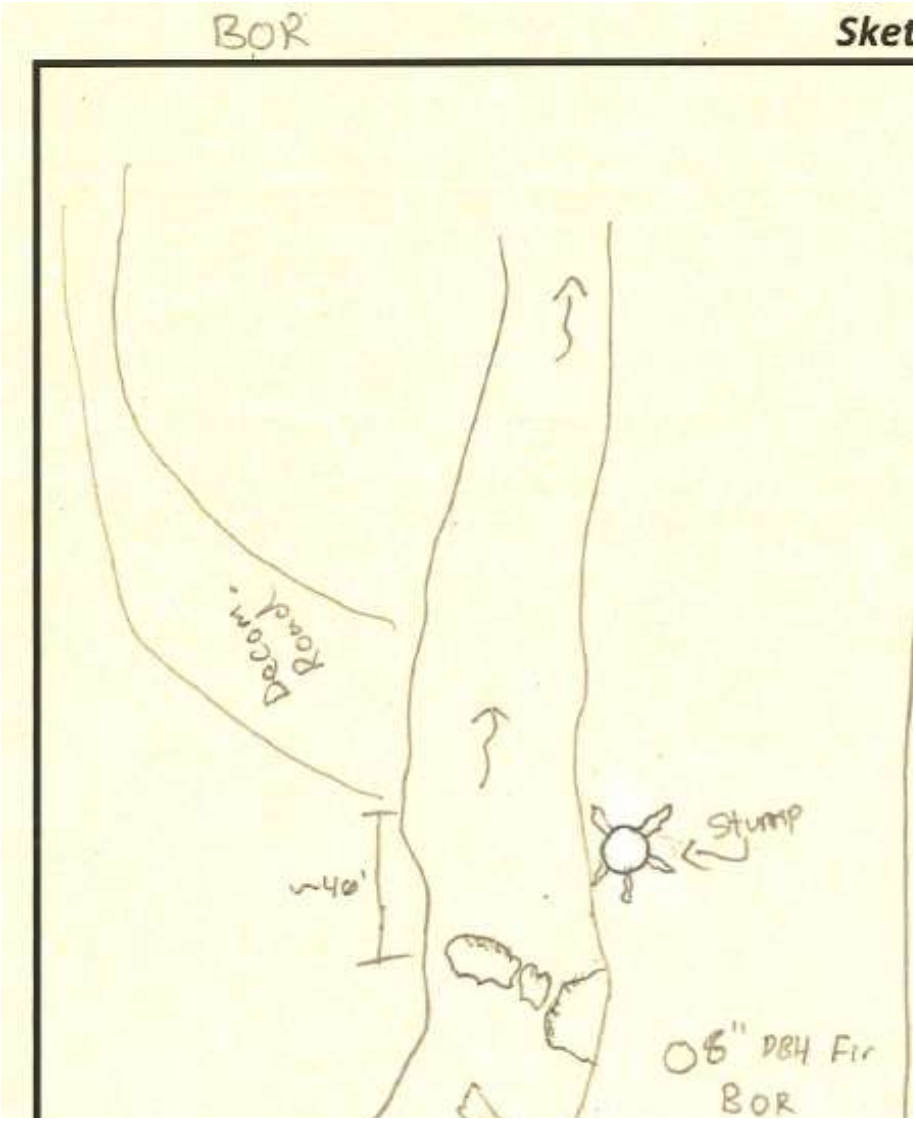
Site Information		
Date:	7/26/2019	
Stream Name:	WF Clear Creek	
Location:		***TOR:***
Reach:	0	***TOR info:***
Rosgen Type:		
Channel Slope:		***Sampling C***

