

WTS 3 Appendix 2

Substrate Samples

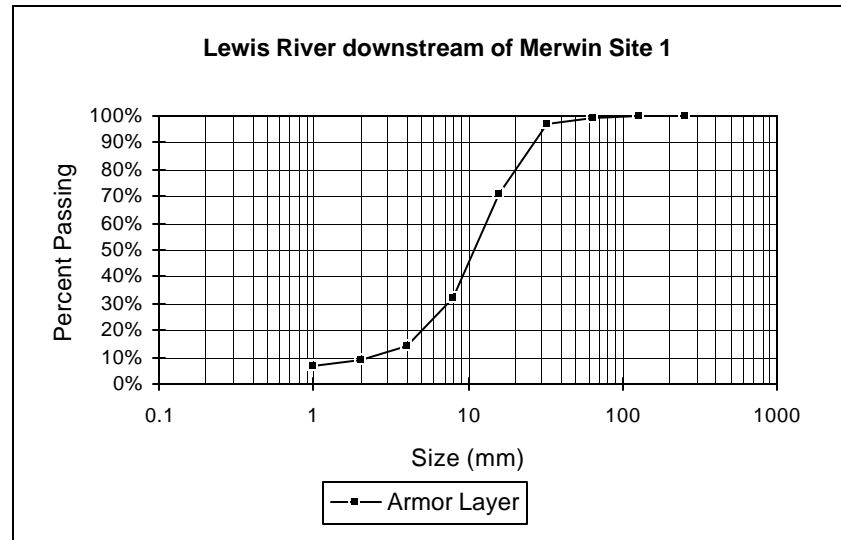
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 1

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	7%	7%	0.07	7
2	2%	9%	0.06	2
4	5%	14%	0.30	5
8	18%	32%	2.16	18
16	39%	71%	9.36	39
32	26%	97%	12.48	26
64	2%	99%	1.92	2
128	1%	100%	1.92	1
256	0%	100%	0.00	
			28.27 mm	100
			0.0927 ft	

Sub-Armor Layer D65= mm
D50= mm

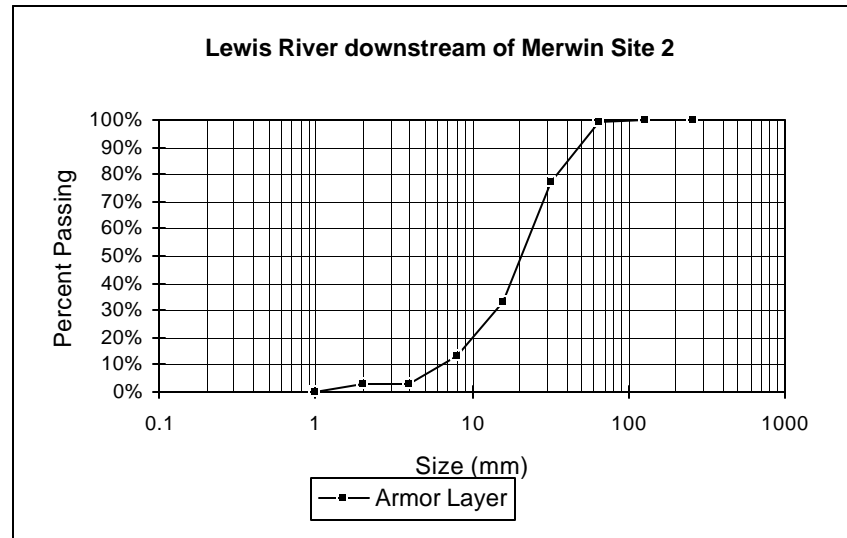
Size (mm)	Weight (g)	Percent	Cum %	Avg size
128				
64				
31.5				
16		(none taken)		
9.5				
4.75				
2				
1				
0.5				
0.25				
0.125				
0.063				
0.003				
pan	0			mm ft



Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 2

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	3%	3%	0.09	3
4	0%	3%	0.00	
8	10%	13%	1.20	10
16	20%	33%	4.80	20
32	44%	77%	21.12	44
64	22%	99%	21.12	22
128	1%	100%	1.92	1
256	0%	100%	0.00	
			50.25 mm	100
			0.1649 ft	



Sub-Armor Layer Size (mm)	Weight (g)	Percent	Cum %	Avg size
128				
64				
31.5				
16				
9.5		(none taken)		
4.75				
2				
1				
0.5				
0.25				
0.125				
0.063				
0.003				
pan	0			mm
				ft



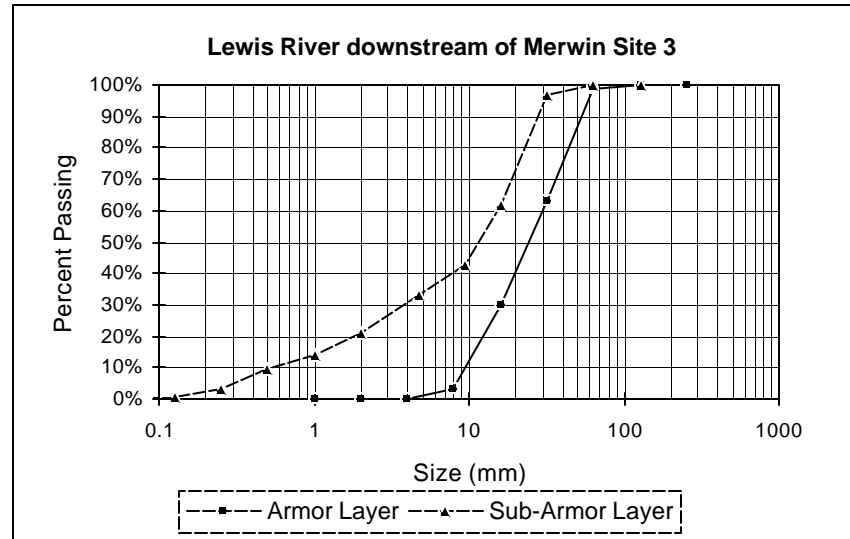
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 3

Armor Layer		D65=	33 mm		
Size (mm)	Percent	D50=	25 mm	No.	
		Cum %	Dg		
1	0%	0%	0.00		
2	0%	0%	0.00		
4	0%	0%	0.00		
8	3%	3%	0.36		3
16	27%	30%	6.48		27
32	33%	63%	15.84		33
64	36%	99%	34.56		36
128	1%	100%	1.92		1
256	0%	100%	0.00		
			59.16 mm		100
			0.1941 ft		

Sub-Armor Layer D65= 17.5 mm
D50= 12.0 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	584	3%	100%	3.05609
31.5	6,444	35%	97%	16.773
16	3,459	19%	62%	4.47813
9.5	1,825	10%	43%	1.2684
4.75	2,191	12%	33%	0.85096
2	1,278	7%	21%	0.23512
1	758	4%	14%	0.06198
0.5	1,223	7%	10%	0.05
0.25	446	2%	3%	0.00912
0.125	103	1%	1%	0.00105
0.063	23	0%	0%	0.00012
0.003	11	0%	0%	2E-05
				26.78 mm
				0.0879 ft



