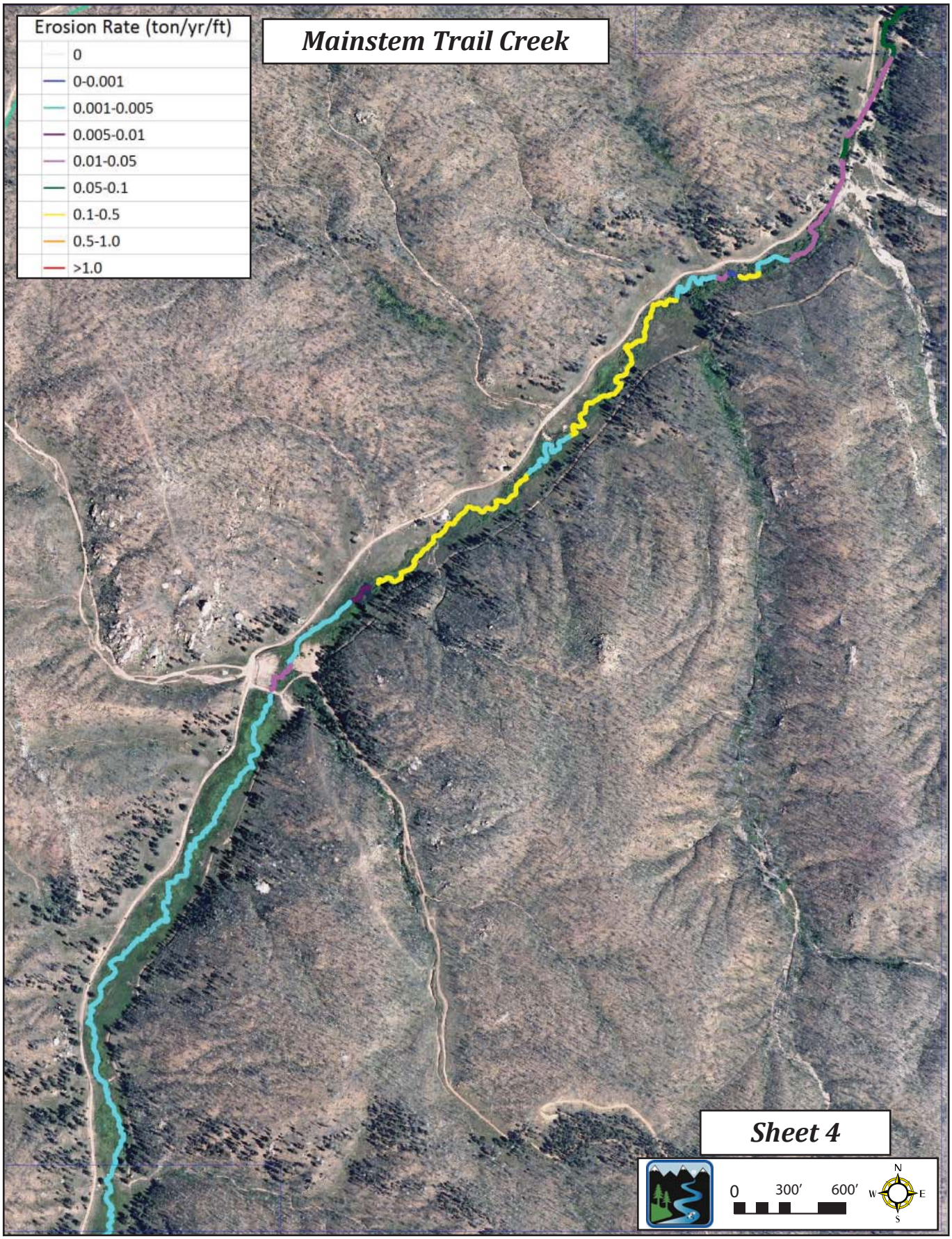
Streambank Erosion Rates (tons/yr/ft)

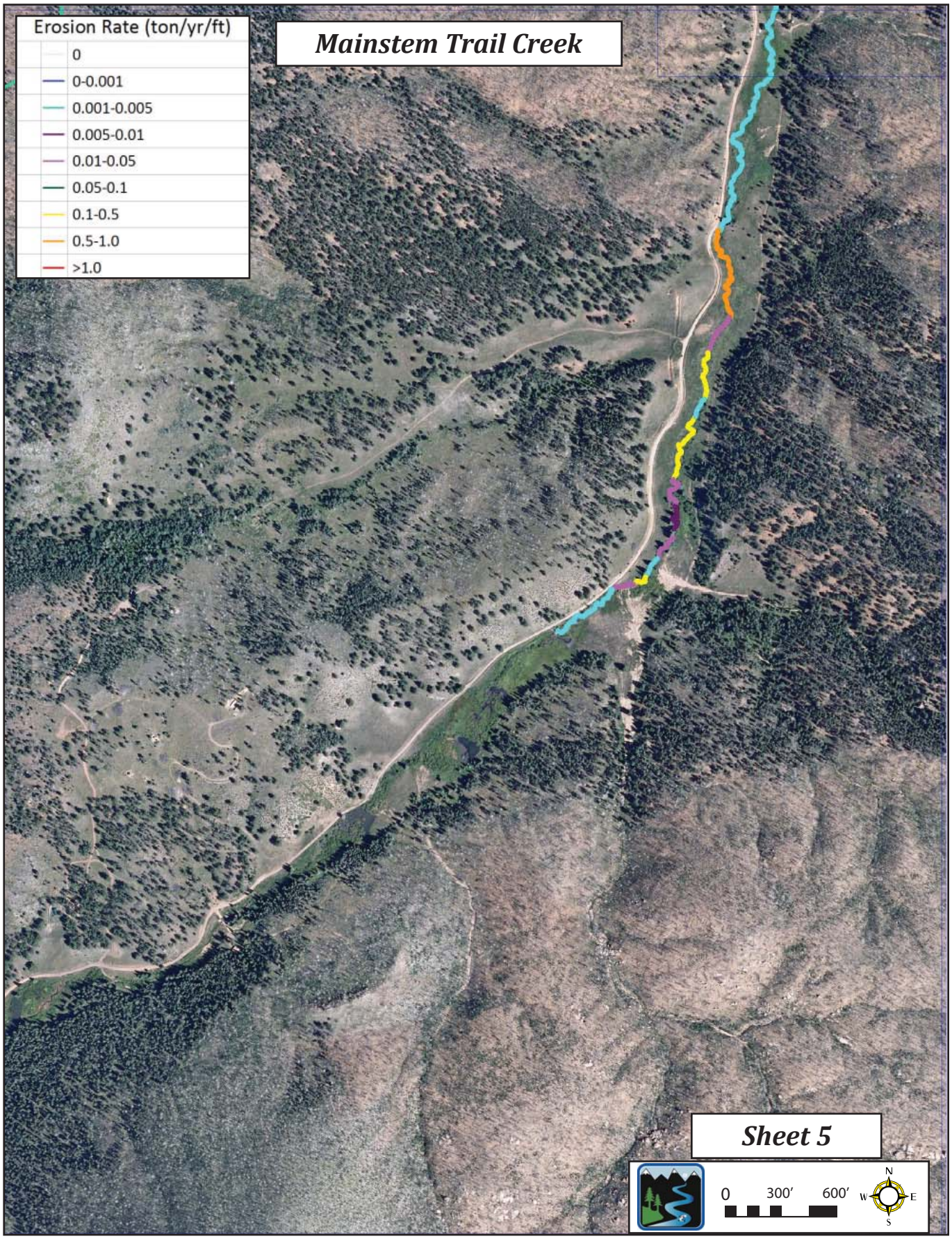



Erosion Rate (ton/yr/ft)
0
0-0.001
0.001-0.005
0.005-0.01
0.01-0.05
0.05-0.1
0.1-0.5
0.5-1.0
>1.0
Mainstem Trail Creek
Sheet 1
0
300'
600'
N
W
E
S


Erosion Rate (ton/yr/ft)
0
0-0.001
0.001-0.005
0.005-0.01
0.01-0.05
0.05-0.1
0.1-0.5
0.5-1.0
>1.0
Mainstem Trail Creek
Sheet 2
0
300'
600'
N
W
E
S


Erosion Rate (ton/yr/ft)
0
0-0.001
0.001-0.005
0.005-0.01
0.01-0.05
0.05-0.1
0.1-0.5
0.5-1.0
>1.0
Mainstem Trail Creek
Sheet 3
0
300'
600'
N
W
E
S


Erosion Rate (ton/yr/ft)
0
0-0.001
0.001-0.005
0.005-0.01
0.01-0.05
0.05-0.1
0.1-0.5
0.5-1.0
>1.0
Mainstem Trail Creek
Sheet 4
0
300'
600'
N
W
E
S


Erosion Rate (ton/yr/ft)
0
0-0.001
0.001-0.005
0.005-0.01
0.01-0.05
0.05-0.1
0.1-0.5
0.5-1.0
>1.0
Mainstem Trail Creek
Sheet 5
0
300'
600'
N
W
E
S

Sub-Watershed 1

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **1**

Watershed Characteristics

Drainage Area (mi^2)	0.38
Drainage Density	13.9

Burn Severity (%)	High	Moderate	Low	Unburned
	3.0%	59.0%	25.0%	13.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	20%	27%	3%	0%	0%	0%	15%	36%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	88%	3%	0%	0%	6%	3%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	57%	40%	3%

Total Erosion (tons/yr): 144

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	6%	68%	18%	5%	0%	3%	0%	0%

Hillslope

Length of Road (ft)	2,250	Sediment from Surface Erosion (tons/yr)	65.7
Total Sediment from Roads (tons/yr)	0.94	Total Introduced Sediment (tons/yr)	67

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	4.63	DA (mi^2)	0.318	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{BKF}(cfs)		DA (mi^2)	
		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac ft)		505	583	583	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		15	362	107	Flow-Related Sediment (tons)				Flow-Related Sediment (tons)				Flow-Related Sediment (tons)				Flow-Related Sediment (tons)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	505	583	78	583	
Flow-Related Sediment (tons)	15	362	347	107	-255

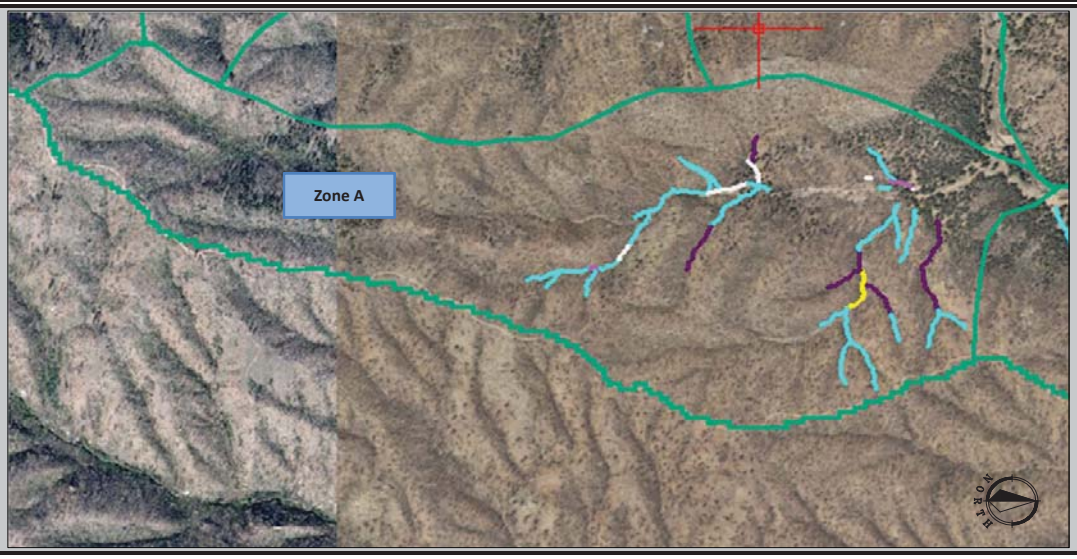
Erosion Summary

Total Existing Water Yield (ac-ft)	583
Total Existing Sediment Yield (tons/yr)	362

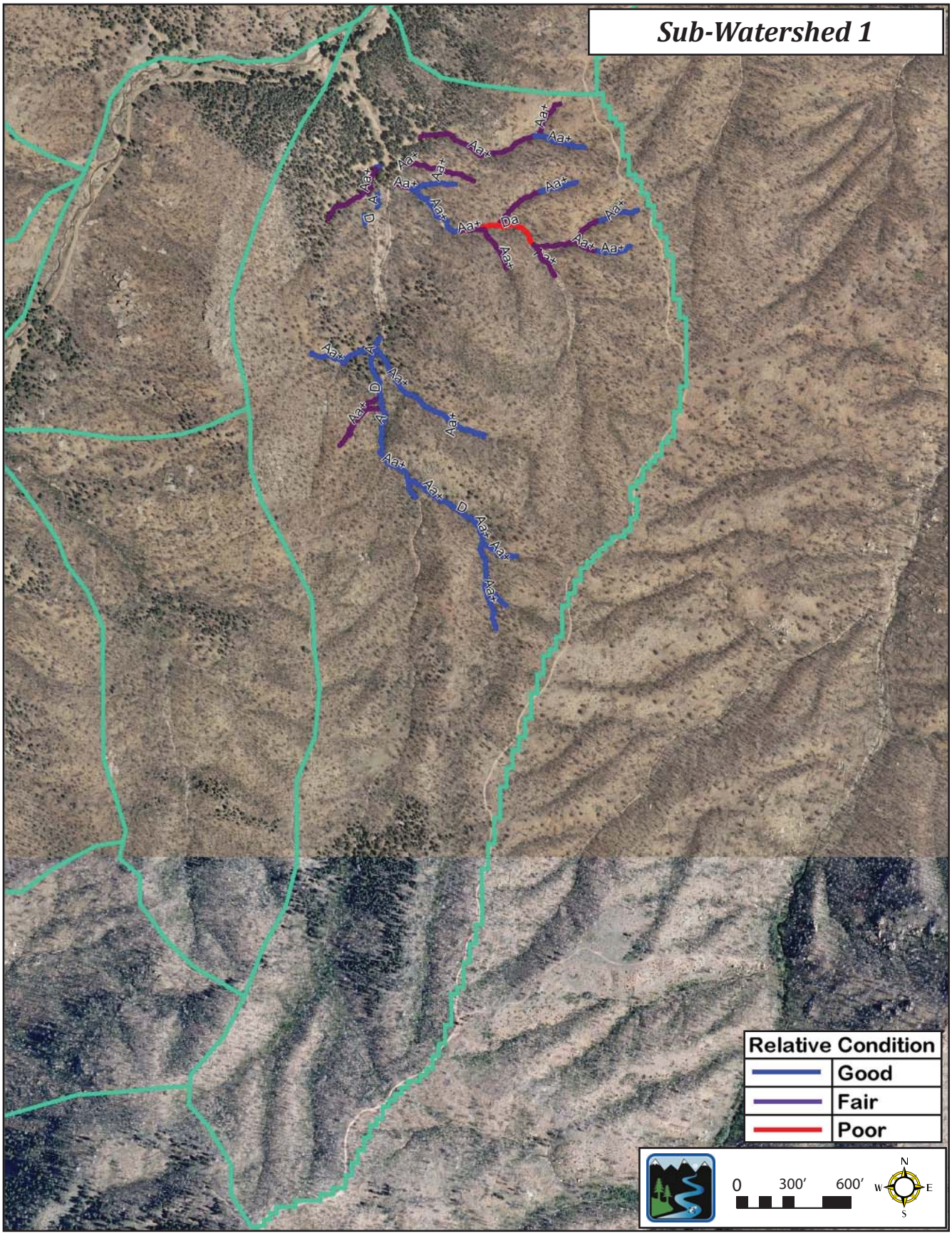
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	144	1	66	152
Percent of Total Yield	68%	0%	31%	42%

Deposition or Scour
Scour

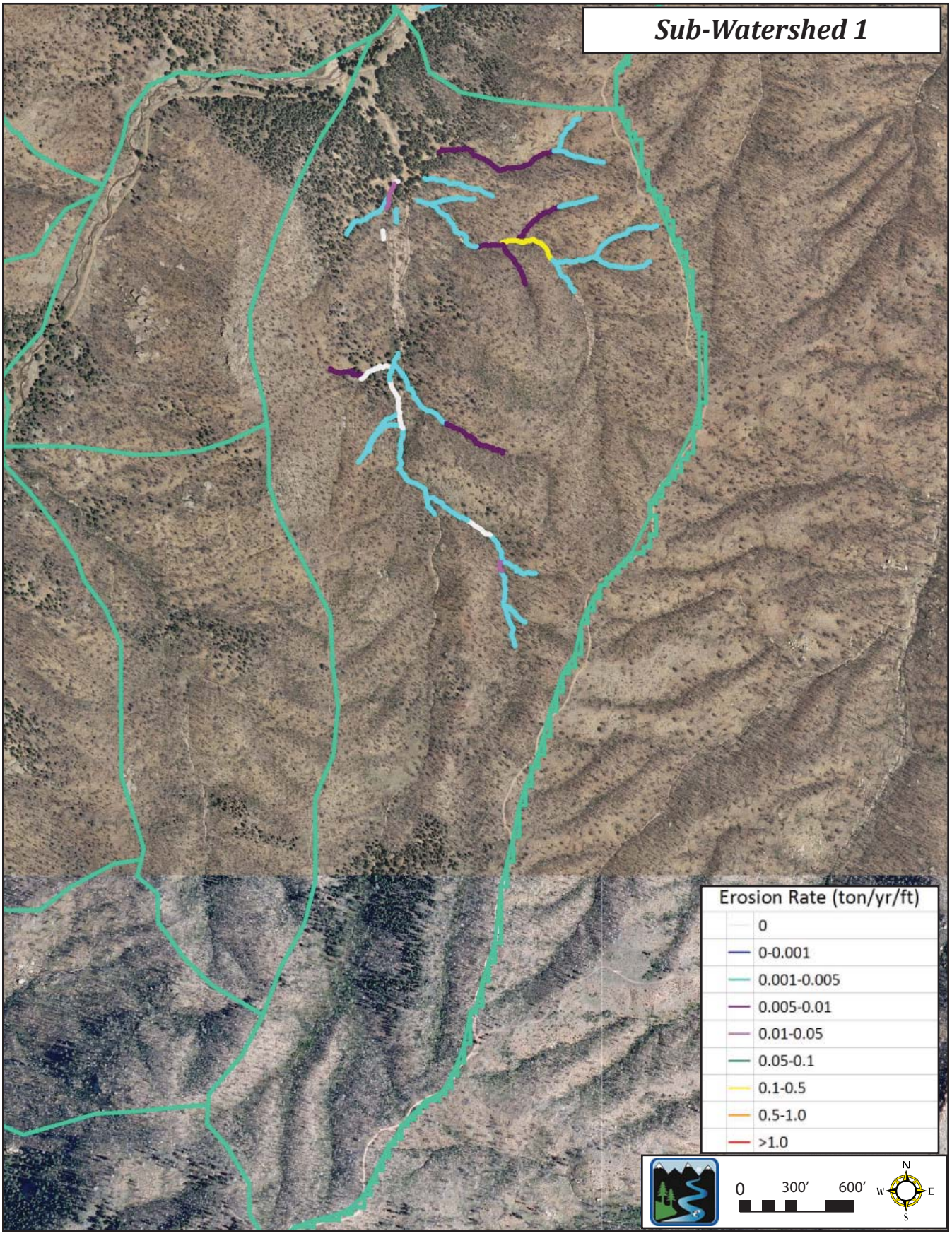
Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 2

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **2**

Watershed Characteristics

Drainage Area (mi^2)	0.24
Drainage Density	9.36

Burn Severity (%)	High	Moderate	Low	Unburned
	1.3%	12.3%	68.1%	18.3%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	22%	0%	2%	2%	0%	0%	13%	60%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	95%	0%	0%	0%	0%	4%	0%	0%	1%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	28%	59%	13%

Total Erosion (tons/yr): 160

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	4%	42%	36%	4%	8%	5%	0%	0%

Hillslope

Length of Road (ft)	1,250
Total Sediment from Roads (tons/yr)	3
Sediment from Surface Erosion (tons/yr)	7.3
Total Introduced Sediment (tons/yr)	11

Hydrology

	Zone A			Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	1.97	DA (mi^2)	0.058	Post-Restoration	3.2	DA (mi^2)	0.153	Post-Restoration		DA (mi^2)		Post-Restoration		DA (mi^2)		Post-Restoration		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)		215	232	232		350	366	366	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		9	43	32		12	13	13	Flow-Related Sediment (tons)				Flow-Related Sediment (tons)				Flow-Related Sediment (tons)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	565	598	33	598	
Flow-Related Sediment (tons)	21	56	36	46	-10

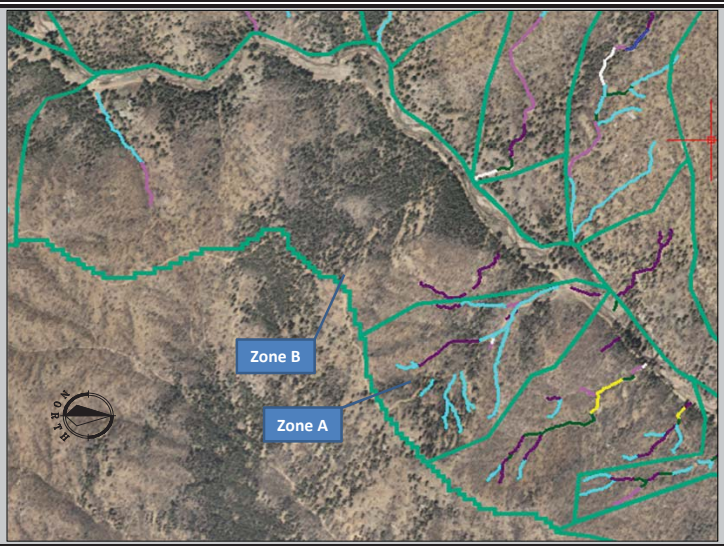
Erosion Summary

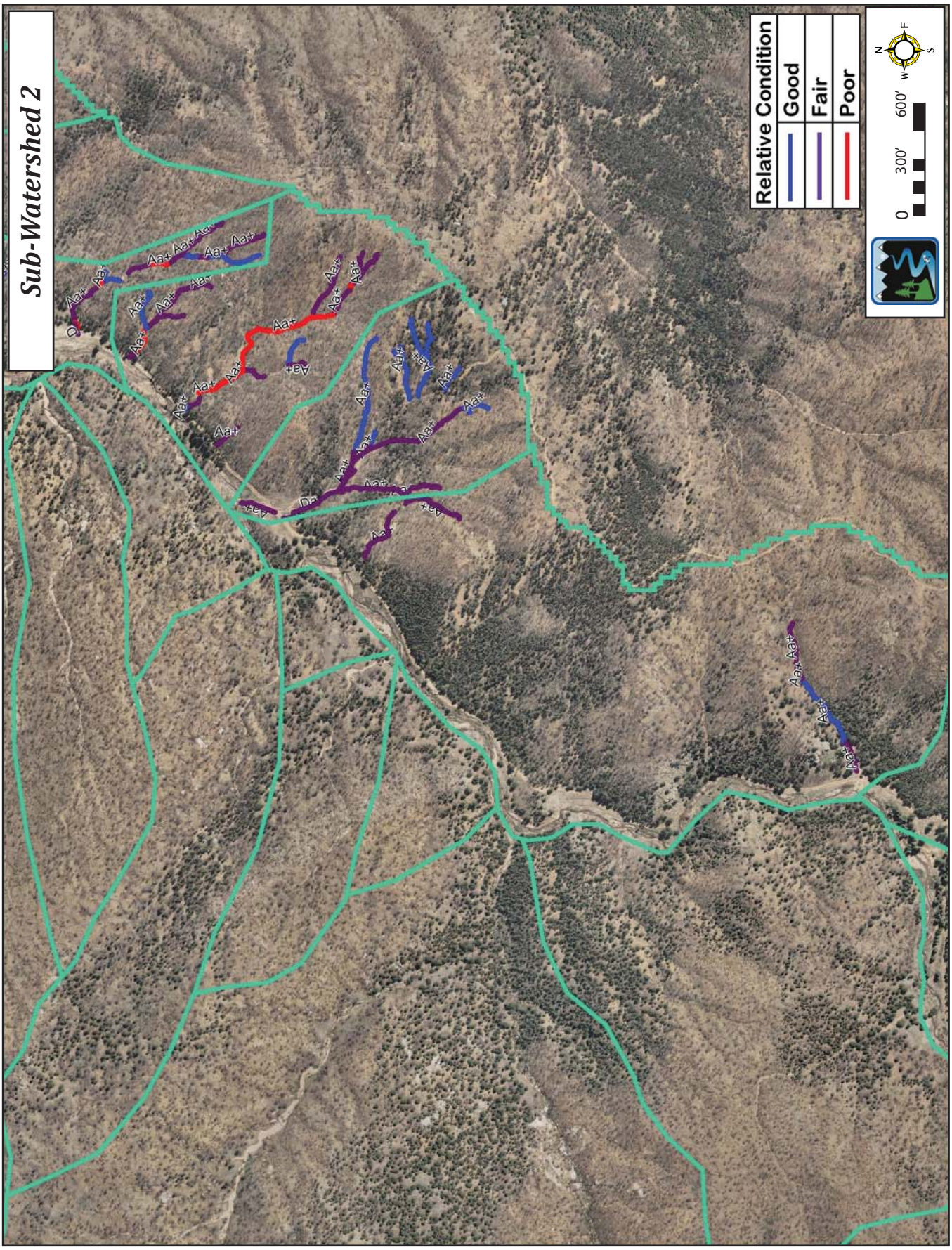
Total Existing Water Yield (ac-ft)	598
Total Existing Sediment Yield (tons/yr)	56

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	160	3	7	-114
Percent of Total Yield	94%	2%	4%	67%

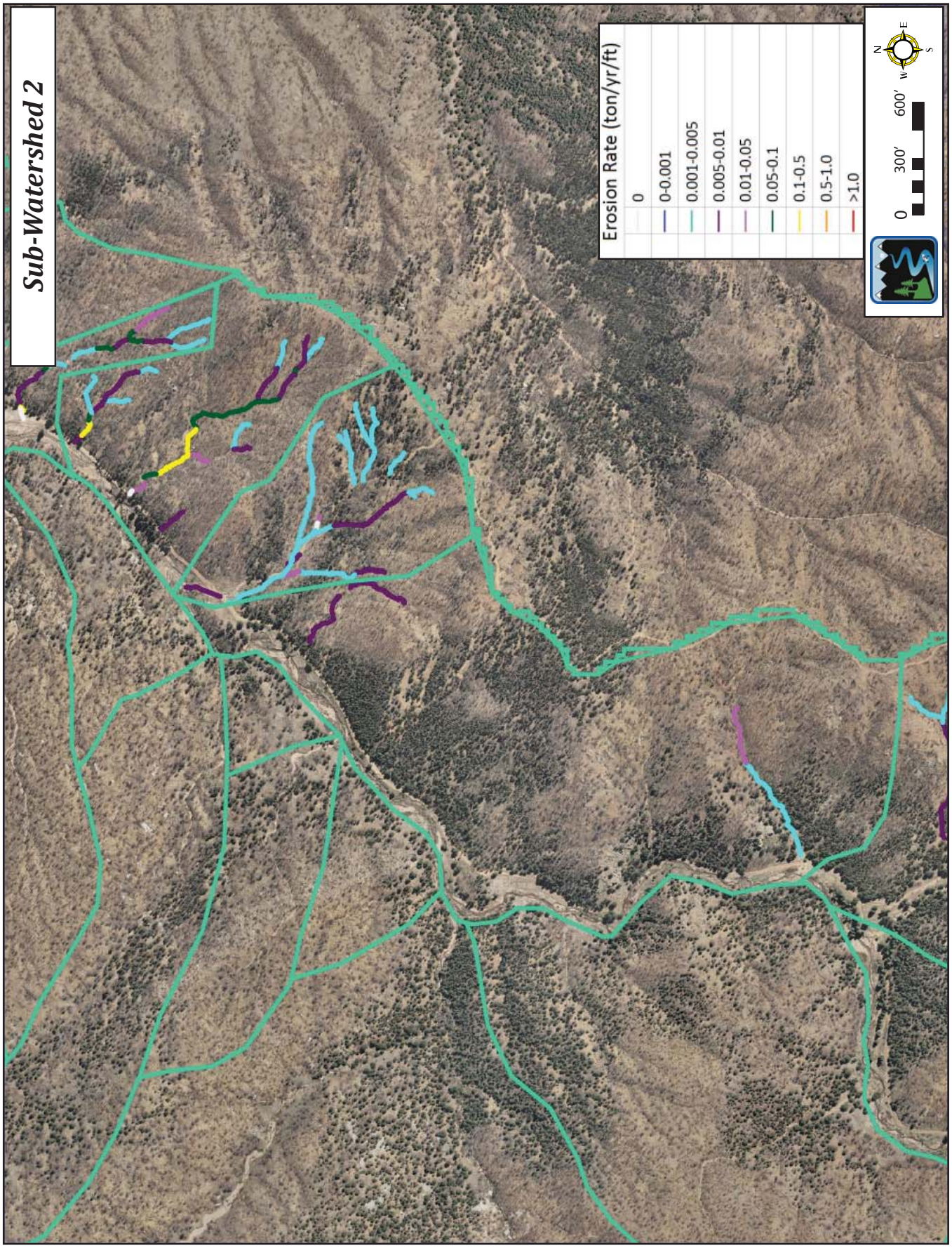
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 4

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **4**

Watershed Characteristics

Drainage Area (mi^2)	1.46
Drainage Density	12

Burn Severity (%)	High	Moderate	Low	Unburned
	20.3%	28.2%	45.3%	6.2%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	8%	13%	43%	28%	8%	0%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	52%	34%	1%	0%	1%	7%	0%	0%	5%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	45%	51%	4%

Total Erosion (tons/yr): 715

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		3%	1%	66%	16%	9%	3%	1%	1%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	160
Total Introduced Sediment (tons/yr)	160

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	1.46	DA (mi^2)	0.032
Water Yield (ac-ft)	160	166	166
Flow-Related Sediment (tons/yr)	7	8	8

Zone B	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	2.2	DA (mi^2)	0.072
Water Yield (ac-ft)	240	252	252
Flow-Related Sediment (tons/yr)	9	47	34

Zone C	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	8.93	DA (mi^2)	1.18
Water Yield (ac-ft)	976	1,231	1,231
Flow-Related Sediment (tons/yr)	24	46	46

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs		DA (mi^2)	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs		DA (mi^2)	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	1,376	1,649	274	418	
Flow-Related Sediment (tons)	40	101	60	43	-58

Erosion Summary

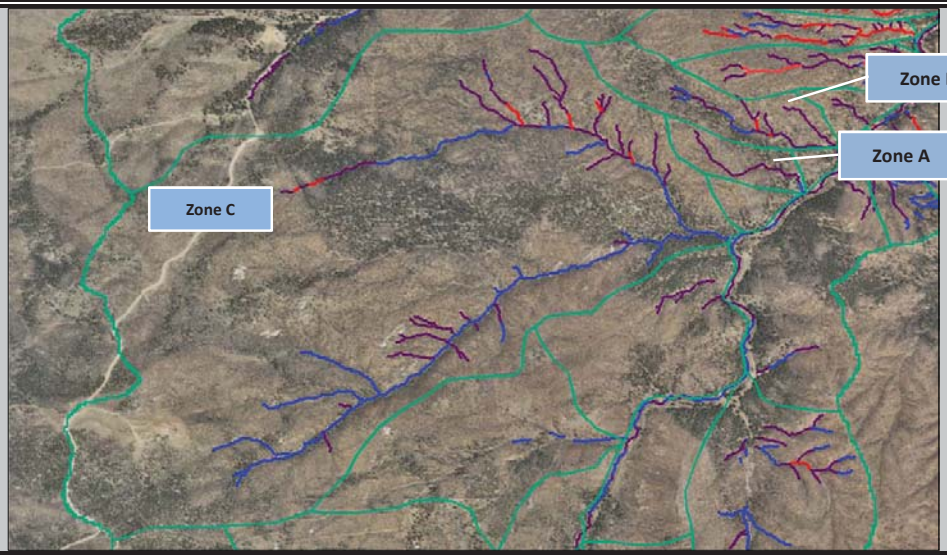
Total Existing Water Yield (ac-ft)	1,649
Total Existing Sediment Yield (tons/yr)	101

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	715	0	160	-774
Percent of Total Yield	82%	0%	18%	-88%

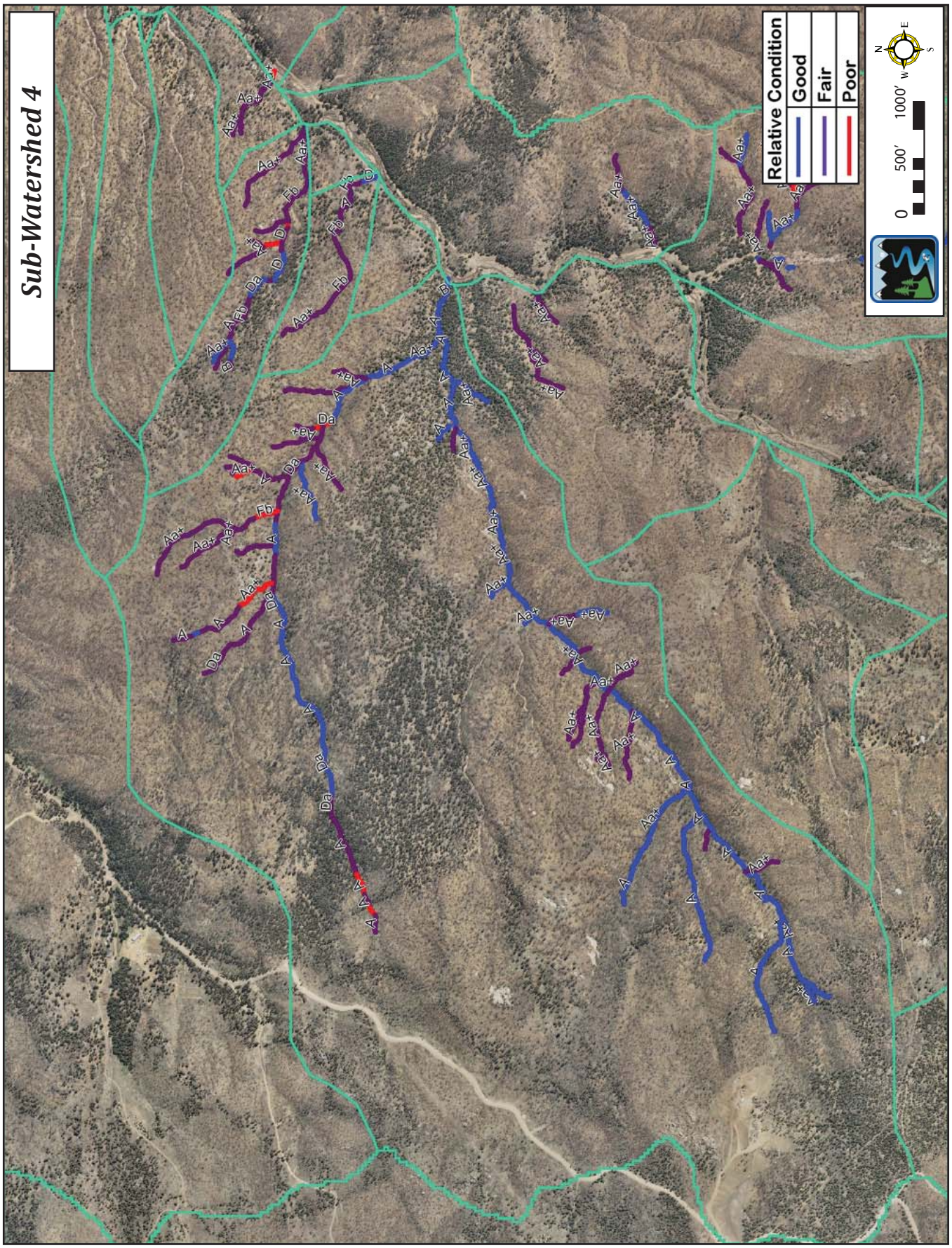
Deposition or Scour

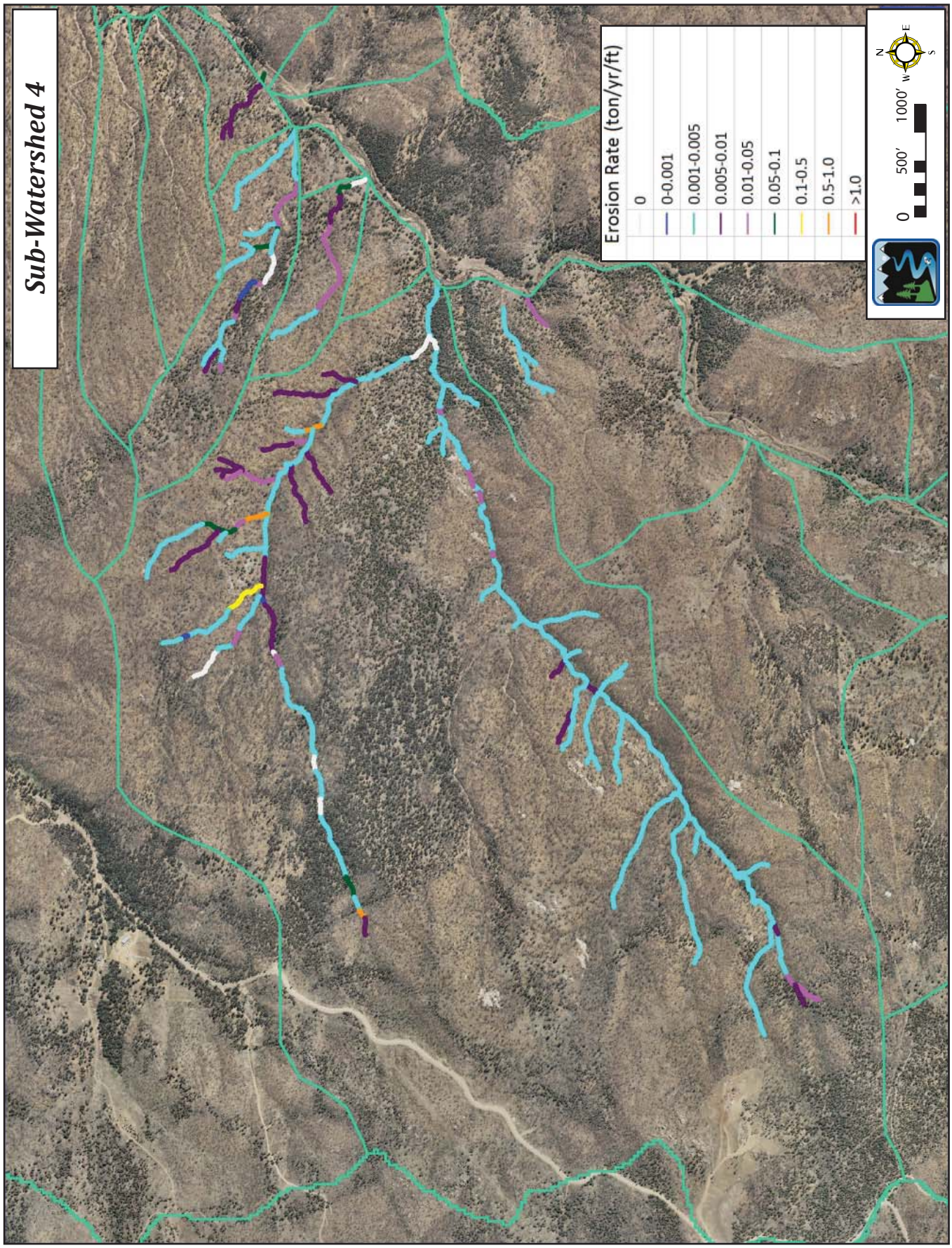
Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition





Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 5

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **5**

Watershed Characteristics

Drainage Area (mi^2)	0.12
Drainage Density	16

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	48.2%	51.8%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	61%	9%	6%	0%	0%	0%	0%	24%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	98%	0%	0%	0%	2%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	45%	51%	4%

Total Erosion (tons/yr): 43

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	2%	34%	42%	10%	12%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	2.71
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	2.71

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs		DA (mi^2)			Q_{bkf} cfs		DA (mi^2)			Q_{bkf} cfs		DA (mi^2)			Q_{bkf} cfs		DA (mi^2)			Q_{bkf} cfs		DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

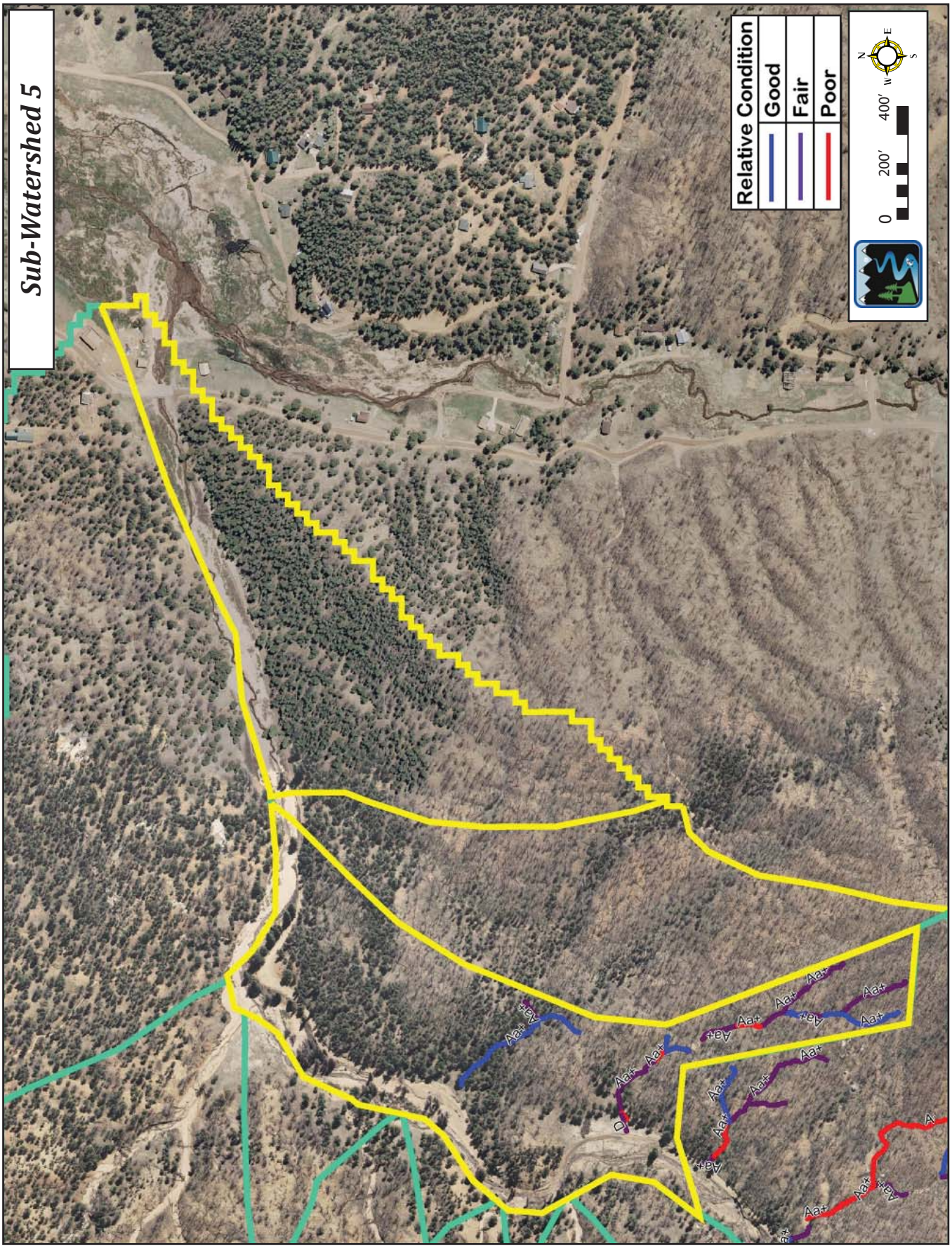
	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	N/A	N/A	N/A	N/A	
Flow-Related Sediment (tons)	N/A	N/A	N/A	N/A	N/A

Erosion Summary

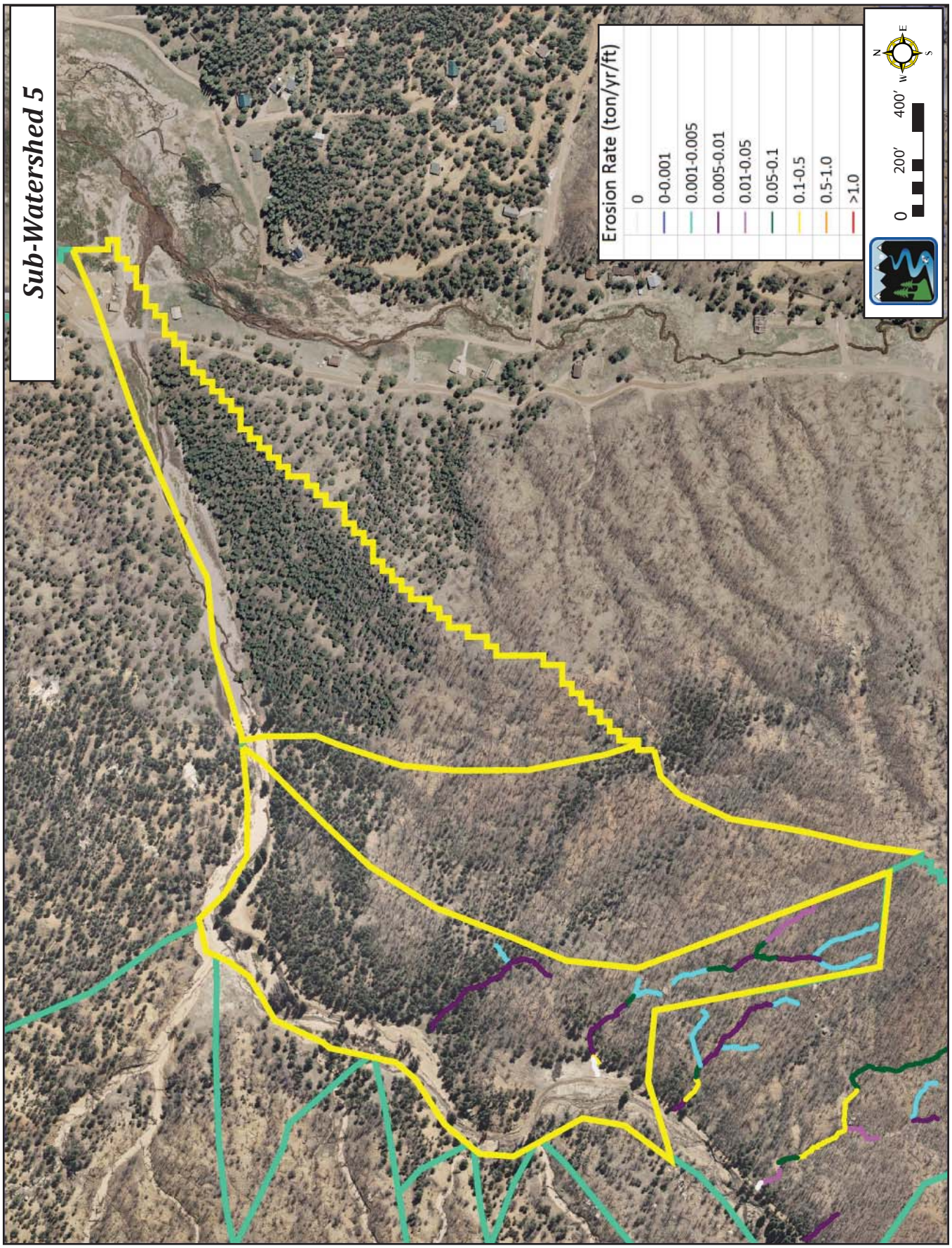
Total Existing Water Yield (ac-ft)	N/A
Total Existing Sediment Yield (tons/yr)	N/A

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	43	0	3	N/A
Percent of Total Yield	94%	0%	6%	N/A

Deposition or Scour
N/A



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 6

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **6**

Watershed Characteristics

Drainage Area (mi^2)	1.77
Drainage Density	10.6

Burn Severity (%)	High	Moderate	Low	Unburned
	35.6%	14.6%	37.4%	12.5%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	12%	13%	37%	20%	10%	4%	1%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	38%	19%	0%	0%	4%	24%	0%	3%	10%	1%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	45%	50%	5%

Total Erosion (tons/yr): 6,104

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		12%	3%	35%	11%	11%	9%	13%	4%	2%

Hillslope

Length of Road (ft)	17,722	Sediment from Surface Erosion (tons/yr)	319
Total Sediment from Roads (tons/yr)	180	Total Introduced Sediment (tons/yr)	499

Hydrology

Zone A					Zone B					Zone C				
Q_{bkf} cfs	2.45	DA (mi^2)	0.090	Post-Restoration	Q_{bkf} cfs	10.2	DA (mi^2)	1.548	Post-Restoration	Q_{bkf} cfs	2.28	DA (mi^2)	0.078	Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		268	268	268	Water Yield (ac-ft)		1,118	1,417	1,417	Water Yield (ac-ft)		249	269	269
Flow-Related Sediment (tons/yr)		10	109	35	Flow-Related Sediment (tons/yr)		27	1,364	380	Flow-Related Sediment (tons/yr)		10	118	38

Zone D					Zone E				
Q_{bkf} cfs	1.91	DA (mi^2)	0.055	Post-Restoration	Q_{bkf} cfs	2.05	DA (mi^2)	0.063	Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		209	225	225	Water Yield (ac-ft)		224	242	242
Flow-Related Sediment (tons/yr)		9	11	11	Flow-Related Sediment (tons/yr)		9	103	34

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	2,069	2,421	353	2,152	
Flow-Related Sediment (tons)	65	1,705	1,640	460	-1,245

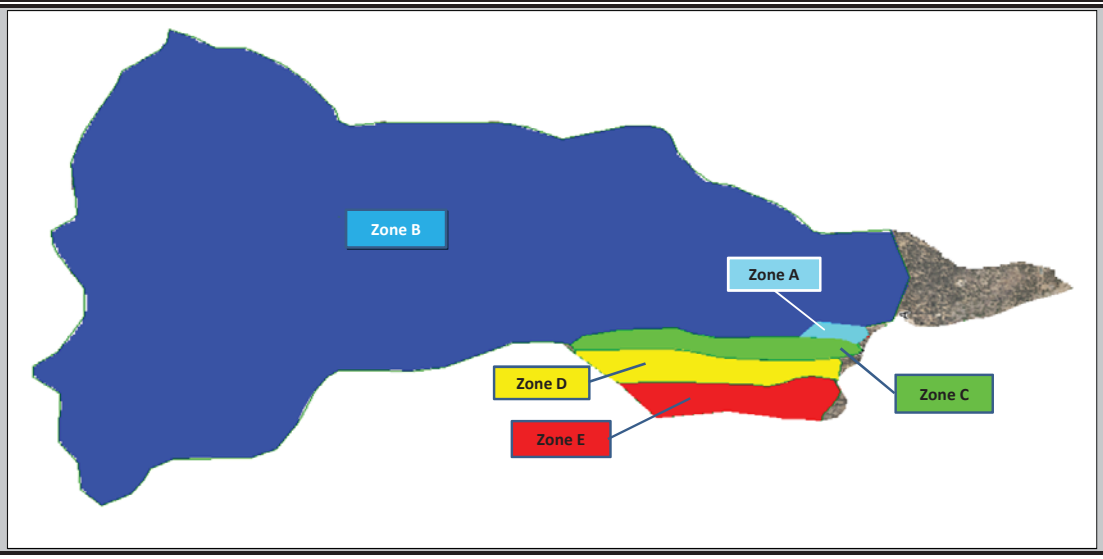
Erosion Summary

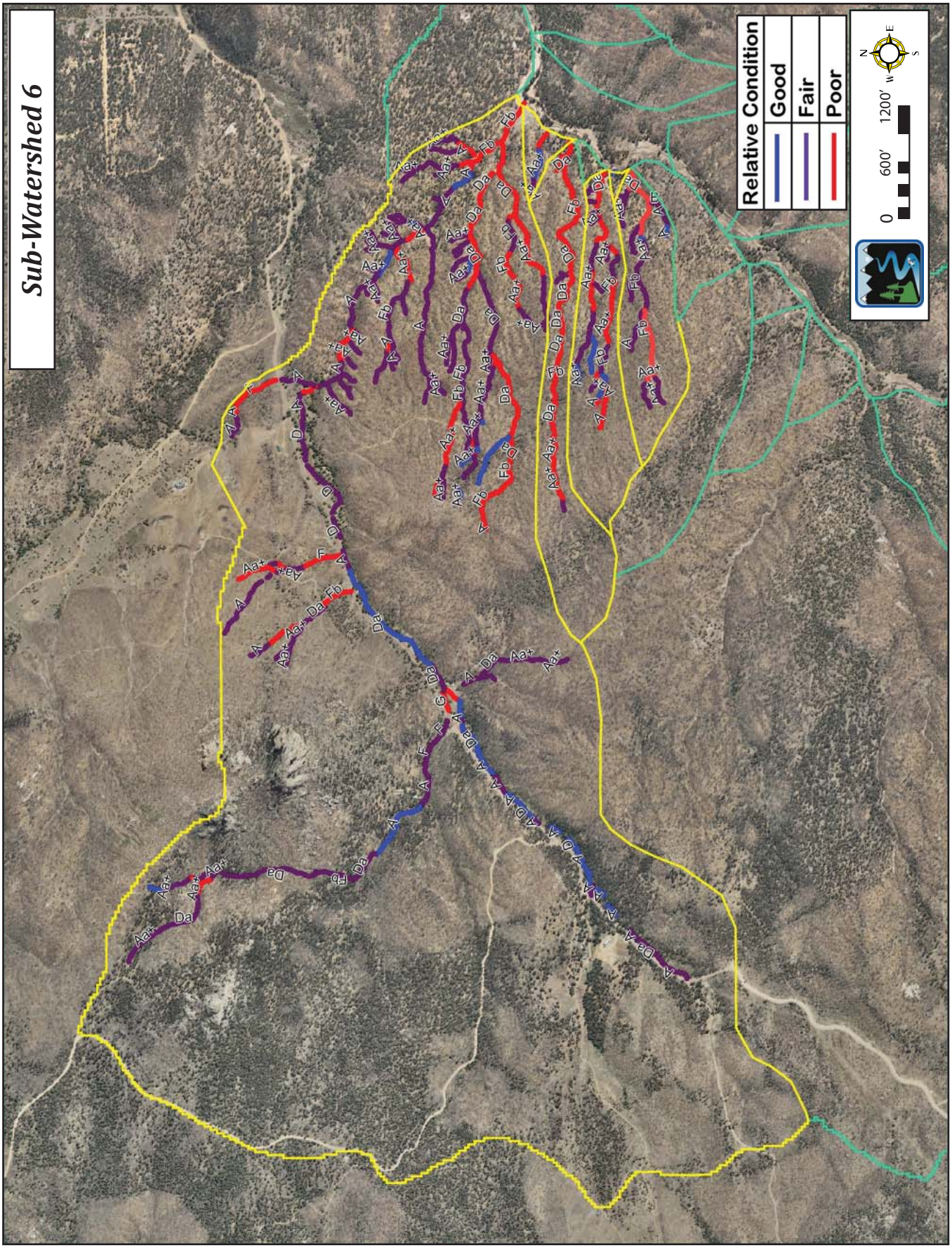
Total Existing Water Yield (ac-ft)	2,421
Total Existing Sediment Yield (tons/yr)	1,705

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	6,104	180	319	-4,898
Percent of Total Yield	92%	3%	5%	-74%

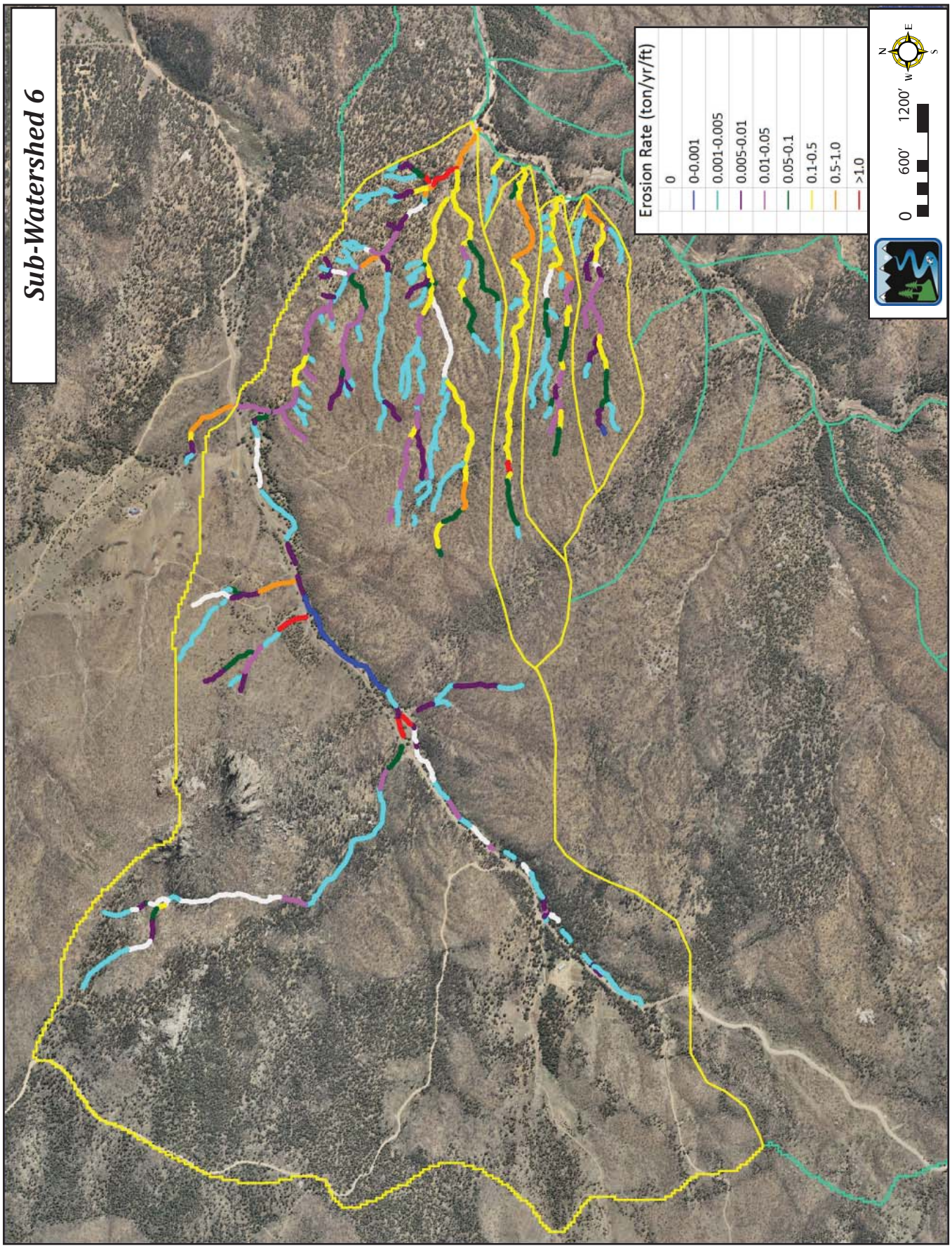
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 7

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **7**

Watershed Characteristics

Drainage Area (mi^2)	0.18
Drainage Density	13.6

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	49.8%	45.2%	5.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	21%	5%	2%	0%	0%	0%	23%	49%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 19

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	17.7
Total Introduced Sediment (tons/yr)	17.7

Hydrology

	Zone A			Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	2.65	DA (mi^2)	0.105	Post-Restoration	Q_{bkf} cfs	2.3	DA (mi^2)	0.079	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		289	316	316	Water Yield (ac-ft)		251	265	265	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		11	13	13	Flow-Related Sediment (tons/yr)		10	11	11	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	541	581	40	581	
Flow-Related Sediment (tons)	21	25	4	25	0

Erosion Summary

Total Existing Water Yield (ac-ft)	581
Total Existing Sediment Yield (tons/yr)	25

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	19	0	18	-12
Percent of Total Yield	52%	0%	48%	-32%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 8

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **8**

Watershed Characteristics

Drainage Area (mi^2)	0.08
Drainage Density	11.81

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	4.0%	96.0%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	11%	0%	1%	0%	0%	1%	6%	82%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 9

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	4.04
Total Introduced Sediment (tons/yr)	4.04

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 2.34	DA (mi^2) 0.082		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	256	272	272	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	10	12	12	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	256	272	16	272	
Flow-Related Sediment (tons)	10	12	2	12	0

Erosion Summary

Total Existing Water Yield (ac-ft)	272
Total Existing Sediment Yield (tons/yr)	12

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	9	0	4	-1
Percent of Total Yield	69%	0%	31%	0%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 9

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **9**

Watershed Characteristics

Drainage Area (mi^2)	0.23
Drainage Density	11.72

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	39.4%	60.2%	50.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	6%	1%	1%	0%	0%	11%	22%	58%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	64%	0%	0%	0%	21%	16%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	51%	49%	0%

Total Erosion (tons/yr)	16

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	25%	16%	11%	18%	28%	0%	2%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	7.48
Total Introduced Sediment (tons/yr)	7.48

Hydrology

Zone A — Q_{bkf} cfs: 2.37; DA (mi^2): 0.084

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	259	284	284
Flow-Related Sediment (tons/yr)	10	13	13

N/A (four zones) — Q_{bkf} cfs: ; DA (mi^2):

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	259	284	25	284	
Flow-Related Sediment (tons)	10	13	3	13	0

Erosion Summary

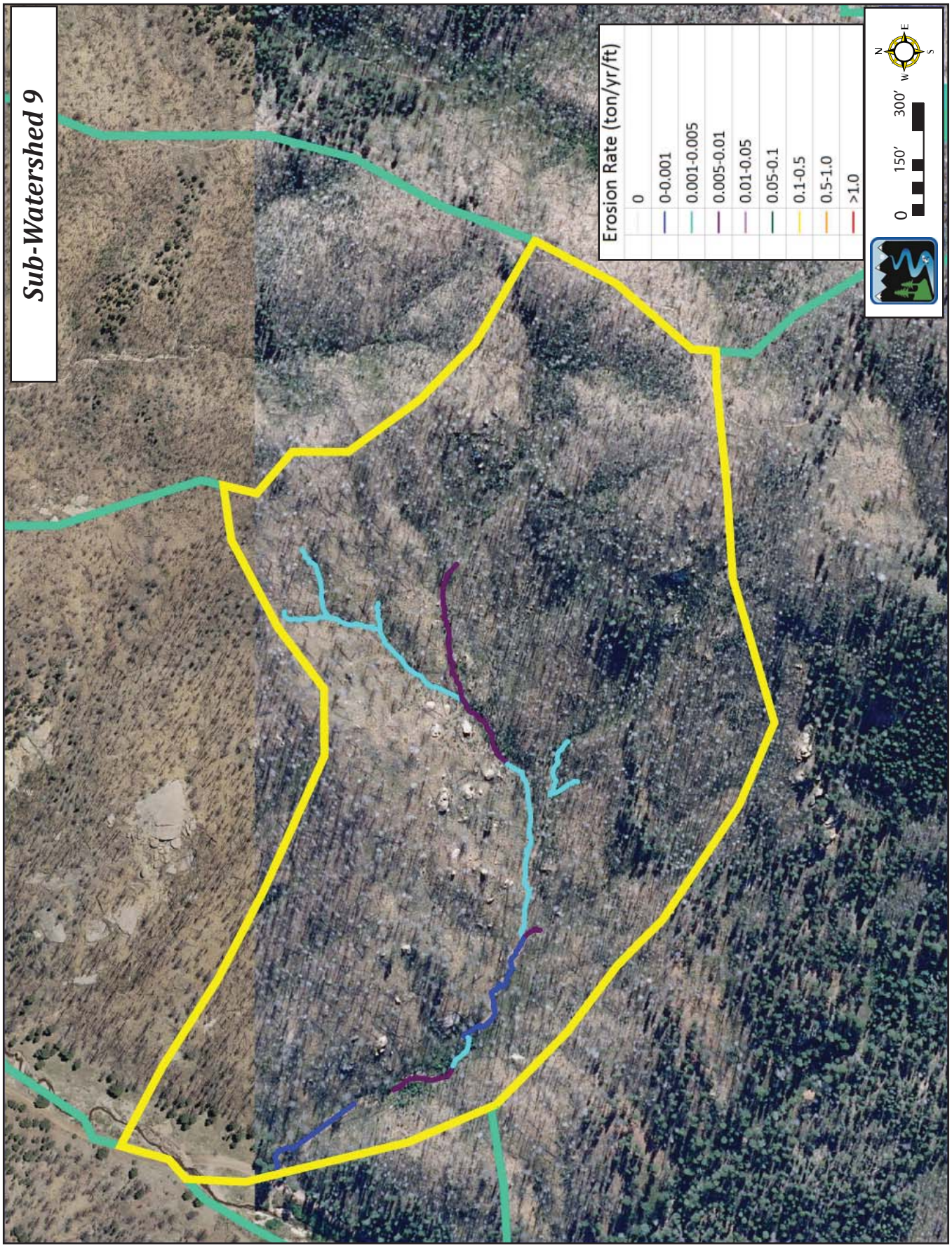
Total Existing Water Yield (ac-ft)	284
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	16	0	7	-10
Percent of Total Yield	68%	0%	32%	46%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed

Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 10

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **10**

Watershed Characteristics

Drainage Area (mi²)	0.14
Drainage Density	12.14

	High	Moderate	Low	Unburned
Burn Severity (%)	18.1%	10.3%	58.4%	13.3%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	1%	2%	64%	17%	15%	0%	1%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	64%	0%	0%	0%	21%	16%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	51%	49%	0%

Total Erosion (tons/yr): 16

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	25%	16%	11%	18%	28%	0%	2%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	14.75
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	14.75

Hydrology

	Zone A			N/A			N/A			N/A			N/A		
Q_{bkf} cfs	3.10														
DA (mi²)	0.143														
	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	338	358	358												
Flow-Related Sediment (tons/yr)	12	14	14												

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	338	358	19	358	
Flow-Related Sediment (tons)	12	14	2	14	0

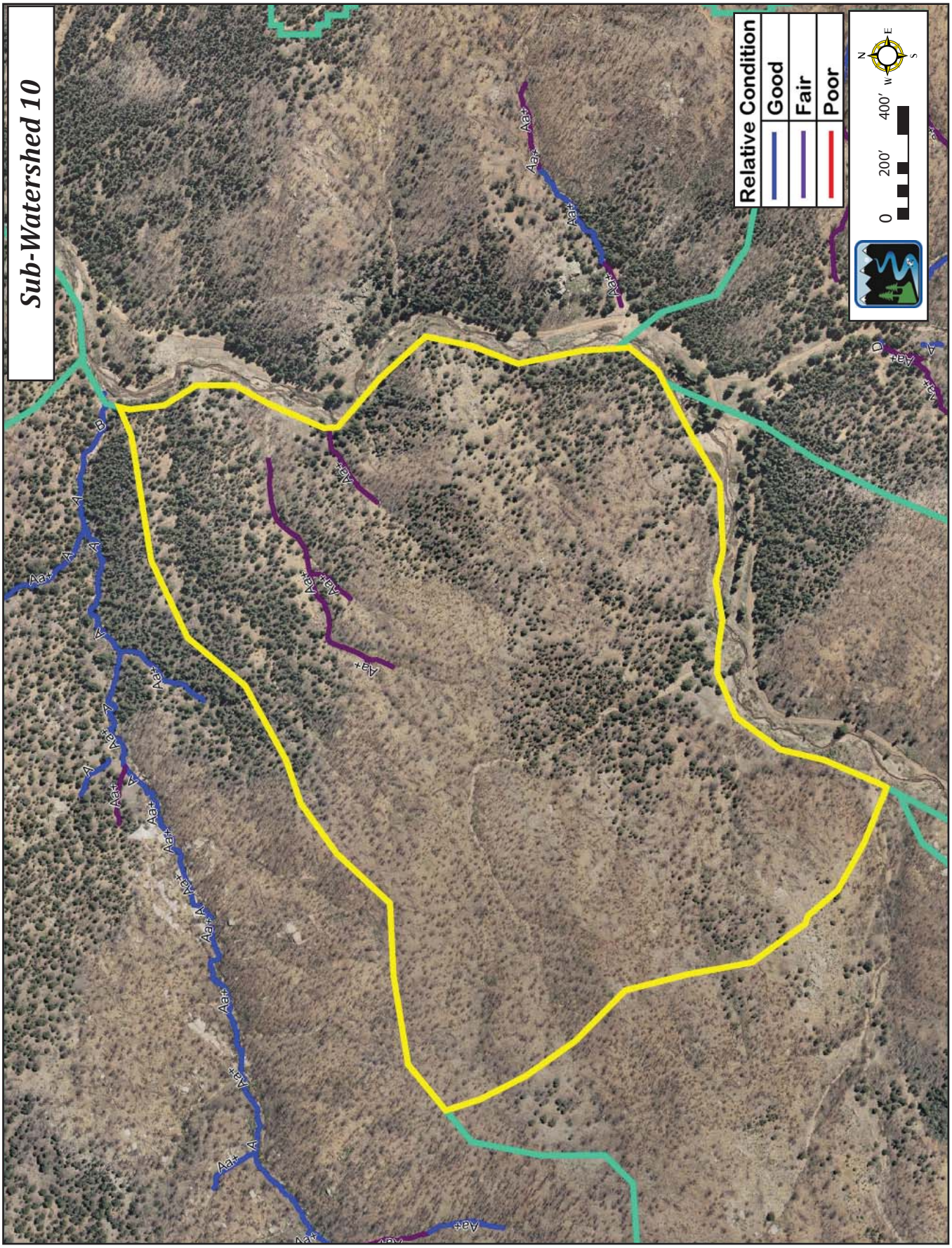
Erosion Summary

Total Existing Water Yield (ac-ft)	358
Total Existing Sediment Yield (tons/yr)	14

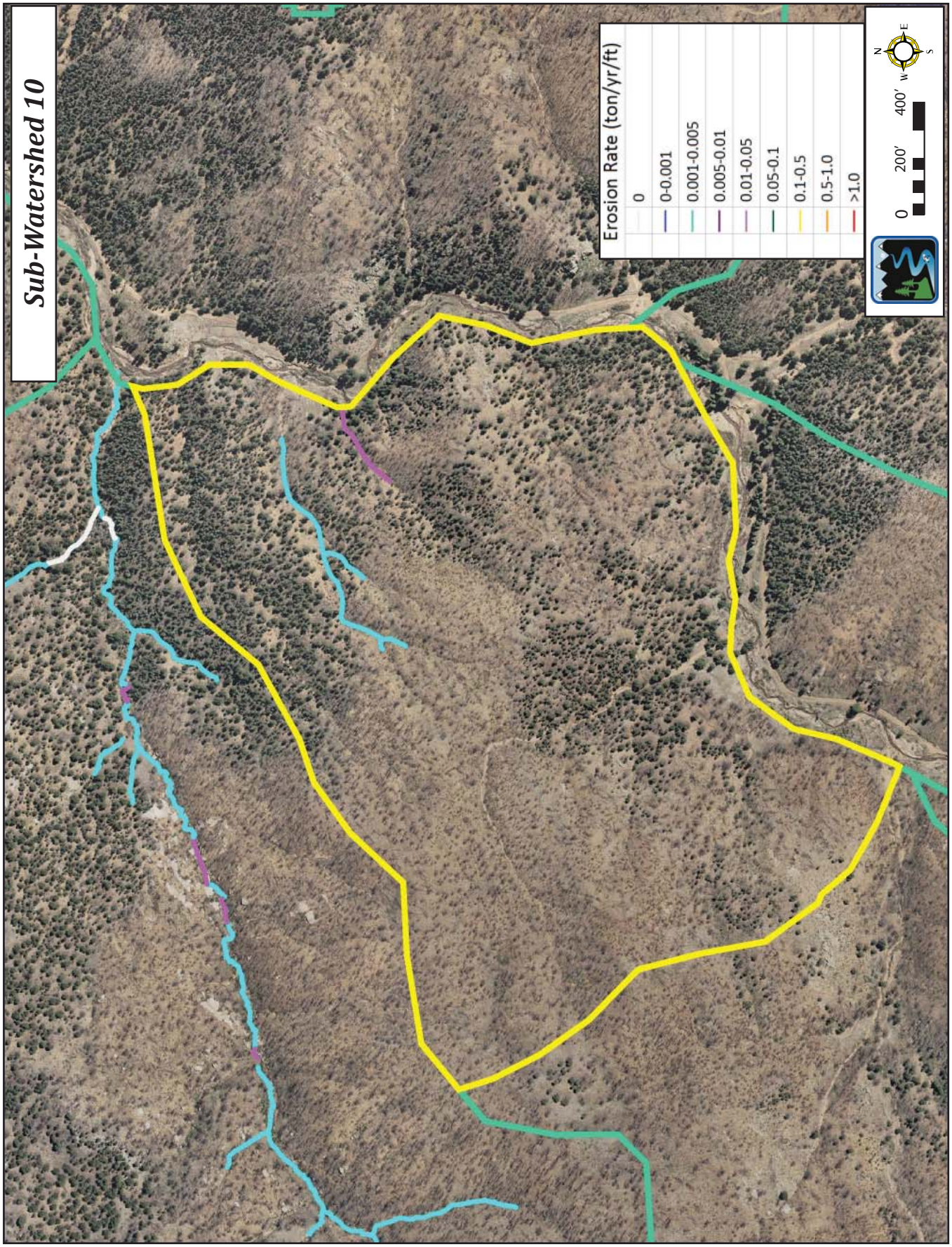
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	16	0	15	-17
Percent of Total Yield	52%	0%	48%	56%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 11

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **11**

Watershed Characteristics

Drainage Area (mi^2)	0.40
Drainage Density	10.21

Burn Severity (%)	High	Moderate	Low	Unburned
	9.0%	29.1%	61.9%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	2%	24%	50%	16%	6%	1%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	0%	84%	0%	0%	0%	0%	0%	0%	7%	9%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 23

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	47%	44%	9%	0%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	20.35
Total Introduced Sediment (tons/yr)	20.35

Hydrology

Zone A		Pre-Fire	Post-Fire	Post-Restoration
Q_{bf} cfs	3.42			
DA (mi^2)	0.174			
Water Yield (ac-ft)		373	420	420
Flow-Related Sediment (tons/yr)		12	17	17

N/A (Zone B)

	Pre-Fire	Post-Fire	Post-Restoration
Q_{bf} cfs			
DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A (Zone C)

	Pre-Fire	Post-Fire	Post-Restoration
Q_{bf} cfs			
DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A (Zone D)

	Pre-Fire	Post-Fire	Post-Restoration
Q_{bf} cfs			
DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	373	420	46	420	
Flow-Related Sediment (tons)	12	17	5	17	0

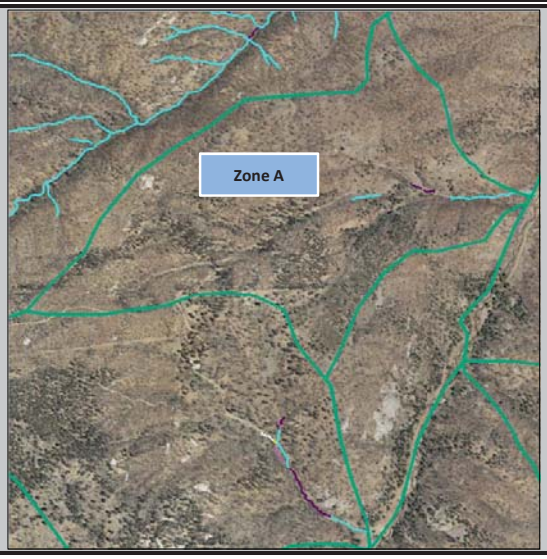
Erosion Summary

Total Existing Water Yield (ac-ft)	420
Total Existing Sediment Yield (tons/yr)	17