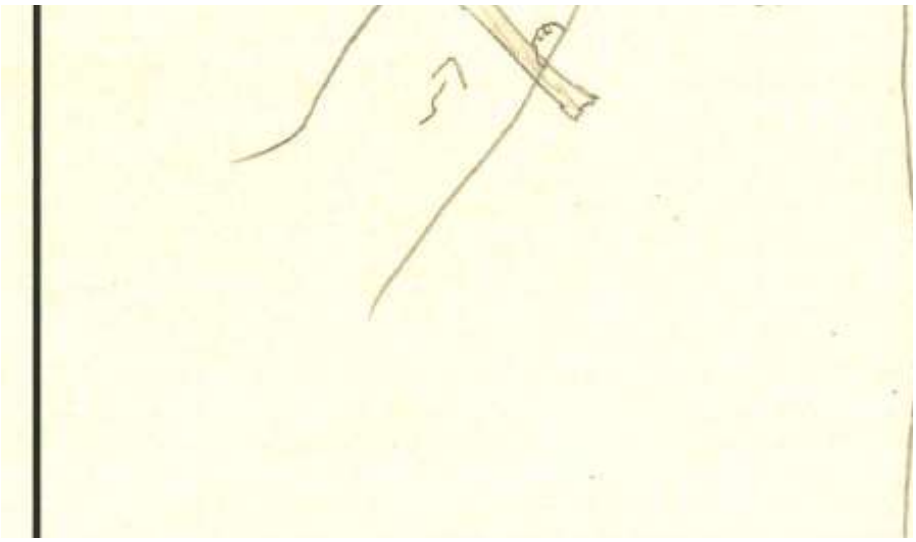
Drive from Kooskia to the 650 Rd. When you re-enter the forest, there is a p