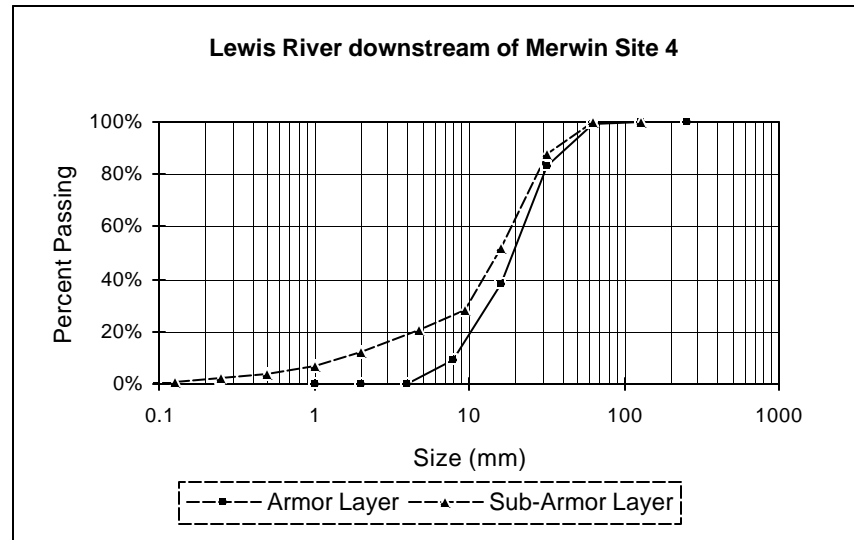
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 4

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	0%	0%	0.00	
8	9%	9%	1.08	9
16	29%	38%	6.96	29
32	45%	83%	21.60	45
64	16%	99%	15.36	16
128	1%	100%	1.92	1
256	0%	100%	0.00	
			46.92 mm	100
			0.1539 ft	

Sub-Armor Layer D65= 21.6 mm
D50= 15.4 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	1,871	12%	100%	11.4602
31.5	5,635	36%	88%	17.1678
16	3,748	24%	52%	5.67951
9.5	1,207	8%	28%	0.9819
4.75	1,274	8%	20%	0.57916
2	832	5%	12%	0.17916
1	547	3%	7%	0.05235
0.5	179	1%	4%	0.00857
0.25	274	2%	2%	0.00656
0.125	74	0%	1%	0.00089
0.063	17	0%	0%	0.0001
0.003	15	0%	0%	3.2E-05
pan	15,673			36.12 mm
				0.1185 ft



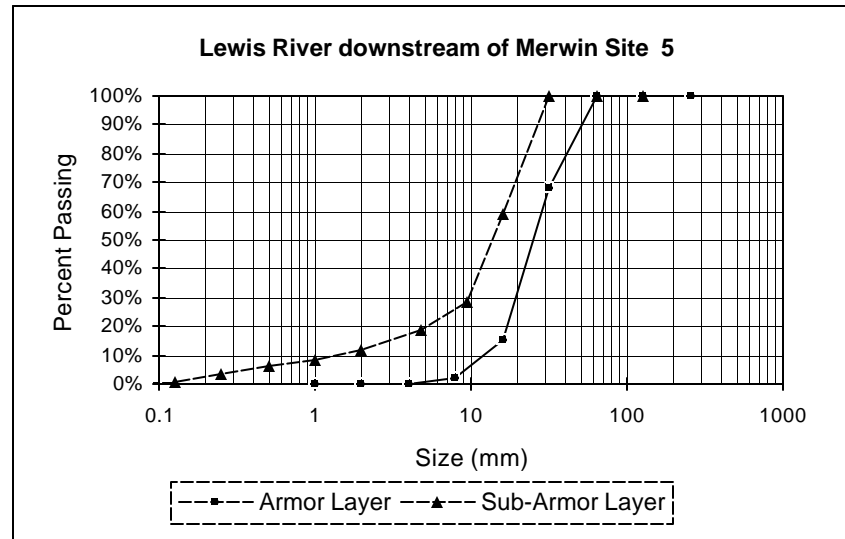
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 5

Armor Layer		D65=	30 mm		
Size (mm)	Percent	D50=	23 mm	No.	
		Cum %	Dg		
1	0%	0%	0.00		
2	0%	0%	0.00		
4	0%	0%	0.00		
8	2%	2%	0.24		2
16	13%	15%	3.12		13
32	53%	68%	25.44		53
64	32%	100%	30.72		32
128	0%	100%	0.00		
256	0%	100%	0.00		
			59.52 mm		
			0.1953 ft		
				100	

Sub-Armor Layer D65= 18.4 mm
D50= 14.1 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	0	0%	100%	0
31.5	6,174	41%	100%	19.7025
16	4,549	30%	59%	7.22039
9.5	1,398	9%	28%	1.19124
4.75	1,034	7%	19%	0.49236
2	605	4%	12%	0.13646
1	246	2%	8%	0.02466
0.5	481	3%	6%	0.02411
0.25	372	2%	3%	0.00932
0.125	72	0%	1%	0.0009
0.063	20	0%	0%	0.00013
0.003	12	0%	0%	2.6E-05
pan	14,963		28.80 mm	
			0.0945 ft	



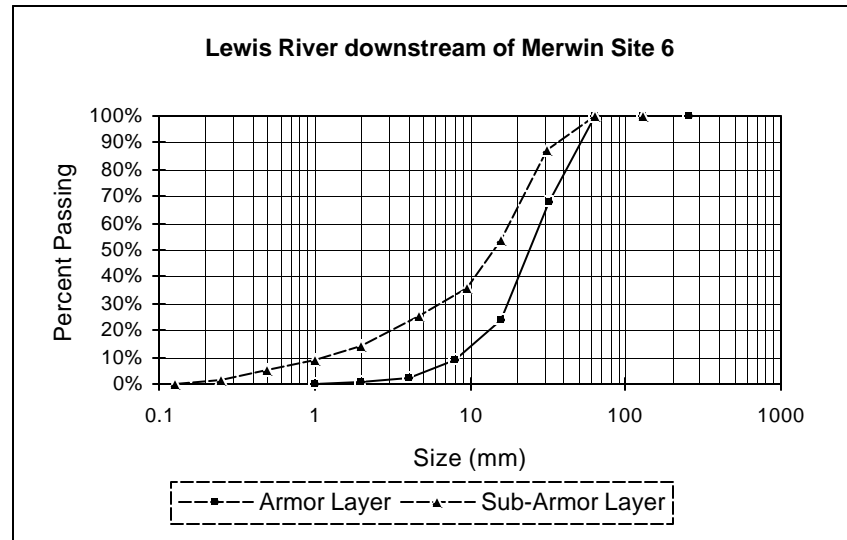
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 6

Armor Layer		D65=	30 mm		
Size (mm)	Percent	D50=	24 mm	Dg	No.
1	0%			0.00	
2	1%			0.03	1
4	1%			0.06	1
8	7%			0.84	7
16	15%			3.60	15
32	44%			21.12	44
64	32%			30.72	32
128	0%			0.00	
256	0%			0.00	
				56.37 mm	100
				0.1849 ft	

Sub-Armor Layer D65= 21.3 mm
D50= 14.7 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	1,942	13%	100%	12.3686
31.5	5,063	34%	87%	16.0392
16	2,638	18%	54%	4.1566
9.5	1,620	11%	36%	1.37033
4.75	1,663	11%	25%	0.7861
2	816	5%	14%	0.18271
1	539	4%	9%	0.05364
0.5	577	4%	5%	0.02871
0.25	159	1%	1%	0.00396
0.125	29	0%	0%	0.00036
0.063	12	0%	0%	7.5E-05
0.003	15	0%	0%	3.3E-05
pan	15,073			34.99 mm
				0.1148 ft