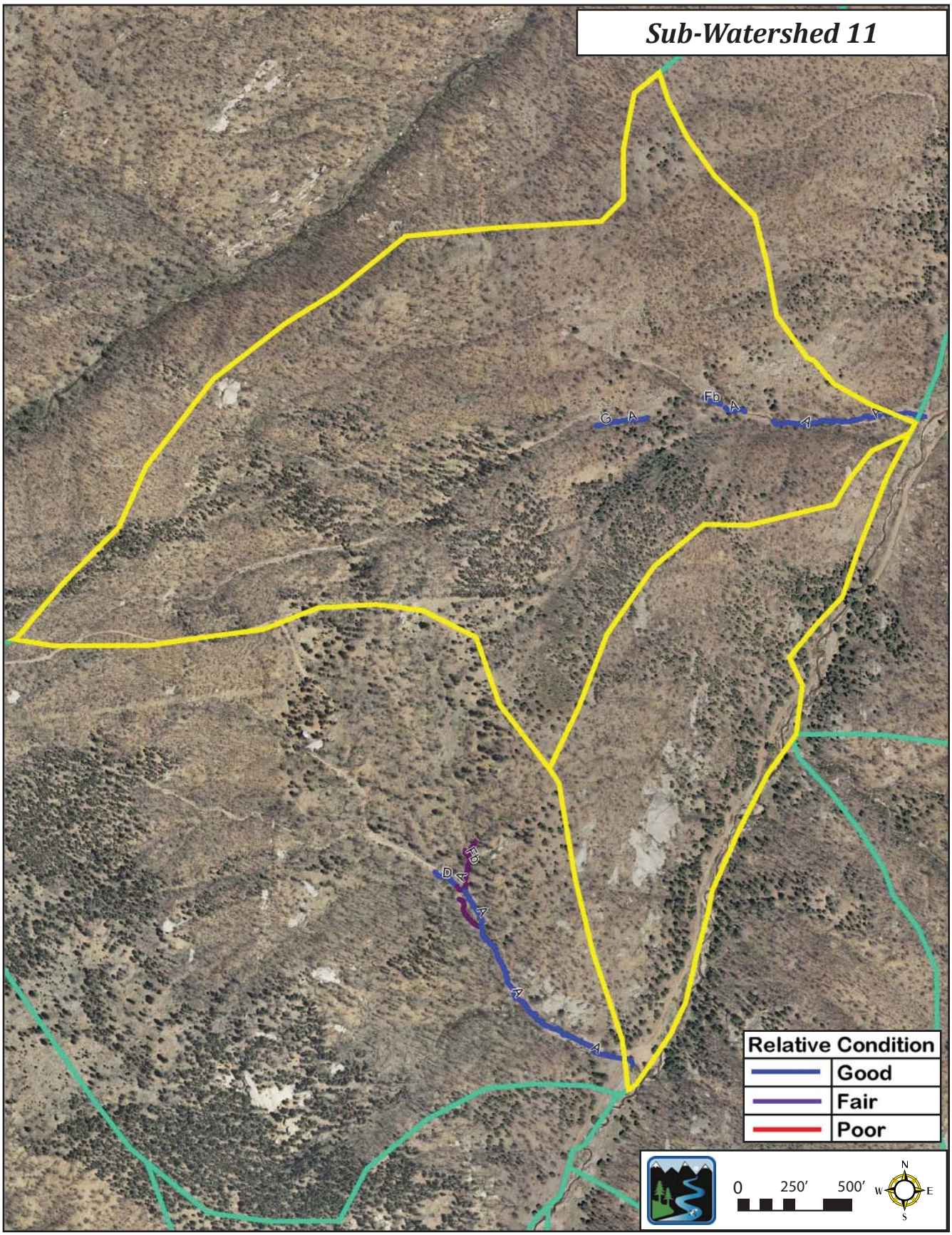
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	23	0	20	-26
Percent of Total Yield	53%	0%	47%	61%

Deposition or Scour: Deposition

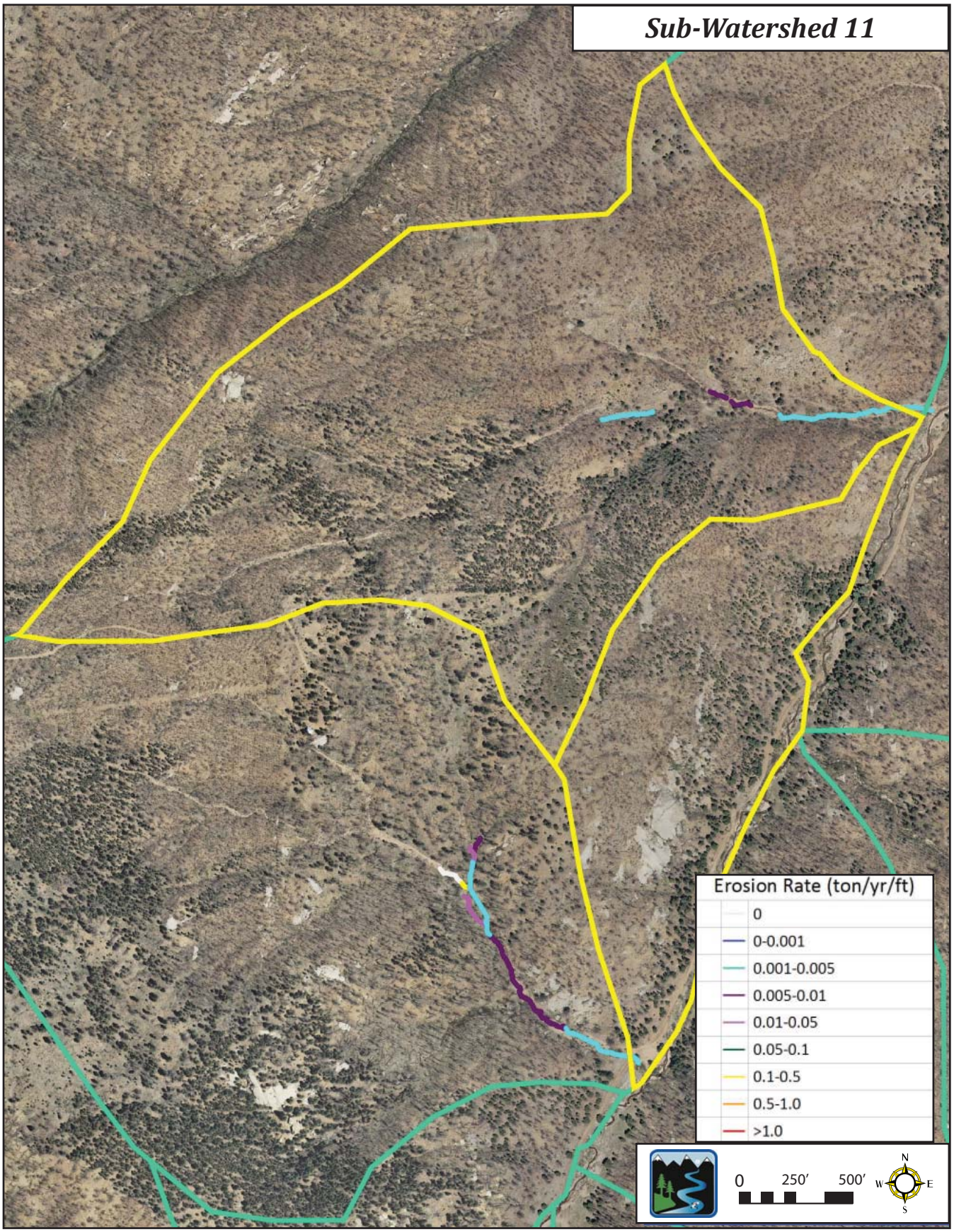
Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 12

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **12**

Watershed Characteristics

Drainage Area (mi^2)	0.95
Drainage Density	9.54

Burn Severity (%)	High	Moderate	Low	Unburned
	3.9%	28.0%	64.1%	4.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	1%	4%	60%	25%	3%	6%	0%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	14%	73%	0%	0%	7%	0%	0%	0%	4%	2%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	74%	26%	0%

Total Erosion (tons/yr): 41

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		7%	0%	39%	4%	47%	0%	2%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	22.2
Total Introduced Sediment (tons/yr)	22.2

Hydrology

	Zone A			Zone B			N/A			N/A			N/A		
Q_{bkf} cfs	3.88	0.225	Post-Restoration	2.06	0.064	Post-Restoration			Post-Restoration			Post-Restoration			Post-Restoration
DA (mi^2)	Pre-Fire	Post-Fire		Pre-Fire	Post-Fire		Pre-Fire	Post-Fire		Pre-Fire	Post-Fire		Pre-Fire	Post-Fire	
Water Yield (ac-ft)	425	472	472	225	231	231									
Flow-Related Sediment (tons/yr)	13	18	18	9	10	10									

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	650	703	53	703	
Flow-Related Sediment (tons)	22	28	5	28	0

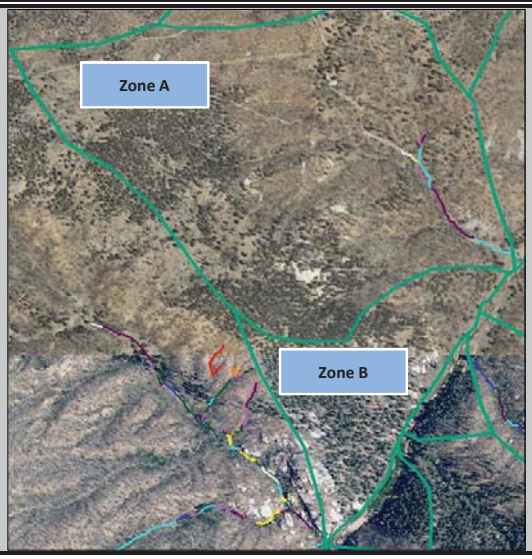
Erosion Summary

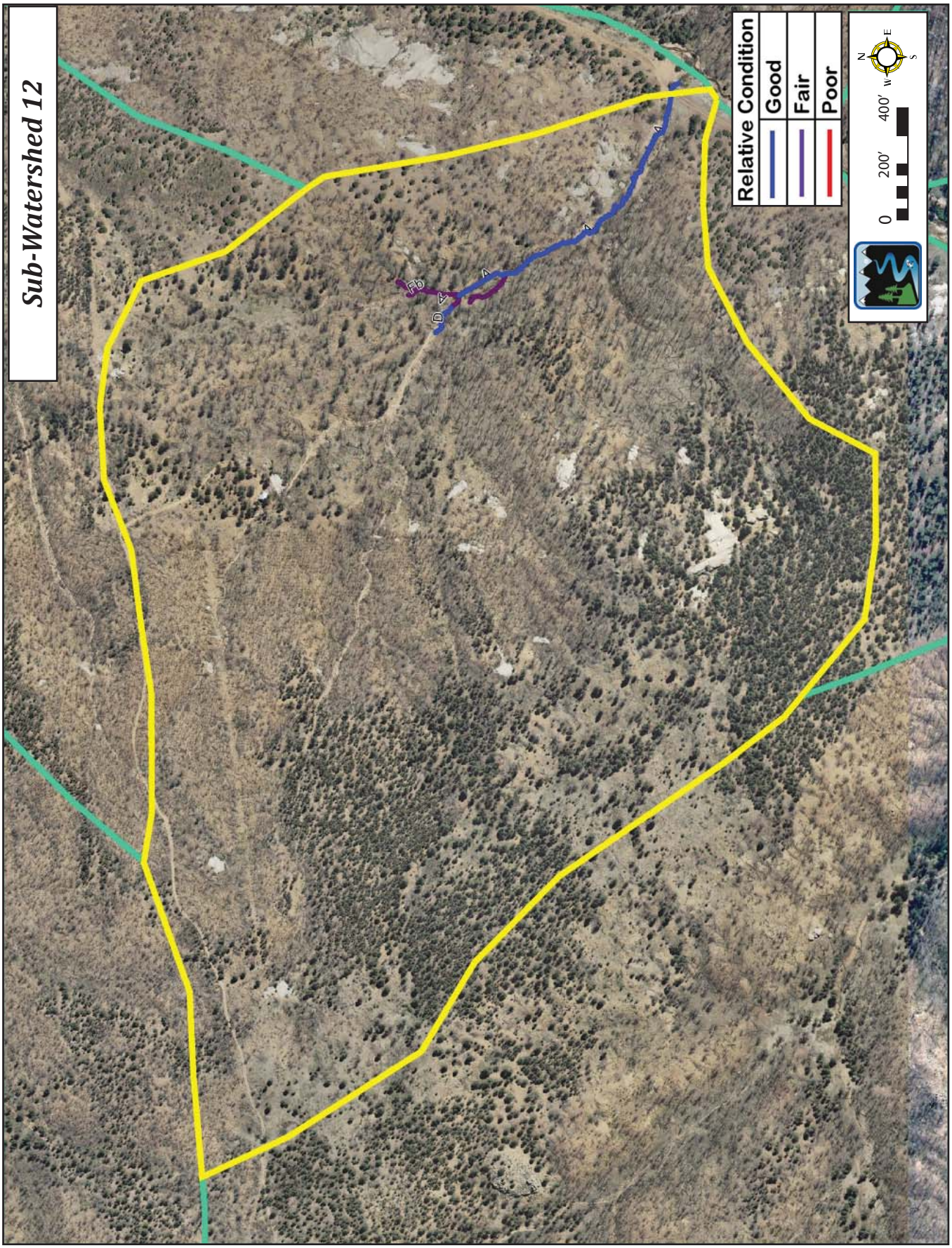
Total Existing Water Yield (ac-ft)	703
Total Existing Sediment Yield (tons/yr)	28

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	41	0	22	-35
Percent of Total Yield	65%	0%	35%	56%

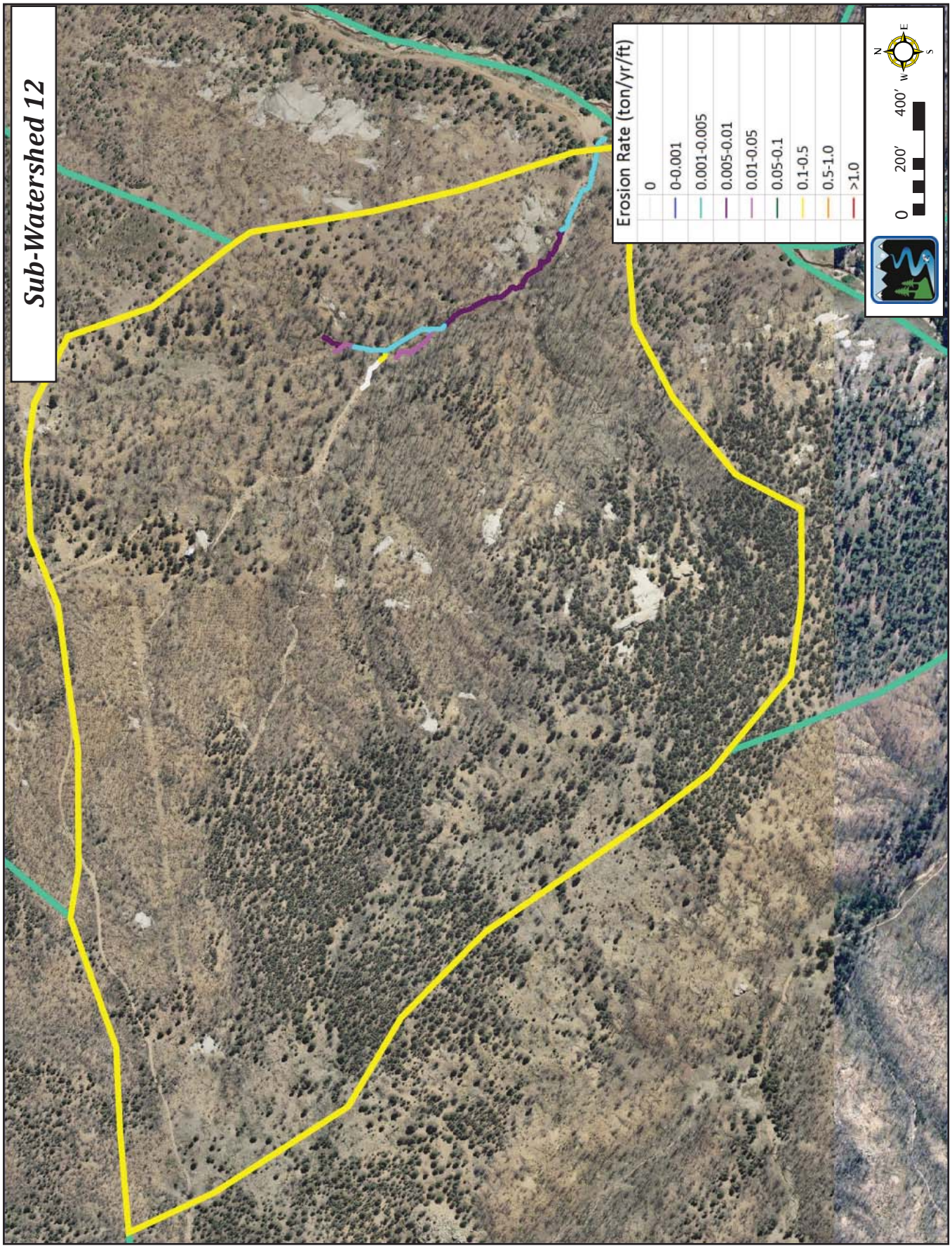
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 13

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **13**

Watershed Characteristics

Drainage Area (mi^2)	0.72
Drainage Density	9.4

Burn Severity (%)	High	Moderate	Low	Unburned
	6.1%	63.6%	30.3%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	9%	22%	42%	14%	8%	3%	0%	2%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	18%	33%	6%	0%	8%	0%	0%	12%	21%	2%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	17%	60%	23%

Total Erosion (tons/yr): 958

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	7%	22%	27%	30%	8%	6%	1%	0%

Hillslope

Length of Road (ft)	4,500
Total Sediment from Roads (tons/yr)	1.95
Sediment from Surface Erosion (tons/yr)	94.49
Total Introduced Sediment (tons/yr)	96.44

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 6.99; DA (mi^2): 0.725			
Water Yield (ac-ft)	764	963	963
Flow-Related Sediment (tons/yr)	20	804	229

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	764	963	199	963	
Flow-Related Sediment (tons)	20	804	784	229	-575

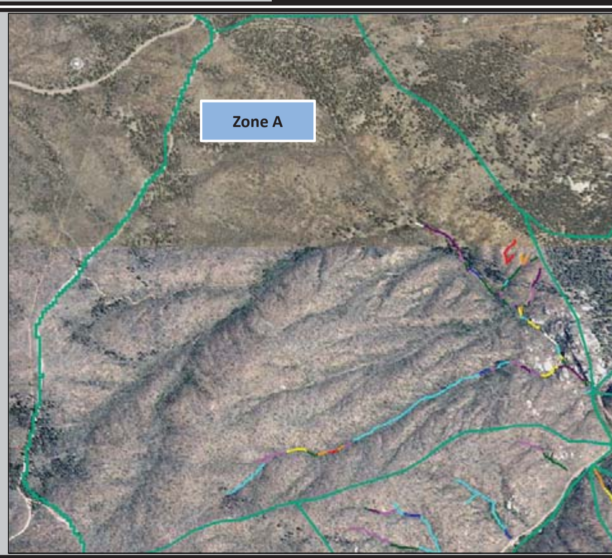
Erosion Summary

Total Existing Water Yield (ac-ft)	963
Total Existing Sediment Yield (tons/yr)	804

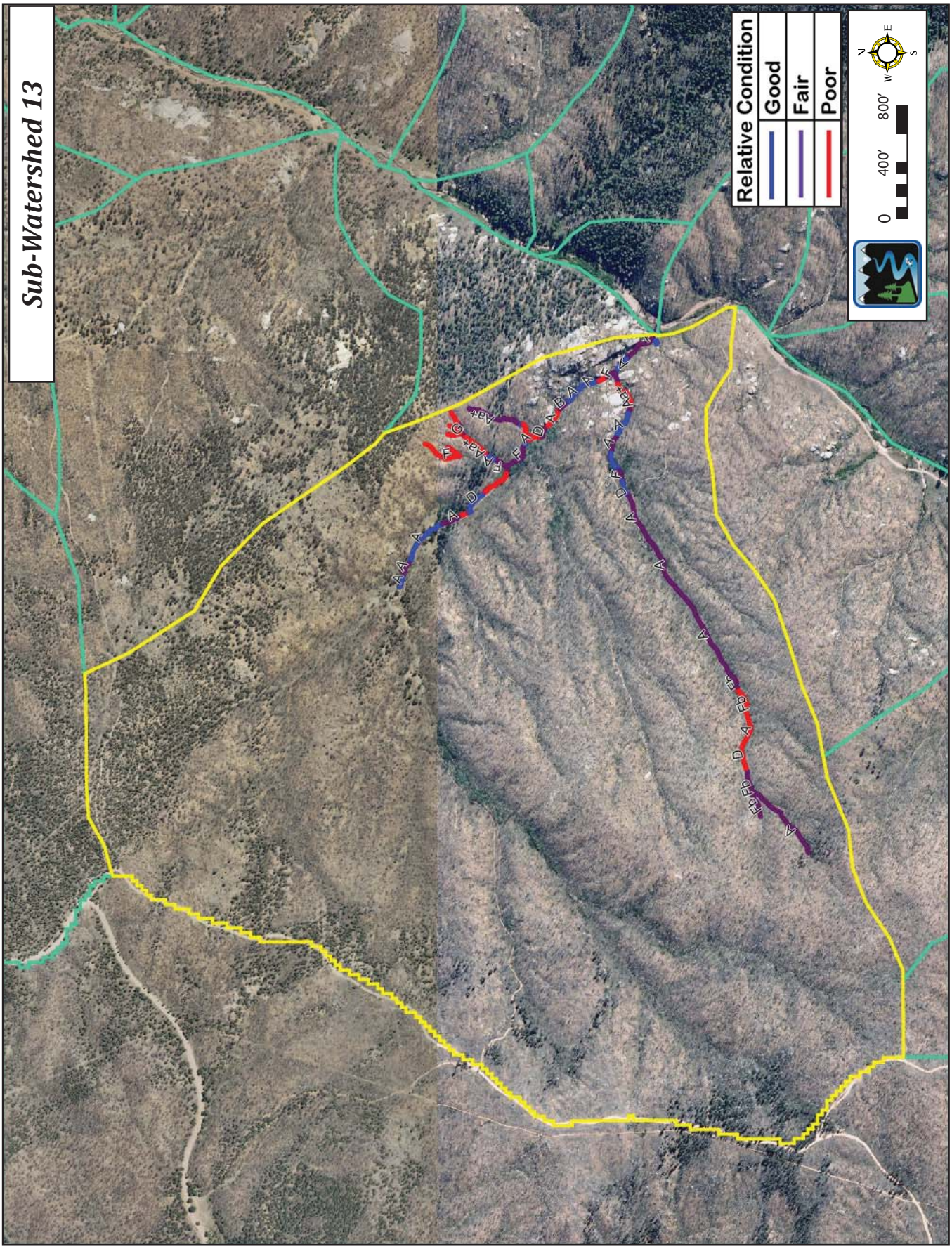
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	958	2	94	-251
Percent of Total Yield	91%	0%	9%	24%

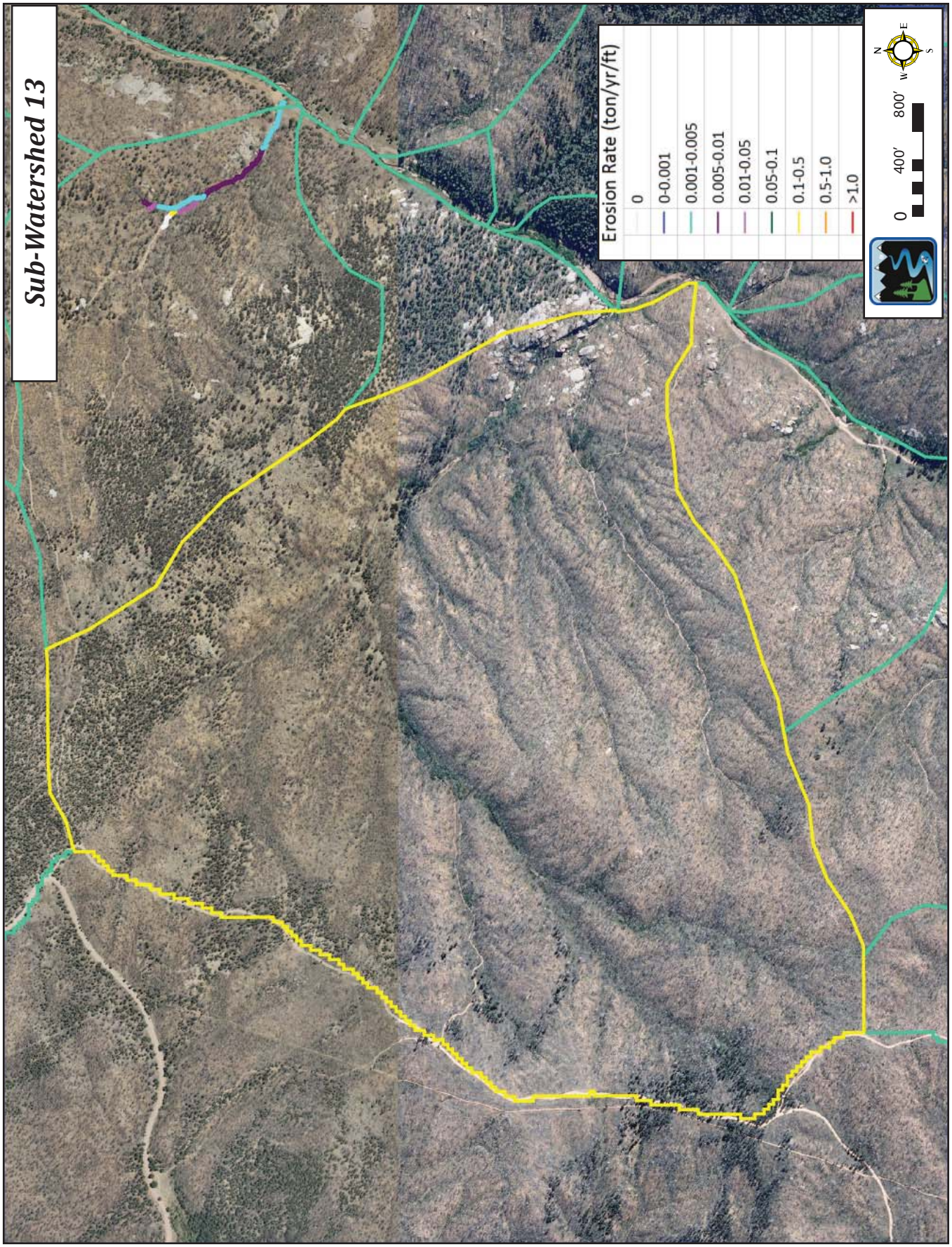
Deposition or Scour
Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition





Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 14

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **14**

Watershed Characteristics

Drainage Area (mi^2)	0.24
Drainage Density	11.93

Burn Severity (%)	High	Moderate	Low	Unburned
	34.4%	63.9%	1.8%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	1%	2%	71%	23%	1%	0%	0%	2%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	59%	16%	0%	0%	0%	9%	0%	11%	6%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	3%	49%	48%

Total Erosion (tons/yr): 949

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		1%	16%	20%	22%	30%	6%	5%	0%	1%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	97.4
Total Introduced Sediment (tons/yr)	97.4

Hydrology

Zone A				Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	2.80	DA (mi^2)	0.117	Q_{bkf} cfs	2.96	DA (mi^2)	0.131	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire
Water Yield (ac-ft)	306	340	340	Water Yield (ac-ft)	323	362	362	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	76	53	Flow-Related Sediment (tons/yr)	11	183	57	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Post-Restoration: Zone A = 340; Zone B = 362; N/A = Post-Restoration

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	629	702	73	702	
Flow-Related Sediment (tons)	22	260	238	110	-150

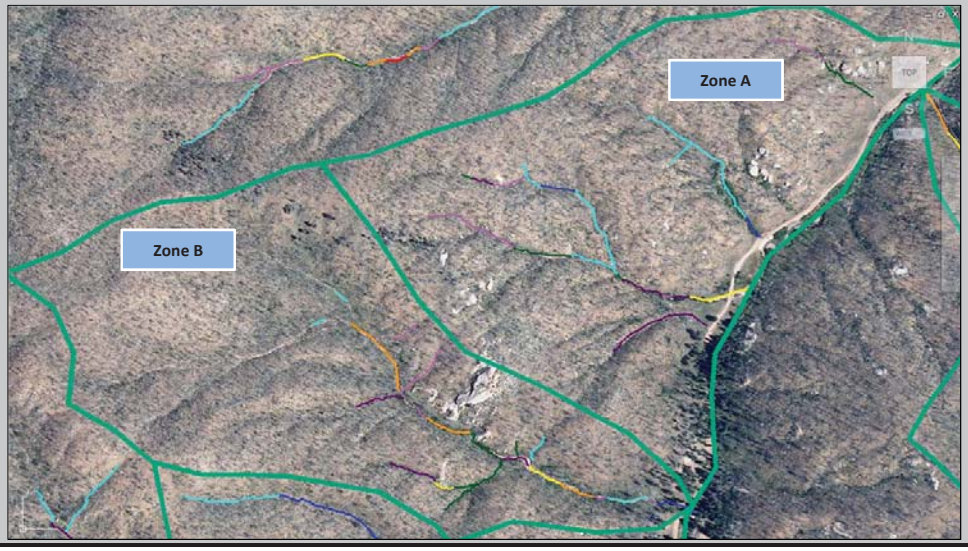
Erosion Summary

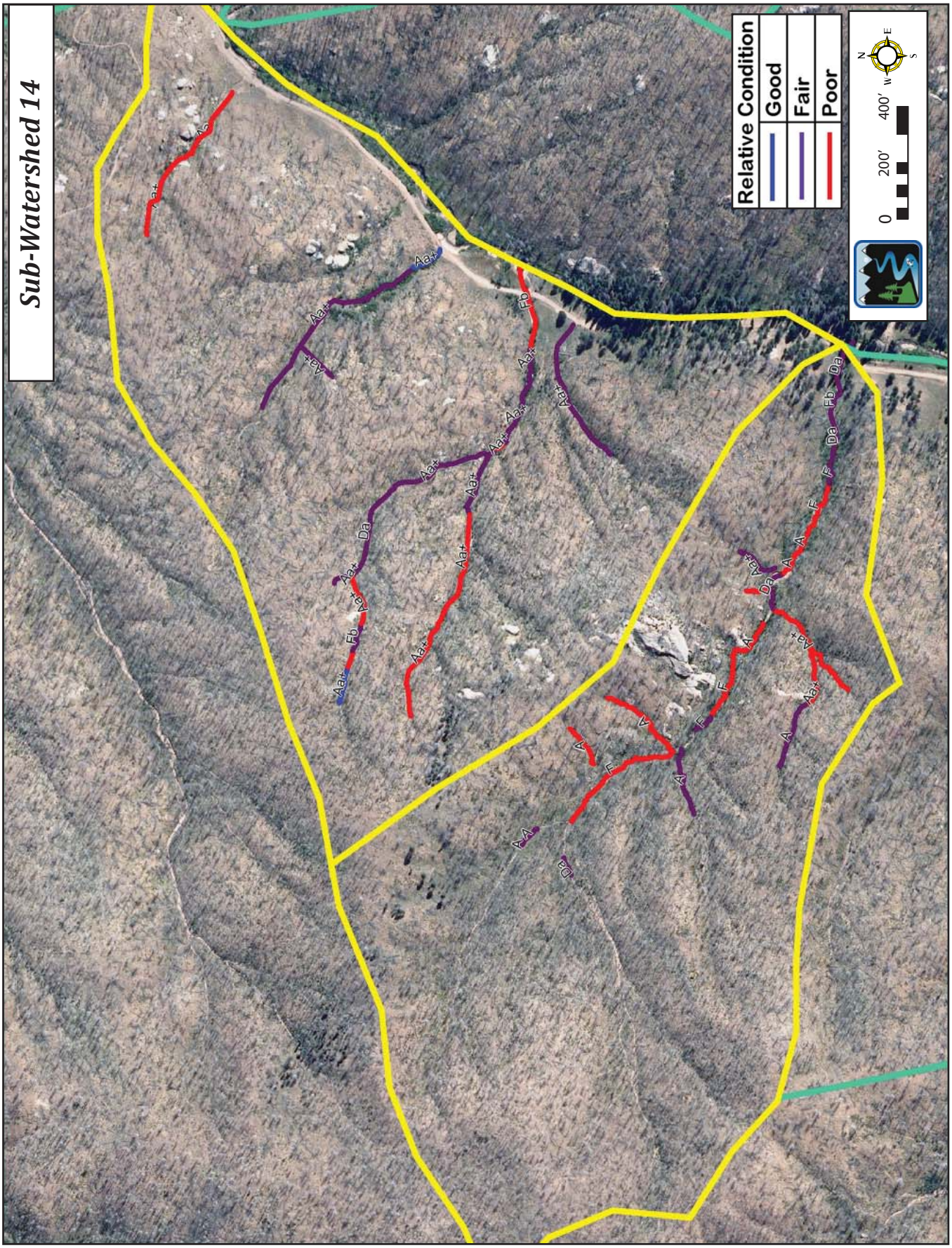
Total Existing Water Yield (ac-ft)	702
Total Existing Sediment Yield (tons/yr)	260

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	949	0	97	-786
Percent of Total Yield	91%	0%	9%	75%

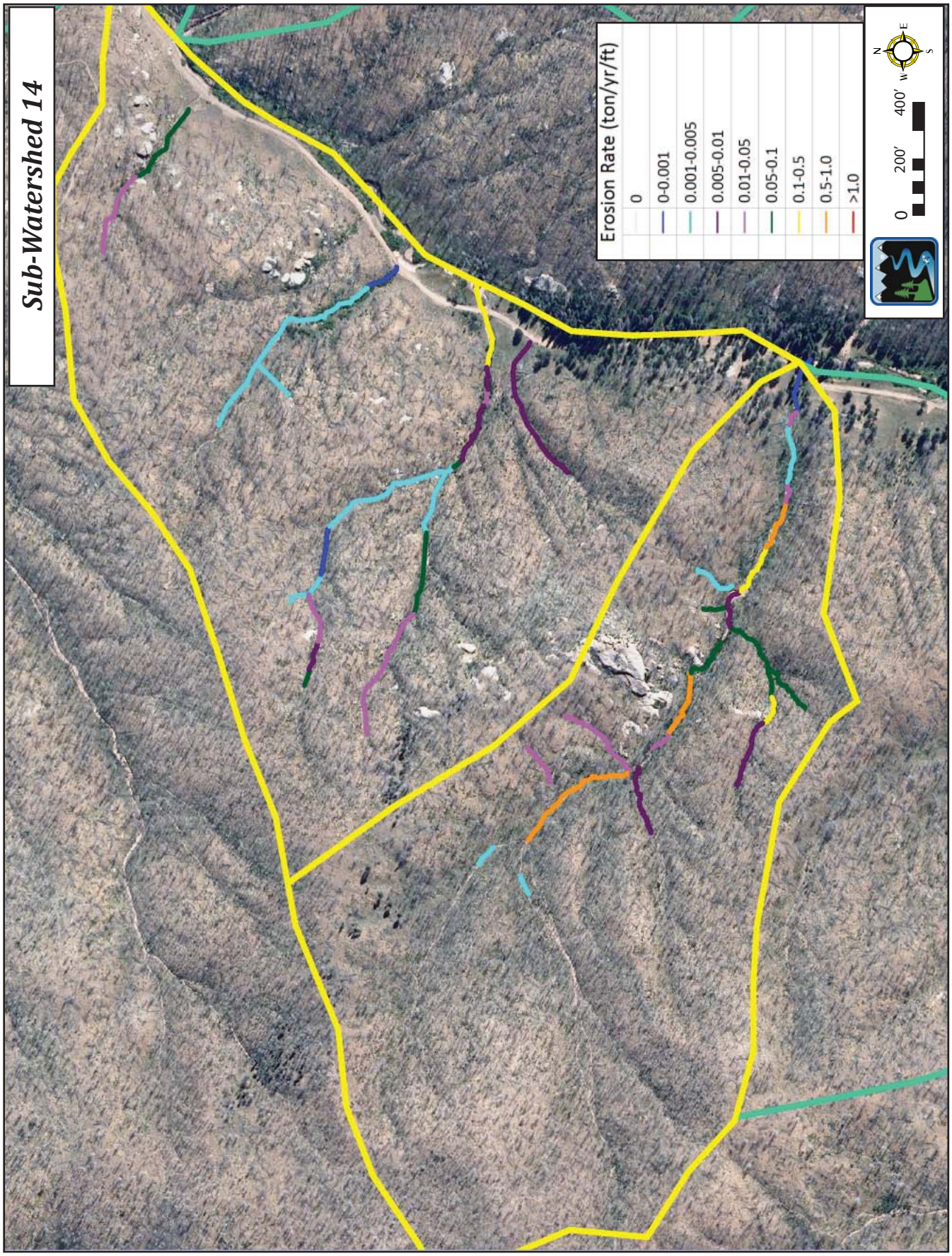
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 15

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **15**

Watershed Characteristics

Drainage Area (mi²)	0.12
Drainage Density	11.93

	High	Moderate	Low	Unburned
Burn Severity (%)	43.4%	47.5%	9.0%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	1%	0%	26%	55%	17%	0%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	47%	12%	0%	0%	0%	41%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	59%	41%	0%

Total Erosion (tons/yr): 16

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	41%	0%	32%	0%	20%	0%	6%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	49.48
Total Introduced Sediment (tons/yr)	49

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 2.84	DA (mi²) 0.121		Post-Restoration	Q_{bkf} cfs	DA (mi²)		Post-Restoration	Q_{bkf} cfs	DA (mi²)		Post-Restoration	Q_{bkf} cfs	DA (mi²)		Post-Restoration	Q_{bkf} cfs	DA (mi²)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	311	346	346	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	15	15	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	311	346	36	346	
Flow-Related Sediment (tons)	11	15	4	15	0