Photo 1 & 2 - TOR facing downstream & upstream *From the cr*

Photo 3 & 4 - BOR facing upstream & downstream

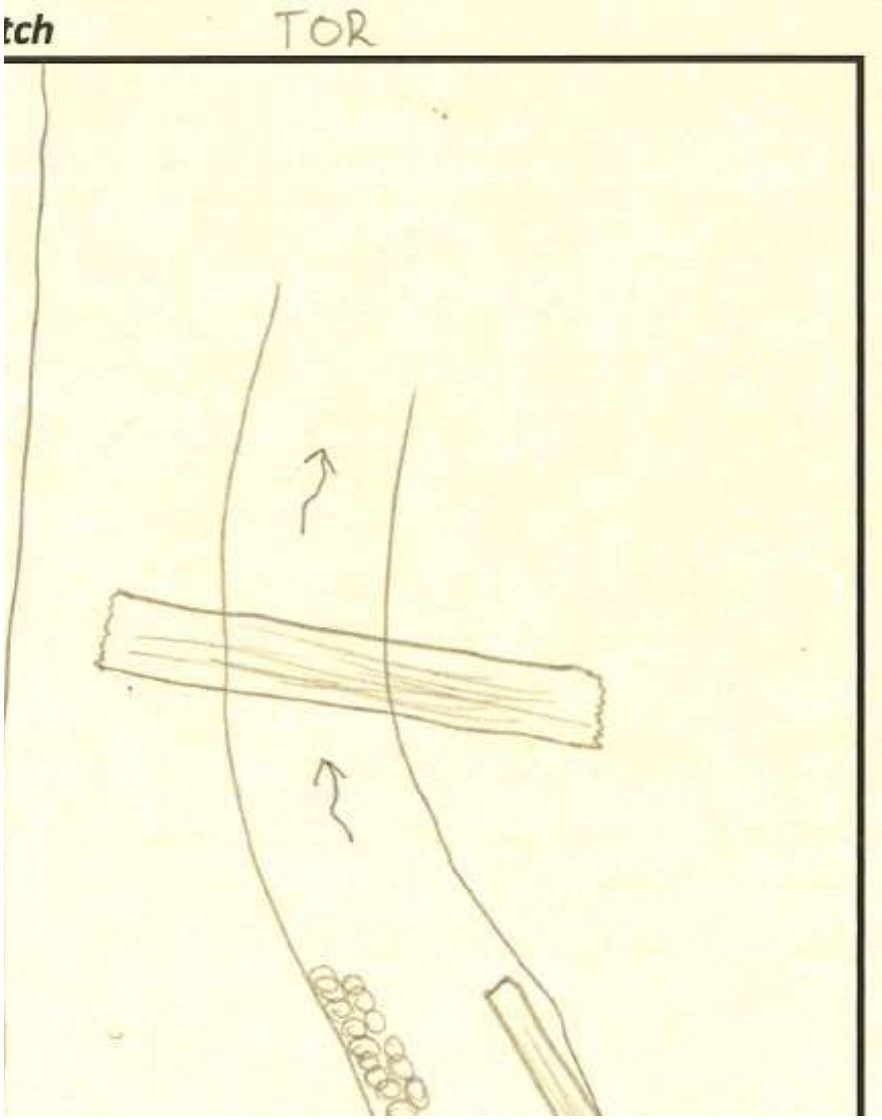
Figure 1- Map of reach location

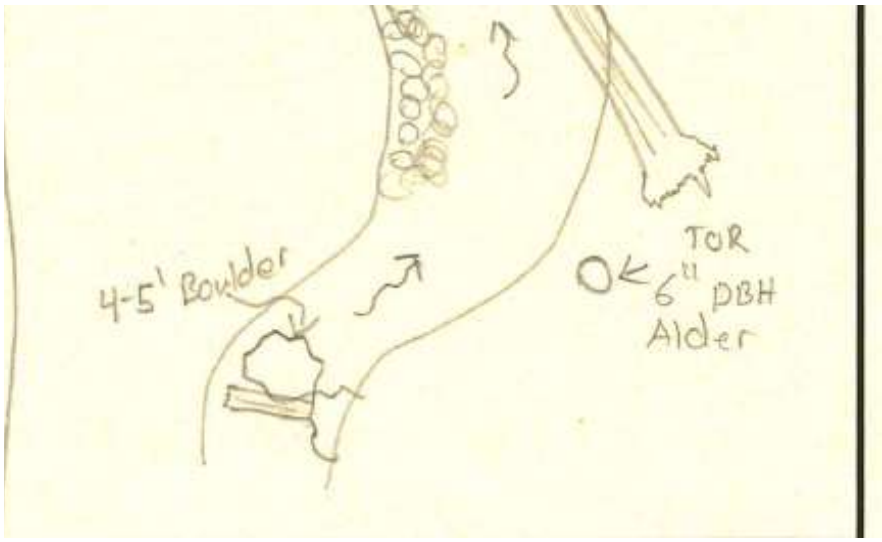




11T 591172 5096616	***BOR:***	11T 591196 5096702
	BOR Info:	
KJ, RL, KB, EP		

ulloff on the left soon after. Walk from there down a decommed road. It will take you directly to the creek.
reek, walk ~40 ft upstream & you should see pink flagging & a tag at the BOR on LBLU. 6" DBH fir.


tch
TOR


4-5' Boulder
TOR
6" DBH
Alder

Tag

Particle Size Distribution Worksheet - all partic

Stream: WF Clear Creek

Observers: KJ, RL, KB, E

[First I

Reach:

Date: 7/26/19

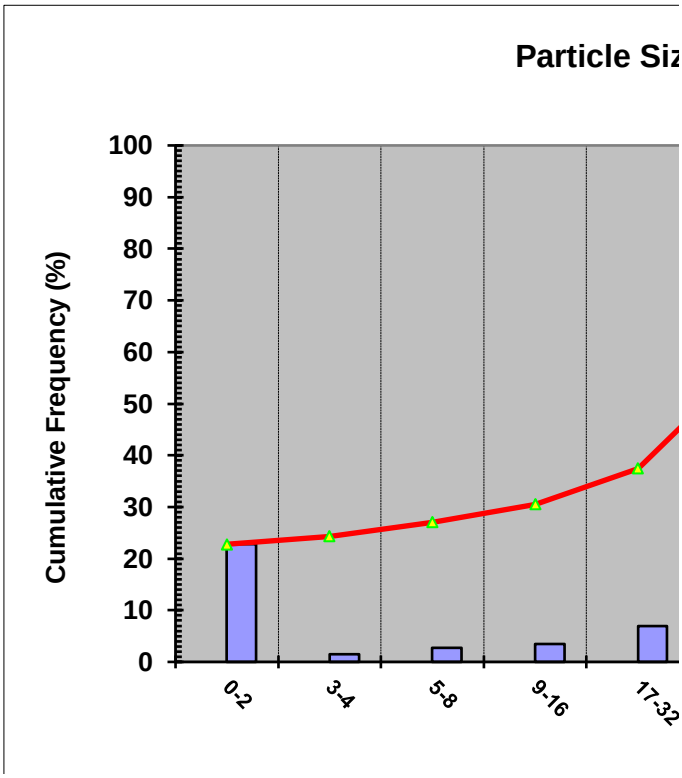
#	Size (mm)	Location
1	70	
2	43	
3	83	
4	102	
5	105	
6	109	
7	10	
8	31	
9	51	
10	170	
11	85	
12	113	
13	107	
14	1	
15	90	
16	55	
17	1	B
18	75	
19	75	
20	110	
21	57	
22	141	
23	58	
24	200	
25	1	B
26	60	
27	45	B
28	107	
29	1	
30	1	B
31	55	
32	47	
33	420	
34	29	
35	57	
36	1	B
37	1	
38	70	
39	40	B
40	105	B
41	90	
42	75	
43	100	B