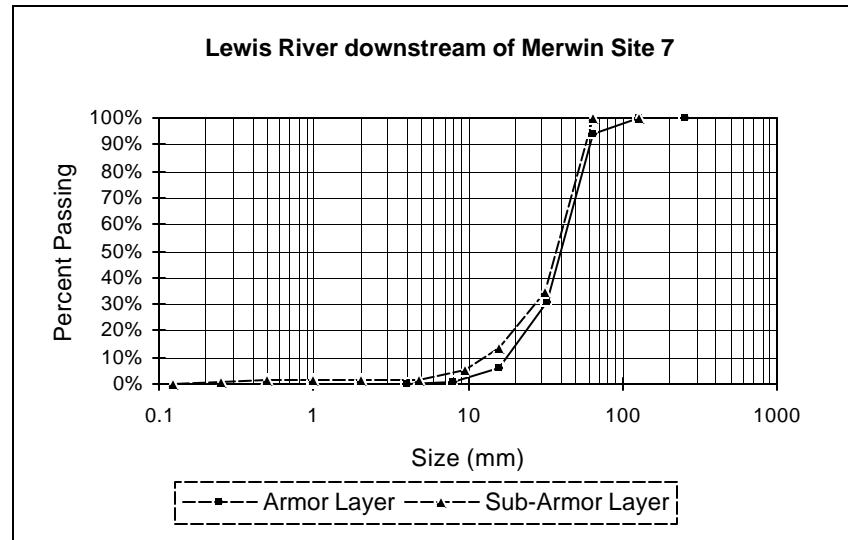
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 7

Armor Layer		D65=	43 mm		
Size (mm)	Percent	D50=	40 mm		
		Cum %	Dg	No.	
1	0%	0%	0.00		
2	0%	0%	0.00		
4	0%	0%	0.00		
8	1%	1%	0.12		1
16	5%	6%	1.20		5
32	25%	31%	12.00		25
64	63%	94%	60.48		63
128	6%	100%	11.52		6
256	0%	100%	0.00		
			85.32 mm		100
			0.2799 ft		

Sub-Armor Layer D65= 46.6 mm
D50= 39.2 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	12,370	65%	100%	62.7886
31.5	3,942	21%	35%	9.95244
16	1,676	9%	14%	2.10464
9.5	629	3%	5%	0.42403
4.75	69	0%	2%	0.02599
2	4	0%	1%	0.00071
1	6	0%	1%	0.00048
0.5	62	0%	1%	0.00246
0.25	96	1%	1%	0.0019
0.125	40	0%	0%	0.0004
0.063	10	0%	0%	5E-05
0.003	9	0%	0%	1.6E-05
pan	18,913			75 mm
				0.2471 ft



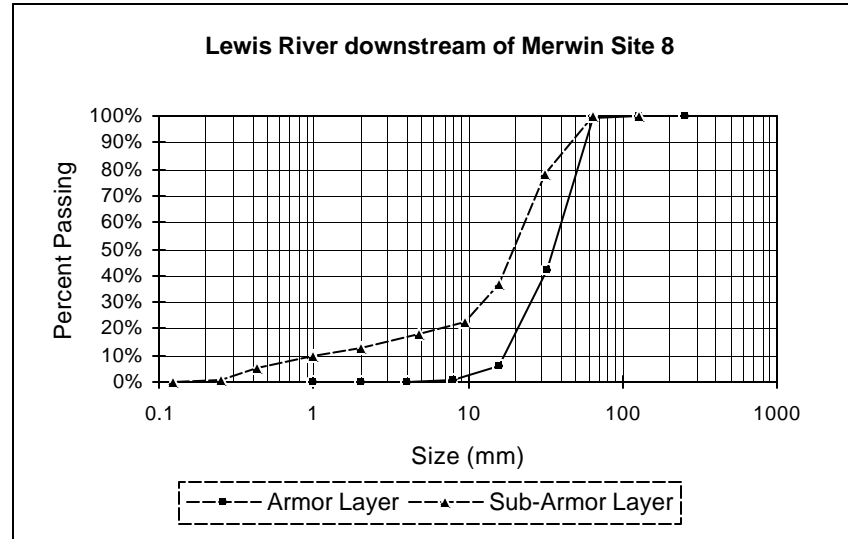
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 8

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	0%	0%	0.00	
8	1%	1%	0.12	1
16	5%	6%	1.20	5
32	36%	42%	17.28	36
64	57%	99%	54.72	57
128	1%	100%	1.92	1
256	0%	100%	0.00	
			75.24 mm	100
			0.2469 ft	

Sub-Armor Layer D65= 26.5 mm
D50= 20.8 mm

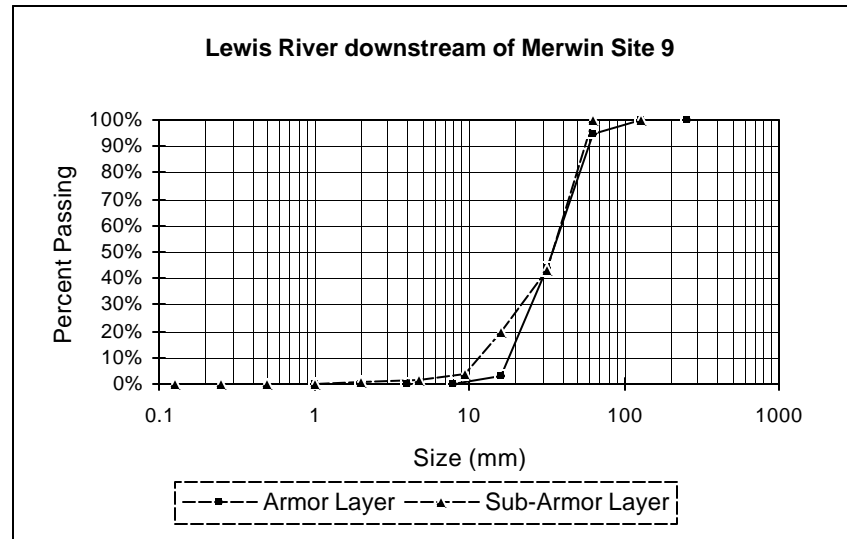
Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	3,074	22%	100%	20.9979
31.5	5,752	41%	78%	19.543
16	2,049	15%	37%	3.46263
9.5	694	5%	23%	0.62961
4.75	666	5%	18%	0.33764
2	490	3%	13%	0.11767
1	577	4%	9%	0.06158
0.425	615	4%	5%	0.03118
0.25	113	1%	1%	0.00271
0.125	16	0%	0%	0.00021
0.063	5	0%	0%	3.3E-05
0.003	3	0%	0%	7E-06
pan	14,054		45.18 mm	
			0.1482 ft	



Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 9

Armor Layer		D65=	41 mm		
Size (mm)	Percent	D50=	36 mm		
		Cum %	Dg	No.	
1	0%	0%	0.00		
2	0%	0%	0.00		
4	0%	0%	0.00		
8	0%	0%	0.00		
16	3%	3%	0.72		3
32	41%	44%	19.68		41
64	51%	95%	48.96		51
128	5%	100%	9.60		5
256	0%	100%	0.00		
			78.96 mm		100
			0.2591 ft		



Sub-Armor Layer D65= 44.0 mm
D50= 35.4 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	8,408	57%	100%	54.59
31.5	3,463	23%	43%	11.1834
16	2,343	16%	20%	3.76344
9.5	381	3%	4%	0.32854
4.75	126	1%	1%	0.06072
2	9	0%	0%	0.00205
1	7	0%	0%	0.00071
0.5	19	0%	0%	0.00096
0.25	18	0%	0%	0.00046
0.125	7	0%	0%	8.9E-05
0.063	3	0%	0%	1.9E-05
0.003	2	0%	0%	4.5E-06
pan	14,786			69.93 mm
				0.2294 ft