Erosion Summary

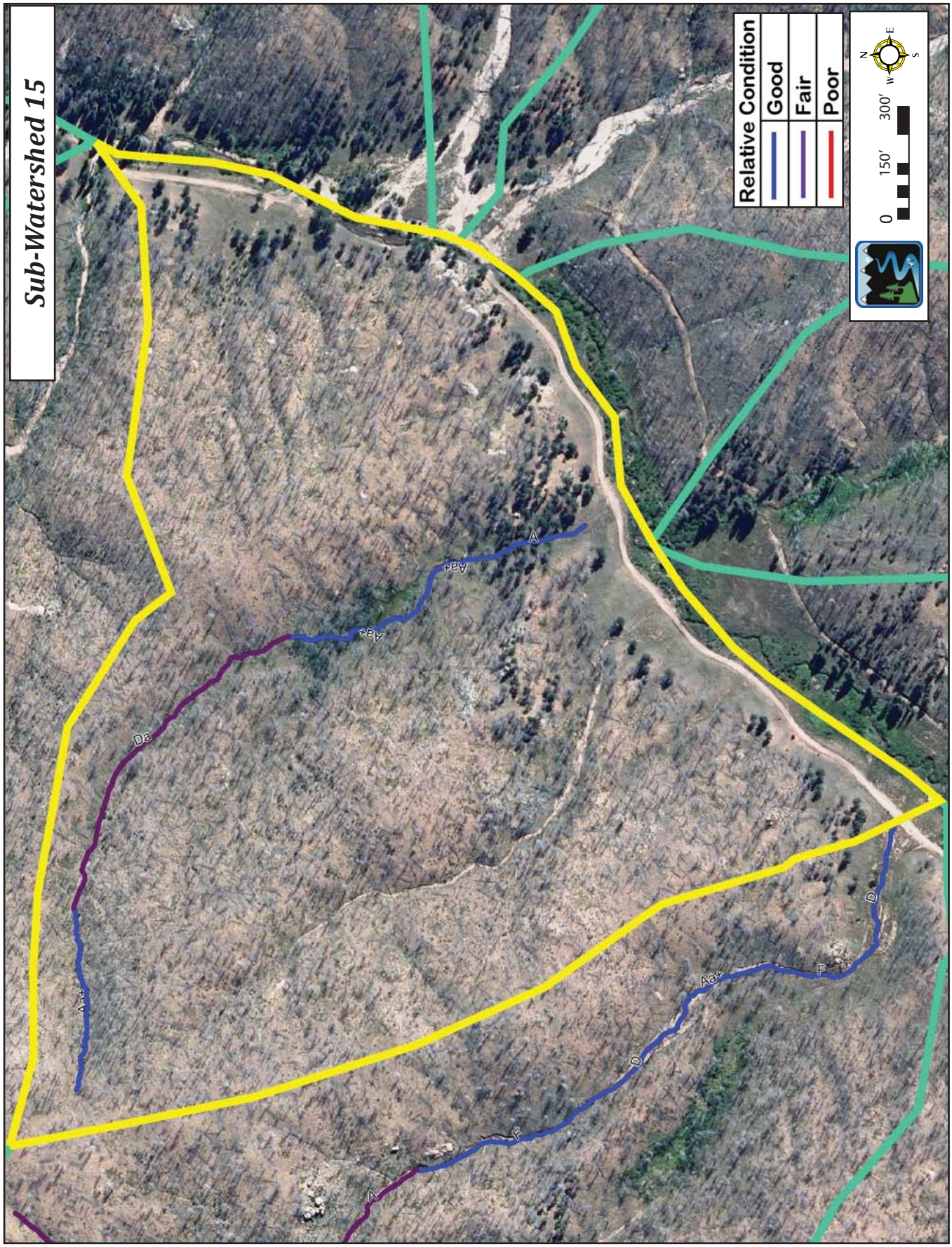
Total Existing Water Yield (ac-ft)	346
Total Existing Sediment Yield (tons/yr)	15

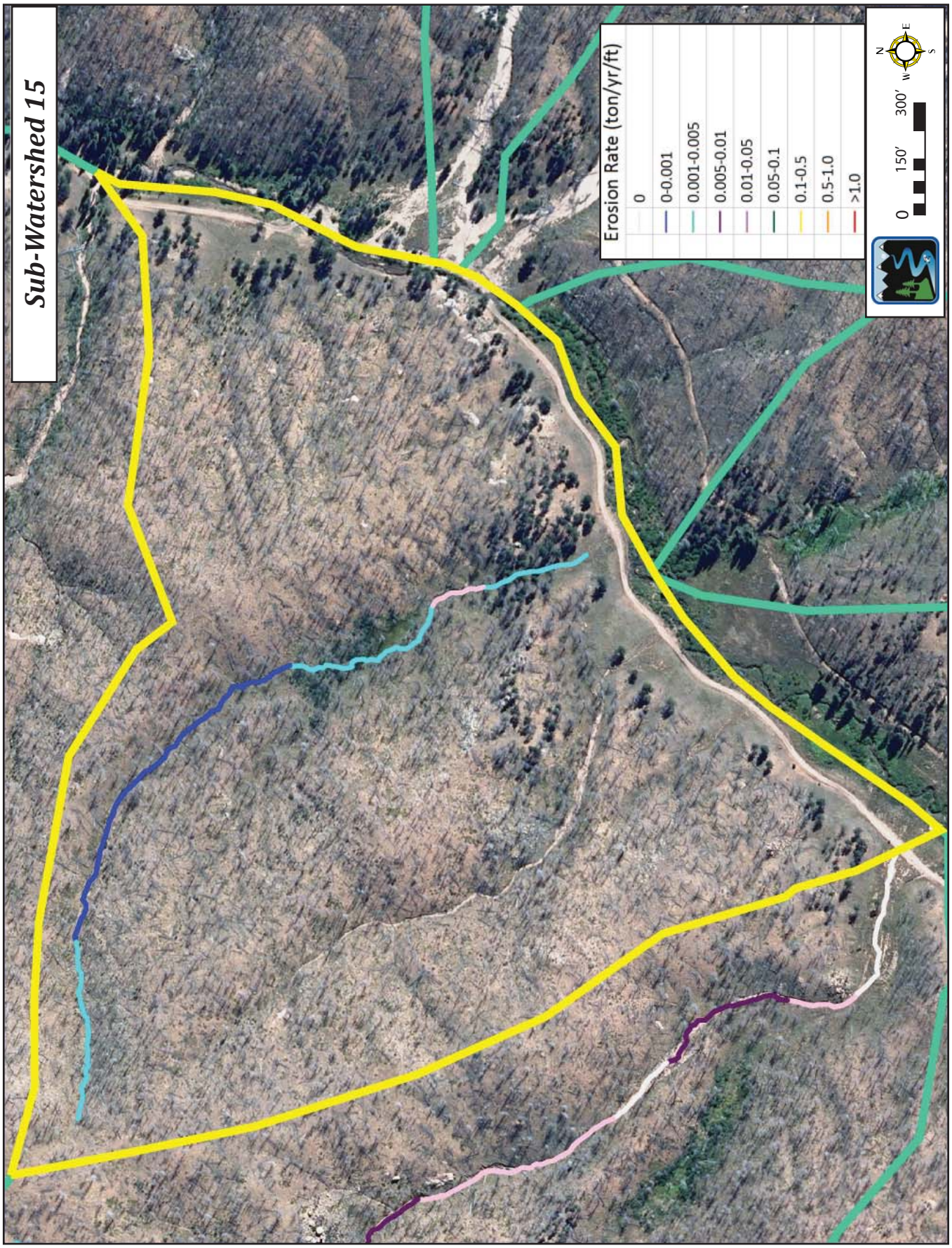
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	16	0	49	-51
Percent of Total Yield	24%	0%	76%	77%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed

Stream Types & Relative Condition





Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 16

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **16**

Watershed Characteristics

Drainage Area (mi^2)	0.19
Drainage Density	10.38

	High	Moderate	Low	Unburned
Burn Severity (%)	57.7%	33.2%	9.1%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	0%	4%	35%	23%	27%	10%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	25%	23%	0%	0%	22%	0%	0%	29%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	71%	29%	0%

Total Erosion (tons/yr)	52

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	10%	26%	34%	28%	0%	3%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	99.7
Total Introduced Sediment (tons/yr)	99.7

Hydrology

Zone A

Q_{bkf} cfs	3.60	DA (mi^2) 0.193		
		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)		393	450	450
Flow-Related Sediment (tons/yr)		13	18	18

N/A

Q_{bkf} cfs		DA (mi^2)		
		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

N/A

Q_{bkf} cfs		DA (mi^2)		
		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

N/A

Q_{bkf} cfs		DA (mi^2)		
		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

N/A

Q_{bkf} cfs		DA (mi^2)		
		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	393	450	57	450	
Flow-Related Sediment (tons)	13	18	5	18	0

Erosion Summary

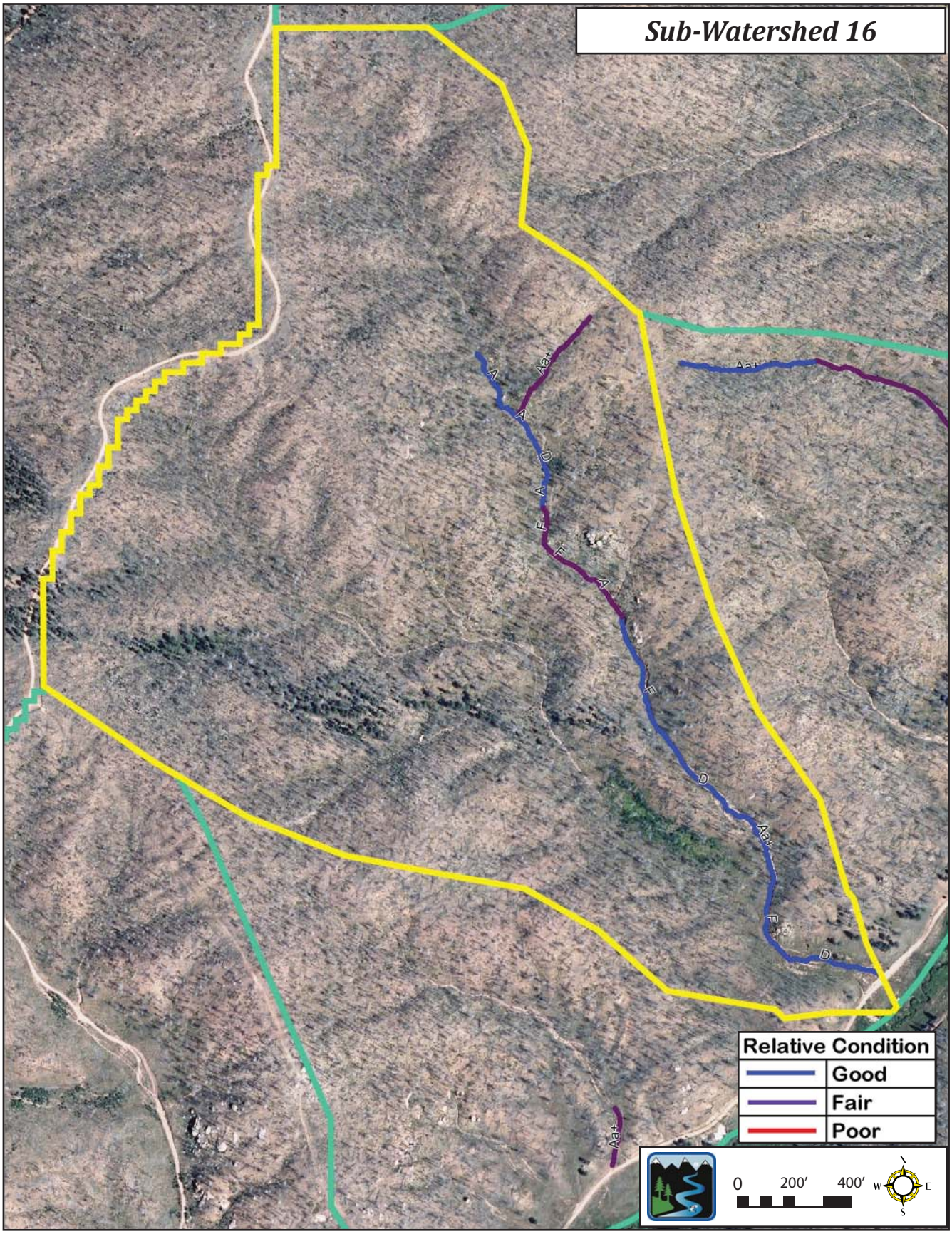
Total Existing Water Yield (ac-ft)	450
Total Existing Sediment Yield (tons/yr)	18

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	52	0	100	-133
Percent of Total Yield	34%	0%	66%	88%

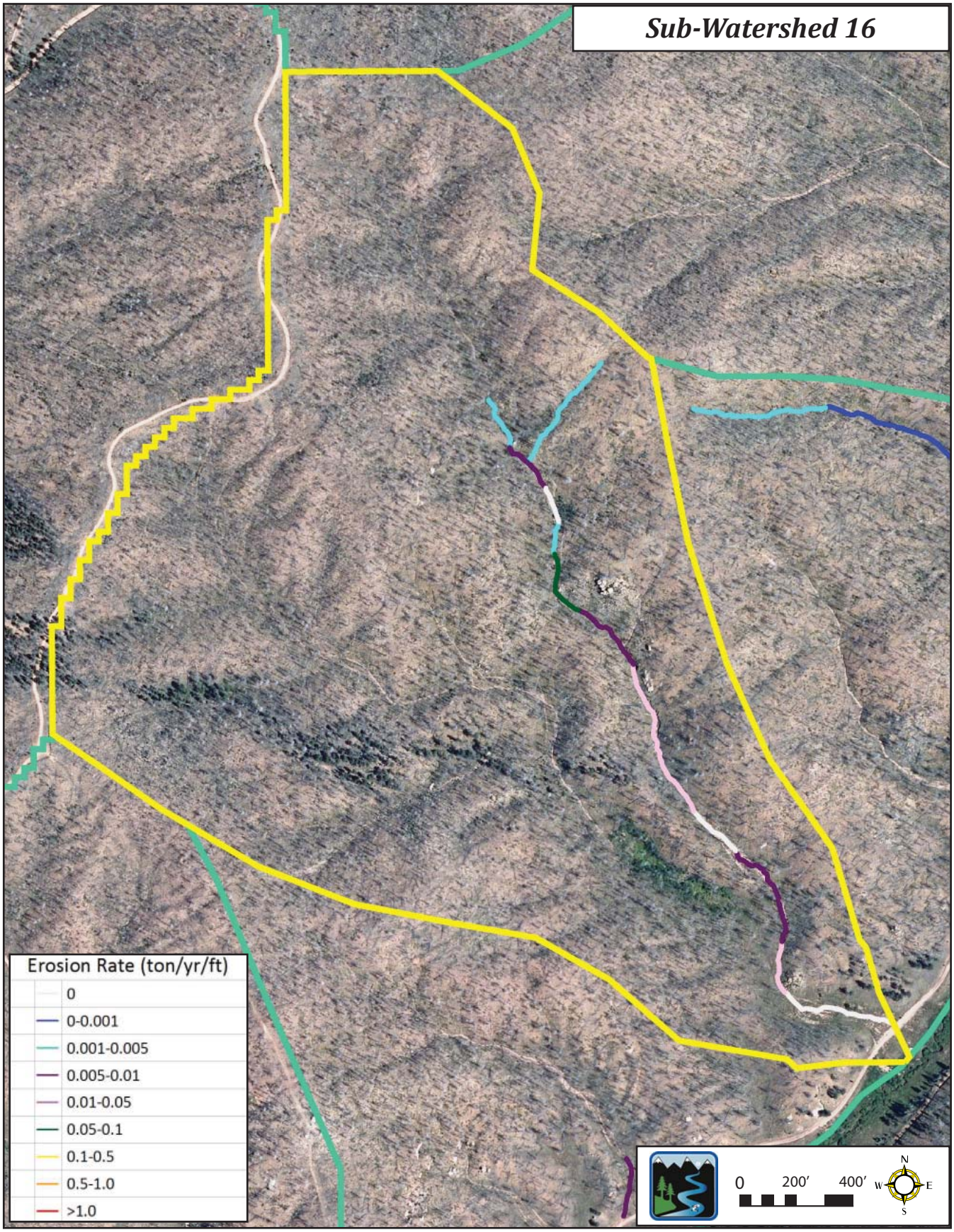
Deposition or Scour
Deposition

Hydrologic Zones of Watershed

Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 17

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **17**

Watershed Characteristics

Drainage Area (mi^2)	0.07
Drainage Density	7.56

Burn Severity (%)	High	Moderate	Low	Unburned
	85.1%	5.6%	8.4%	90.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	3%	24%	72%	0%	1%	0%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 7

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	48.98
Total Introduced Sediment (tons/yr)	48.98

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 2.23			
DA (mi^2): 0.074			
Water Yield (ac-ft)	243	265	265
Flow-Related Sediment (tons/yr)	10	52	38

N/A (4 zones)

Q_{bkf} cfs				
DA (mi^2)				
	Pre-Fire	Post-Fire	Post-Restoration	
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	243	265	22	265	
Flow-Related Sediment (tons)	10	52	42	38	-14

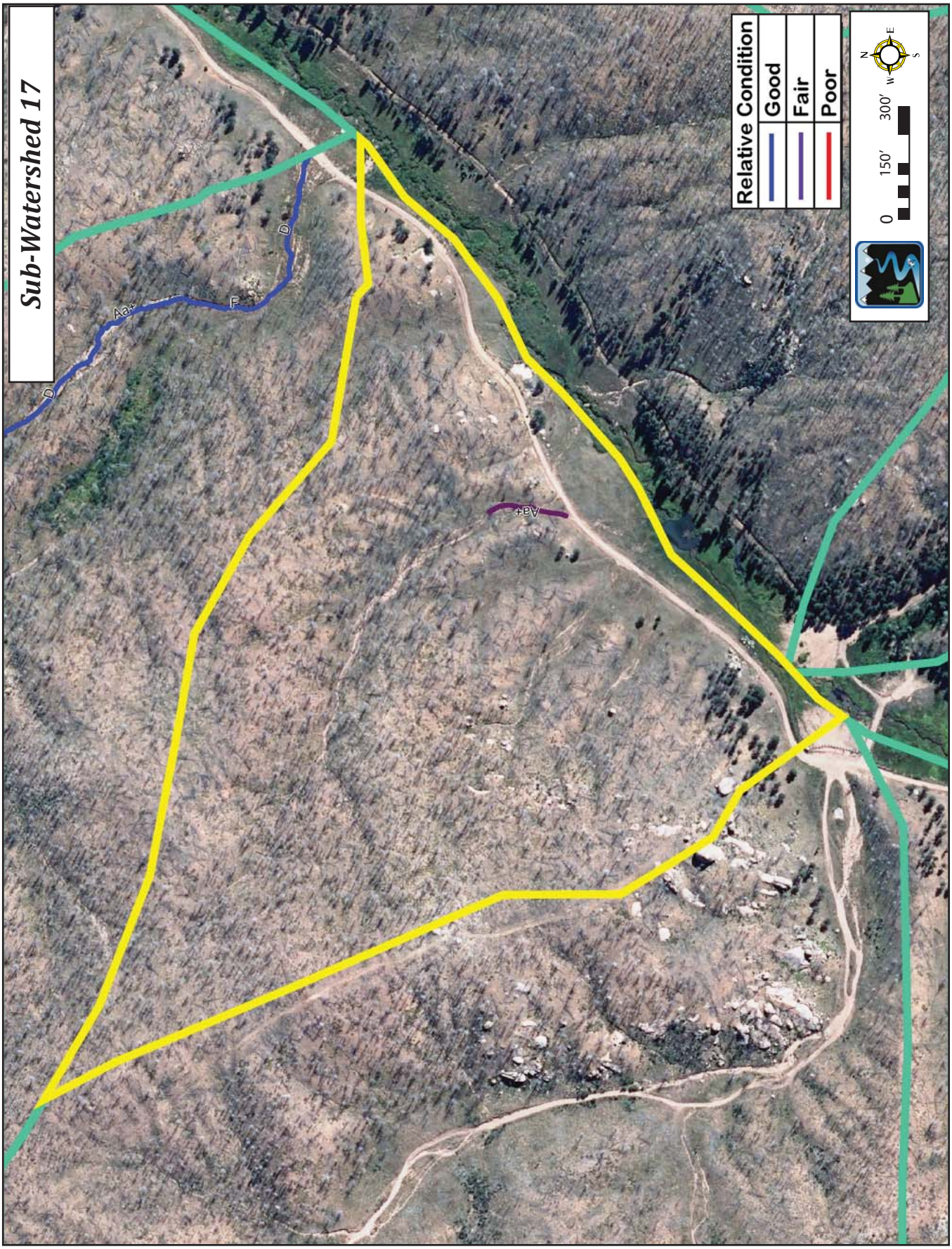
Erosion Summary

Total Existing Water Yield (ac-ft)	265
Total Existing Sediment Yield (tons/yr)	52

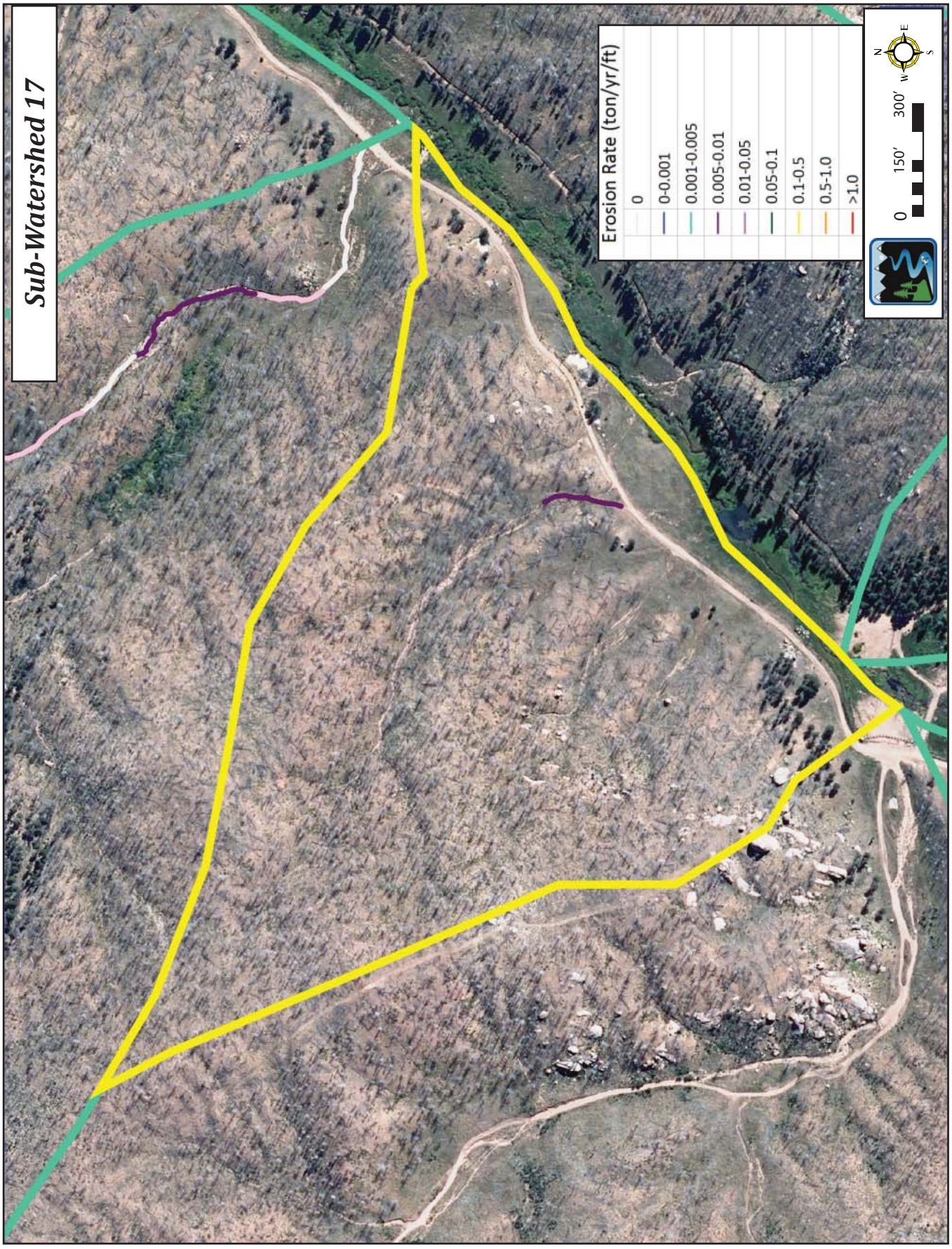
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	7	0	49	-4
Percent of Total Yield	13%	0%	87%	7%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 18

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **18**

Watershed Characteristics

Drainage Area (mi^2)	0.41
Drainage Density	9.71

Burn Severity (%)	High	Moderate	Low	Unburned
	70.4%	23.1%	6.5%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	1%	49%	32%	7%	11%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	19%	38%	0%	0%	5%	9%	0%	5%	25%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	25%	52%	23%

Total Erosion (tons/yr): 428

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		9%	5%	47%	0%	33%	0%	0%	6%	0%

Hillslope

Length of Road (ft)	2,250
Total Sediment from Roads (tons/yr)	6.7
Sediment from Surface Erosion (tons/yr)	185.15
Total Introduced Sediment (tons/yr)	191.9

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 4.06			
DA (mi^2)		0.245	
Water Yield (ac-ft)	443	516	516
Flow-Related Sediment (tons/yr)	14	310	93

N/A (×4)

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	443	516	72	516	
Flow-Related Sediment (tons)	14	310	296	93	-217

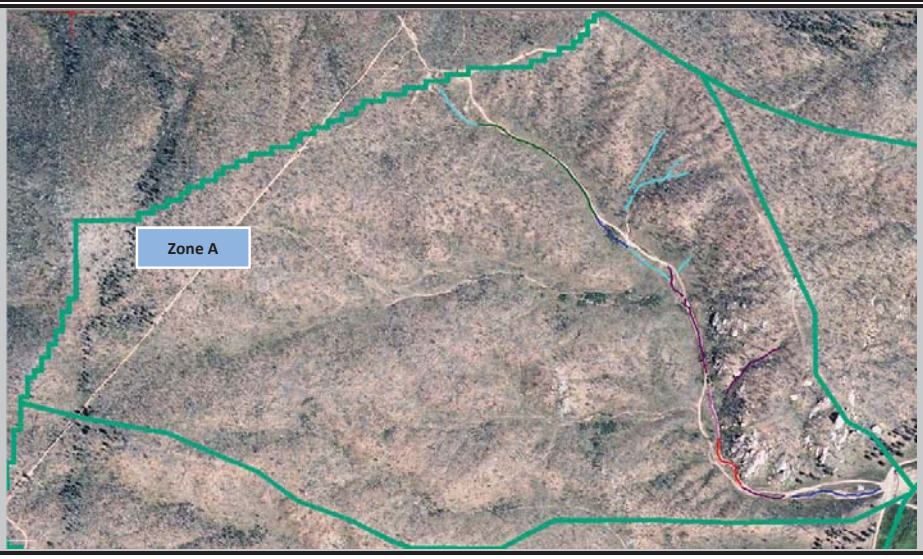
Erosion Summary

Total Existing Water Yield (ac-ft)	516
Total Existing Sediment Yield (tons/yr)	310

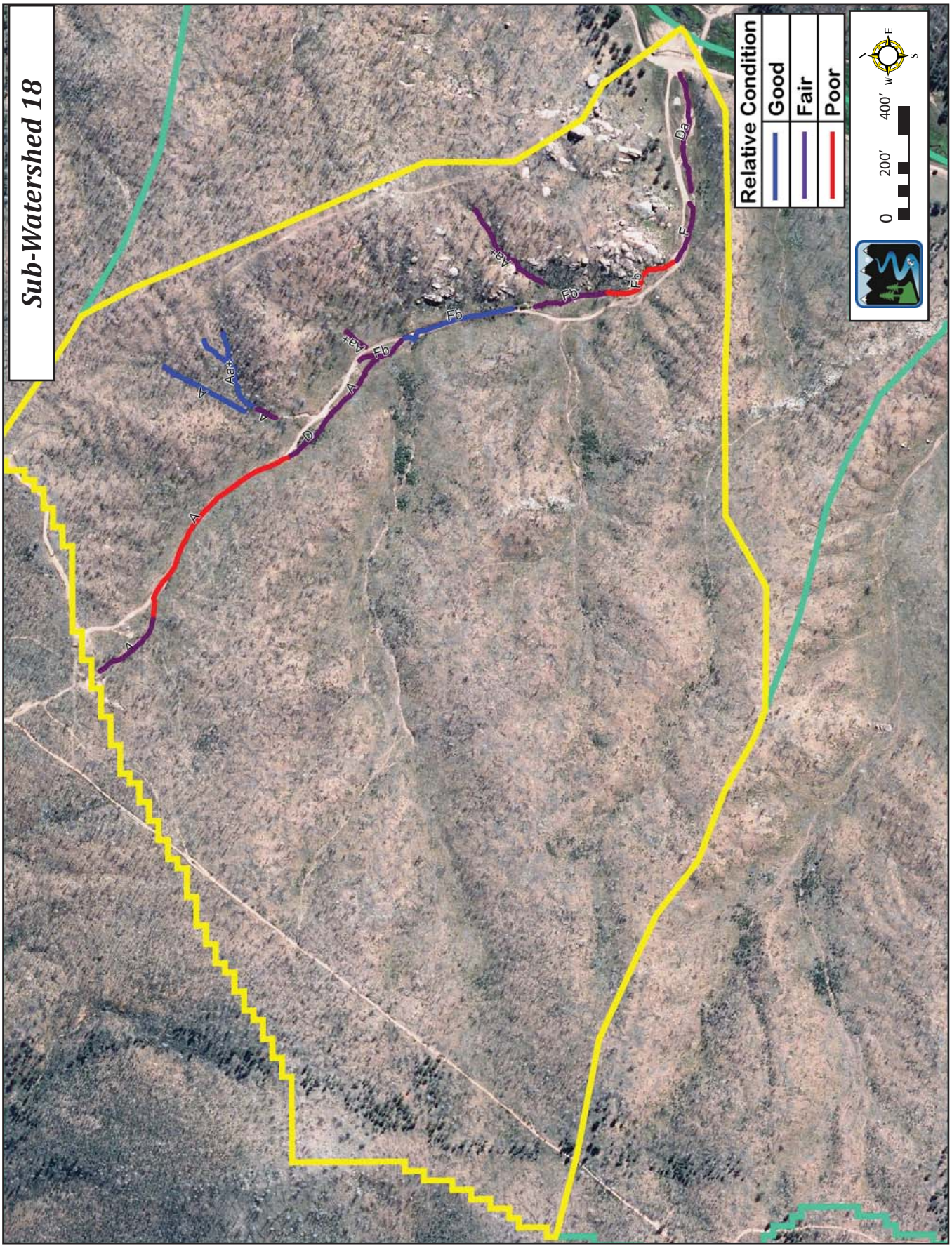
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	428	7	185	-310
Percent of Total Yield	69%	1%	30%	50%

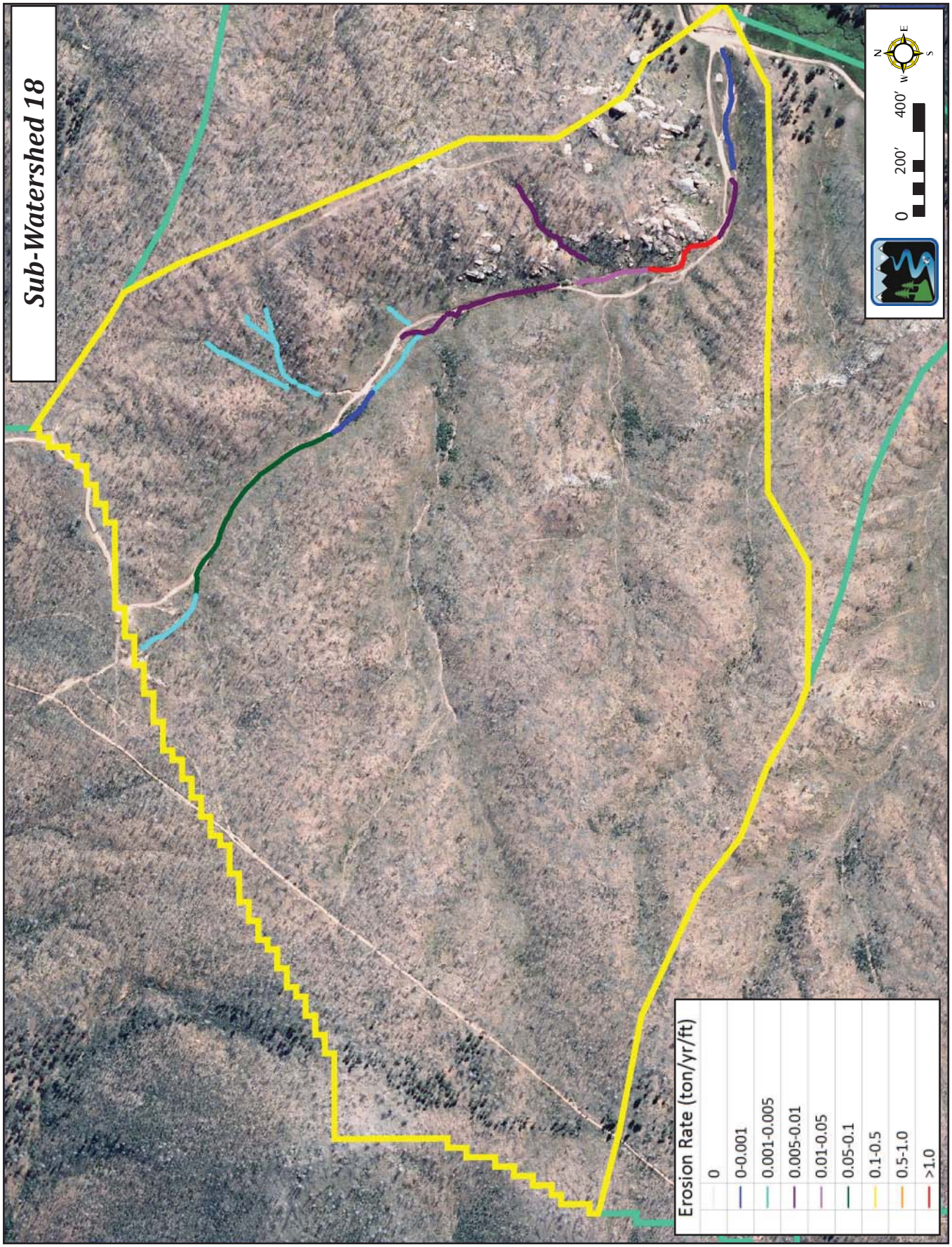
Deposition or Scour: Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition





Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 19

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **19**

Watershed Characteristics

Drainage Area (mi^2)	0.17
Drainage Density	10.54

Burn Severity (%)	High	Moderate	Low	Unburned
	8.5%	73.9%	17.6%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	7%	62%	26%	4%	0%	1%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 16

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	33.32
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	33.3

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 3.34			
DA (mi^2): 0.166			
Water Yield (ac-ft)	364	411	411
Flow-Related Sediment (tons/yr)	12	17	17

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs			
DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	364	411	47	411	
Flow-Related Sediment (tons)	12	17	5	17	0

Erosion Summary

Total Existing Water Yield (ac-ft)	411
Total Existing Sediment Yield (tons/yr)	17

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	16	0	33	-32
Percent of Total Yield	32%	0%	68%	66%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 20

Watershed Summary | Stream: **Trail Creek Watershed** | Sub-Watershed: **20**

Watershed Characteristics

Drainage Area (mi^2)	0.25
Drainage Density	10.28

	High	Moderate	Low	Unburned
Burn Severity (%)	5.2%	25.3%	64.4%	5.1%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	0%	30%	56%	13%	0%	0%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	14

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	11.78
Total Introduced Sediment (tons/yr)	11.78

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 3.02	DA (mi^2) 0.136		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	330	358	358	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	14	14	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	330	358	28	358	
Flow-Related Sediment (tons)	11	14	3	14	0

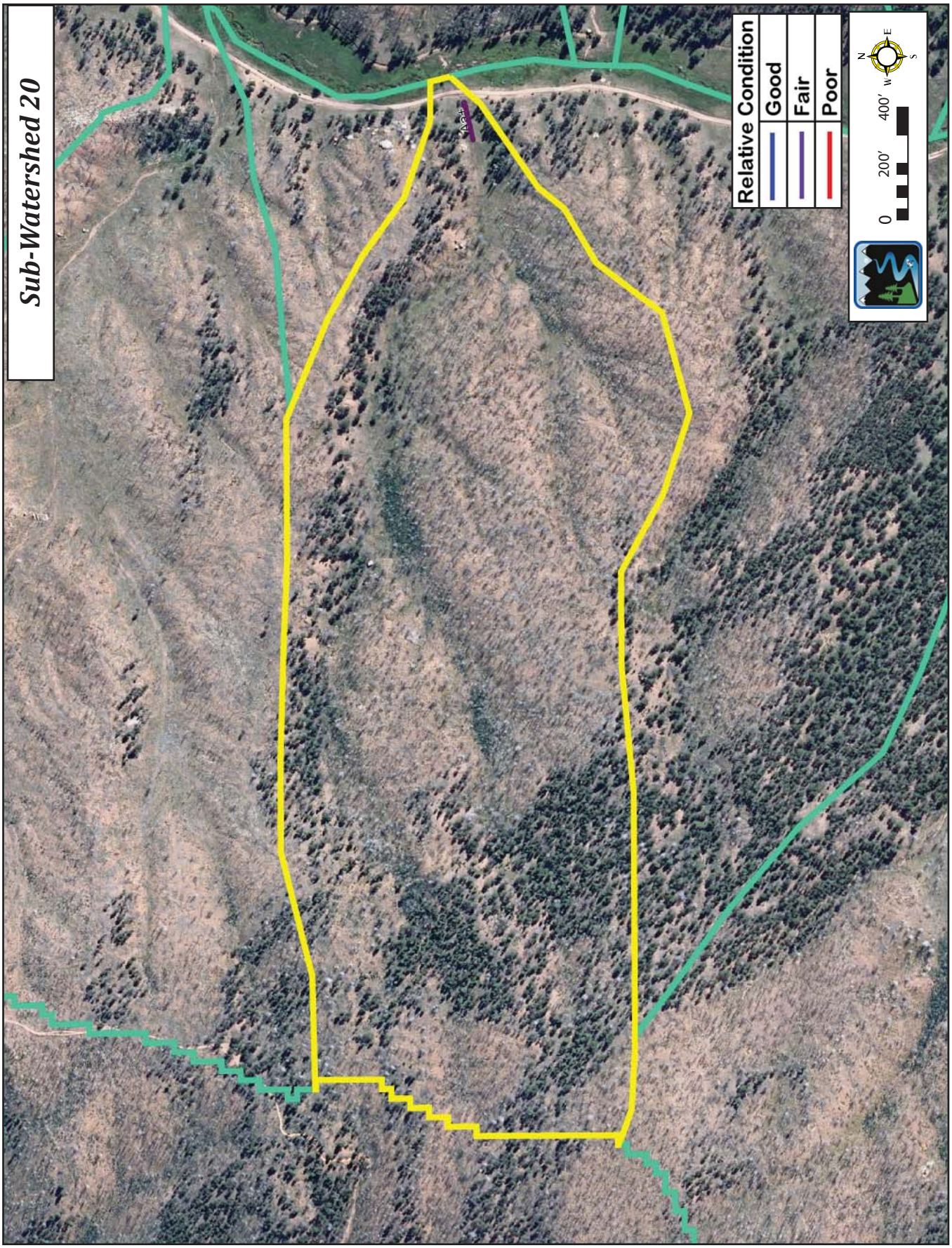
Erosion Summary

Total Existing Water Yield (ac-ft)	358
Total Existing Sediment Yield (tons/yr)	14