50 Percentile (mm): 55

84 Percentile (mm): 130

% Fines (<4mm): 24.3

RSI: N/A



44	61	
45	5	
46	1	B
47	90	
48	1	B
49	85	
50	68	
51	34	
52	1	
53	3	
54	102	
55	36	
56	108	
57	71	
58	1120	
59	87	
60	1	
61	58	
62	1	
63	40	
64	1	B
65	34	
66	1	B
67	48	
68	125	
69	1	
70	75	
71	120	
72	1120	
73	141	
74	30	
75	35	
76	106	
77	1120	
78	450	
79	115	
80	3	
81	105	
82	60	
83	7	
84	58	
85	1	B
86	30	
87	340	
88	1	B
89	35	
90	1	
91	72	
92	130	
93	108	
94	300	
95	56	
96	1	B
97	69	
98	95	
99	8	

100	1	
101	85	
102	22	B
103	48	
104	30	B
105	5	
106	33	
107	1	B
108	70	
109	1	
110	65	
111	43	B
112	66	B
113	145	
114	1	
115	53	
116	1	B
117	55	B
118	36	
119	31	B
120	33	
121	190	
122	72	
123	56	
124	38	
125	628	
126	440	
127	21	
128	1	
129	70	B
130	85	
131	1	B
132	28	
133	77	B
134	40	
135	86	
136	145	
137	5	
138	15	
139	73	
140	1	B
141	45	
142	46	
143	106	
144	180	
145	38	
146	470	
147	10	
148	11	
149	45	B
150	571	
151	100	
152	8	B
153	93	B
154	195	
155	1	B

156	148	
157	1	B
158	17	B
159	24	
160	80	
161	97	B
162	33	
163	160	B
164	369	
165	2	
166	47	
167	77	
168	390	
169	1	B
170	78	B
171	1	B
172	130	B
173	1	B
174	1	B
175	97	
176	18	B
177	18	
178	32	
179	1	B
180	1	B
181	1	B
182	15	
183	30	B
184	52	
185	210	
186	90	
187	57	
188	155	
189	245	
190	320	
191	13	
192	70	
193	1	B
194	1	
195	1	B
196	1	B
197	1	B
198	4	B
199	211	
200	45	
201	31	B
202	1	B
203	12	
204	130	
205	1	B
206	76	
207	132	
208	1	B
209	35	
210	1	B
211	65	

212	55	
213	106	
214	495	
215	164	
216	55	
217	297	
218	1	B
219	6	B
220	3	
221	1	B
222	203	
223	95	B
224	71	
225	56	
226	93	
227	1	
228	106	
229	1	B
230	11	
231	115	
232	18	B
233	11	
234	1	B
235	90	
236	121	
237	136	
238	45	B
239	1	
240	40	
241	1	
242	1	B
243	180	
244	136	
245	29	B
246	145	B
247	1	
248	1	B
249	146	
250	42	B
251	60	
252	82	
253	112	
254	135	B
255	76	
256	2	B
257	1	B
258	147	B
259	1	B
260		
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les (bed and channel)

EP

ntiial, Last Name]

[MON-DD-YYYY]

Particle Size Class Frequency Array

Size Class	#	% in Class	Cumulative %
0-2	59	22.8	22.8
3-4	4	1.5	24.3
5-8	7	2.7	27.0
9-16	9	3.5	30.5
17-32	18	6.9	37.5
33-64	50	19.3	56.8
65-128	68	26.3	83.0
129-256	28	10.8	93.8
257-512	11	4.2	98.1
513-1024	2	0.8	98.8
1024-2048	3	1.2	100.0
2048-4096	0	0.0	100.0
>4096	0	0.0	100.0