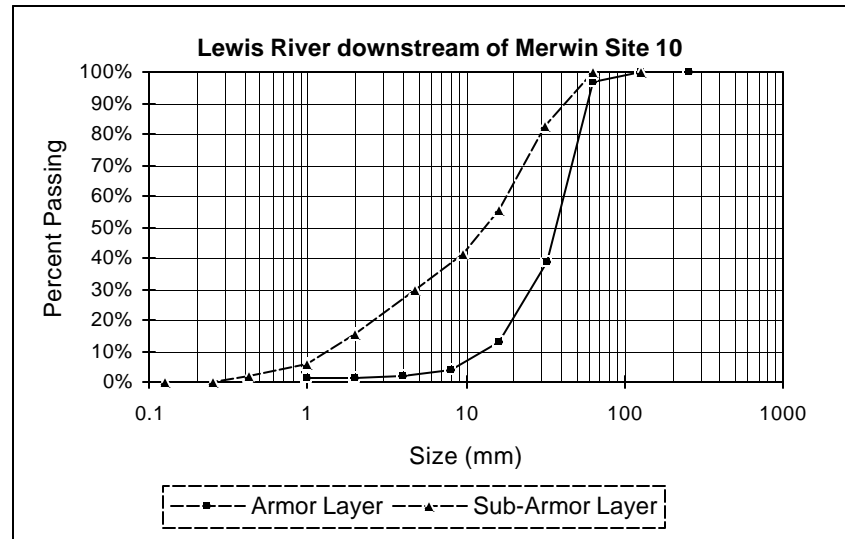
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 10

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	1%	1%	0.01	1
2	0%	1%	0.00	
4	1%	2%	0.06	1
8	2%	4%	0.24	2
16	9%	13%	2.16	9
32	26%	39%	12.48	26
64	58%	97%	55.68	58
128	3%	100%	5.76	3
256	0%	100%	0.00	
			76.39 mm	100
			0.2506 ft	

Sub-Armor Layer D65= 21.5 mm
D50= 13.5 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	3,251	18%	100%	16.8774
31.5	4,987	27%	82%	12.8774
16	2,646	14%	55%	3.39836
9.5	2,129	12%	41%	1.46792
4.75	2,601	14%	30%	1.00217
2	1,803	10%	16%	0.32907
1	763	4%	6%	0.06189
0.425	254	1%	2%	0.00979
0.25	44	0%	0%	0.0008
0.125	9	0%	0%	9.1E-05
0.063	2	0%	0%	1E-05
0.003	3	0%	0%	5.4E-06
pan	18,492		36.02 mm	
			0.1182 ft	



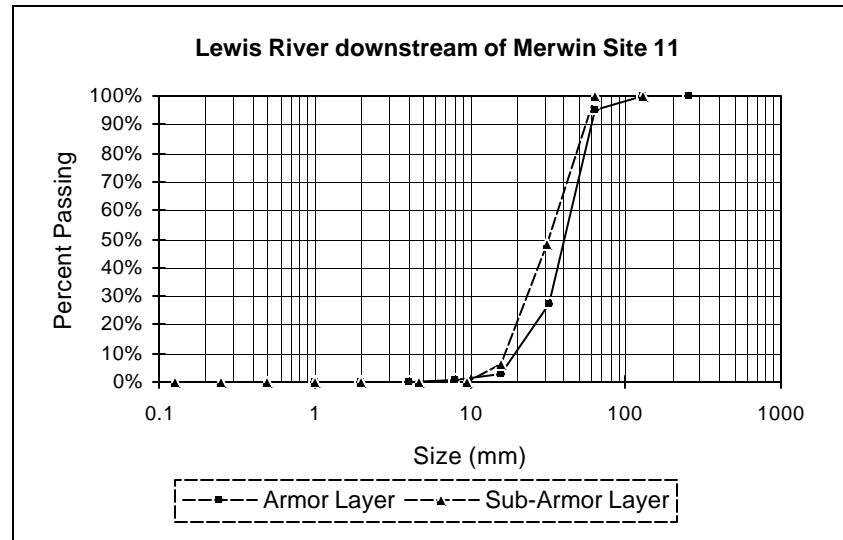
Lower Lewis River Sediment Samples

Station Lewis River downstream of Merwin Site 11

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	0%	0%	0.00	
8	1%	1%	0.12	1
16	2%	3%	0.48	2
32	24%	27%	11.52	24
64	68%	95%	65.28	68
128	5%	100%	9.60	5
256	0%	100%	0.00	
			87.00 mm	100
			0.2854 ft	

Sub-Armor Layer D65= 42.1 mm
D50= 32.7 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	9,857	52%	100%	49.8747
31.5	7,941	42%	48%	19.9854
16	1,154	6%	6%	1.44455
9.5	17	0%	0%	0.01142
4.75	1	0%	0%	0.00038
2	1	0%	0%	0.00018
1	1	0%	0%	7.9E-05
0.5	1	0%	0%	4E-05
0.25	0	0%	0%	0
0.125	0	0%	0%	0
0.063	0	0%	0%	0
0.003	0	0%	0%	0
pan	18,973			71.32 mm
				0.2340 ft



Lower Lewis River Sediment Samples

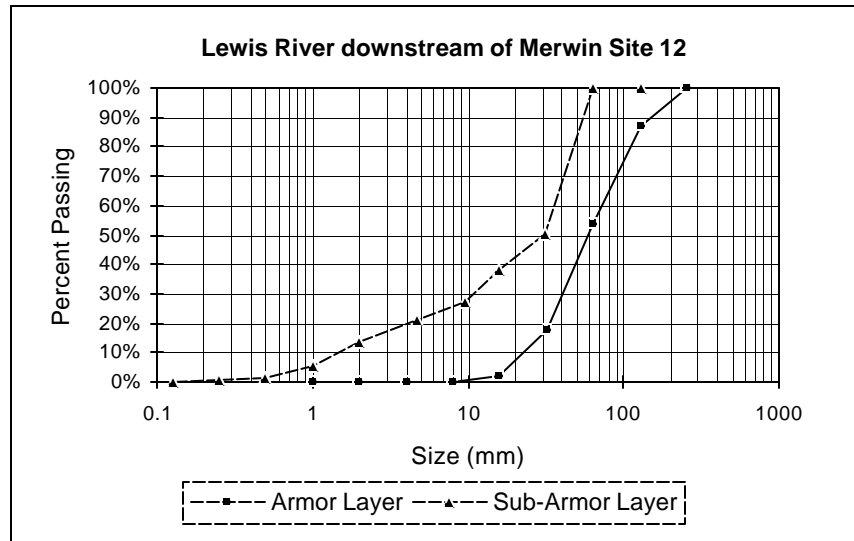
Station Lewis River downstream of Merwin Site 12

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	0%	0%	0.00	
8	0%	0%	0.00	
16	2%	2%	0.48	2
32	16%	18%	7.68	16
64	36%	54%	34.56	36
128	33%	87%	63.36	33
256	13%	100%	16.64	13
			122.72 mm	100
			0.4026 ft	

D65= 80 mm
D50= 60 mm

Sub-Armor Layer Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	8,687	50%	100%	47.7745
31.5	2,163	12%	50%	5.91678
16	1,905	11%	38%	2.59187
9.5	1,077	6%	27%	0.78665
4.75	1,226	7%	21%	0.50042
2	1,462	8%	14%	0.28267
1	646	4%	5%	0.05551
0.5	212	1%	2%	0.00911
0.25	46	0%	0%	0.00099
0.125	12	0%	0%	0.00013
0.063	8	0%	0%	4.3E-05
0.003	12	0%	0%	2.3E-05
pan	17,456		57.92 mm	
			0.1900 ft	