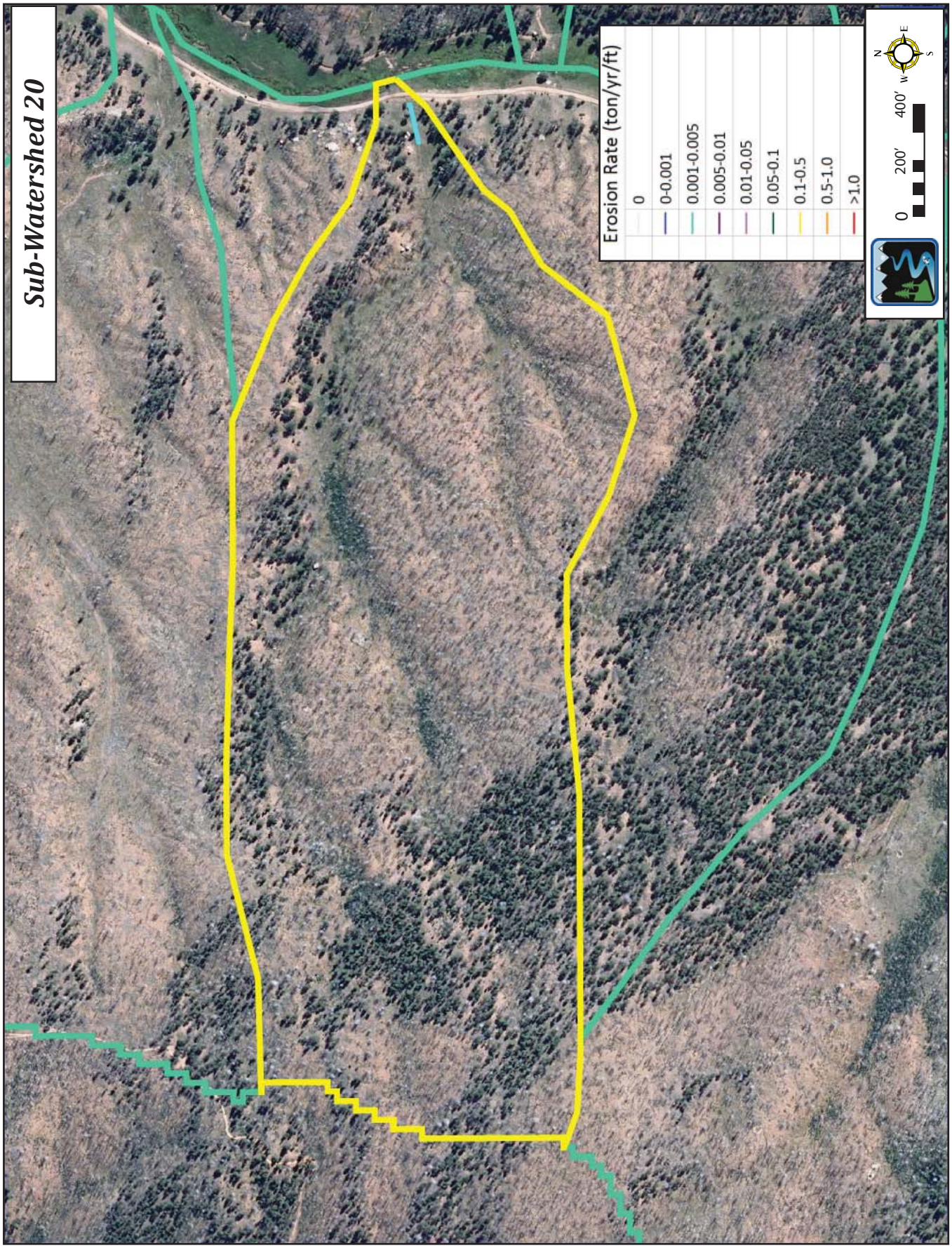
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	14	0	12	-11
Percent of Total Yield	54%	0%	46%	45%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 21

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **21**

Watershed Characteristics

Drainage Area (mi^2)	0.11
Drainage Density	9.55

	High	Moderate	Low	Unburned
Burn Severity (%)	0.1%	0.0%	75.3%	24.5%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	0%	1%	66%	32%	0%	0%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	10

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	3.96
Total Introduced Sediment (tons/yr)	3.96

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 2.76	DA (mi^2) 0.114		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	302	313	313	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	12	12	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	302	313	11	313	
Flow-Related Sediment (tons)	11	12	1	12	0

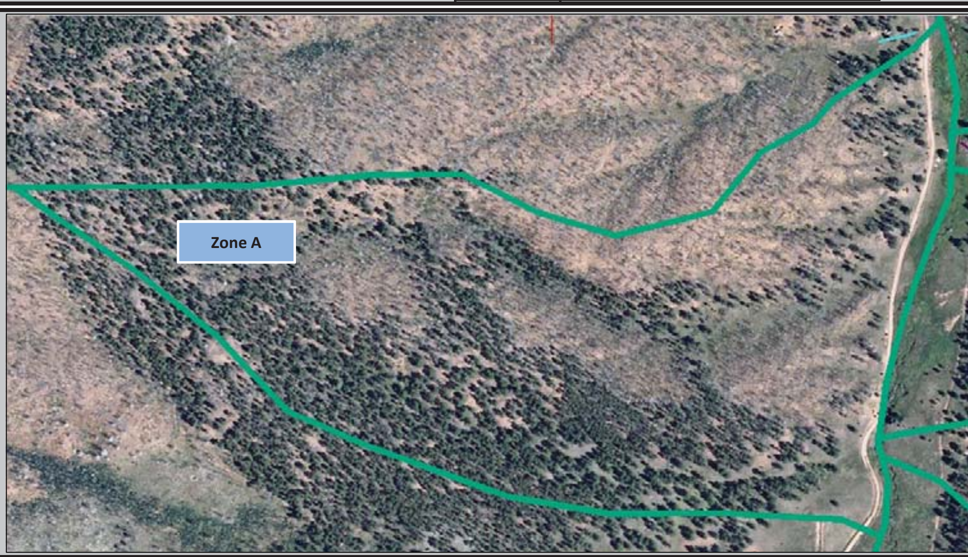
Erosion Summary

Total Existing Water Yield (ac-ft)	313
Total Existing Sediment Yield (tons/yr)	12

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	10	0	4	-2
Percent of Total Yield	72%	0%	28%	14%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 22

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **22**

Watershed Characteristics

Drainage Area (mi^2)	0.42
Drainage Density	9.98

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	31.1%	45.6%	23.3%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	17%	19%	23%	36%	5%	0%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 37

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	23.7
Total Introduced Sediment (tons/yr)	23.7

Hydrology

Zone A			
Q_{bkf} cfs 5.30	DA (mi^2) 0.417		Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft) 579	579	663	663
Flow-Related Sediment (tons/yr)	16	24	24

N/A			
Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	579	663	84	663	
Flow-Related Sediment (tons)	16	24	7	24	0

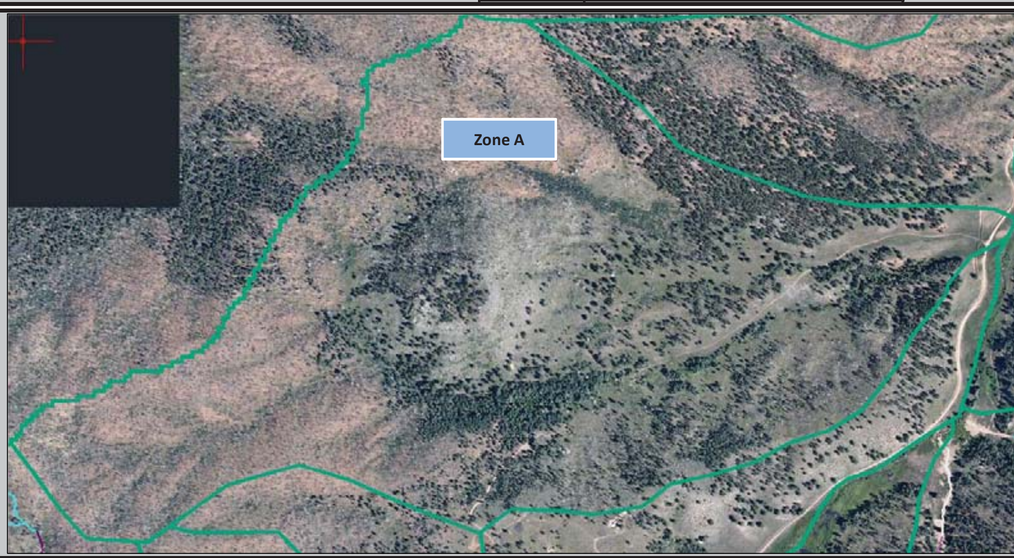
Erosion Summary

Total Existing Water Yield (ac-ft)	663
Total Existing Sediment Yield (tons/yr)	24

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	37	0	24	-37
Percent of Total Yield	61%	0%	39%	61%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 23

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **23**

Watershed Characteristics

Drainage Area (mi^2)	0.10
Drainage Density	8.79

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	66.0%	34.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	2%	2%	17%	76%	0%	0%	0%	3%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 8

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	2.95
Total Introduced Sediment (tons/yr)	2.95

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	2.57	DA (mi^2)	0.099	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		281	303	303	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		10	13	13	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	281	303	22	303	
Flow-Related Sediment (tons)	10	13	2	13	0

Erosion Summary

Total Existing Water Yield (ac-ft)	303
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	8	0	3	2
Percent of Total Yield	73%	0%	27%	14%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 25

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **25**

Watershed Characteristics

Drainage Area (mi^2)	0.05
Drainage Density	14.12

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	22.6%	67.1%	10.3%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	2%	9%	20%	52%	18%	0%	0%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 7

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	4.08
Total Introduced Sediment (tons/yr)	4.08

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	1.88	DA (mi^2)	0.053	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		205	212	212	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		9	9	9	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	205	212	6	212	
Flow-Related Sediment (tons)	9	9	1	9	0

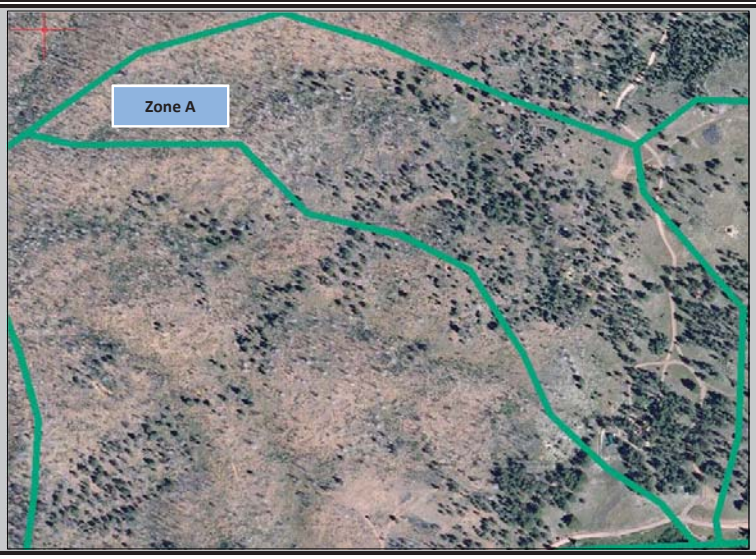
Erosion Summary

Total Existing Water Yield (ac-ft)	212
Total Existing Sediment Yield (tons/yr)	9

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	7	0	4	-2
Percent of Total Yield	63%	0%	37%	15%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 26

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **26**

Watershed Characteristics

Drainage Area (mi^2)	0.11
Drainage Density	13.76

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	35.9%	48.9%	15.2%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	0%	13%	73%	14%	0%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 14

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0

Sediment from Surface Erosion (tons/yr)	8.14
Total Introduced Sediment (tons/yr)	8.14

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	2.76	DA (mi^2)	0.114	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
	Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	302	327	327	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	14	14	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	302	327	25	327	
Flow-Related Sediment (tons)	11	14	3	14	0

Erosion Summary

Total Existing Water Yield (ac-ft)	327
Total Existing Sediment Yield (tons/yr)	14

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	14	0	8	-9
Percent of Total Yield	63%	0%	37%	39%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 27

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **27**

Watershed Characteristics

Drainage Area (mi^2)	0.35
Drainage Density	13.77

Burn Severity (%)	High	Moderate	Low	Unburned
	7.8%	63.4%	28.0%	90.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	16%	28%	37%	19%	0%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	47%	32%	0%	0%	8%	6%	0%	6%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	70%	30%	0%

Total Erosion (tons/yr): 68

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		8%	10%	23%	36%	20%	3%	0%	0%	0%

Hillslope

Length of Road (ft)	3,500	Sediment from Surface Erosion (tons/yr)	64.9
Total Sediment from Roads (tons/yr)	11.1	Total Introduced Sediment (tons/yr)	76

Hydrology

	Zone A			Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	4.59	DA (mi^2)	0.313	Post-Restoration	Q_{bkf} cfs	0.58	DA (mi^2)	0.005	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		501	578	578	Water Yield (ac-ft)		63	64	64	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		15	22	22	Flow-Related Sediment (tons/yr)		4	4	4	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	564	642	77	642	
Flow-Related Sediment (tons)	19	26	7	26	0

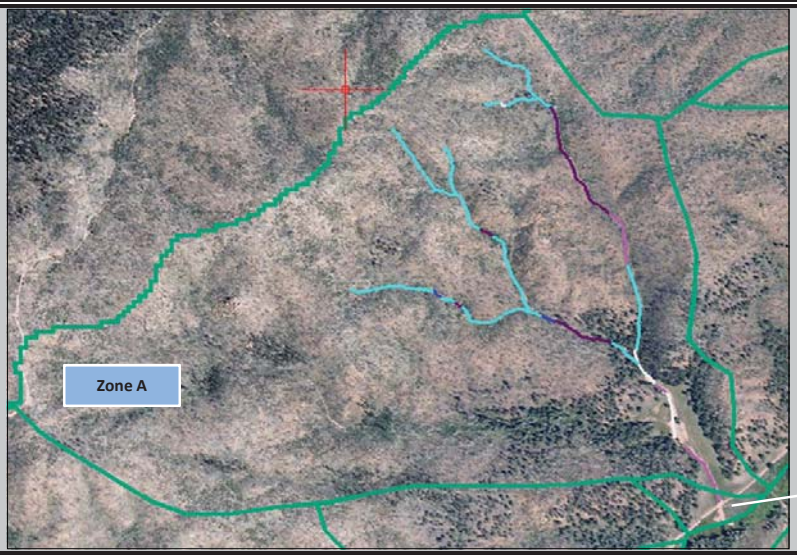
Erosion Summary

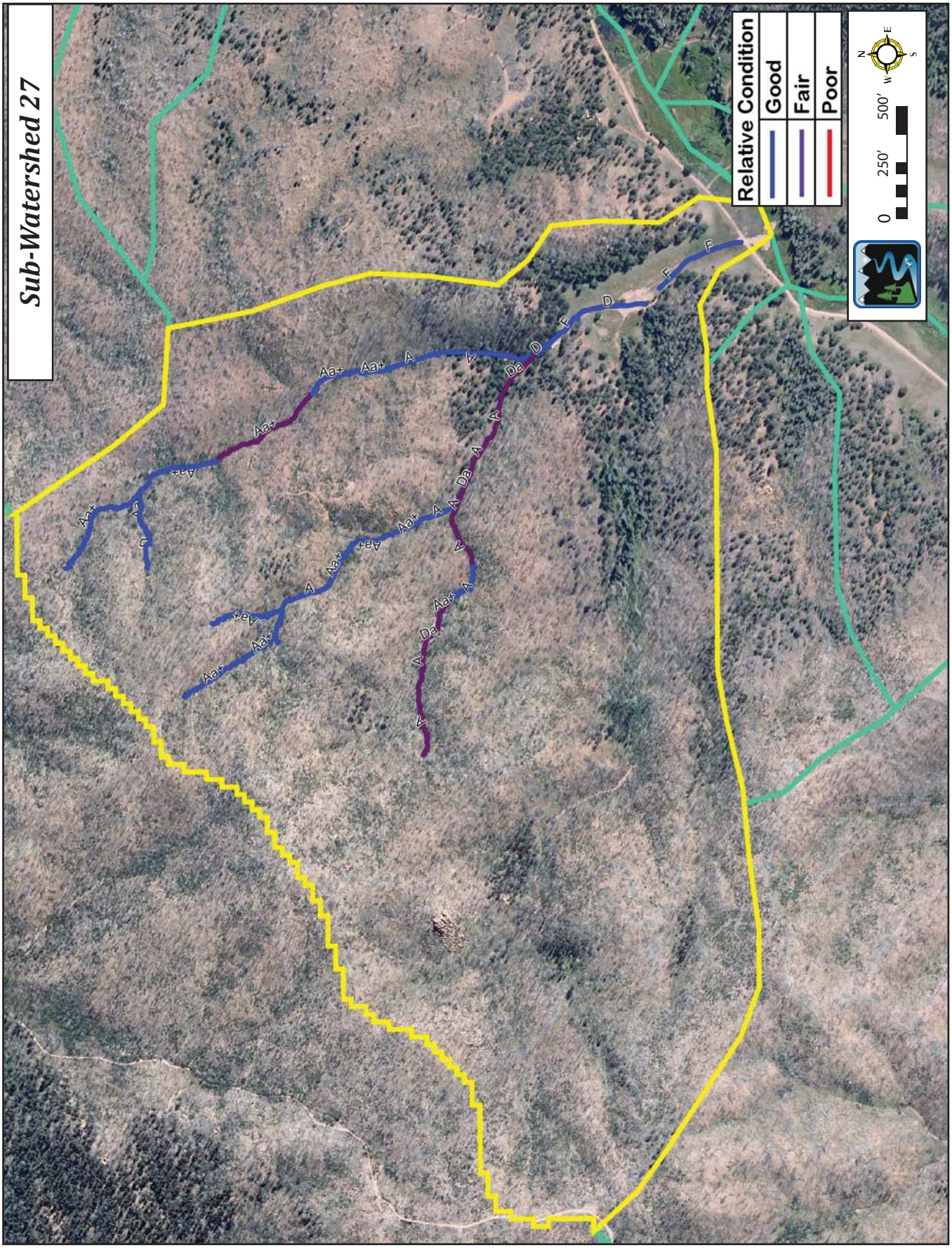
Total Existing Water Yield (ac-ft)	642
Total Existing Sediment Yield (tons/yr)	26

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	68	11	65	-118
Percent of Total Yield	47%	8%	45%	82%

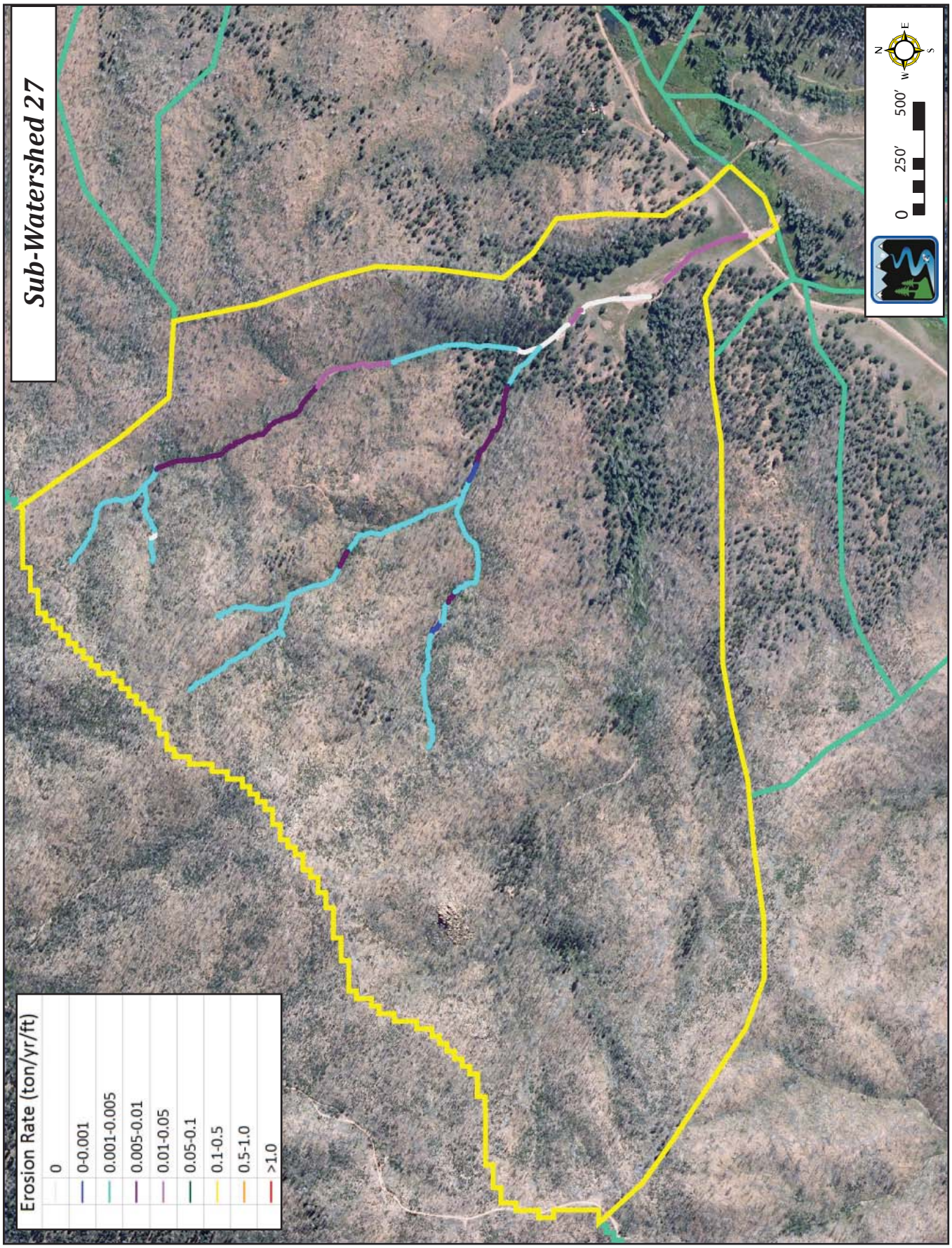
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 28

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **28**

Watershed Characteristics

Drainage Area (mi^2)	0.77
Drainage Density	9.59

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	26.0%	67.2%	6.8%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	1%	1%	71%	24%	0%	0%	0%	3%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 10

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	7.37
Total Introduced Sediment (tons/yr)	7.37

Hydrology

Zone A				Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	1.62	DA (mi^2)	0.039	Q_{bkf} cfs	1.86	DA (mi^2)	0.052	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)		177	180	180	Water Yield (ac-ft)	204	211	211	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		8	8	8	Flow-Related Sediment (tons/yr)	9	9	9	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	380	391	10	391	
Flow-Related Sediment (tons)	17	18	1	18	0

Erosion Summary

Total Existing Water Yield (ac-ft)	391
Total Existing Sediment Yield (tons/yr)	18

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	10	0	7	0
Percent of Total Yield	58%	0%	42%	2%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 29

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **29**

Watershed Characteristics

Drainage Area (mi^2)	0.73
Drainage Density	9.4

Burn Severity (%)	High	Moderate	Low	Unburned
	4.9%	38.6%	39.4%	17.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	13%	20%	19%	26%	18%	2%	0%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 62

Percent of Erosion Categories	Erosion Rate (tons/yr/ft) 0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	7,000
Total Sediment from Roads (tons/yr)	26.8
Sediment from Surface Erosion (tons/yr)	32.1
Total Introduced Sediment (tons/yr)	58.9

Hydrology

Zone A	Q_{bkf} cfs 7.01	DA (mi^2) 0.729	Post-Restoration
		Pre-Fire	Post-Fire
Water Yield (ac-ft)		766	907	907
Flow-Related Sediment (tons/yr)		20	32	32

N/A: Q_{bkf} cfs; DA (mi^2); Pre-Fire; Post-Fire; Post-Restoration; Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	766	907	141	907	
Flow-Related Sediment (tons)	20	32	12	32	0

Erosion Summary

Total Existing Water Yield (ac-ft)	907
Total Existing Sediment Yield (tons/yr)	32

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	62	27	32	-89
Percent of Total Yield	51%	22%	27%	74%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 30

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **30**

Watershed Characteristics

Drainage Area (mi^2)	0.03
Drainage Density	11

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	32.6%	54.9%	12.4%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	0%	3%	57%	39%	0%	0%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	9

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	7.82
Total Introduced Sediment (tons/yr)	7.82

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 2.67	DA (mi^2) 0.106		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	292	311	311	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	64	45	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	292	311	19	311	
Flow-Related Sediment (tons)	11	64	54	45	-20

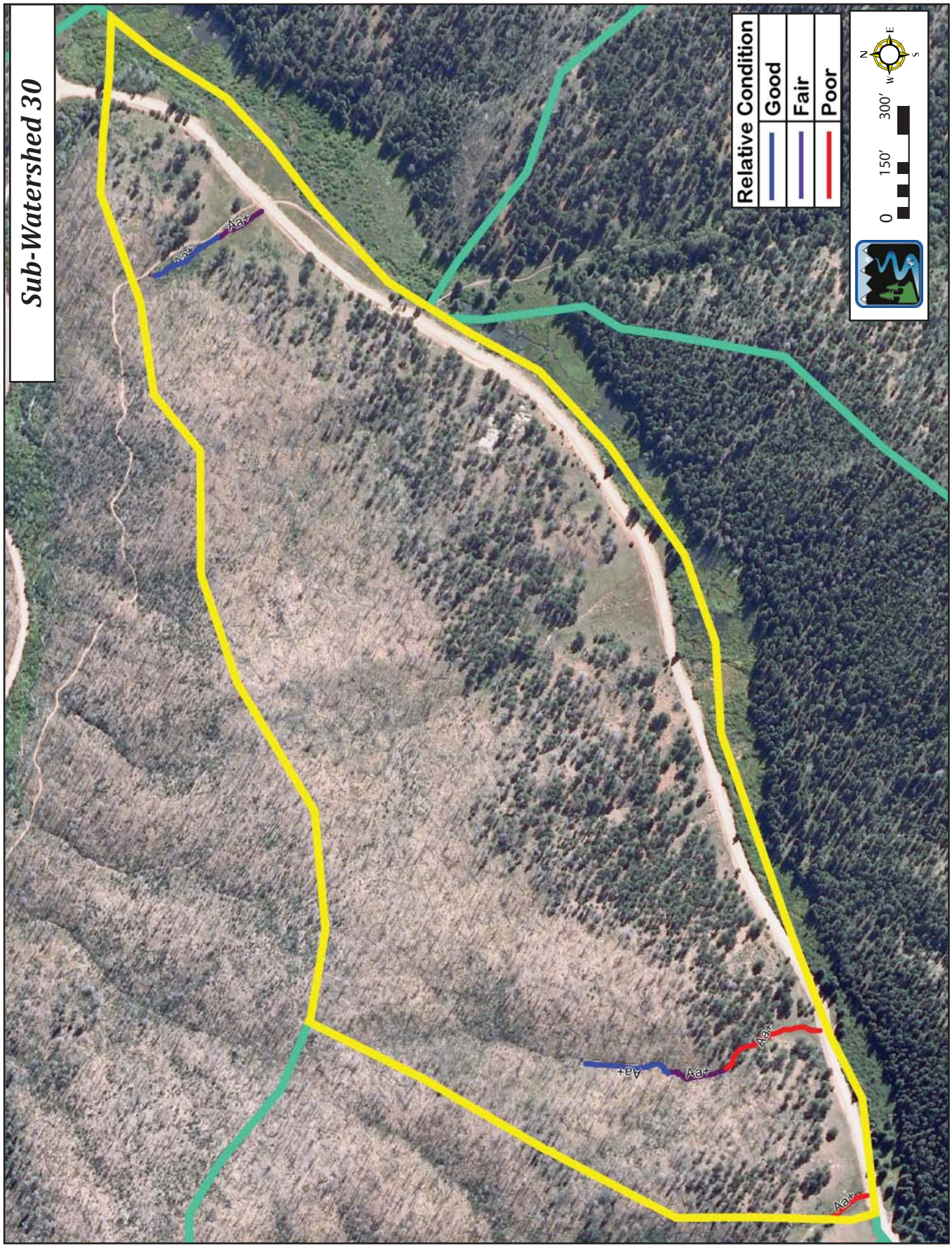
Erosion Summary

Total Existing Water Yield (ac-ft)	311
Total Existing Sediment Yield (tons/yr)	64

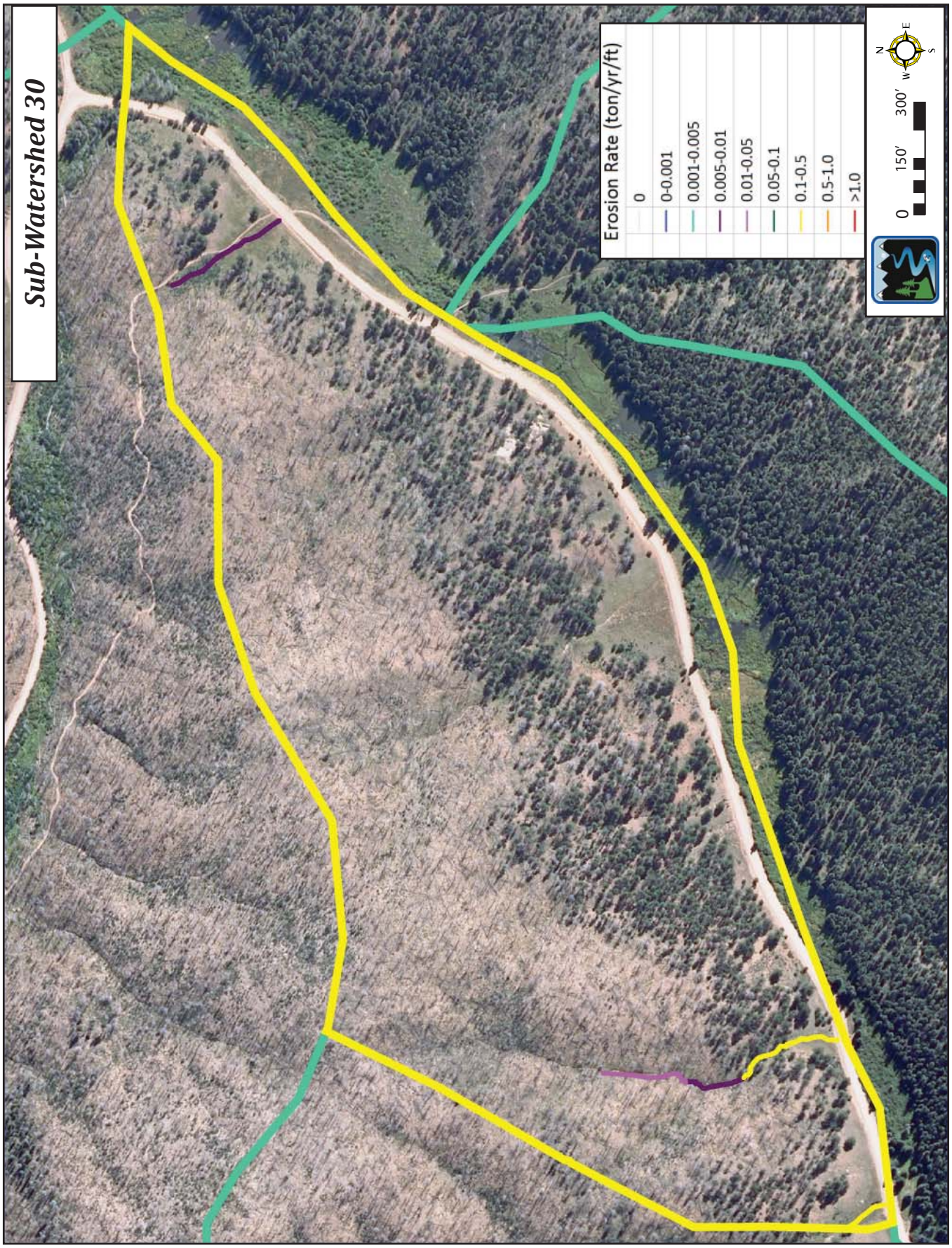
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	9	0	8	47
Percent of Total Yield	54%	0%	46%	74%

Deposition or Scour
Scour

Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 33

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **33**

Watershed Characteristics

Drainage Area (mi^2)	0.13
Drainage Density	10.88

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	38.3%	59.9%	1.8%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	4%	4%	24%	28%	21%	19%	0%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	18

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	5.96
Total Introduced Sediment (tons/yr)	5.96

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs 1.80; DA (mi^2) 0.049			
Water Yield (ac-ft)	197	209	209
Flow-Related Sediment (tons/yr)	8	10	10

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	197	209	12	209	
Flow-Related Sediment (tons)	8	10	1	10	0

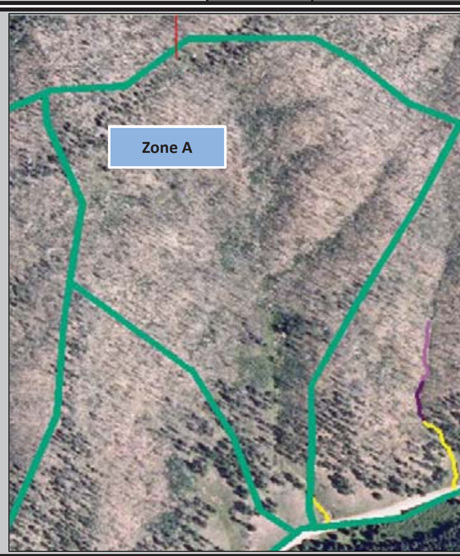
Erosion Summary

Total Existing Water Yield (ac-ft)	209
Total Existing Sediment Yield (tons/yr)	10

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	18	0	6	-14
Percent of Total Yield	75%	0%	25%	59%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 34

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **34**

Watershed Characteristics

Drainage Area (mi^2)	0.08
Drainage Density	10.58

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	1.1%	85.1%	13.7%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	1%	13%	4%	38%	36%	0%	0%	7%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 8

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	2.69
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	2.69

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	2.36	DA (mi^2)	0.084	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire
Water Yield (ac-ft)	258	266	266	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	10	11	11	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	258	266	7	266	
Flow-Related Sediment (tons)	10	11	1	11	0

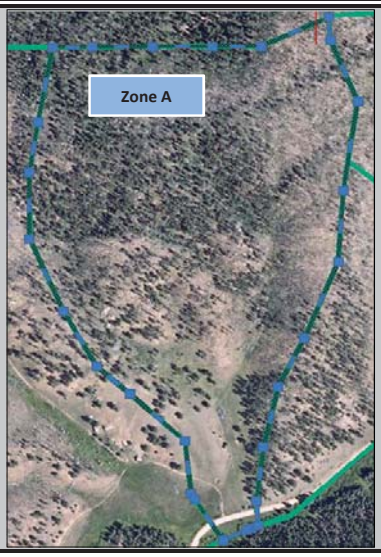
Erosion Summary

Total Existing Water Yield (ac-ft)	266
Total Existing Sediment Yield (tons/yr)	11

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	8	0	3	0
Percent of Total Yield	75%	0%	25%	0%

Deposition or Scour: Scour

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 35

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **35**

Watershed Characteristics

Drainage Area (mi^2)	1.11
Drainage Density	10

	High	Moderate	Low	Unburned
Burn Severity (%)	2.6%	58.2%	23.7%	15.5%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	11%	17%	41%	20%	6%	1%	0%	3%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	66%	0%	0%	0%	0%	0%	34%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 95

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	34%	0%	53%	13%	0%	0%	0%	0%

Hillslope

Length of Road (ft)	2,000	Sediment from Surface Erosion (tons/yr)	34.4
Total Sediment from Roads (tons/yr)	2.7	Total Introduced Sediment (tons/yr)	37.1

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs: 2.71	DA (mi^2): 0.110		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	296	318	318	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	13	13	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	296	318	22	318	
Flow-Related Sediment (tons)	11	13	2	13	0