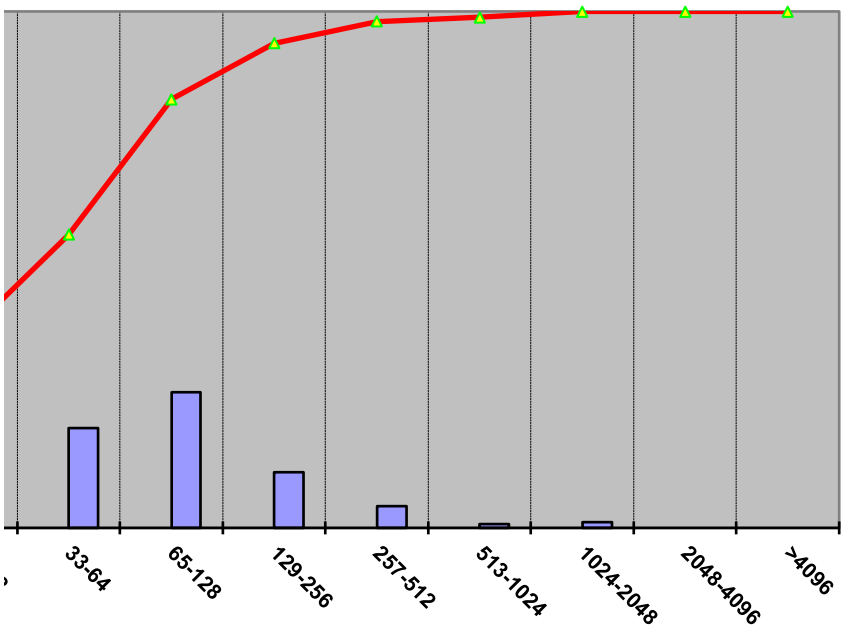
Total: *259*

30 Particle Bar Count (mm)

1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

Mean Grain Size: #DIV/0!

ze Frequency Distribution



Partile Size Class (mm)

Bin 2 4 8 16 32 64 128 256…

Stream Name: WF Clear Creek ***Date:*** 7/26/19 [MON-DD-YYYY]

Reach:

Surveyor(s): KJ, RL, KB, EP ***Recorder:***

[First Initial, Last Name]

Reach Length(m): 50

Random Start (m): 2 ***Rosgen Channel Type:***

Transect #: 1 **Transect Location Above BOR(m):** 2

Wetted Width (m) 2.10

Bankfull Width (m) 4.20

Bankfull Depth 1 (m) 0.60 (dry) **ll Depth 2 (m)** 0.71 **Bankfull Depth 3 (m)** 0.71

Width/Depth 6.24

Hoop #1		
De (mm)	*Dt(mm)*	*MCE (%)*
0	57	0.00
0	31	0.00
46	72	63.89
0	154	0.00
12	58	20.69
0	62	0.00
0	52	0.00
11	73	15.07
0	33	0.00
0	37	0.00
0	30	0.00
0	49	0.00
55	86	63.95
0	37	0.00
0	37	0.00
25	81	30.86
36	63	57.14
0	116	0.00
		#DIV/0!
		#DIV/0!

Hoop #2		
De (mm)	*Dt(mm)*	*MCE (%)*
0	28	0.00
0	35	0.00
11	16	68.75
0	15	0.00
0	75	0.00
0	27	0.00
0	42	0.00
0	40	0.00
0	40	0.00
0	50	0.00
0	107	0.00
0	85	0.00
0	79	0.00
		#DIV/0!
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		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!

Hoop #3		
De (mm)	*Dt(mm)*	*MCE (%)*
27	55	49.09
0	28	0.00
18	55	32.73
0	53	0.00
0	28	0.00
0	20	0.00
0	85	0.00
0	175	0.00
0	140	0.00
0	98	0.00
0	85	0.00
0	48	0.00
0	27	0.00
25	100	25.00
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!

Average MCE (%): 13.98
%Fines: 0.03
WCE: 16.56

Average MCE (%): 5.29
%Fines: 0.01
WCE: 6.24

Average MCE (%): 7.63
%Fines: 0.01
WCE: 8.55

Transect #: 2

Transect Location above BOR(m): 12

Wetted Width (m) 2.40

Bankfull Width (m) 4.30

Bankfull Depth 1 (m) 0.35 (dry)

ll Depth 2 (m) 0.52

Bankfull Depth 3 (m) 0.29

Width/Depth 11.12

Hoop #1		
De (mm)	*Dt(mm)*	*MCE (%)*
36	69	52.17
0	75	0.00
11	51	21.57
31	77	40.26
71	135	52.59
		#DIV/0!
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		#DIV/0!
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		#DIV/0!
		#DIV/0!