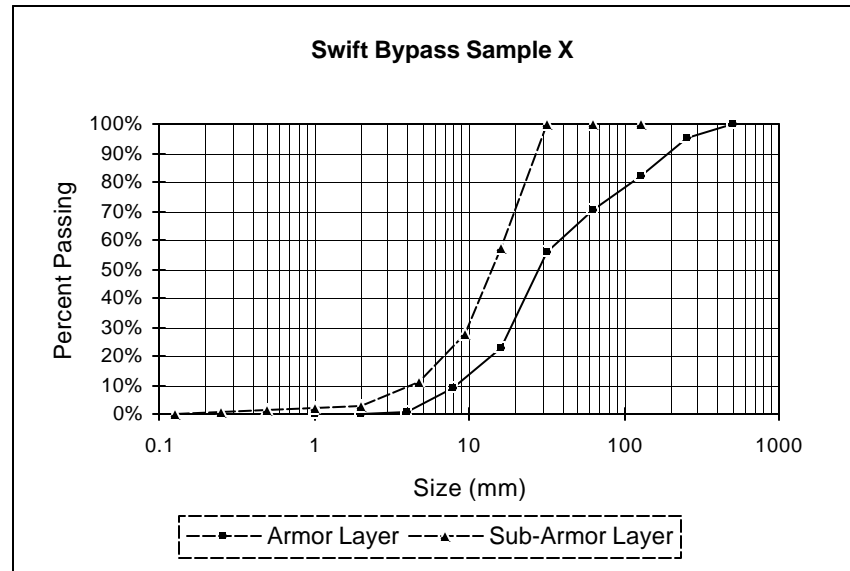
D65= 41.1 mm
D50= 31.3 mm



Swift Bypass Reach Sediment Samples

Station		Swift Bypass Sample X			
Armor Layer		D65=	52.6 mm		
Size (mm)		D50=	29.1 mm		
Percent	Cum %	Dg	No.		
1	0%	0%	0.00	1	
2	0%	0%	0.00	8	
4	1%	1%	0.06	14	
8	8%	9%	0.96	33	
16	14%	23%	3.36	14	
32	33%	56%	15.84	12	
64	14%	70%	13.44	13	
128	12%	82%	38.40	5	
256	13%	95%	49.92	100	
512	5%	100%	12.80		
			134.78 mm		
			0.4422 ft		

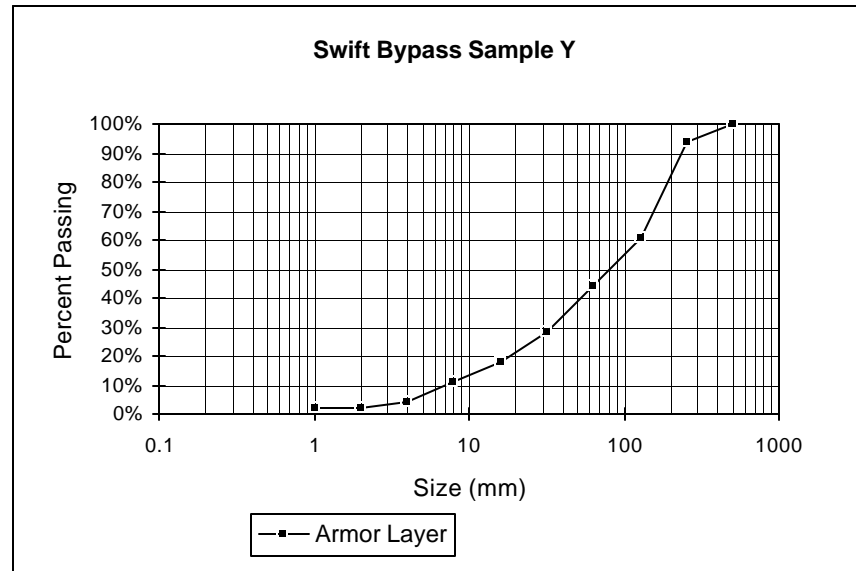
Sub-Armor Layer		D65=	18.8 mm	
Size (mm)		D50=	14.4 mm	
Weight (g)	Percent	Cum %	Avg size	
128	0%	100%	0	
64	0%	100%	0	
31.5	43%	100%	20.3338	
16	30%	57%	7.01224	
9.5	17%	28%	2.11134	
4.75	9%	11%	0.6098	
2	0%	3%	0.01595	
1	1%	2%	0.01278	
0.5	1%	1%	0.00511	
0.25	0%	1%	0.00171	
0.125	0%	0%	0.00032	
0.063	0%	0%	5.8E-05	
0.003	0%	0%	2.6E-05	
pan	12,911		30.10 mm	
			0.0988 ft	



Swift Bypass Reach Sediment Samples

Station Swift Bypass Sample Y					
Armor Layer					
Size (mm)	Percent	Cum %	Dg	No.	
1	2%	2%	0.02	2	
2	0%	2%	0.00		
4	2%	4%	0.12	2	
8	7%	11%	0.84	7	
16	7%	18%	1.68	7	
32	10%	28%	4.80	10	
64	16%	44%	15.36	16	
128	17%	61%	54.40	17	
256	33%	94%	126.72	33	
512	6%	100%	15.36	6	
			219.30 mm	100	
			0.7195 ft		

Sub-Armor Layer					
D65= mm					
D50= mm					
Size (mm)	Weight (g)	Percent	Cum %	Avg size	
128					
64					
31.5					
16					
9.5					
4.75					
2			none taken		
1					
0.425					
0.25					
0.125					
0.063					
0.003					
pan	0				



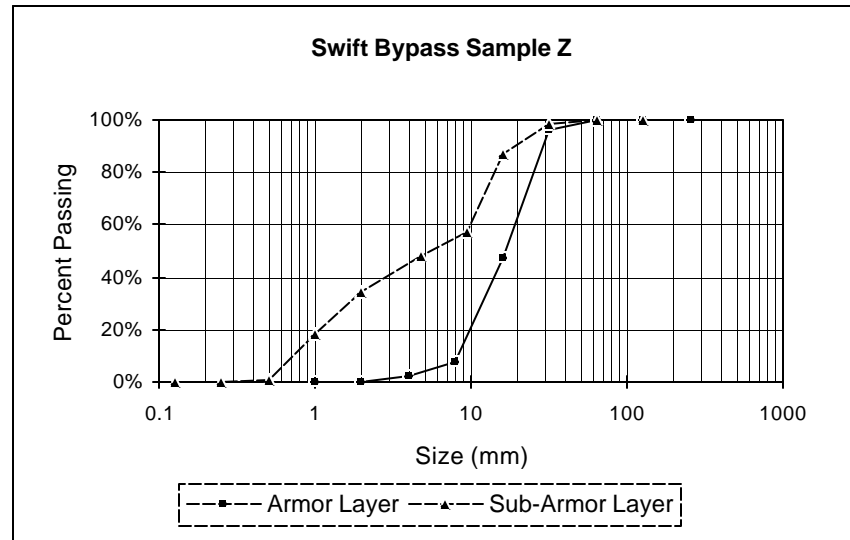
Swift Bypass Reach Sediment Samples

Station **Swift Bypass Sample Z**

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	2%	2%	0.12	2
8	6%	8%	0.72	6
16	39%	47%	9.36	39
32	49%	96%	23.52	49
64	4%	100%	3.84	4
128	0%	100%	0.00	
256	0%	100%	0.00	
			37.56 mm	100
			0.1232 ft	

Sub-Armor Layer	D65=	11.2 mm
	D50=	5.6 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	429	2%	100%	1.69314
31.5	2,698	11%	98%	5.29639
16	7,312	30%	87%	7.13945
9.5	2,111	9%	57%	1.10653
4.75	3,341	14%	48%	0.97865
2	3,945	16%	35%	0.54738
1	4,267	18%	18%	0.26314
0.5	150	1%	1%	0.00463
0.25	47	0%	0%	0.00072
0.125	11	0%	0%	8.5E-05
0.063	5	0%	0%	1.9E-05
0.003	8	0%	0%	1.1E-05
pan	24,324		17.03 mm	
			0.0559 ft	