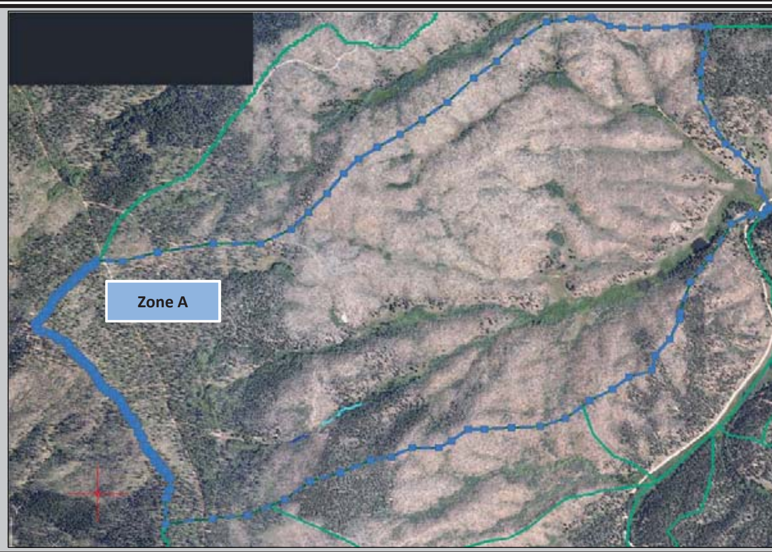
Erosion Summary

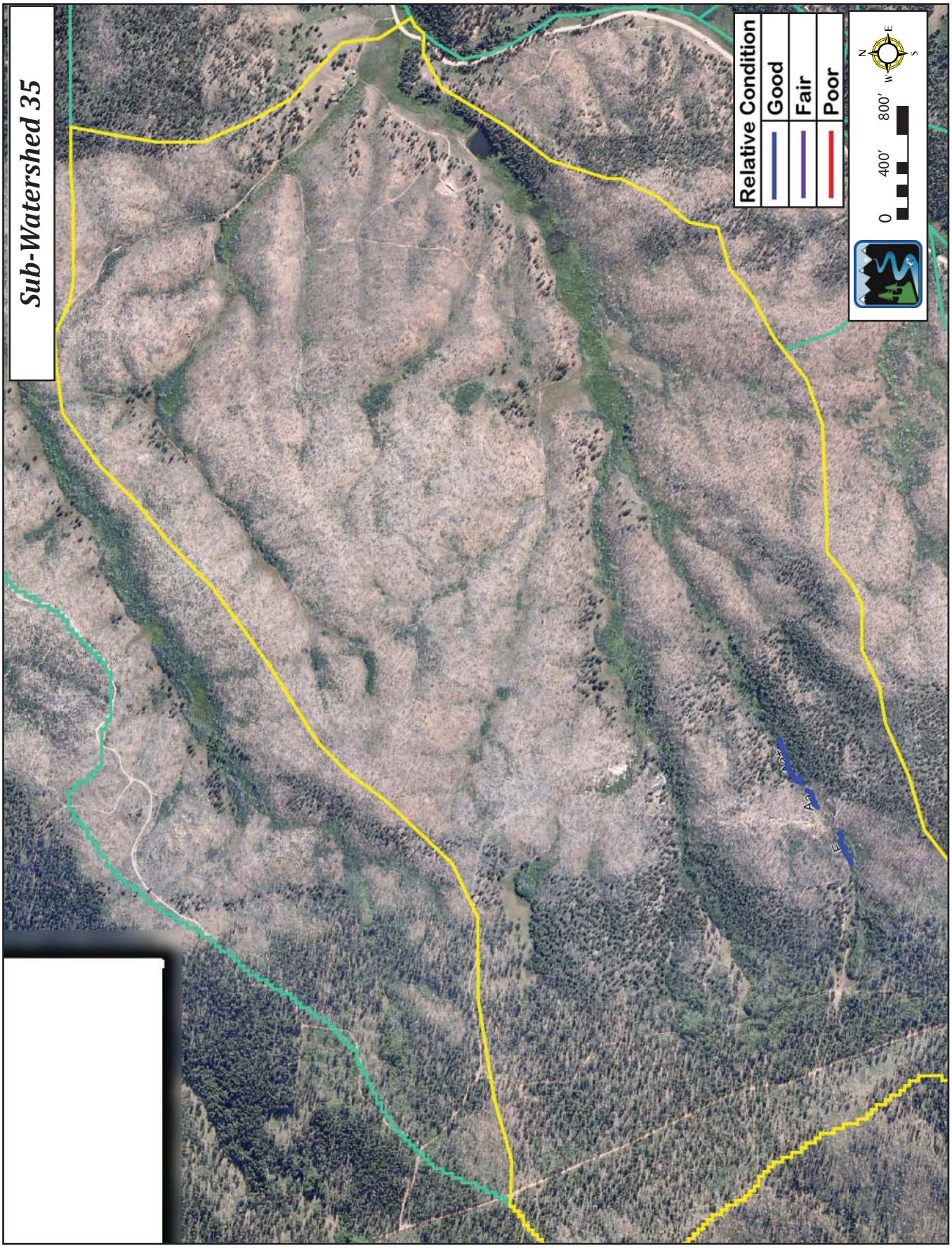
Total Existing Water Yield (ac-ft)	318
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	95	3	34	-119
Percent of Total Yield	72%	2%	26%	90%

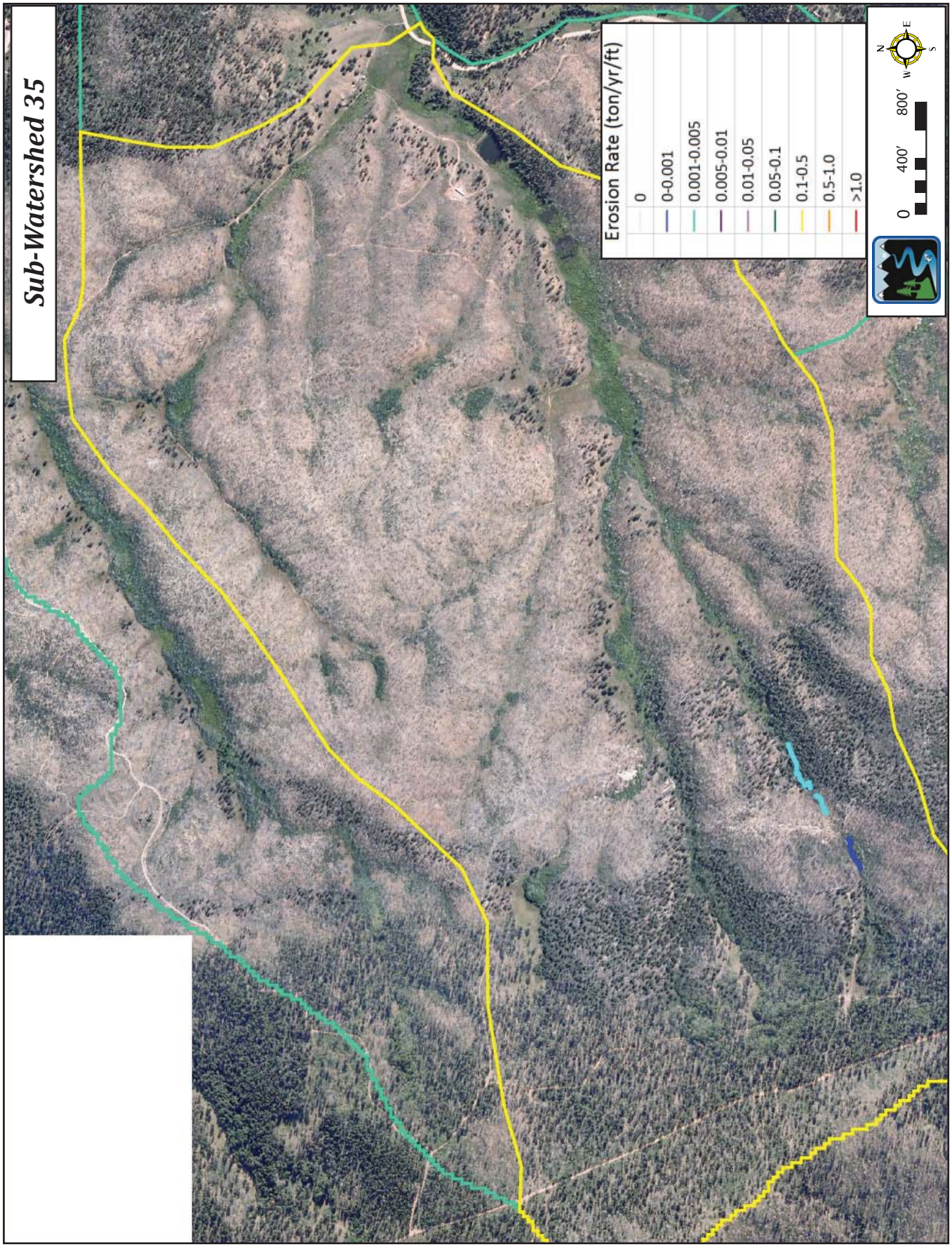
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 36

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **36**

Watershed Characteristics

Drainage Area (mi^2)	0.13
Drainage Density	9.95

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	3.1%	79.4%	17.5%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	2%	76%	18%	0%	0%	0%	3%	0%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 12

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	5.87
Total Introduced Sediment (tons/yr)	5.87

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 2.99; DA (mi^2): 0.133			
Water Yield (ac-ft)	326	340	340
Flow-Related Sediment (tons/yr)	11	13	13

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs; DA (mi^2)			
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	326	340	14	340	
Flow-Related Sediment (tons)	11	13	1	13	0

Erosion Summary

Total Existing Water Yield (ac-ft)	340
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	12	0	6	-5
Percent of Total Yield	67%	0%	33%	29%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 40

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **40**

Watershed Characteristics

Drainage Area (mi^2)	0.17
Drainage Density	11.01

Burn Severity (%)	High	Moderate	Low	Unburned
	1.9%	74.2%	15.1%	8.8%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	23%	49%	20%	7%	0%	0%	1%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 17

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	6.3
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	6.3

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 3.36	DA (mi^2)	0.168	
Water Yield (ac-ft)	367	407	407
Flow-Related Sediment (tons/yr)	12	16	16

N/A (×4)

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	367	407	40	407	
Flow-Related Sediment (tons)	12	16	4	16	0

Erosion Summary

Total Existing Water Yield (ac-ft)	407
Total Existing Sediment Yield (tons/yr)	16

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	17	0	6	-7
Percent of Total Yield	73%	0%	27%	31%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 41

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **41**

Watershed Characteristics

Drainage Area (mi^2)	0.05
Drainage Density	13.92

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	51.9%	29.2%	18.9%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	3%	91%	3%	0%	0%	0%	3%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 7

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	1.66
Total Introduced Sediment (tons/yr)	1.66

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	1.88	DA (mi^2)	0.053	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire
Water Yield (ac-ft)	205	214	214	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	9	10	10	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Post-Restoration

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	205	214	9	214	
Flow-Related Sediment (tons)	9	10	1	10	0

Erosion Summary

Total Existing Water Yield (ac-ft)	214
Total Existing Sediment Yield (tons/yr)	10

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	7	0	2	1
Percent of Total Yield	81%	0%	19%	11%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 42

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **42**

Watershed Characteristics

Drainage Area (mi^2)	42.00
Drainage Density	8.79

Burn Severity (%)	High	Moderate	Low	Unburned
	11.2%	31.5%	26.2%	31.1%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	7%	29%	31%	27%	5%	0%	0%	0%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	26%	0%	0%	0%	0%	0%	74%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 14

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	74%	0%	0%	26%	0%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	5.2
Total Introduced Sediment (tons/yr)	5.2

Hydrology

Zone A	Q_{bkf} cfs: 3.88	DA (mi^2): 0.224	Post-Restoration
		Pre-Fire	Post-Fire
Water Yield (ac-ft)		424	465	465
Flow-Related Sediment (tons/yr)		13	17	17

N/A (4 zones)

Q_{bkf} cfs	DA (mi^2)	Post-Restoration
	Pre-Fire	Post-Fire	
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	424	465	41	465	
Flow-Related Sediment (tons)	13	17	4	17	0

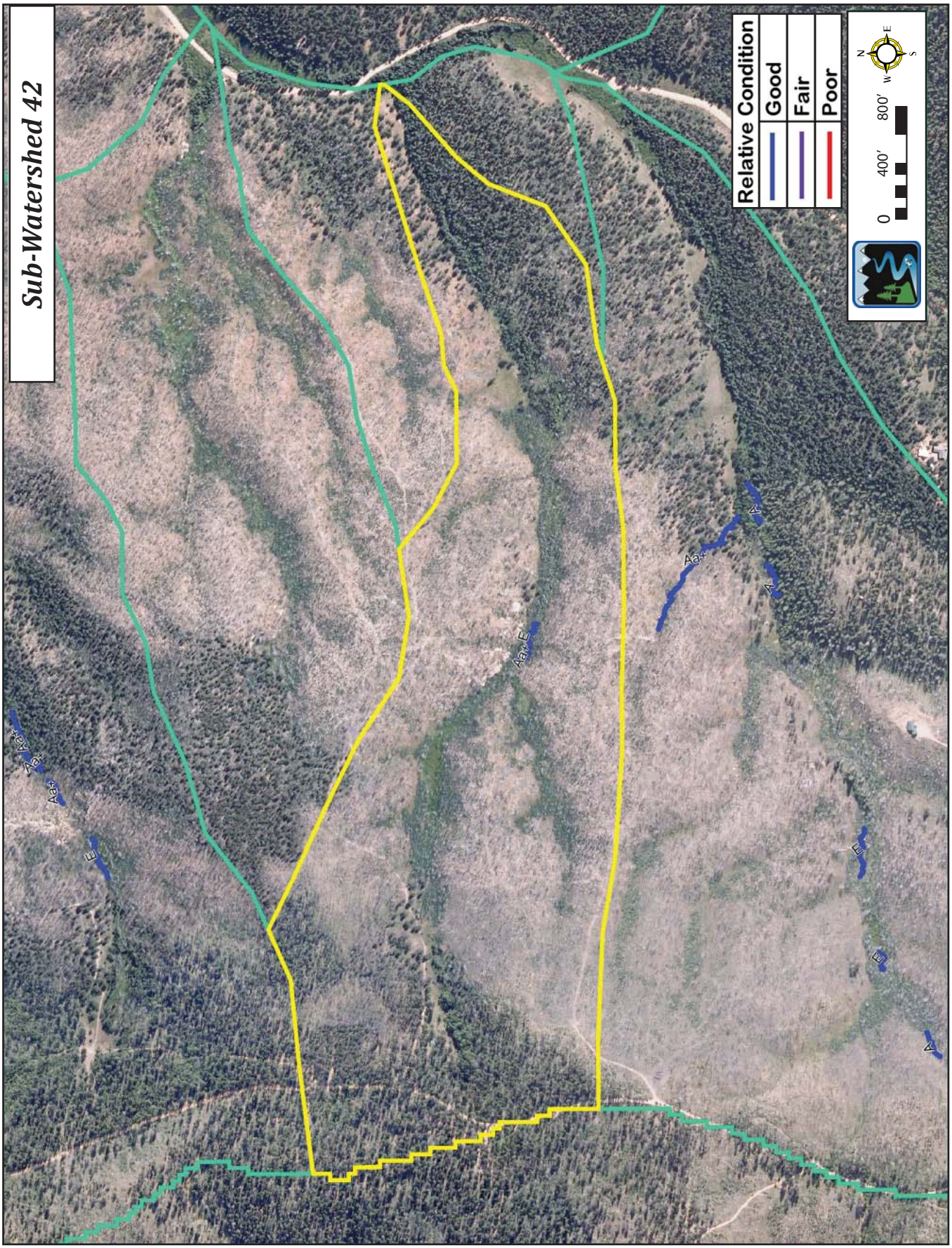
Erosion Summary

Total Existing Water Yield (ac-ft)	465
Total Existing Sediment Yield (tons/yr)	17

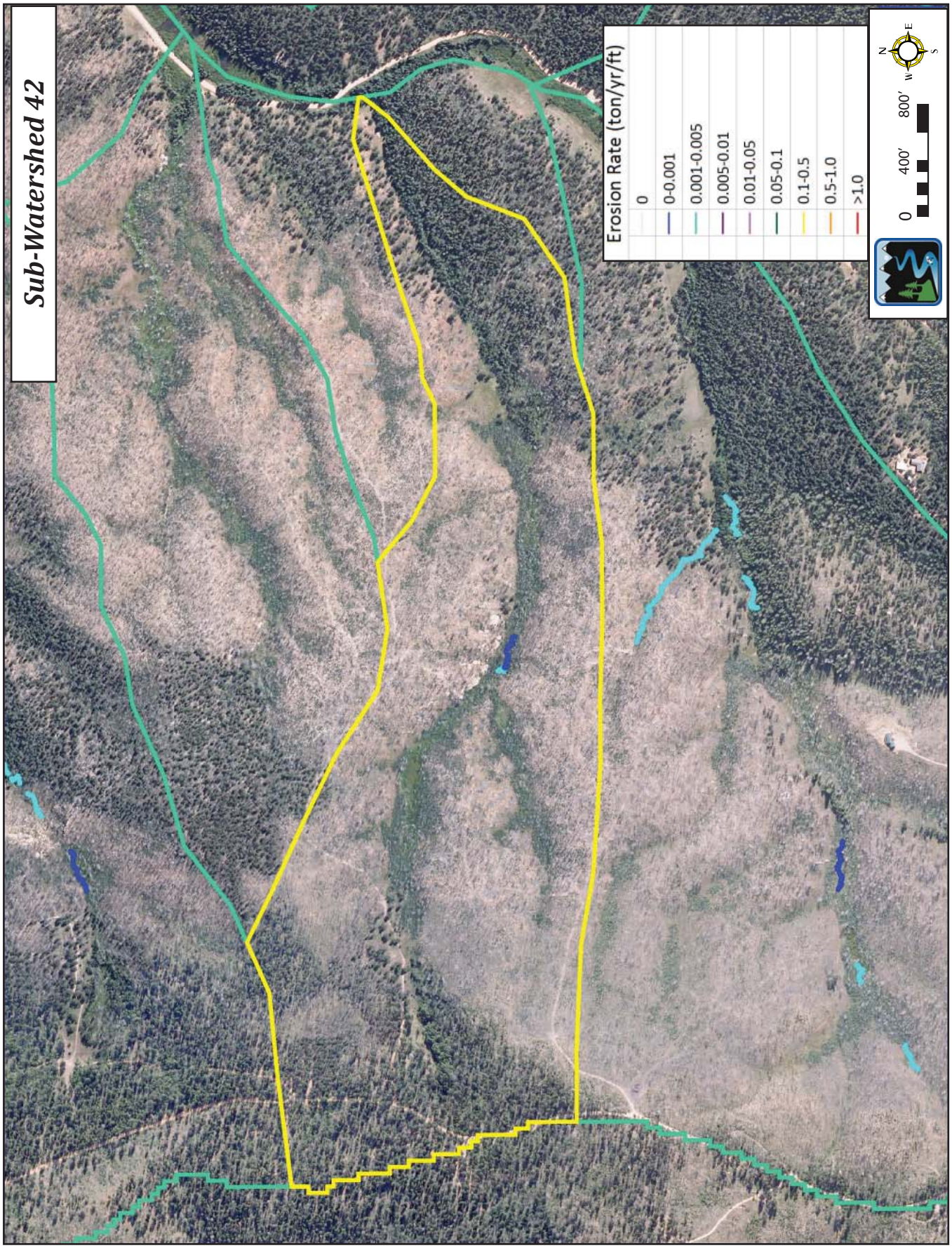
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	14	0	5	-2
Percent of Total Yield	73%	0%	27%	10%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 43

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **43**

Watershed Characteristics

Drainage Area (mi^2)	0.20
Drainage Density	11.11

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	0.0%	100.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	18%	6%	15%	0%	0%	0%	11%	49%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 19

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	4,500
Total Sediment from Roads (tons/yr)	42.1
Sediment from Surface Erosion (tons/yr)	4.36
Total Introduced Sediment (tons/yr)	46.46

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	3.62	DA (mi^2)	0.195	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		395	395	395	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		13	13	13	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	395	395	0	395	
Flow-Related Sediment (tons)	13	13	0	13	0

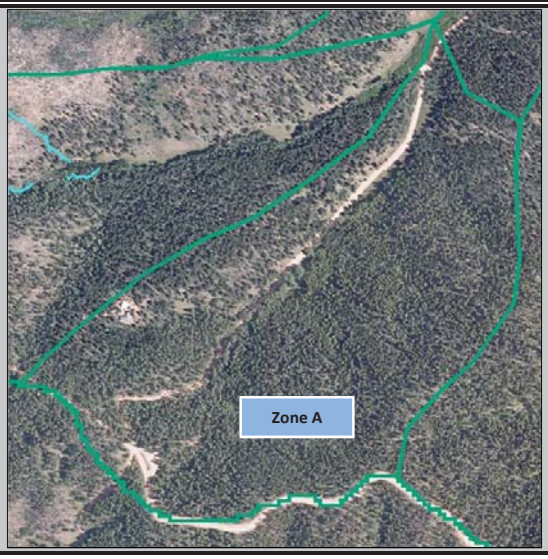
Erosion Summary

Total Existing Water Yield (ac-ft)	395
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	19	42	4	-53
Percent of Total Yield	29%	64%	7%	80%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 44

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **44**

Watershed Characteristics

Drainage Area (mi^2)	0.37
Drainage Density	8.88

	High	Moderate	Low	Unburned
Burn Severity (%)	1.4%	51.9%	27.7%	19.1%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	23%	22%	19%	32%	3%	0%	1%	1%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	40%	34%	0%	0%	0%	0%	26%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 29

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	14%	67%	4%	15%	0%	0%	0%	0%

Hillslope

Length of Road (ft)	5,000
Total Sediment from Roads (tons/yr)	8.4
Sediment from Surface Erosion (tons/yr)	11.3
Total Introduced Sediment (tons/yr)	19.7

Hydrology

Zone A			
Q_{bkf} cfs 5.01	DA (mi^2) 0.373		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	548	621	621
Flow-Related Sediment (tons/yr)	16	22	22

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	548	621	73	621	
Flow-Related Sediment (tons)	16	22	7	22	0

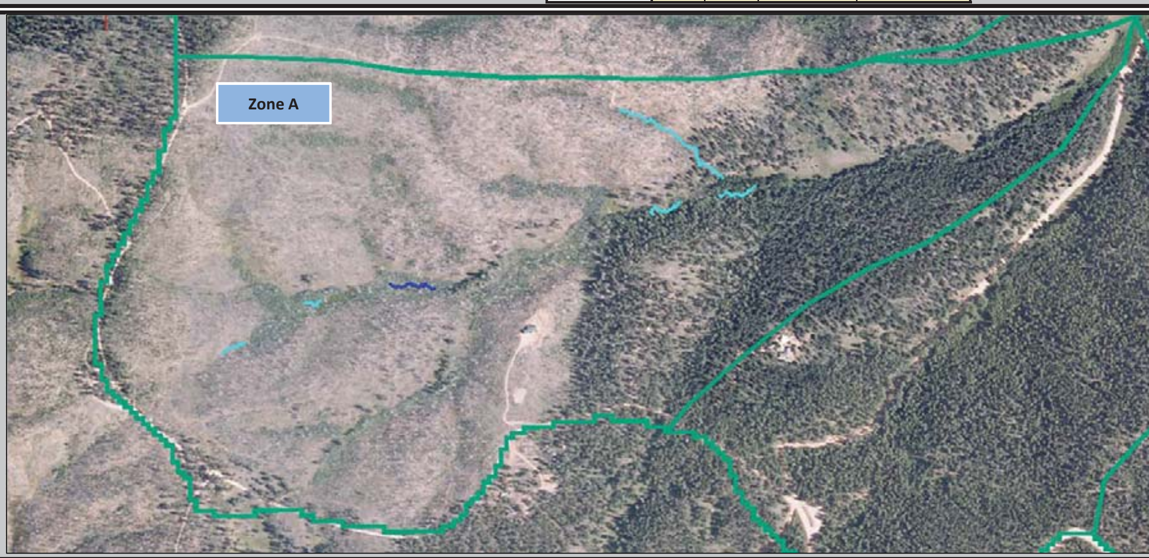
Erosion Summary

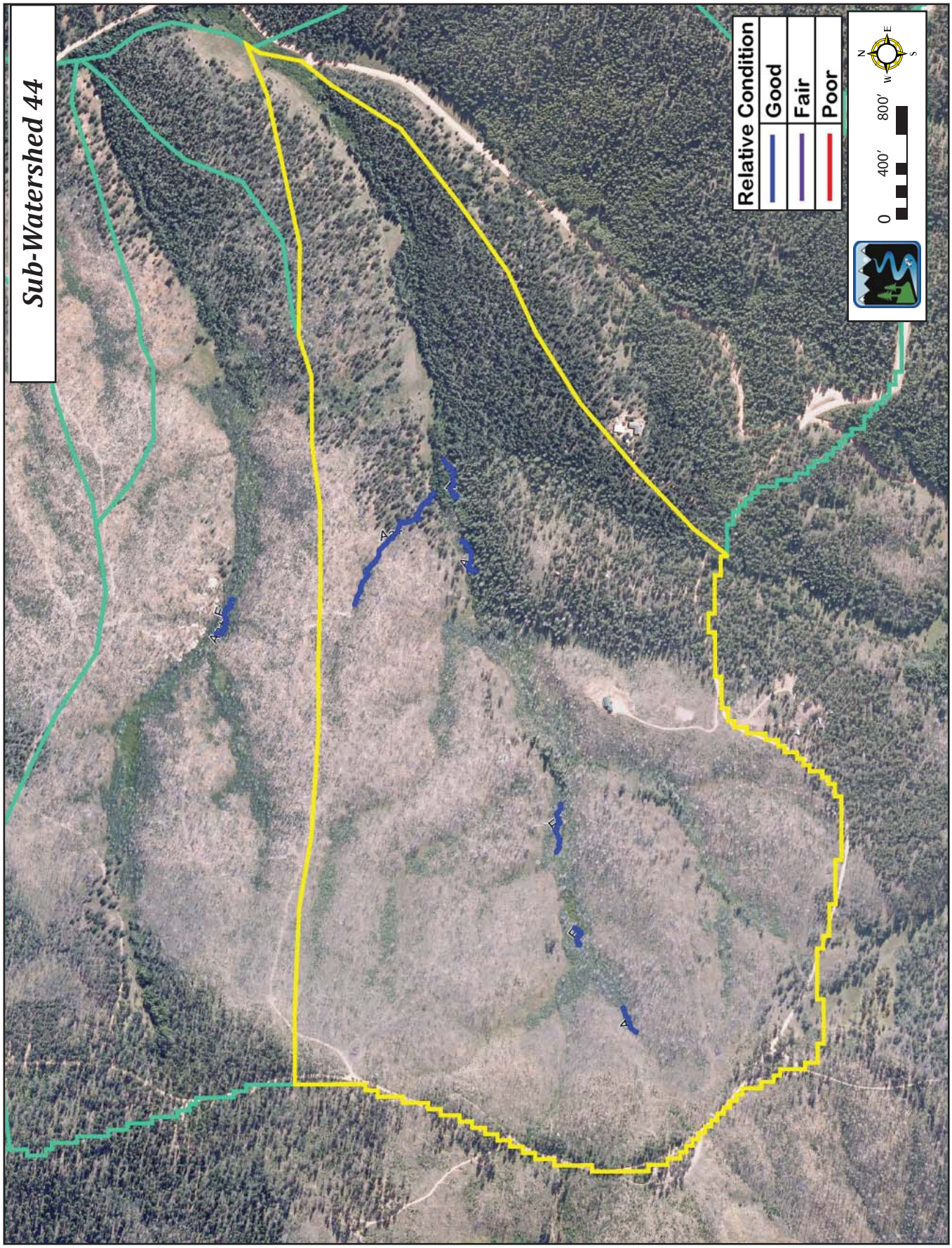
Total Existing Water Yield (ac-ft)	621
Total Existing Sediment Yield (tons/yr)	22

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	29	8	11	-26
Percent of Total Yield	60%	17%	23%	54%

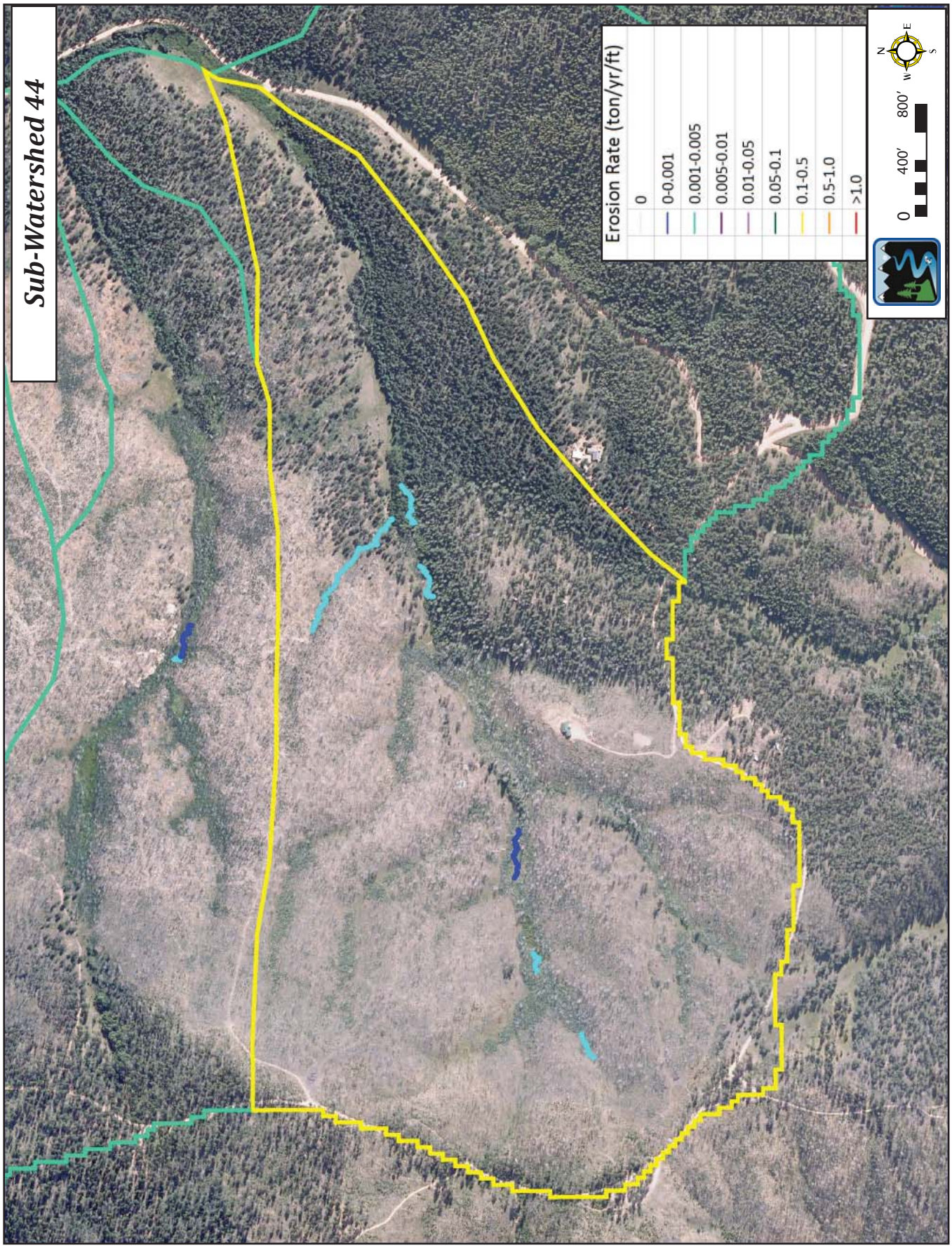
Deposition or Scour
Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 45

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **45**

Watershed Characteristics

Drainage Area (mi^2)	0.55
Drainage Density	11

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	0.0%	0.0%	100.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	9%	6%	23%	1%	8%	0%	19%	34%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 54

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	12.06
Total Introduced Sediment (tons/yr)	12.06

Hydrology

	Zone A			N/A			N/A			N/A			N/A		
Q_{bkf} cfs	6.09														
DA (mi^2)	0.551														
	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	666	666	666												
Flow-Related Sediment (tons/yr)	18	18	18												

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	666	666	0	666	
Flow-Related Sediment (tons)	18	18	0	18	0

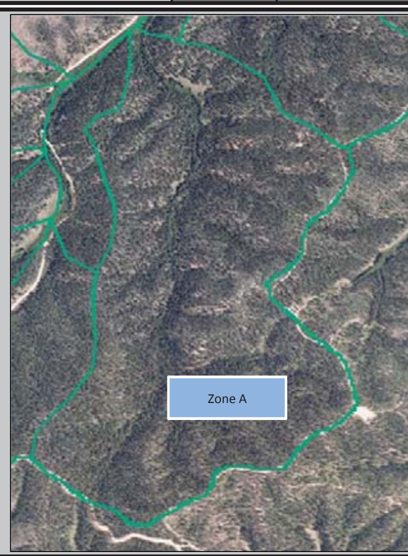
Erosion Summary

Total Existing Water Yield (ac-ft)	666
Total Existing Sediment Yield (tons/yr)	18

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	54	0	12	-48
Percent of Total Yield	82%	0%	18%	73%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 46

Watershed Summary | Stream: **Trail Creek Watershed** | Sub-Watershed: **46**

Watershed Characteristics

Drainage Area (mi^2)	0.34
Drainage Density	10.75

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	0.0%	1.0%	99.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	21%	18%	9%	1%	0%	0%	25%	27%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	33

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	3,750	Sediment from Surface Erosion (tons/yr)	7.43
Total Sediment from Roads (tons/yr)	0.91	Total Introduced Sediment (tons/yr)	8.34

Hydrology

	Zone A			N/A			N/A			N/A			N/A		
Q_{bkf} cfs	4.80														
DA (mi^2)	0.343														
	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	525	525	525												
Flow-Related Sediment (tons/yr)	15	15	15												

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	525	525	0	525	
Flow-Related Sediment (tons)	15	15	0	15	0

Erosion Summary

Total Existing Water Yield (ac-ft)	525
Total Existing Sediment Yield (tons/yr)	15

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	33	1	7	-26
Percent of Total Yield	80%	2%	18%	63%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 47

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **47**

Watershed Characteristics

Drainage Area (mi^2)	0.36
Drainage Density	12.51

Burn Severity (%)	High	Moderate	Low	Unburned
	30.0%	13.5%	32.8%	53.4%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	19%	6%	2%	0%	0%	0%	44%	29%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 35

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	13.08
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	13.08

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	4.42	DA (mi^2)	0.291	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac-ft)		483	518	518	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		14	18	18	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	483	518	35	518	
Flow-Related Sediment (tons)	14	18	3	18	0

Erosion Summary

Total Existing Water Yield (ac-ft)	518
Total Existing Sediment Yield (tons/yr)	18

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	35	0	13	-31
Percent of Total Yield	73%	0%	27%	64%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 48

Watershed Summary	Stream:	Trail Creek Watershed	Sub-Watershed:	48

Watershed Characteristics

Drainage Area (mi²)	0.07
Drainage Density	11.01

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	0.0%	16.3%	83.7%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	37%	0%	0%	6%	0%	0%	0%	57%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	6

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	1.5
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	1.5

Hydrology

Zone A			
Q_{bkf} cfs 2.09	DA (mi²) 0.065		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	228	229	229
Flow-Related Sediment (tons/yr)	9	9	9

N/A			
Q_{bkf} cfs	DA (mi²)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi²)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi²)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi²)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	228	229	2	229	
Flow-Related Sediment (tons)	9	9	0	9	0

Erosion Summary

Total Existing Water Yield (ac-ft)	229
Total Existing Sediment Yield (tons/yr)	9

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	6	0	2	2
Percent of Total Yield	80%	0%	20%	20%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 49

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **49**

Watershed Characteristics

Drainage Area (mi^2)	0.12
Drainage Density	13.21

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	2.9%	97.1%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	29%	0%	2%	1%	0%	0%	11%	57%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 14

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	3.46
Total Introduced Sediment (tons/yr)	3.46

Hydrology

Zone A		Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	2.83			
DA (mi^2)	0.120			
Water Yield (ac-ft)		309	332	332
Flow-Related Sediment (tons/yr)		11	13	13

N/A (Zone B): Q_{bkf} cfs; DA (mi^2); Pre-Fire; Post-Fire; Post-Restoration; Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

N/A (Zone C): Q_{bkf} cfs; DA (mi^2); Pre-Fire; Post-Fire; Post-Restoration; Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

N/A (Zone D): Q_{bkf} cfs; DA (mi^2); Post-Restoration; Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

N/A (Zone E): Q_{bkf} cfs; DA (mi^2); Pre-Fire; Post-Fire; Post-Restoration; Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	309	332	23	332	
Flow-Related Sediment (tons)	11	13	2	13	0

Erosion Summary

Total Existing Water Yield (ac-ft)	332
Total Existing Sediment Yield (tons/yr)	13

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	14	0	3	-4
Percent of Total Yield	80%	0%	20%	23%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 51

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **51**

Watershed Characteristics

Drainage Area (mi^2)	0.92
Drainage Density	7.29

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	1.6%	32.0%	66.4%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	19%	15%	9%	4%	6%	5%	17%	25%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 55

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	16.3
Total Introduced Sediment (tons/yr)	16.3

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 6.65 / DA (mi^2): 0.655			
Water Yield (ac-ft)	726	818	818
Flow-Related Sediment (tons/yr)	19	27	27

Zone B	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs: 1.49 / DA (mi^2): 0.033			
Water Yield (ac-ft)	162	171	171
Flow-Related Sediment (tons/yr)	8	9	9

N/A (Water Yield (ac-ft); Flow-Related Sediment (tons/yr)) — Pre-Fire / Post-Fire / Post-Restoration

N/A (Water Yield (ac-ft); Flow-Related Sediment (tons/yr)) — Pre-Fire / Post-Fire / Post-Restoration

N/A (Water Yield (ac-ft); Flow-Related Sediment (tons/yr)) — Pre-Fire / Post-Fire / Post-Restoration

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	888	989	100	989	
Flow-Related Sediment (tons)	27	35	9	35	0

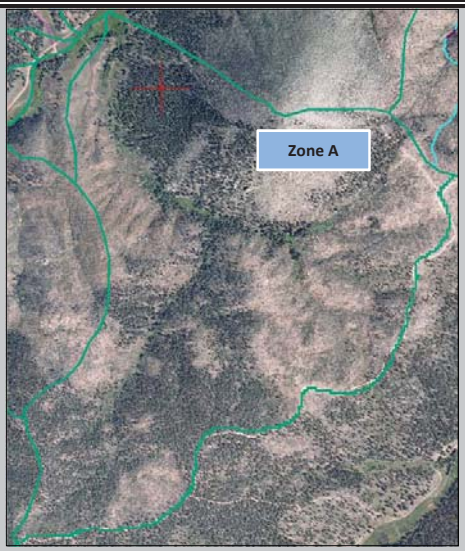
Erosion Summary

Total Existing Water Yield (ac-ft)	989
Total Existing Sediment Yield (tons/yr)	35

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	55	0	16	-36
Percent of Total Yield	77%	0%	23%	51%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 52