Hoop #2		
De (mm)	*Dt(mm)*	*MCE (%)*
0	24	0.00
0	35	0.00
21	50	42.00
24	36	66.67
3	28	10.71
5	40	12.50
41	84	48.81
40	62	64.52
0	43	0.00
22	73	30.14
0	56	0.00
6	42	14.29
18	55	32.73
0	34	0.00
4	74	5.41
41	67	61.19
30	60	50.00
18	52	34.62
19	36	52.78
		#DIV/0!
		#DIV/0!

Hoop #3		
De (mm)	*Dt(mm)*	*MCE (%)*
0	30	0.00
31	65	47.69
132	216	61.11
44	83	53.01
0	25	0.00
15	41	36.59
12	34	35.29
27	46	58.70
10	24	41.67
37	72	51.39
112	146	76.71
81	106	76.42
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!

Average MCE (%): 33.32
%Fines: 0.01
WCE: 33.99

Average MCE (%): 27.70
%Fines: 0.10
WCE: 34.93

Average MCE (%): 44.88
%Fines: 0.15
WCE: 53.15

Transect #:	3
Wetted Width (m)	1.60
Bankfull Width (m)	3.50
Bankfull Depth 1 (m)	0.50
Width/Depth	6.77

Transect Location above BOR(m): 22

Bankfull Depth 2 (m) 0.62 **Bankfull Depth 3 (m)** 0.43 (dry)

Hoop #1		
De (mm)	*Dt(mm)*	*MCE (%)*
0	108	0.00
0	78	0.00
5	28	17.86
0	72	0.00
0	55	0.00
0	75	0.00
		#DIV/0!
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		#DIV/0!
		#DIV/0!

Hoop #2		
De (mm)	*Dt(mm)*	*MCE (%)*
35	72	48.61
36	71	50.70
2	47	4.26
0	50	0.00
0	48	0.00
0	60	0.00
2	61	3.28
0	27	0.00
0	55	0.00
0	75	0.00
10	66	15.15
0	78	0.00
		#DIV/0!
		#DIV/0!

Hoop #3		
De (mm)	*Dt(mm)*	*MCE (%)*
142	172	82.56
0	70	0.00
0	29	0.00
71	90	78.89
71	123	57.72
26	57	45.61
		#DIV/0!
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		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!

Average MCE (%):	2.98
%Fines:	0.01
WCE:	3.95

Average MCE (%):	10.17
%Fines:	0.05
WCE:	14.66

Average MCE (%):	44.13
%Fines:	0.06
WCE:	47.48

Transect #:	4
Wetted Width (m)	3.25
Bankfull Width (m)	6.30
Bankfull Depth 1 (m)	0.64
Width/Depth	16.02

Transect Location above BOR(m): 32

Bankfull Depth 2 (m) 0.48 **Bankfull Depth 3 (m)** 0.06 (dry)

Hoop #1		
De (mm)	*Dt(mm)*	*MCE (%)*
25	39	64.10

Hoop #2		
De (mm)	*Dt(mm)*	*MCE (%)*
47	105	44.76

Hoop #3		
De (mm)	*Dt(mm)*	*MCE (%)*
0	74	0.00

		#DIV/0!
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		#DIV/0!
		#DIV/0!

0	138	0.00
0	40	0.00
50	105	47.62
78	137	56.93
		#DIV/0!
		#DIV/0!

Averge MCE (%): 64.10
%Fines: 0.95
WCE: 98.21

Averge MCE (%): 44.76
%Fines: 0.95
WCE: 97.24

Averge MCE (%): 20.91
%Fines: 0.30
WCE: 44.64

Transect #: 5
Wetted Width (m) 2.05
Bankfull Width (m) 3.60
Bankfull Depth 1 (m) 0.65
Width/Depth 6.79

Transect Location above BOR(m): 42

Bankfull Depth 2 (m) 0.50

Bankfull Depth 3 (m) 0.44

Hoop #1		
De (mm)	*Dt(mm)*	*MCE (%)*
0	30	0.00
20	65	30.77
0	50	0.00
15	65	23.08
18	95	18.95
10	65	15.38
0	30	0.00
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		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!

Hoop #2		
De (mm)	*Dt(mm)*	*MCE (%)*
0	32	0.00
0	45	0.00
0	25	0.00
32	39	82.05
0	50	0.00
0	54	0.00
0	31	0.00
0	51	0.00
45	101	44.55
0	56	0.00
31	50	62.00
		#DIV/0!
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		#DIV/0!
		#DIV/0!
		#DIV/0!