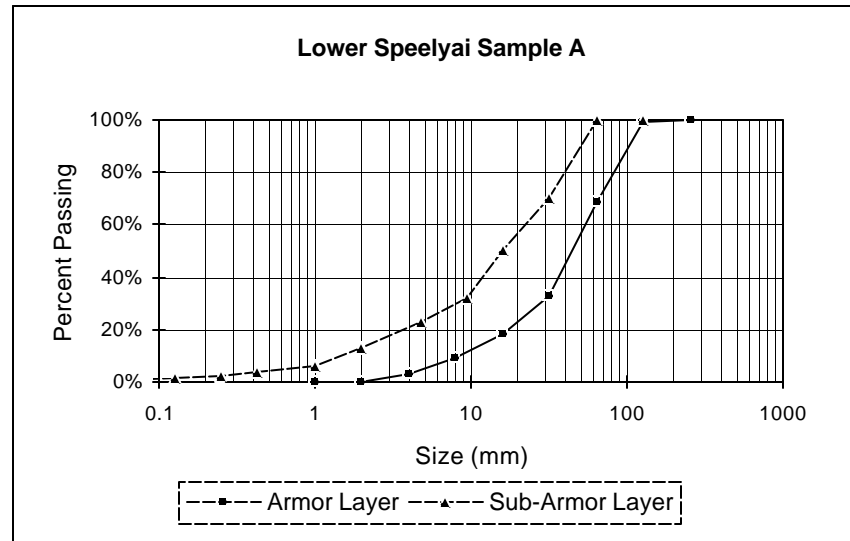
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample A

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	3%	3%	0.18	3
8	6%	9%	0.72	6
16	9%	18%	2.16	9
32	15%	33%	7.20	15
64	36%	69%	34.56	36
128	30%	99%	57.60	30
256	1%	100%	1.28	1
			103.70 mm	100
			0.3402 ft	

Sub-Armor Layer D65= 27.6 mm
D50= 15.8 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	4,225	30%	100%	28.8868
31.5	2,711	19%	70%	9.21945
16	2,601	19%	51%	4.39953
9.5	1,326	9%	32%	1.20408
4.75	1,363	10%	23%	0.69164
2	995	7%	13%	0.23917
1	307	2%	6%	0.0328
0.425	158	1%	4%	0.00802
0.25	168	1%	3%	0.00404
0.125	131	1%	1%	0.00175
0.063	42	0%	0%	0.00028
0.003	14	0%	0%	3.3E-05
pan	14,041			44.69 mm
				0.1466 ft



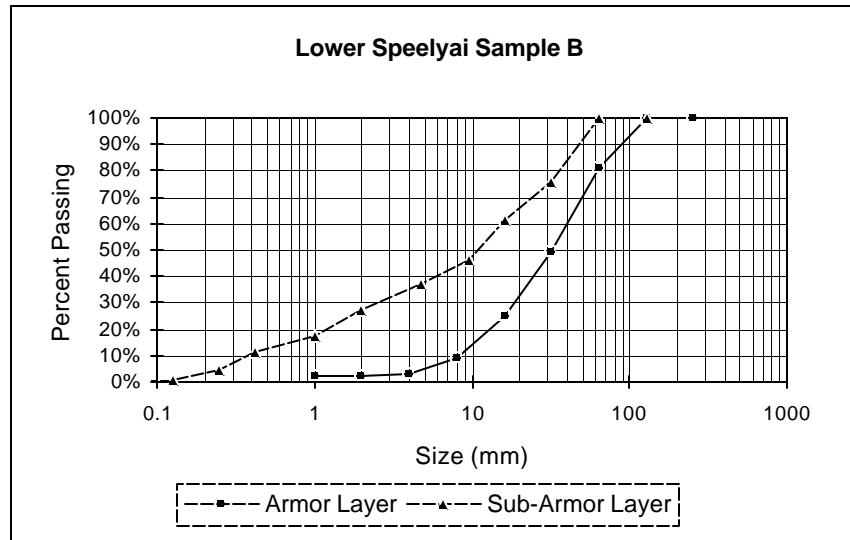
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample B

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	2%	2%	0.02	2
2	0%	2%	0.00	
4	1%	3%	0.06	1
8	6%	9%	0.72	6
16	16%	25%	3.84	16
32	24%	49%	11.52	24
64	32%	81%	30.72	32
128	19%	100%	36.48	19
256	0%	100%	0.00	
			83.36 mm	100
			0.2735 ft	

Sub-Armor Layer D65= 20.1 mm
D50= 11.1 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	3,854	24%	100%	23.4613
31.5	2,273	14%	76%	6.88242
16	2,321	15%	61%	3.49548
9.5	1,416	9%	46%	1.14483
4.75	1,644	10%	37%	0.74277
2	1,455	9%	27%	0.31139
1	1,026	7%	18%	0.09759
0.425	1,062	7%	11%	0.04798
0.25	551	3%	5%	0.01179
0.125	127	1%	1%	0.00151
0.063	32	0%	0%	0.00019
0.003	9	0%	0%	1.9E-05
pan	15,770		36.20 mm	
			0.1188 ft	



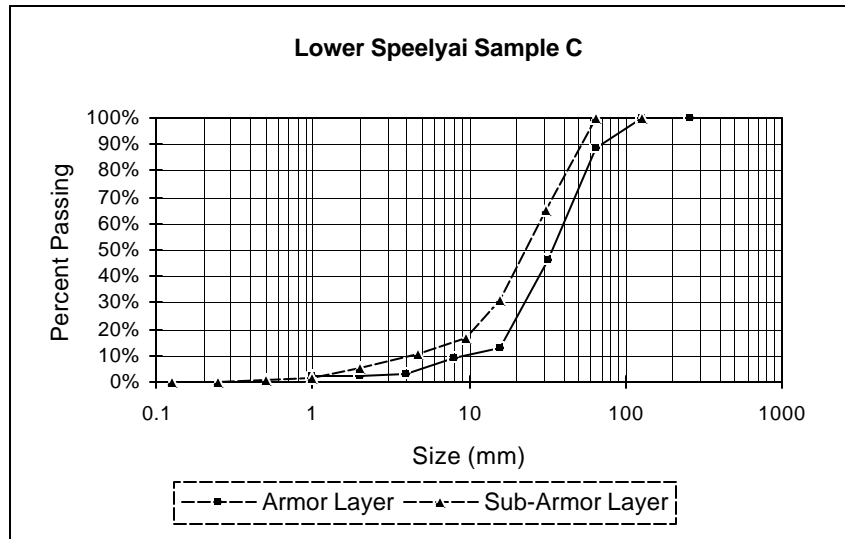
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample C

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	2%	2%	0.02	2
2	0%	2%	0.00	
4	1%	3%	0.06	1
8	6%	9%	0.72	6
16	4%	13%	0.96	4
32	33%	46%	15.84	33
64	43%	89%	41.28	43
128	11%	100%	21.12	11
256	0%	100%	0.00	
			80.00 mm	100
			0.2625 ft	

Sub-Armor Layer

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	2,520	35%	100%	33.1579
31.5	2,501	34%	65%	16.3682
16	1,084	15%	31%	3.52865
9.5	442	6%	16%	0.77241
4.75	371	5%	10%	0.3623
2	269	4%	5%	0.12443
1	63	1%	1%	0.01295
0.5	20	0%	1%	0.00206
0.25	11	0%	0%	0.00057
0.125	6	0%	0%	0.00015
0.063	5	0%	0%	6.4E-05
0.003	4	0%	0%	1.8E-05
pan	7,296		54.33 mm	
			0.1782 ft	