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **52**

Watershed Characteristics

Drainage Area (mi^2)	0.27
Drainage Density	4.5

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	21.0%	29.4%	49.6%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	47%	15%	4%	1%	0%	0%	0%	32%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 11

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	4.3
Total Introduced Sediment (tons/yr)	4.3

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	4.22	DA (mi^2)	0.265	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)		461	519	519	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		14	19	19	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	461	519	58	519	
Flow-Related Sediment (tons)	14	19	5	19	0

Erosion Summary

Total Existing Water Yield (ac-ft)	519
Total Existing Sediment Yield (tons/yr)	19

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	11	0	4	4
Percent of Total Yield	72%	0%	28%	21%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 53

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **53**

Watershed Characteristics

Drainage Area (mi^2)	0.48
Drainage Density	10.33

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	60.4%	14.6%	25.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	27%	8%	1%	1%	1%	5%	19%	39%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	58%	29%	0%	0%	11%	1%	0%	1%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions			

Total Erosion (tons/yr): 261

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	1%	14%	38%	18%	26%	0%	1%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	46.6
Total Introduced Sediment (tons/yr)	46.60

Hydrology

	Zone A			N/A			N/A			N/A			N/A		
Q_{bkf} cfs	5.70	DA (mi^2) 0.482		Q_{bkf} cfs	DA (mi^2)		Q_{bkf} cfs	DA (mi^2)		Q_{bkf} cfs	DA (mi^2)		Q_{bkf} cfs	DA (mi^2)	
	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	623	732	732												
Flow-Related Sediment (tons/yr)	17	239	146												

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	623	732	110	732	
Flow-Related Sediment (tons)	17	239	222	146	-93

Erosion Summary

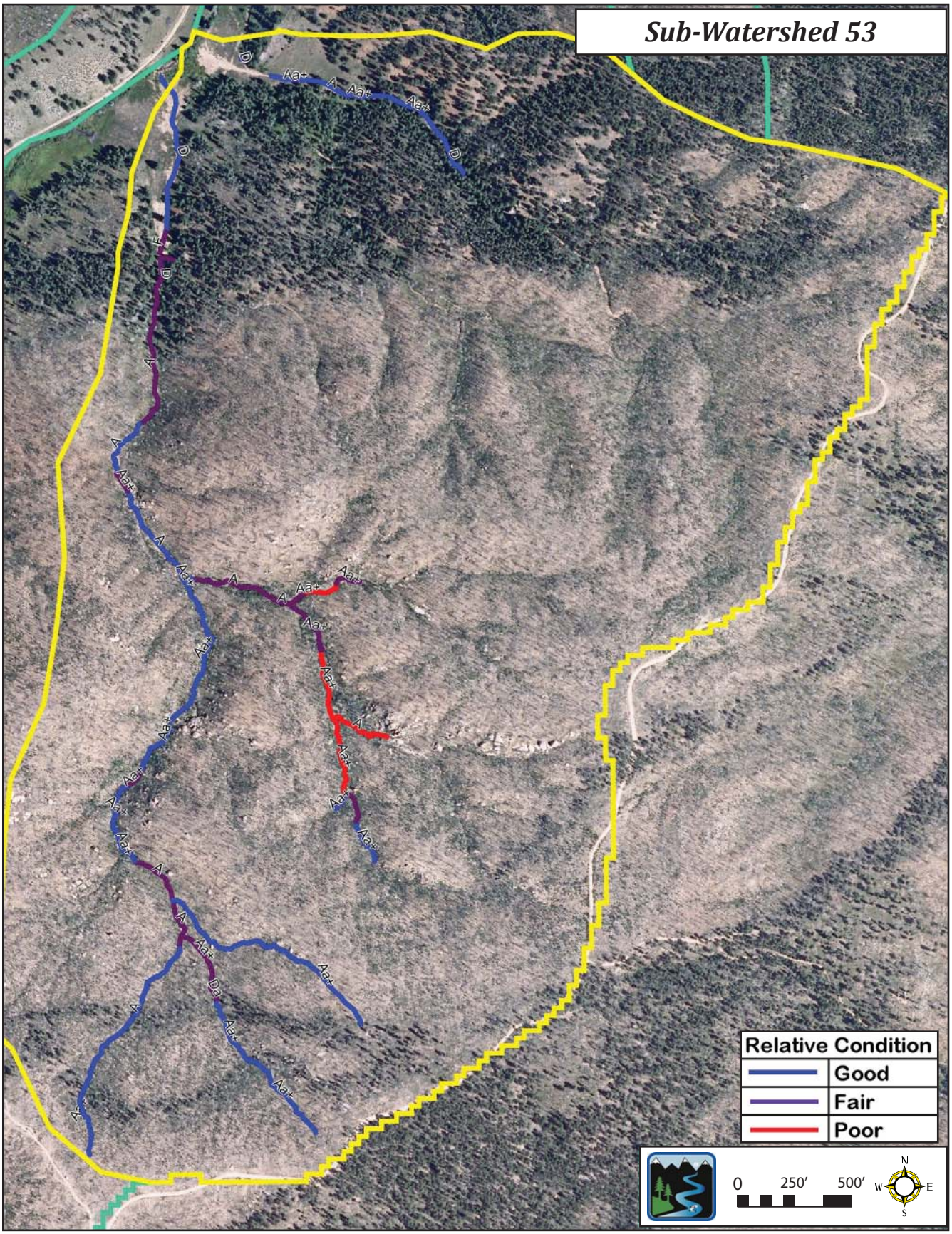
Total Existing Water Yield (ac-ft)	732
Total Existing Sediment Yield (tons/yr)	239

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	261	0	47	-69
Percent of Total Yield	85%	0%	15%	22%

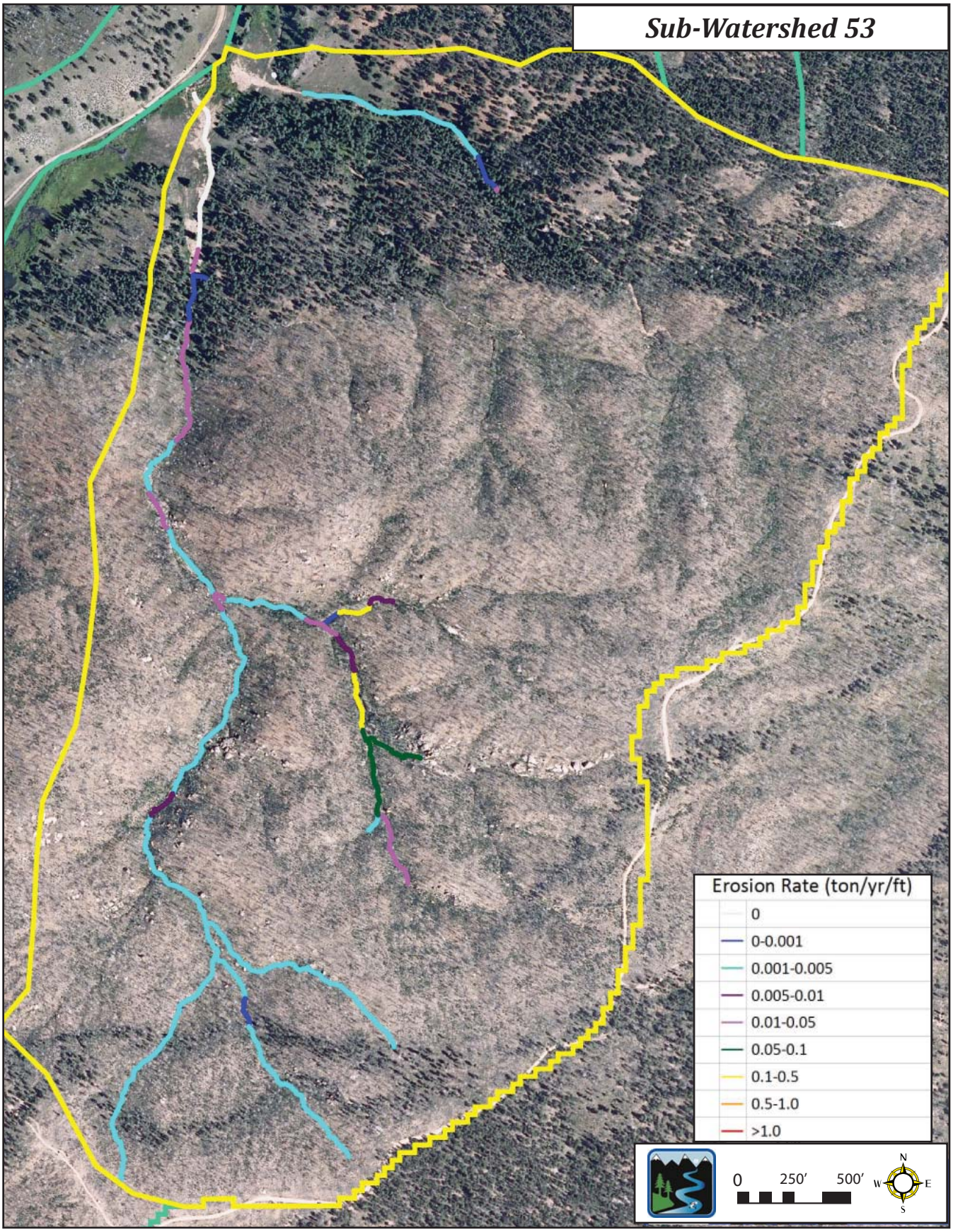
Deposition or Scour
Deposition

Hydrologic Zones of Watershed

Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 54

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **54**

Watershed Characteristics

Drainage Area (mi^2)	0.03
Drainage Density	9.33

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	8.7%	91.3%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	4%	0%	3%	0%	0%	0%	69%	23%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr): 3

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	1.69
Total Introduced Sediment (tons/yr)	1.69

Hydrology

	Zone A			N/A			N/A			N/A			N/A		
Q_{bkf} cfs / DA (mi^2)															
	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)															
Flow-Related Sediment (tons/yr)															

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	N/A	N/A	N/A	N/A	
Flow-Related Sediment (tons)	N/A	N/A	N/A	N/A	N/A

Erosion Summary

Total Existing Water Yield (ac-ft)	N/A
Total Existing Sediment Yield (tons/yr)	N/A

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	3	0	2	N/A
Percent of Total Yield	64%	0%	36%	N/A

Deposition or Scour
N/A

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 55

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **55**

Watershed Characteristics

Drainage Area (mi^2)	0.06
Drainage Density	9.27

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	33.0%	67.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	0%	0%	0%	0%	0%	0%	9%	91%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 5

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	2.5
Total Introduced Sediment (tons/yr)	2.50

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bf} cfs	1.99	DA (mi^2)	0.059	Post-Restoration	Q_{bf} cfs		DA (mi^2)		Post-Restoration	Q_{bf} cfs		DA (mi^2)		Post-Restoration	Q_{bf} cfs		DA (mi^2)		Post-Restoration	Q_{bf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire				Pre-Fire	Post-Fire	
Water Yield (ac ft)		217	219	219	Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)		9	9	9	Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	217	219	2	219	
Flow-Related Sediment (tons)	9	9	0	9	0

Erosion Summary

Total Existing Water Yield (ac-ft)	219
Total Existing Sediment Yield (tons/yr)	9

Sediment (tons/yr)	Banks	Roads	Surface Erosion	Streambed
	5	0	3	2
Percent of Total Yield	67%	0%	33%	18%

Deposition or Scour
Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 56

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **56**

Watershed Characteristics

Drainage Area (mi^2)	0.16
Drainage Density	11.99

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	52.5%	47.5%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	6%	0%	1%	0%	0%	0%	39%	55%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 9

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	2.96
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	2.96

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	2.37	DA (mi^2)	0.084	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)		259	265	265	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		10	11	11	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	259	265	6	265	
Flow-Related Sediment (tons)	10	11	1	11	0

Erosion Summary

Total Existing Water Yield (ac-ft)	265
Total Existing Sediment Yield (tons/yr)	11

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	9	0	3	-1
Percent of Total Yield	75%	0%	25%	12%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 57

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **57**

Watershed Characteristics

Drainage Area (mi^2)	0.16
Drainage Density	12.8

	High	Moderate	Low	Unburned
Burn Severity (%)	4.2%	26.4%	27.4%	42.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	20%	0%	0%	1%	0%	11%	33%	36%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	35%	16%	0%	0%	0%	0%	0%	14%	35%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	42%	52%	6%

Total Erosion (tons/yr): 40

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	23%	57%	19%	0%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	10.3
Total Introduced Sediment (tons/yr)	10.3

Hydrology

Zone A			
Q_{bkf} cfs 3.63	DA (mi^2) 0.196		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	396	453	453
Flow-Related Sediment (tons/yr)	13	255	78

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	396	453	57	453	
Flow-Related Sediment (tons)	13	255	242	78	-178

Erosion Summary

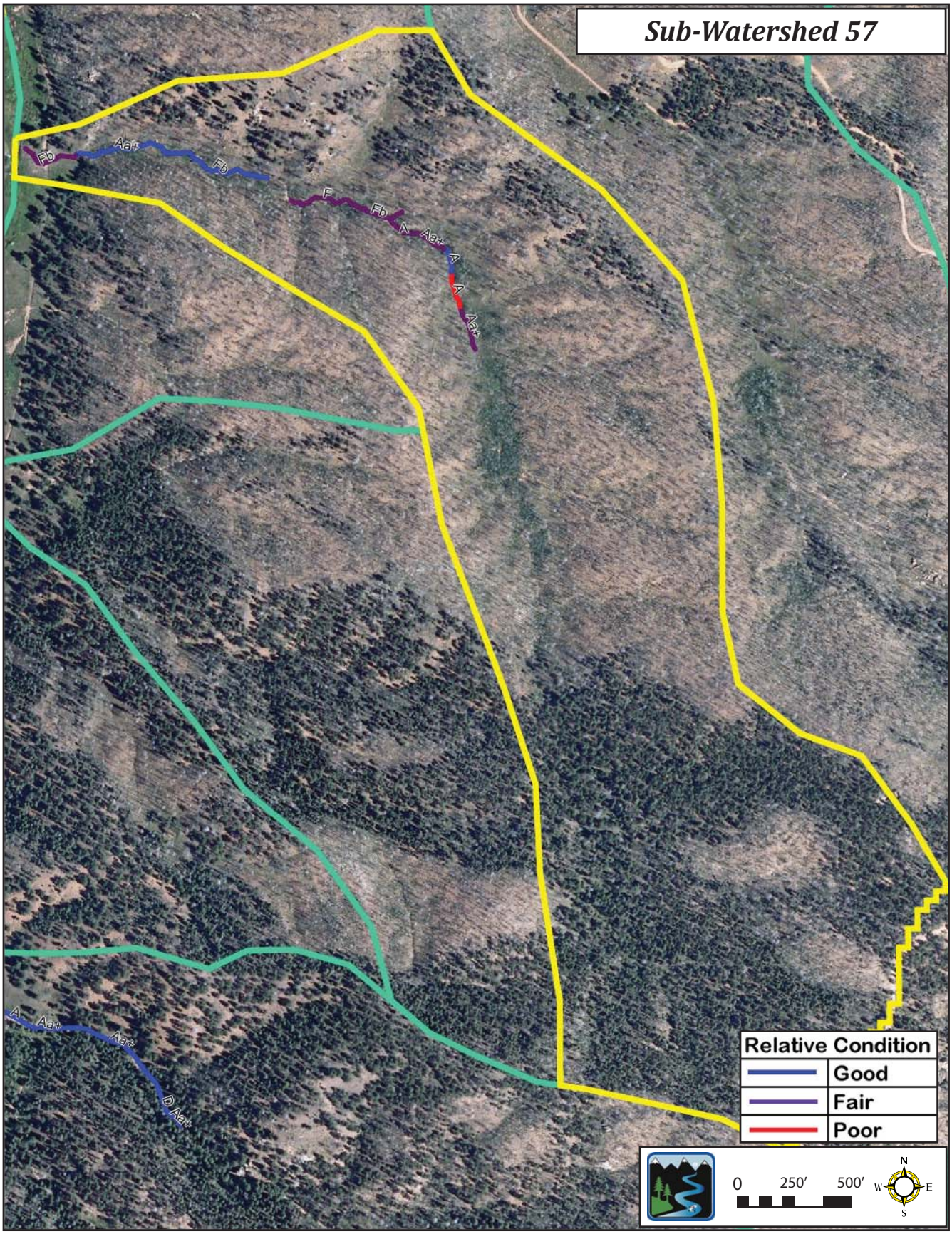
Total Existing Water Yield (ac-ft)	453
Total Existing Sediment Yield (tons/yr)	255

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	40	0	10	205
Percent of Total Yield	80%	0%	20%	80%

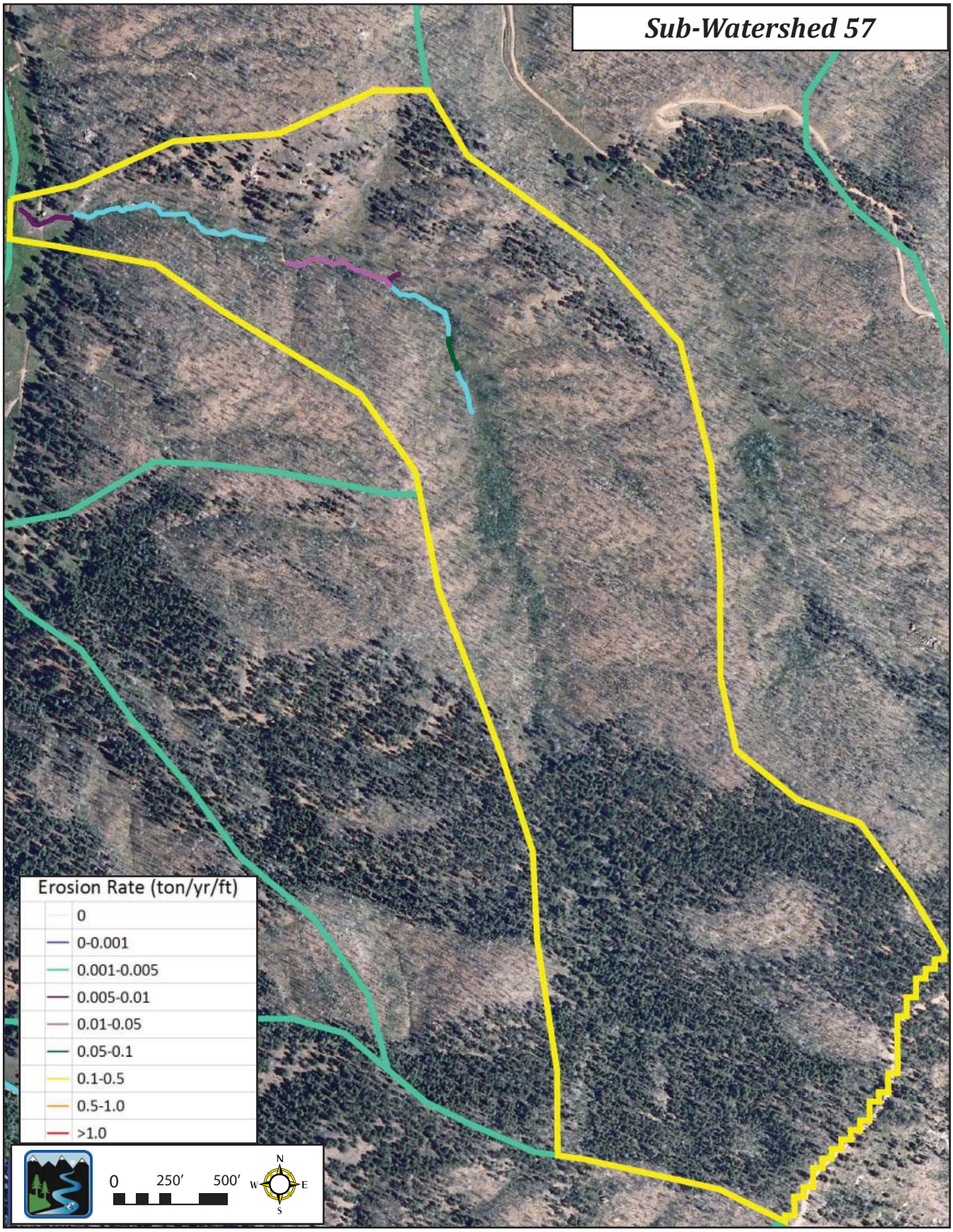
Deposition or Scour
Scour

Hydrologic Zones of Watershed

Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 58

Watershed Summary

Stream: **Trail Creek Watershed** Sub-Watershed: **58**

Watershed Characteristics

Drainage Area (mi^2)	0.53
Drainage Density	11.03

	High	Moderate	Low	Unburned
Burn Severity (%)	6.3%	33.8%	59.6%	0.3%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	19%	4%	1%	1%	0%	1%	34%	40%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	44%	47%	0%	0%	0%	8%	0%	0%	2%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	13%	73%	14%

Total Erosion (tons/yr): 105

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	8%	24%	35%	24%	8%	0%	2%	0%

Hillslope

Length of Road (ft)	4,500
Total Sediment from Roads (tons/yr)	10.1
Sediment from Surface Erosion (tons/yr)	21.27
Total Introduced Sediment (tons/yr)	31.37

Hydrology

Zone A — Q_{bkf} cfs 3.63; DA (mi^2) 0.196

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	396	453	453
Flow-Related Sediment (tons/yr)	13	255	78

N/A — Q_{bkf} cfs; DA (mi^2)

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A — Q_{bkf} cfs; DA (mi^2)

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A — Q_{bkf} cfs; DA (mi^2)

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A — Q_{bkf} cfs; DA (mi^2)

	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	396	453	57	453	
Flow-Related Sediment (tons)	13	255	242	78	-178

Erosion Summary

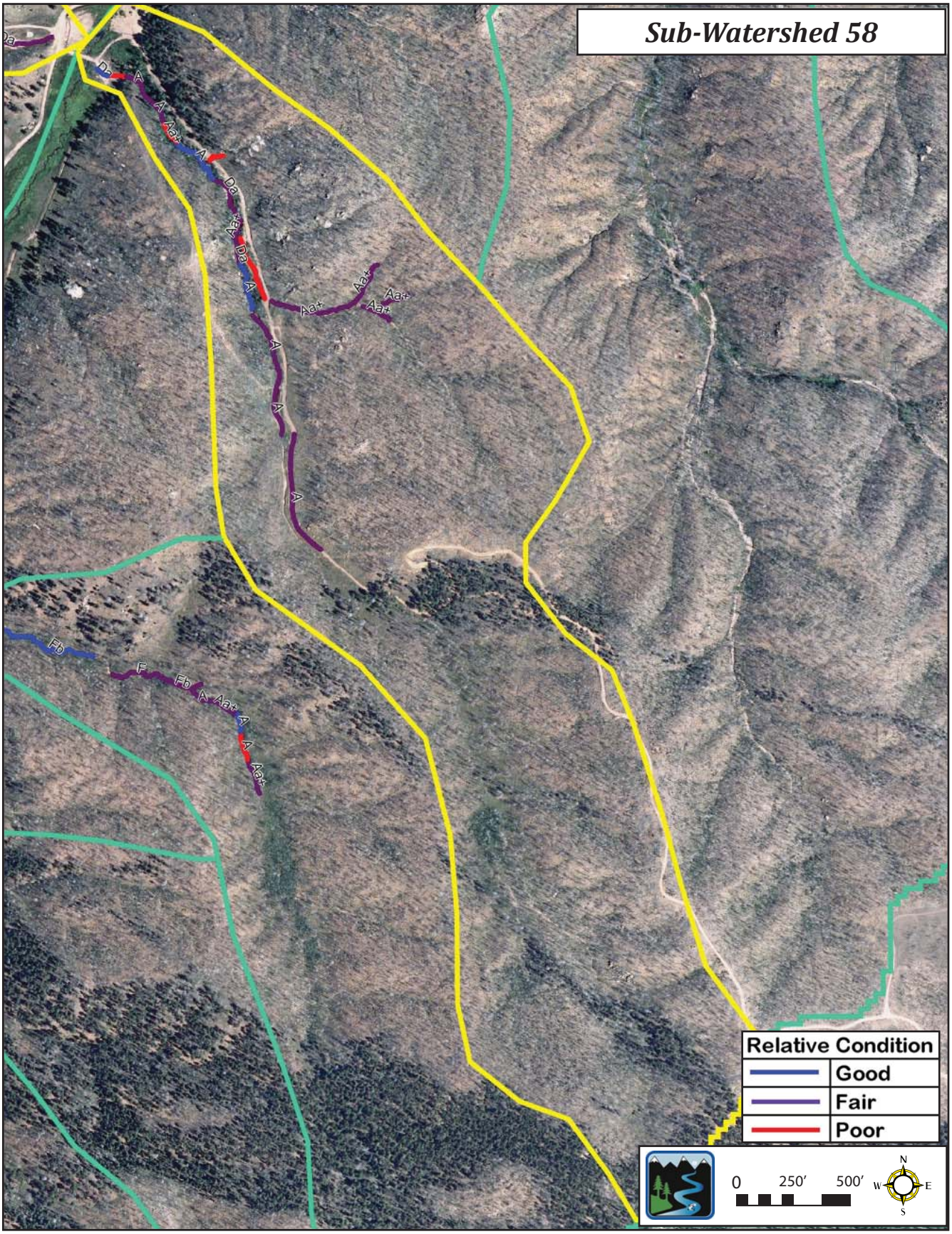
Total Existing Water Yield (ac-ft)	453
Total Existing Sediment Yield (tons/yr)	255

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	105	10	21	119
Percent of Total Yield	77%	7%	16%	47%

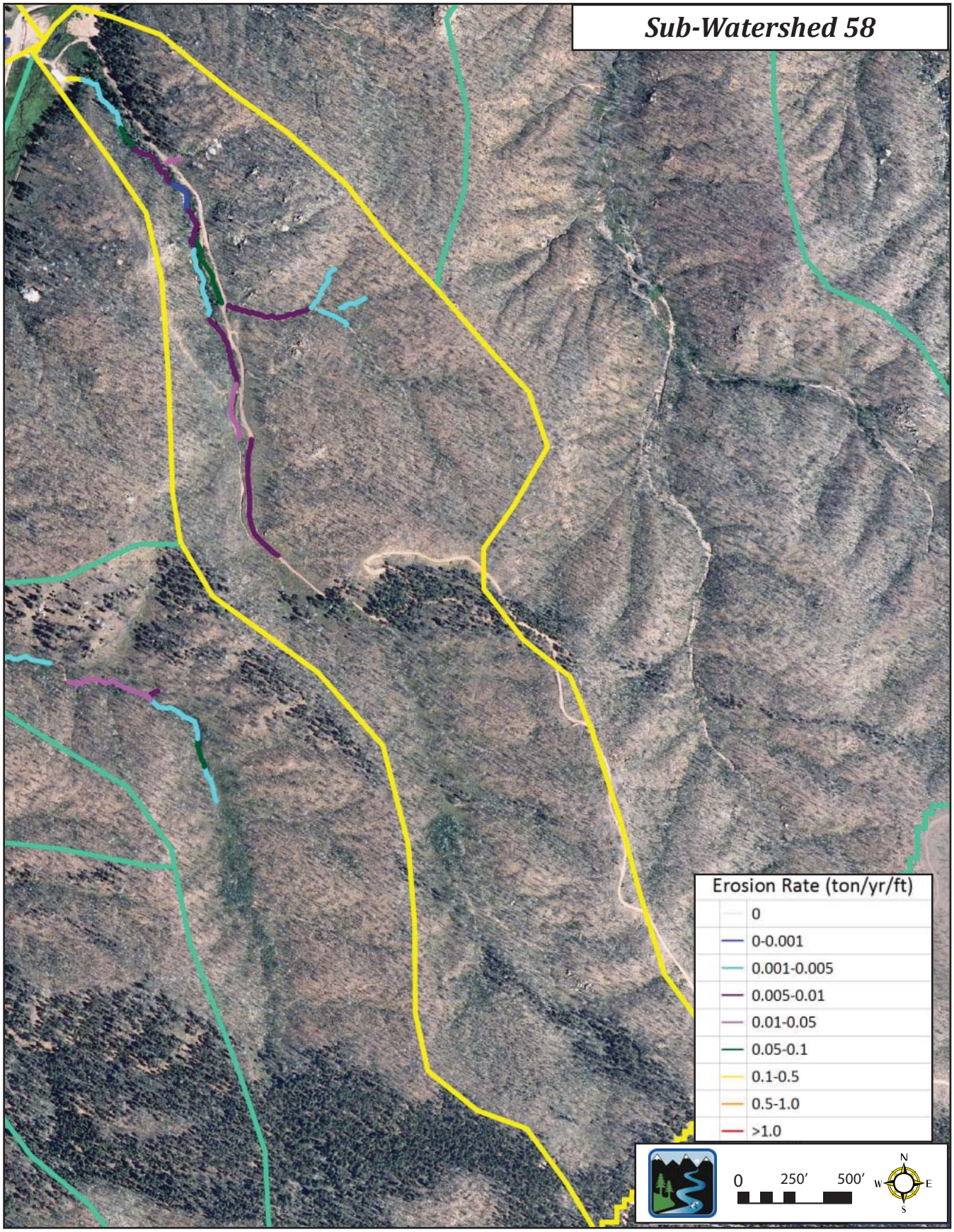
Deposition or Scour: Scour

Hydrologic Zones of Watershed

Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 59

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **59**

Watershed Characteristics

Drainage Area (mi^2)	0.75
Drainage Density	11.05

Burn Severity (%)	High	Moderate	Low	Unburned
	9.1%	77.1%	12.0%	1.8%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	25%	18%	3%	1%	0%	0%	18%	35%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	35%	33%	0%	0%	0%	28%	0%	0%	4%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	50%	38%	11%

Total Erosion (tons/yr): 218

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		14%	12%	26%	23%	20%	2%	2%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0

Sediment from Surface Erosion (tons/yr)	74.6
Total Introduced Sediment (tons/yr)	74.6

Hydrology

Zone A				Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	4.71	DA (mi^2)	0.329	Q_{bkf} cfs	2.44	DA (mi^2)	0.089	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration		Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)		514	611	611	Water Yield (ac-ft)	266	292	292	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		15	401	118	Flow-Related Sediment (tons/yr)	10	135	43	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	780	903	123	903	
Flow-Related Sediment (tons)	25	536	511	162	-374

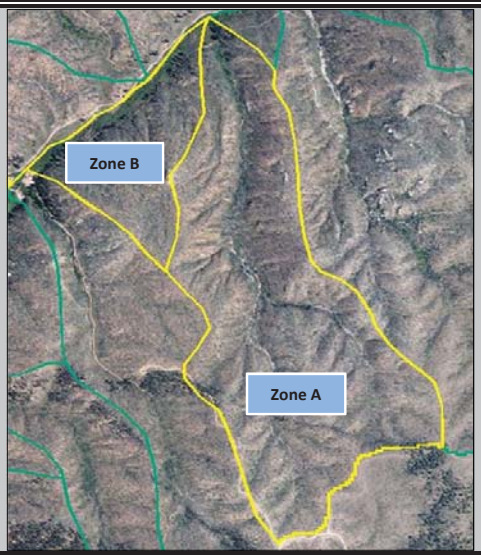
Erosion Summary

Total Existing Water Yield (ac-ft)	903
Total Existing Sediment Yield (tons/yr)	536

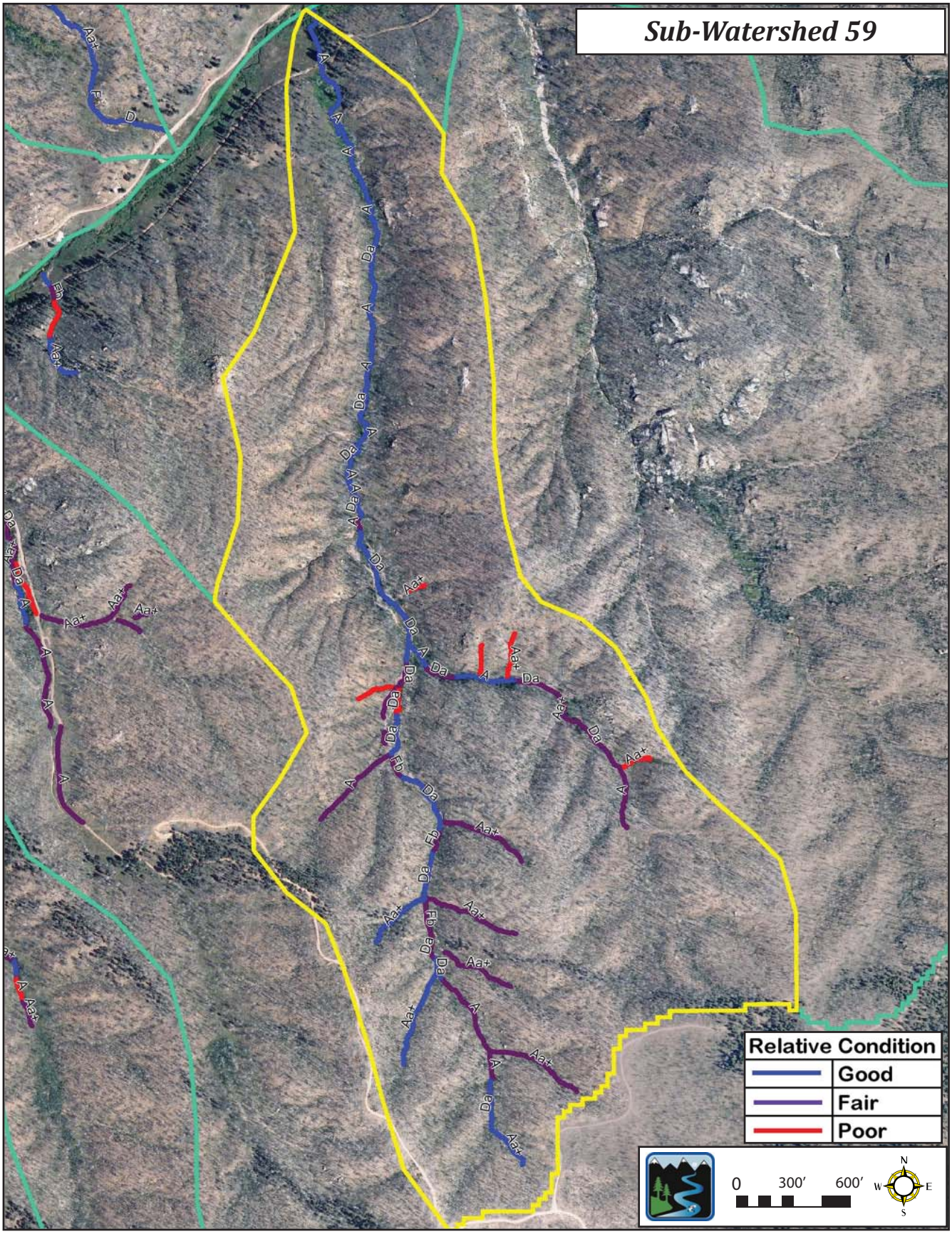
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	218	0	75	243
Percent of Total Yield	75%	0%	25%	45%

Deposition or Scour
Scour

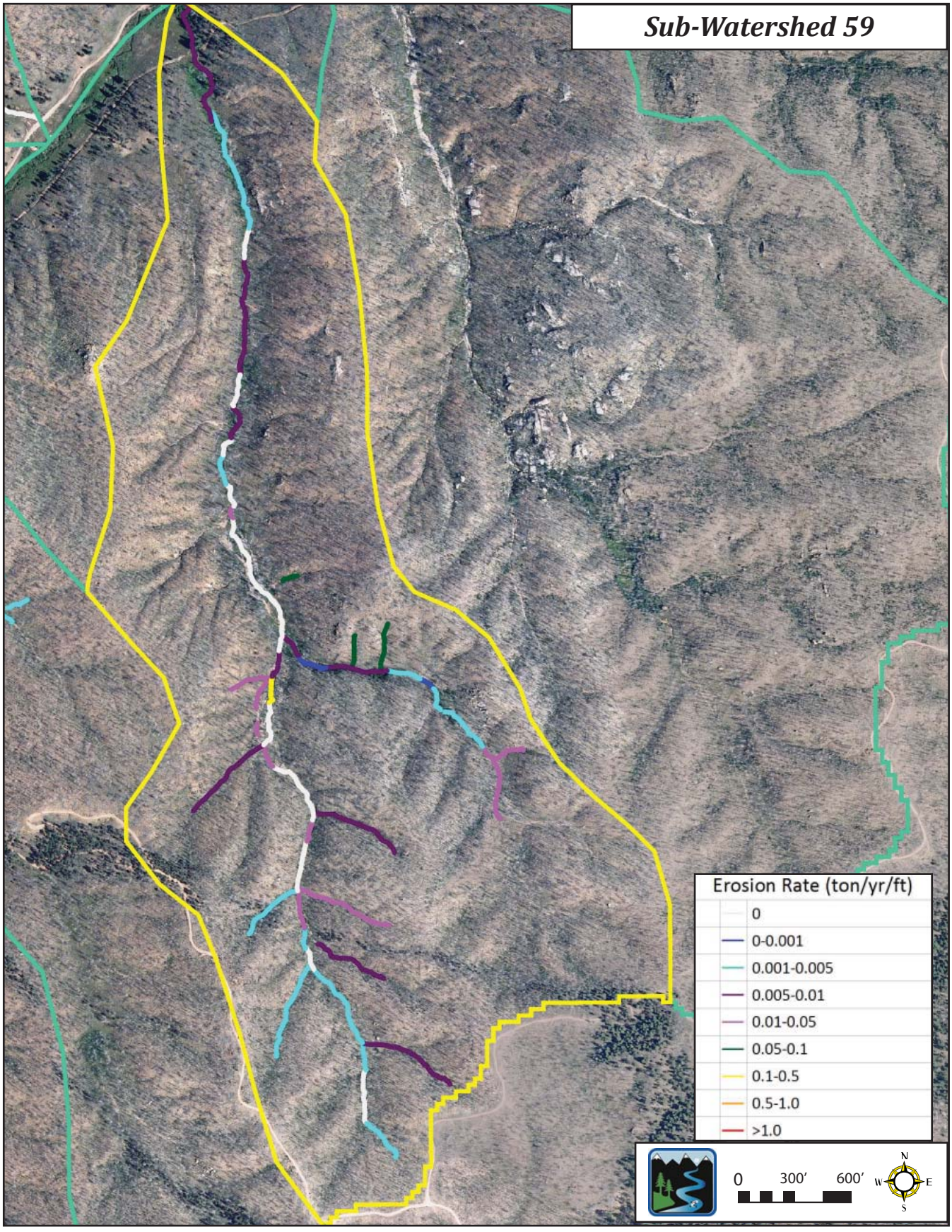
Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 60