Hoop #3		
De (mm)	*Dt(mm)*	*MCE (%)*
26	36	72.22
0	37	0.00
0	39	0.00
17	38	44.74
21	55	38.18
0	38	0.00
0	54	0.00
0	47	0.00
31	86	36.05
51	112	45.54
59	130	45.38
0	39	0.00
19	41	46.34
61	97	62.89
0	75	0.00
36	41	87.80
75	122	61.48

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50	62	80.65
0	22	0.00
16	50	32.00
23	40	57.50
11	21	52.38
0	62	0.00
10	37	27.03
		#DIV/0!
		#DIV/0!

Average MCE (%): 12.60
%Fines: 0.03
WCE: 15.22

Average MCE (%): 17.15
%Fines: 0.08
WCE: 23.77

Average MCE (%): 32.92
%Fines: 0.30
WCE: 53.05

Reach Summaries	
Average Wetted Width:	2.28
Average Bankfull Width:	4.38
Average Bankfull Depth:	0.50
Average W/D:	8.76
Average WCE:	36.77

Explanation:

bankfull width over bankfull depth

Rosgen Reach Channel Classification Form

Version 5.1, June 2000 Clearwater Natioanl Forest

DATE: 7/26/2019 **DISTRICT:** **STREAM:** WF Clear Creek

REACH: **OBSERVERS:** KJ, RL, KB, EP

HUC: 1706- **WRC[1]:** 1706- **DATA RECORD #[2]**

Channel Braiding	**Single Thread Channel:** X	**Multiple Thread Channel:**

SITE # 1	measurements across channel 0.25	0.50	0.75	Mean	2X Max BF Depth
Bankfull Depths (m)	0.60	0.71	0.71	0.67	
Bankfull Width (m)		4.2	Width/Depth Ratio (site 1)[3]		6.24
Floodprone Width (m)			Entrenchment (site1)[4]		0.0
Channel Gradient %	up	down	Average site 1		
			#DIV/0!		

SITE # 2	measurements across channel 0.25	0.50	0.75	Mean	2X Max BF Depth
Bankfull Depths (m)	0.50	0.62	0.43	0.52	
Bankfull Width (m)		3.50	Width/Depth Ratio (site2)[3]		6.8
Floodprone Width (m)			Entrenchment (site 2)[4]		0.0
Channel Gradient %	up	down	Average site 2		
			#DIV/0!		

SITE # 3	measurements across channel 0.25	0.50	0.75	Mean	2X Max BF Depth
Bankfull Depths (m)	0.65	0.50	0.44	0.53	
Bankfull Width (m)		3.60	Width/Depth Ratio (site3)[3]		6.8
Floodprone Width (m)			Entrenchment (site3)[4]		0.0
Channel Gradient %	up	down	Average site 3		
			#DIV/0!		

Mean Channel Gradient: #DIV/0! **Mean W / D Ratio:** 6.60 **Mean Entrenchment Ratio:** 0.00

Sinuosity:	**Low (<1.2):**	**Moderate (>1.2):**	**High (>1.4):**	**Very High (>1.6):**

Channel Substrate Percentage (D50)

Bedrock %	Boulder (256mm+)%	Cobble (64-256 mm) %	Gravel (2-64 mm) %	Sand (0-2 mm) %	Silt / Clay %	D 50	Channel Type

Notes :

1 - Water Resource Codes are required for the FISHAB program
2 - Data Record # is a number assigned by the FISHAB program. It is not the same as the reach number. This will be filled in when data is entered
3 - Width/Depth ratio is bankfull width/average bankfull depth
4 - Entrenchment is the the floodprone width/bnakfull width ratio

POOL-TAIL FINES									
Habitat Unit #	Grid 1			Grid 2			Grid 3		
	# Fines < 2mm	# Fines < 6mm	# Non-Meas.	# Fines < 2mm	# Fines < 6mm	# Non-Meas.	# Fines < 2mm	# Fines < 6mm	# Non-Meas.
1	5	17	0	3	9	12	6	9	8
2									
3									
4									
5									
6									
7									
8									
9									
10									

Do pool tail fines in pools found in 50m reach; not at scour and plunge pools or riffle/runs.
Non-meas. Are considered rocks larger than 512mm on axis that would get stuck going through a sieve and organics.
Comments: Grid #2 non-measurables are all from a log.