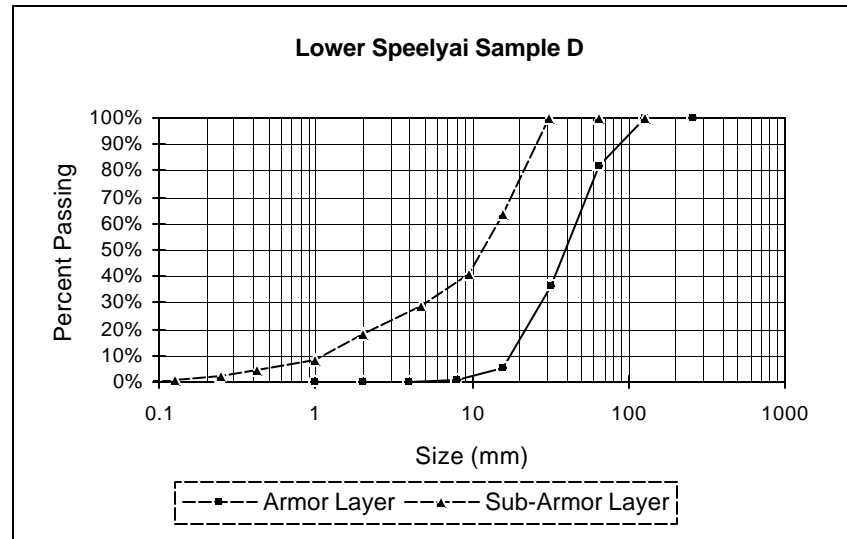
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample D

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	0%	0%	0.00	
8	1%	1%	0.12	1
16	4%	5%	0.96	4
32	31%	36%	14.88	31
64	46%	82%	44.16	46
128	18%	100%	34.56	18
256	0%	100%	0.00	
			94.68 mm	100
			0.3106 ft	

Sub-Armor Layer D65= 16.5 mm
D50= 12.1 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	0	0%	100%	0
31.5	4,052	36%	100%	17.2938
16	2,556	23%	64%	5.4259
9.5	1,349	12%	41%	1.53734
4.75	1,235	11%	29%	0.7865
2	1,046	9%	18%	0.31554
1	434	4%	8%	0.05819
0.425	280	3%	5%	0.01783
0.25	176	2%	2%	0.00531
0.125	44	0%	1%	0.00074
0.063	12	0%	0%	0.0001
0.003	4	0%	0%	1.2E-05
pan	11,188		25.44 mm	
			0.0835 ft	



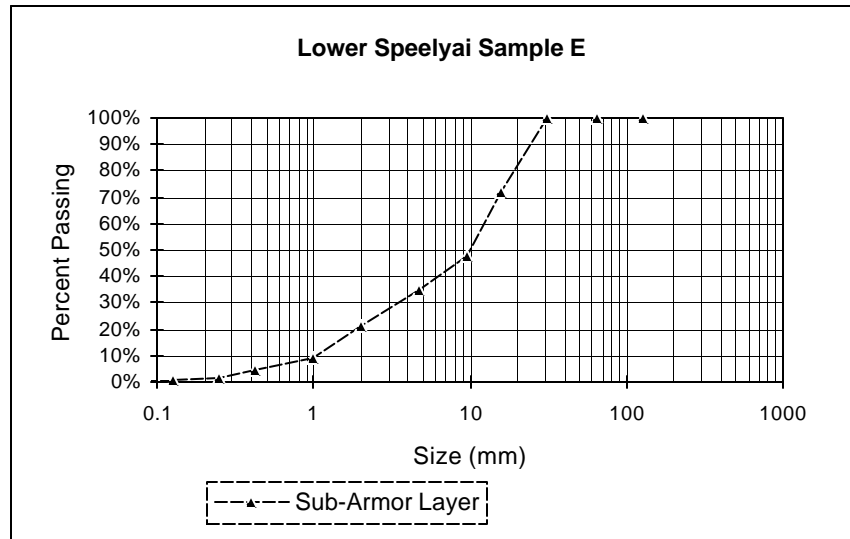
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample E

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1				
2				
4				
8				
16				
32				
64				
128				
256				
none taken				
			0.00 mm	0
			0.0000 ft	

Sub-Armor Layer D65= 12.2 mm
D50= 10.1 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	0	0%	100%	0
31.5	3,621	28%	100%	13.4096
16	3,090	24%	72%	5.6916
9.5	1,705	13%	48%	1.68596
4.75	1,766	14%	35%	0.97586
2	1,534	12%	21%	0.40152
1	605	5%	9%	0.07038
0.425	338	3%	4%	0.01868
0.25	174	1%	2%	0.00455
0.125	38	0%	0%	0.00055
0.063	14	0%	0%	0.0001
0.003	9	0%	0%	2.3E-05
pan	12,894			22.26 mm
				0.0730 ft



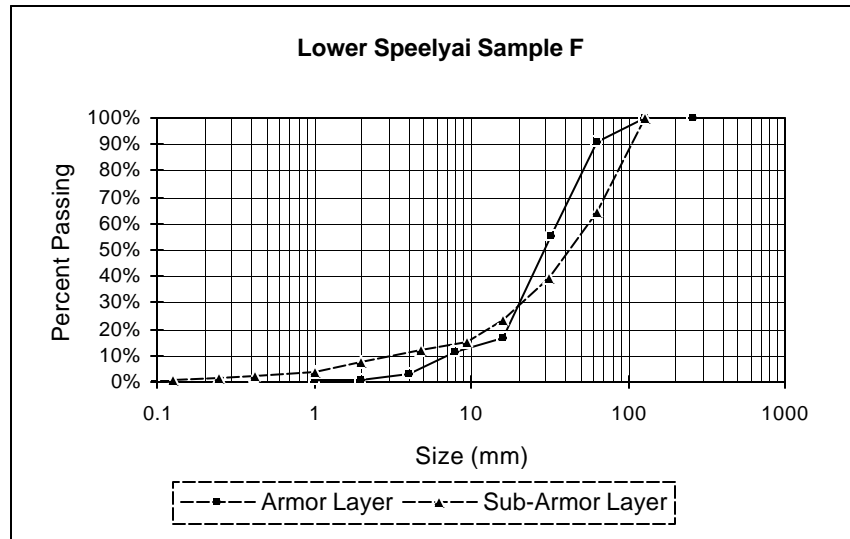
Lower Speelyai Sediment Samples

Station Lower Speelyai Sample F

Armor Layer		D65=	40.9 mm		
		D50=	29.9 mm		
Size (mm)	Percent	Cum %	Dg	No.	
1	1%	1%	0.01	1	
2	0%	1%	0.00		
4	2%	3%	0.12	2	
8	8%	11%	0.96	8	
16	6%	17%	1.44	6	
32	38%	55%	18.24	38	
64	36%	91%	34.56	36	
128	9%	100%	17.28	9	
256	0%	100%	0.00		
			72.61 mm	100	
			0.2382 ft		