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **60**

Watershed Characteristics

Drainage Area (mi^2)	0.54
Drainage Density	10.28

Burn Severity (%)	High	Moderate	Low	Unburned
	1.9%	90.0%	8.1%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	20%	11%	1%	0%	0%	6%	43%	20%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	31%	35%	5%	0%	6%	22%	0%	0%	1%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	27%	56%	17%

Total Erosion (tons/yr): 224

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		15%	14%	23%	21%	22%	2%	1%	1%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	84.35
Total Introduced Sediment (tons/yr)	84.35

Hydrology

Zone A		Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	5.29			
DA (mi^2)	0.416			
Water Yield (ac-ft)		578	701	701
Flow-Related Sediment (tons/yr)		16	495	145

N/A (Zone B)

		Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs				
DA (mi^2)				
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

N/A (Zone C)

		Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs				
DA (mi^2)				
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

N/A (Zone D)

		Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs				
DA (mi^2)				
Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	578	701	123	701	
Flow-Related Sediment (tons)	16	495	479	145	-351

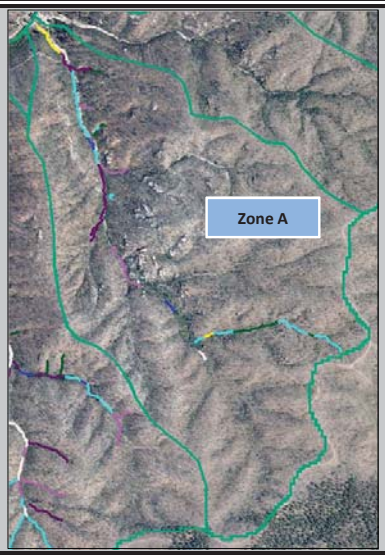
Erosion Summary

Total Existing Water Yield (ac-ft)	701
Total Existing Sediment Yield (tons/yr)	495

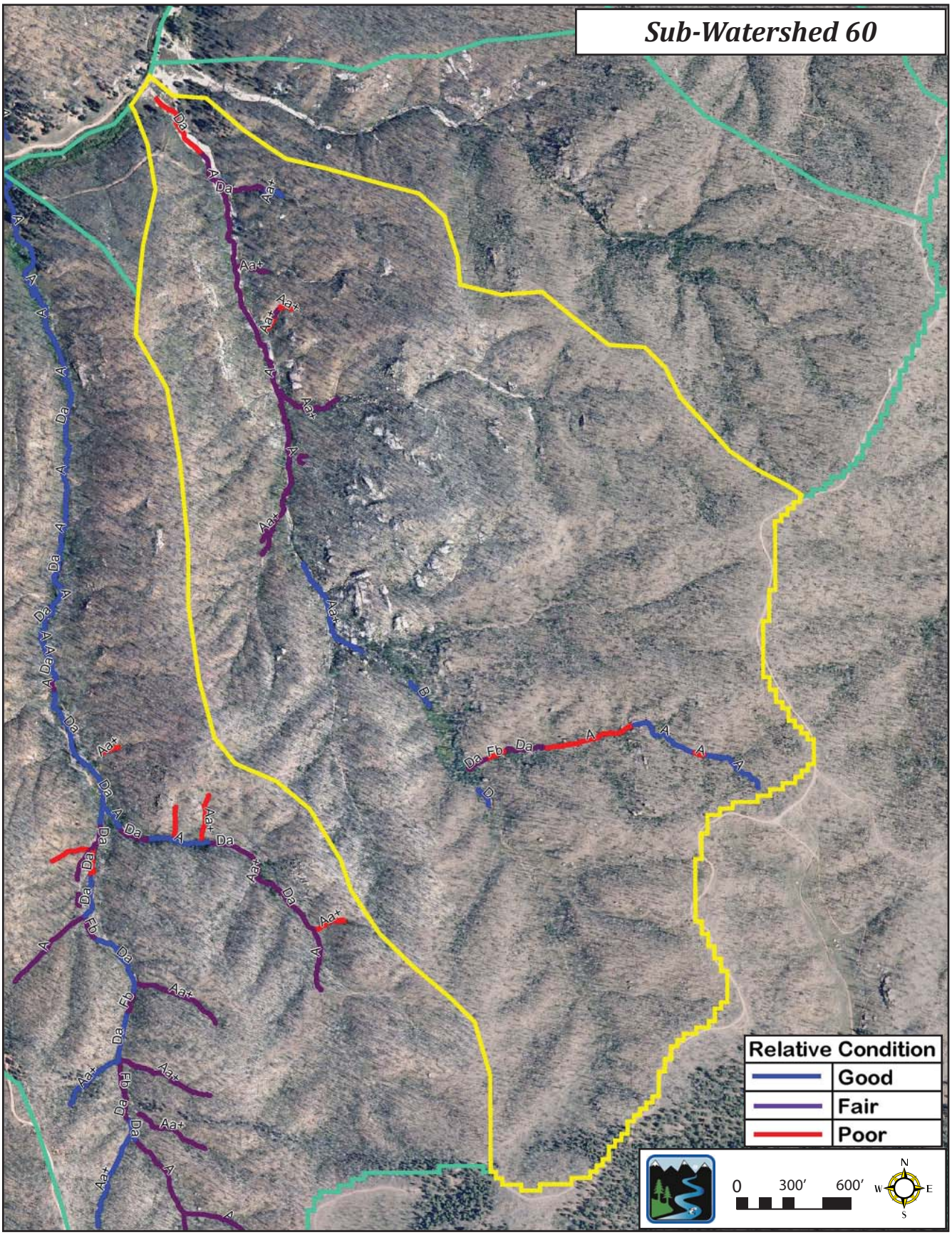
	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	224	0	84	187
Percent of Total Yield	73%	0%	27%	38%

Deposition or Scour
Scour

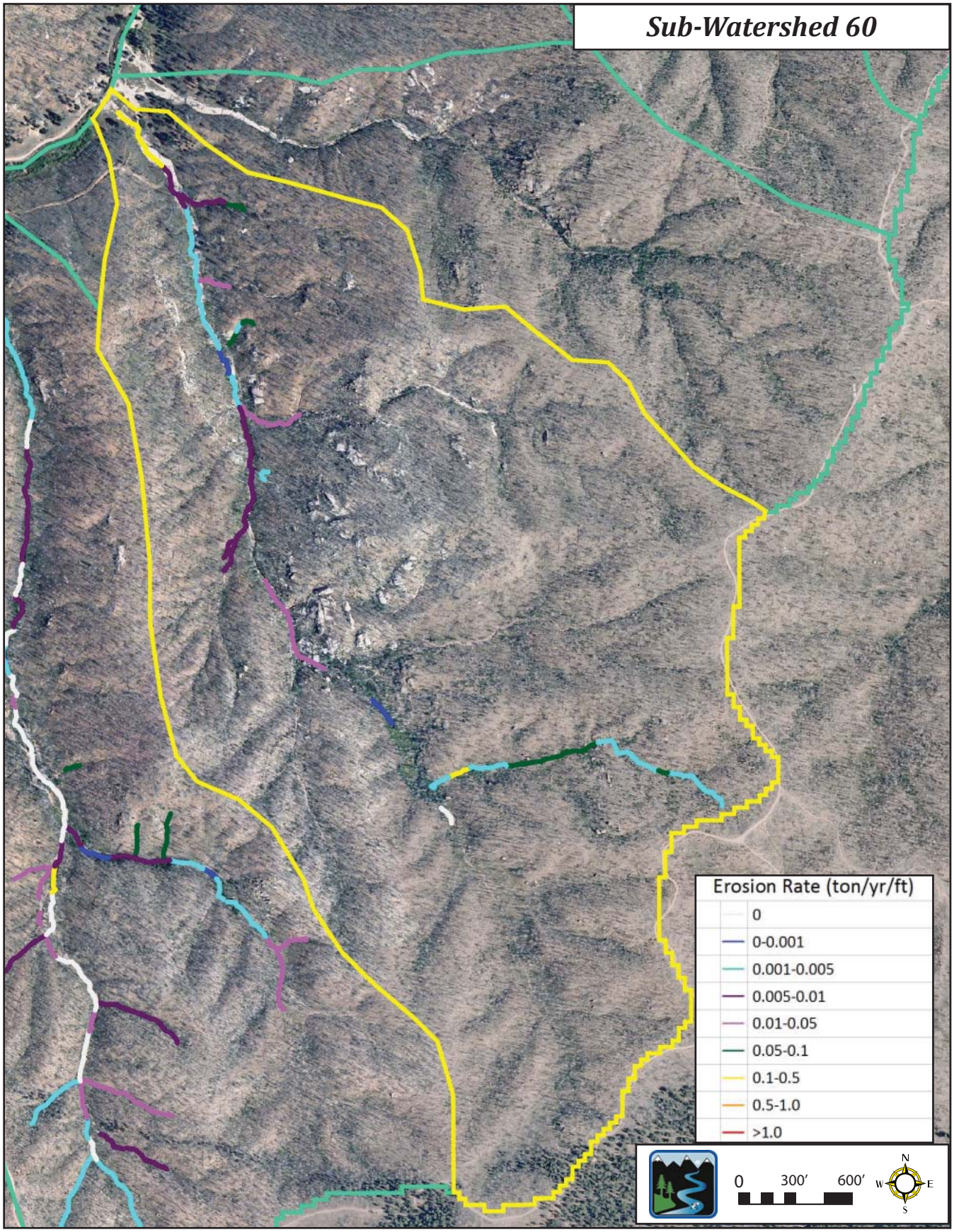
Hydrologic Zones of Watershed



Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)



Sub-Watershed 61

Watershed Summary — Stream: **Trail Creek Watershed** — Sub-Watershed: **61**

Watershed Characteristics

Drainage Area (mi^2)	0.13
Drainage Density	8.16

	High	Moderate	Low	Unburned
Burn Severity (%)	6.3%	63.0%	30.7%	0.0%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	1%	0%	0%	0%	0%	0%	79%	20%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	9

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	14.35
Total Introduced Sediment (tons/yr)	14.35

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs 2.90	DA (mi^2) 0.125		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration	Q_{bkf} cfs	DA (mi^2)		Post-Restoration
	Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)	316	353	353	Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)	11	15	15	Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	316	353	37	353	
Flow-Related Sediment (tons)	11	15	4	15	-351

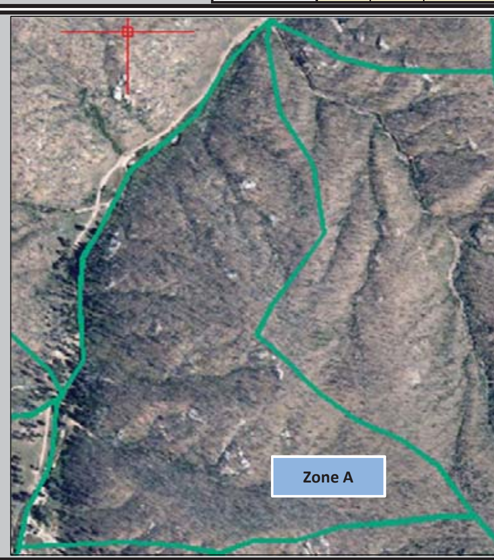
Erosion Summary

Total Existing Water Yield (ac-ft)	353
Total Existing Sediment Yield (tons/yr)	15

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	9	0	14	-8
Percent of Total Yield	39%	0%	61%	34%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 62

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **62**

Watershed Characteristics

Drainage Area (mi^2)	0.17
Drainage Density	12.83

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	91.0%	9.0%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	15%	0%	1%	2%	0%	5%	41%	37%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	0%	40%	0%	0%	0%	20%	0%	0%	41%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	5%	39%	56%

Total Erosion (tons/yr): 846

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	8%	12%	0%	33%	30%	17%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	33.14
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	33.14

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs	3.24		
DA (mi^2)		0.156	
Water Yield (ac-ft)	354	400	400
Flow-Related Sediment (tons/yr)	12	213	66

N/A (×4)

Q_{bkf} cfs			
DA (mi^2)			
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	354	400	46	400	
Flow-Related Sediment (tons)	12	213	201	66	-147

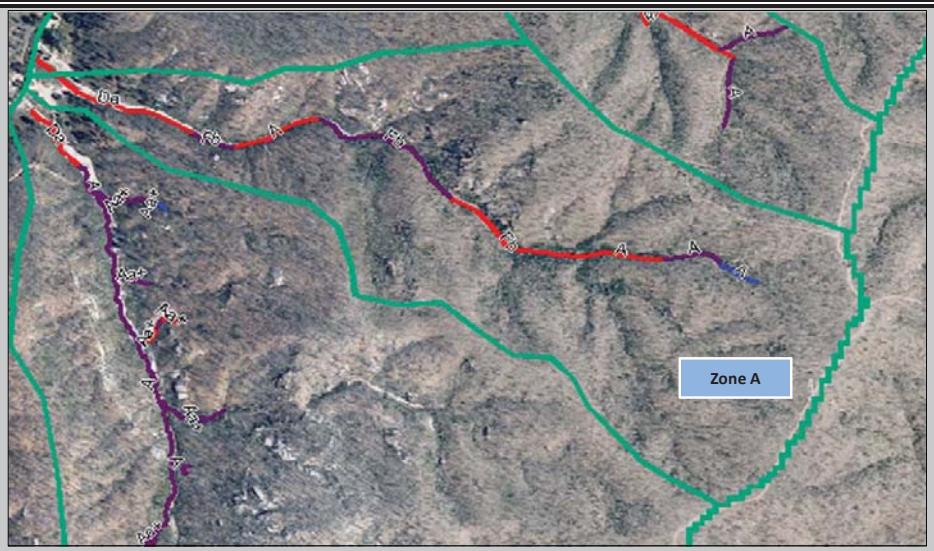
Erosion Summary

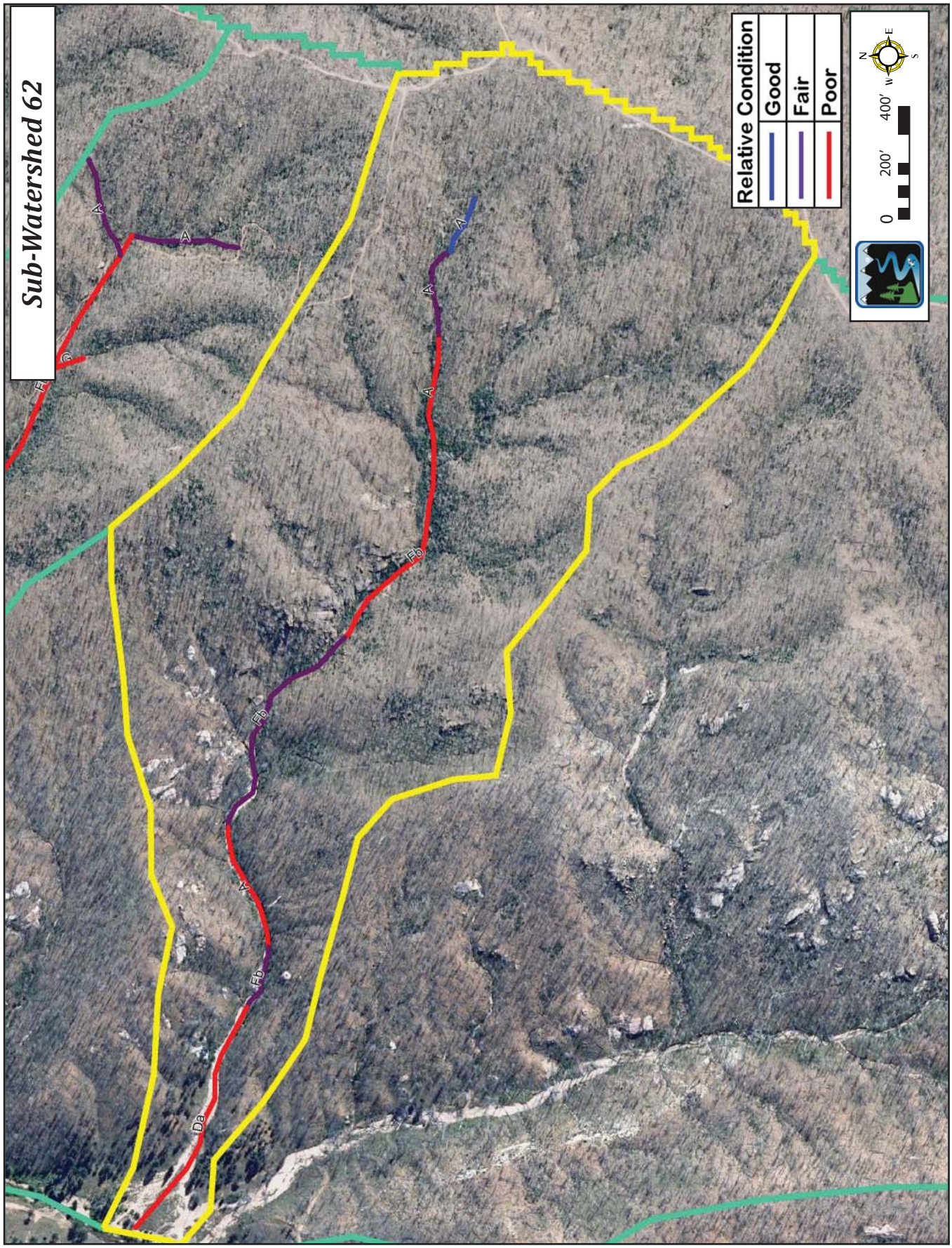
Total Existing Water Yield (ac-ft)	400
Total Existing Sediment Yield (tons/yr)	213

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	846	0	33	-666
Percent of Total Yield	96%	0%	4%	76%

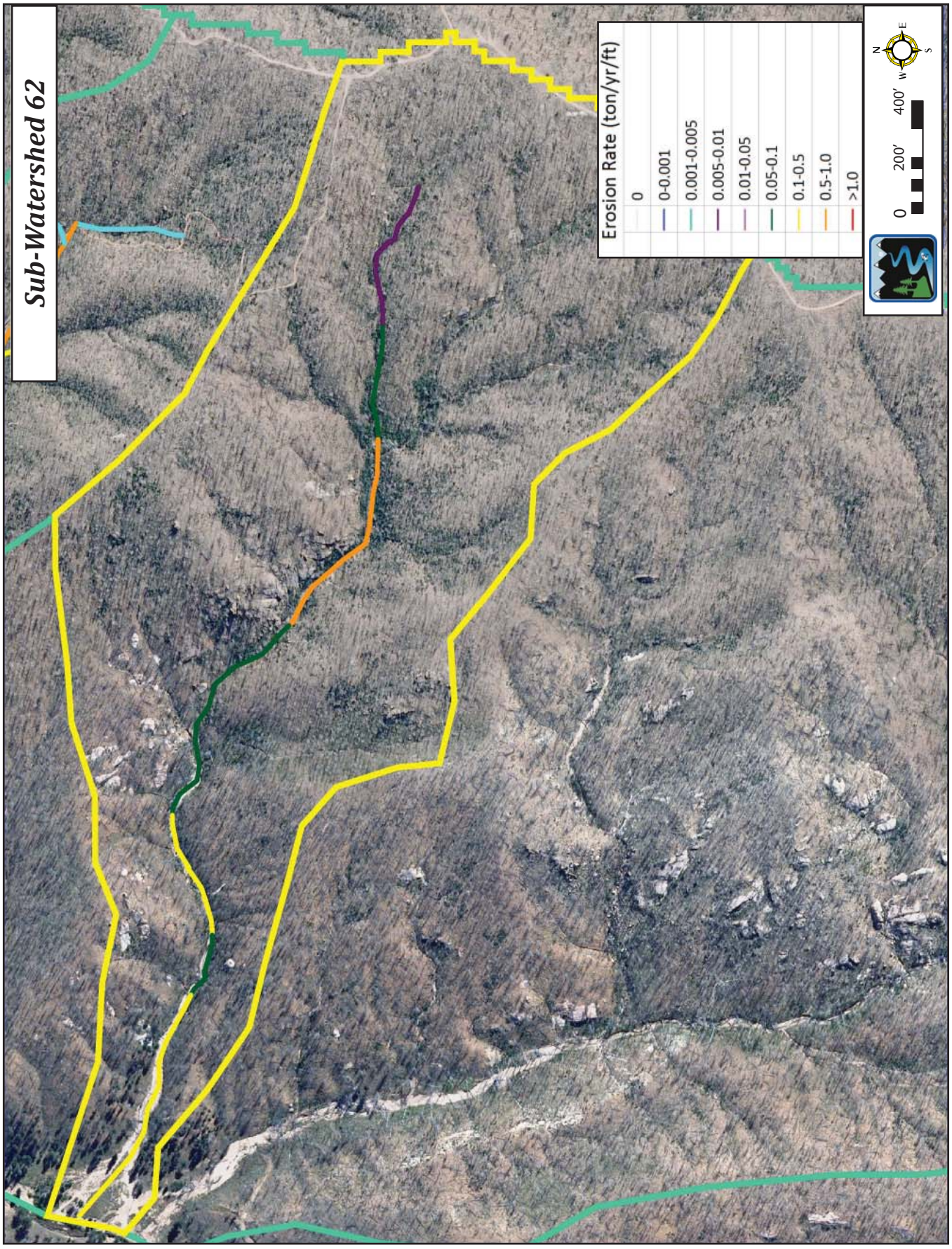
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 63

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **63**

Watershed Characteristics

Drainage Area (mi^2)	0.34
Drainage Density	11.8

Burn Severity (%)	High	Moderate	Low	Unburned
	7.2%	90.5%	2.3%	0.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	29%	7%	0%	0%	0%	0%	20%	43%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	0%	29%	0%	0%	23%	0%	0%	0%	45%	2%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	3%	25%	72%

Total Erosion (tons/yr): 1,931

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	29%	34%	2%	35%	0%	0%

Hillslope

Length of Road (ft)	3,750	Sediment from Surface Erosion (tons/yr)	52
Total Sediment from Roads (tons/yr)	5.2	Total Introduced Sediment (tons/yr)	57.2

Hydrology

Zone A				N/A				N/A				N/A				N/A			
Q_{bkf} cfs	3.41	DA (mi^2)	0.173	Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)		Q_{bkf} cfs		DA (mi^2)	
		Pre-Fire	Post-Fire		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire	
Water Yield (ac-ft)		372	423	423				Water Yield (ac-ft)				Water Yield (ac-ft)				Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)		12	231	71				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)				Flow-Related Sediment (tons/yr)			

Post-Restoration

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	372	423	51	423	
Flow-Related Sediment (tons)	12	231	219	71	-160

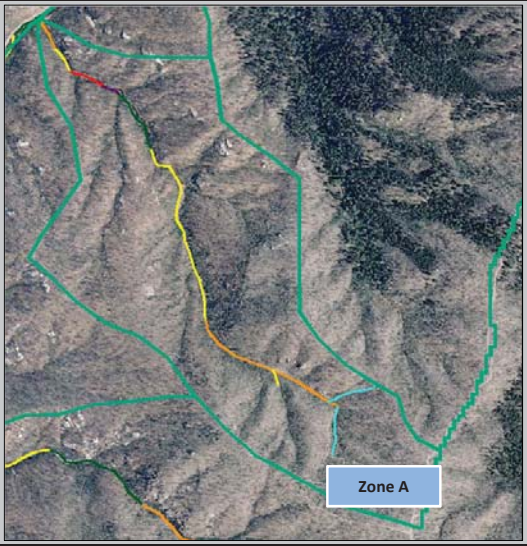
Erosion Summary

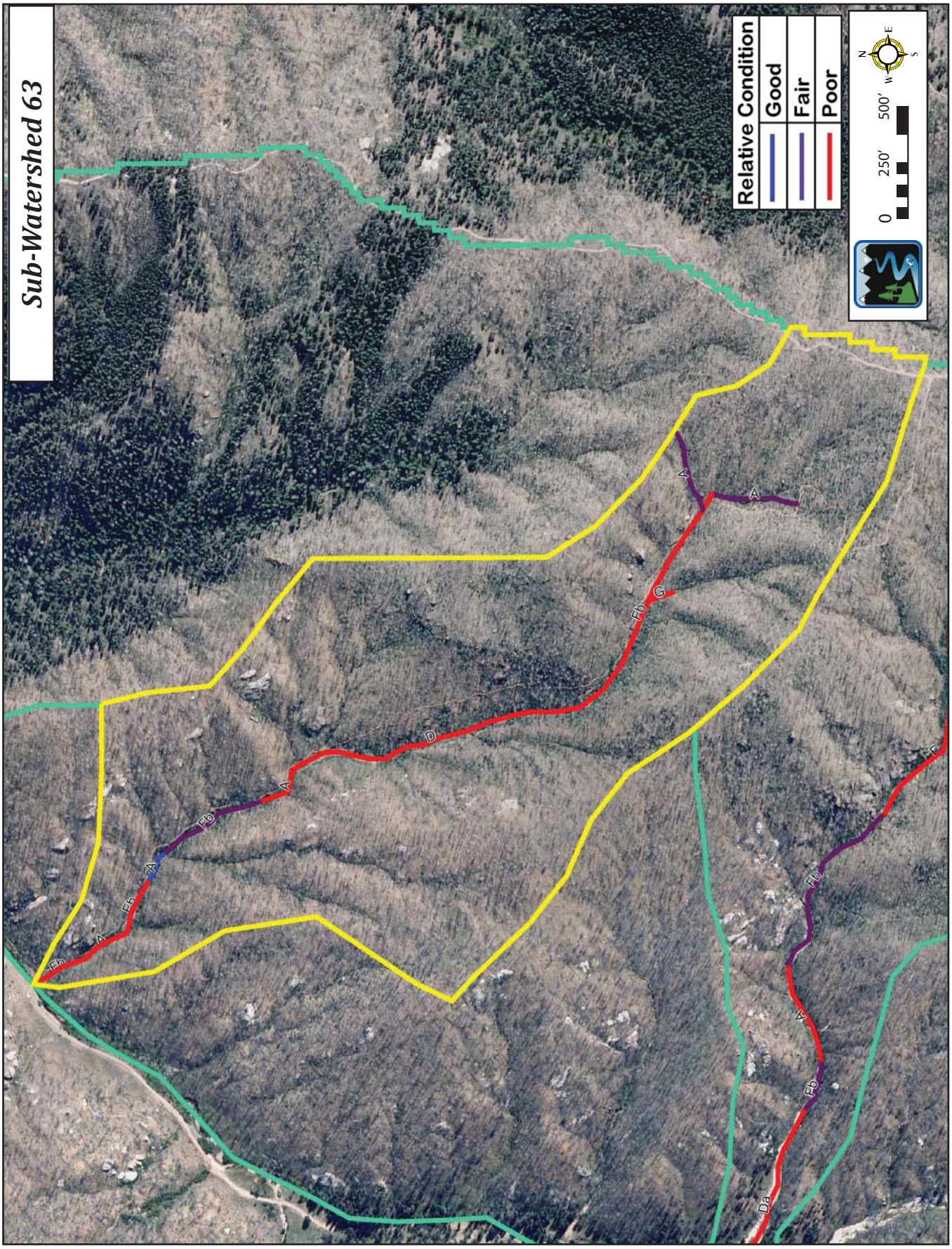
Total Existing Water Yield (ac-ft)	423
Total Existing Sediment Yield (tons/yr)	231

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	1,931	5	52	-1,757
Percent of Total Yield	97%	0%	3%	88%

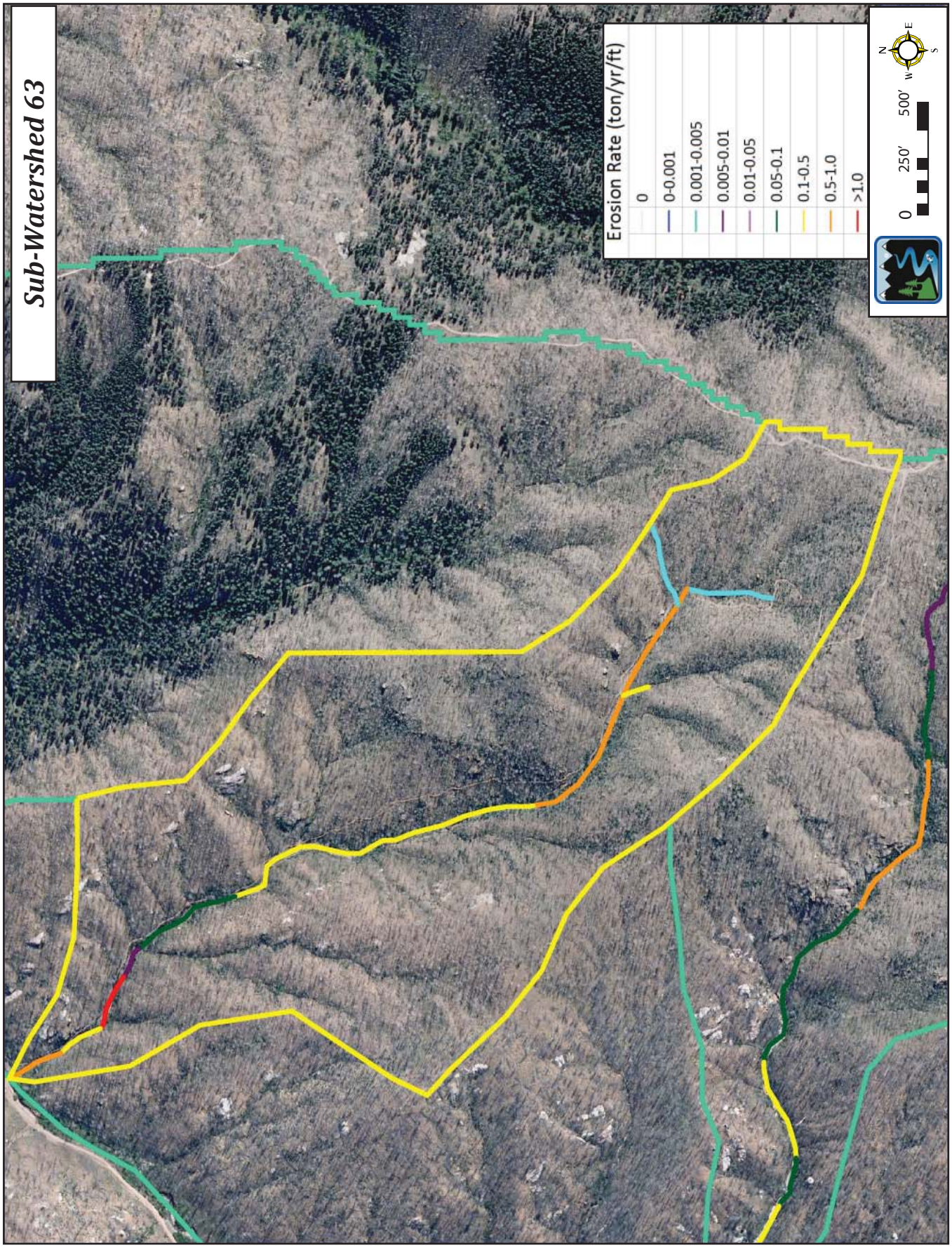
Deposition or Scour: Deposition

Hydrologic Zones of Watershed





Stream Types & Relative Condition



Streambank Erosion Rates (tons/yr/ft)

Sub-Watershed 64

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **64**

Watershed Characteristics

Drainage Area (mi^2)	0.06
Drainage Density	9.36

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	1.5%	98.5%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	44%	6%	0%	1%	0%	0%	0%	49%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 5

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	0.95
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	0.95

Hydrology

Zone A	Q_{bkf} cfs: 2.03	DA (mi^2): 0.062	Post-Restoration
		Pre-Fire	Post-Fire
Water Yield (ac-ft)	222	222	222
Flow-Related Sediment (tons/yr)	9	9	9

N/A | N/A | N/A | N/A

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	222	222	0	222	
Flow-Related Sediment (tons)	9	9	0	9	0

Erosion Summary

Total Existing Water Yield (ac-ft)	222
Total Existing Sediment Yield (tons/yr)	9

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	5	0	1	3
Percent of Total Yield	84%	0%	16%	34%

Deposition or Scour: Scour

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 65

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **65**

Watershed Characteristics

Drainage Area (mi^2)	0.10
Drainage Density	11.88

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	11.0%	89.0%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	46%	0%	0%	2%	0%	0%	0%	51%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 11

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	2.5
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	2.5

Hydrology

Zone A	Pre-Fire	Post-Fire	Post-Restoration
Q_{bkf} cfs = 2.64; DA (mi^2) = 0.104			
Water Yield (ac-ft)	288	288	288
Flow-Related Sediment (tons/yr)	11	11	11

N/A (Pre-Fire / Post-Fire / Post-Restoration): Water Yield (ac-ft); Flow-Related Sediment (tons/yr)

Totals from all Zones	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	288	288	0	288	
Flow-Related Sediment (tons)	11	11	0	11	0

Erosion Summary

Total Existing Water Yield (ac-ft)	288
Total Existing Sediment Yield (tons/yr)	11

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	11	0	3	-3
Percent of Total Yield	81%	0%	19%	22%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 66

Watershed Summary

Stream: **Trail Creek Watershed** | Sub-Watershed: **66**

Watershed Characteristics

Drainage Area (mi^2)	0.15
Drainage Density	10.37

	High	Moderate	Low	Unburned
Burn Severity (%)	0.0%	0.0%	50.0%	99.5%

	N	NE	E	SE	S	SW	W	NW
Percent of Aspect	20%	16%	1%	0%	0%	0%	24%	37%

	Aa+	A	B	C	D	Da+	E	F	Fb	G
Stream Types (%)	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

	Good	Fair	Poor
Percent of Stream Conditions	100%	0%	0%

Total Erosion (tons/yr)	14

Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
Percent of Erosion Categories	0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0
Total Sediment from Roads (tons/yr)	0
Sediment from Surface Erosion (tons/yr)	3.16
Total Introduced Sediment (tons/yr)	3.16

Hydrology

Zone A			
Q_{bkf} cfs: 3.22	DA (mi^2): 0.154		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)	352	352	352
Flow-Related Sediment (tons/yr)	12	12	12

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

N/A			
Q_{bkf} cfs	DA (mi^2)		
	Pre-Fire	Post-Fire	Post-Restoration
Water Yield (ac-ft)			
Flow-Related Sediment (tons/yr)			

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	352	352	0	352	
Flow-Related Sediment (tons)	12	12	0	12	0

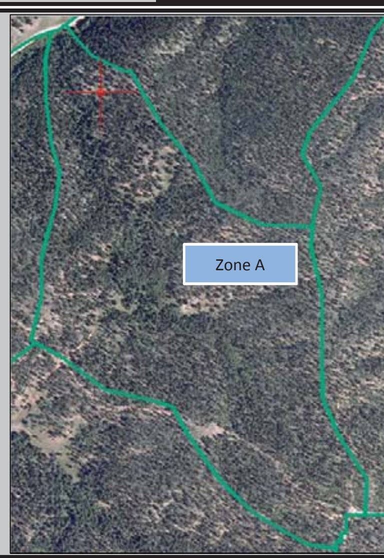
Erosion Summary

Total Existing Water Yield (ac-ft)	352
Total Existing Sediment Yield (tons/yr)	12

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	14	0	3	-5
Percent of Total Yield	82%	0%	18%	31%

Deposition or Scour
Deposition

Hydrologic Zones of Watershed



The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.

Sub-Watershed 67

Watershed Summary Stream: **Trail Creek Watershed** Sub-Watershed: **67**

Watershed Characteristics

Drainage Area (mi^2)	0.18
Drainage Density	11.04

Burn Severity (%)	High	Moderate	Low	Unburned
	0.0%	0.0%	12.4%	87.6%

Percent of Aspect	N	NE	E	SE	S	SW	W	NW
	14%	5%	0%	1%	0%	6%	35%	38%

Stream Types (%)	Aa+	A	B	C	D	Da+	E	F	Fb	G
	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%

Streambank Erosion

Percent of Stream Conditions	Good	Fair	Poor
	100%	0%	0%

Total Erosion (tons/yr): 24

Percent of Erosion Categories	Erosion Rate (tons/yr/ft)	0	0-0.001	0.001-0.005	0.005-0.01	0.01-0.05	0.05-0.1	0.1-0.5	0.5-1.0	>1.0
		0%	0%	0%	0%	0%	100%	0%	0%	0%

Hillslope

Length of Road (ft)	0	Sediment from Surface Erosion (tons/yr)	5.6
Total Sediment from Roads (tons/yr)	0	Total Introduced Sediment (tons/yr)	5.6

Hydrology

	Zone A				Zone B				N/A				N/A				N/A			
Q_{bkf} cfs	3.43	DA (mi^2)	0.175	Post-Restoration	Q_{bkf} cfs	2.31	DA (mi^2)	0.08	Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration	Q_{bkf} cfs		DA (mi^2)		Post-Restoration
		Pre-Fire	Post-Fire			Pre-Fire	Post-Fire				Pre-Fire	Post-Fire			Pre-Fire	Post-Fire			Pre-Fire	Post-Fire		
Water Yield (ac-ft)	375	375	375		Water Yield (ac-ft)	252	252	252		Water Yield (ac-ft)					Water Yield (ac-ft)					Water Yield (ac-ft)				
Flow-Related Sediment (tons/yr)	12	12	12		Flow-Related Sediment (tons/yr)	10	10	10		Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)					Flow-Related Sediment (tons/yr)				

Totals from all Zones

	Pre-Fire	Post-Fire	Total Increase	Post-Restoration	Reduction Post-Rest.
Water Yield (ac-ft)	627	627	0	627	
Flow-Related Sediment (tons)	22	22	0	22	0

Erosion Summary

Total Existing Water Yield (ac-ft)	627
Total Existing Sediment Yield (tons/yr)	22

	Banks	Roads	Surface Erosion	Streambed
Sediment (tons/yr)	24	0	6	-7
Percent of Total Yield	81%	0%	19%	25%

Deposition or Scour: Deposition

Hydrologic Zones of Watershed

The stream type and condition observed at the confluence indicated low erosion rates and good condition streams. Thus, detailed inventories were not warranted and the erosion rates from stable reaches were extrapolated to this sub-watershed.