Sub-Armor Layer D65= 64.9 mm
D50= 45.2 mm

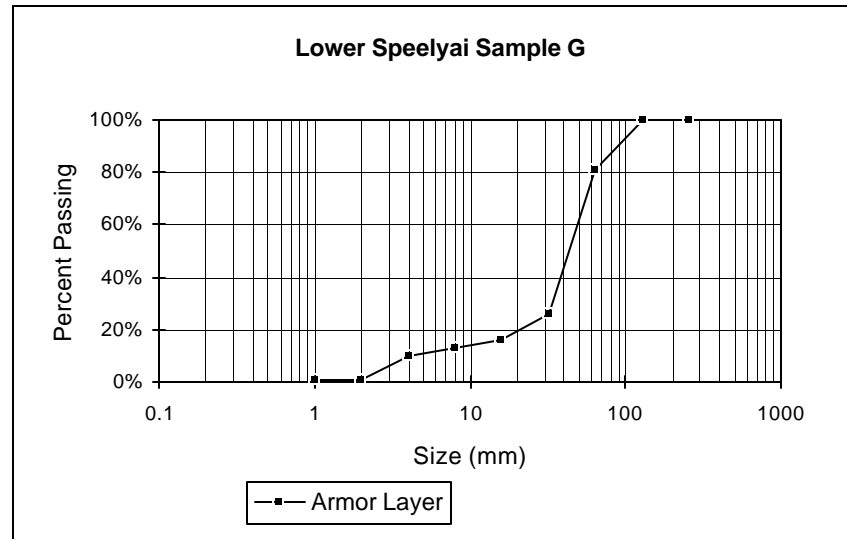
Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	7,620	35%	100%	68.1308
64	5,395	25%	65%	24.1185
31.5	3,380	16%	39%	7.51583
16	1,816	8%	24%	2.00848
9.5	725	3%	15%	0.43046
4.75	903	4%	12%	0.29961
2	835	4%	8%	0.13123
1	346	2%	4%	0.02417
0.425	174	1%	2%	0.00577
0.25	151	1%	1%	0.00237
0.125	68	0%	1%	0.00059
0.063	38	0%	0%	0.00017
0.003	23	0%	0%	3.5E-05
pan	21,474			102.67 mm
				0.3368 ft



Lower Speelyai Sediment Samples

Station Lower Speelyai Sample G

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	1%	1%	0.01	1
2	0%	1%	0.00	
4	9%	10%	0.54	9
8	3%	13%	0.36	3
16	3%	16%	0.72	3
32	10%	26%	4.80	10
64	55%	81%	52.80	55
128	19%	100%	36.48	19
256	0%	100%	0.00	
			95.71 mm	100
			0.3140 ft	



Sub-Armor Layer Size (mm)	Weight (g)	Percent	Cum %	Avg size
128				
64				
31.5				
16				
9.5				
4.75				
2		none taken		
1				
0.425				
0.25				
0.125				
0.063				
0.003				
pan	0			0.00 mm
				0.0000 ft



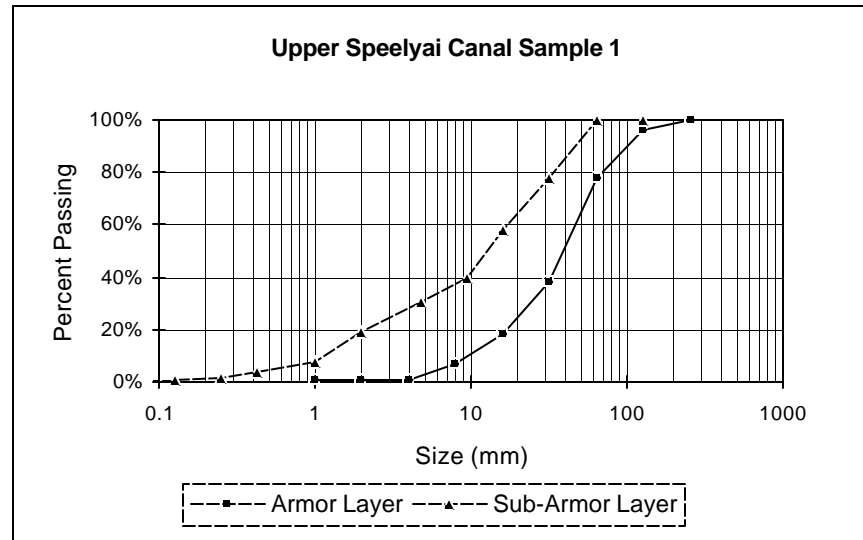
Speelyai Creek - Upper Sediment Samples

Station **Upper Speelyai Canal Sample 1**

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	1%	1%	0.01	1
2	0%	1%	0.00	
4	0%	1%	0.00	
8	6%	7%	0.72	6
16	11%	18%	2.64	11
32	20%	38%	9.60	20
64	40%	78%	38.40	40
128	18%	96%	34.56	18
256	4%	100%	5.12	4
			91.05 mm	100
			0.2987 ft	

Sub-Armor Layer D65= 21.3 mm
D50= 13.1 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	3,315	22%	100%	21.426
31.5	2,872	19%	78%	9.23302
16	2,760	19%	58%	4.41325
9.5	1,374	9%	40%	1.17946
4.75	1,721	12%	31%	0.82557
2	1,723	12%	19%	0.39151
1	572	4%	7%	0.05777
0.425	255	2%	3%	0.01223
0.25	153	1%	2%	0.00348
0.125	62	0%	1%	0.00078
0.063	26	0%	0%	0.00016
0.003	20	0%	0%	4.4E-05
pan	14,853		37.54 mm	
			0.1232 ft	



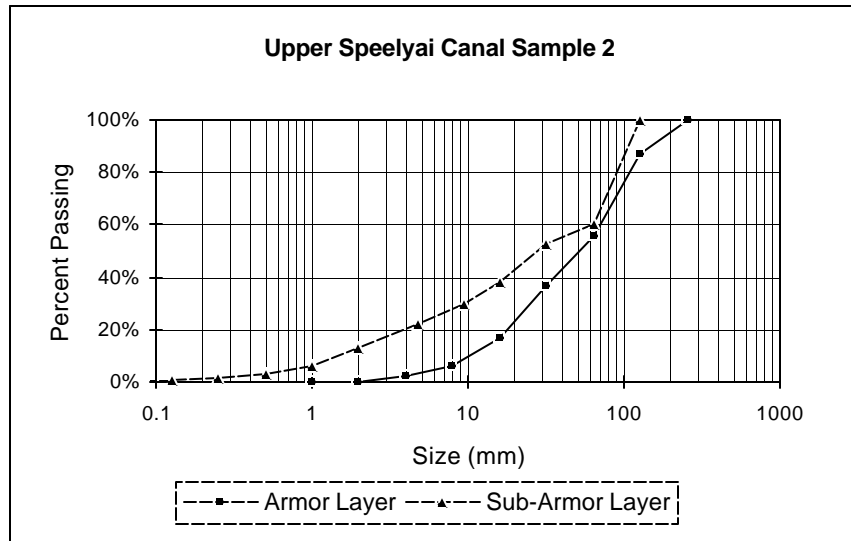
Speelyai Creek - Upper Sediment Samples

Station Upper Speelyai Canal Sample 2

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	0%	0%	0.00	
2	0%	0%	0.00	
4	2%	2%	0.12	2
8	4%	6%	0.48	4
16	11%	17%	2.64	11
32	20%	37%	9.60	20
64	19%	56%	18.24	19
128	31%	87%	59.52	31
256	13%	100%	16.64	13
			107.24 mm	100
			0.3518 ft	

Sub-Armor Layer	D65=	71.5 mm
	D50=	18.4 mm

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	7,630	40%	100%	76.173
64	1,415	7%	60%	7.06323
31.5	2,776	14%	53%	6.89237
16	1,713	9%	39%	2.11542
9.5	1,464	8%	30%	0.97057
4.75	1,686	9%	22%	0.62462
2	1,368	7%	13%	0.24007
1	639	3%	6%	0.04984
0.5	311	2%	3%	0.01213
0.25	153	1%	1%	0.00298
0.125	45	0%	0%	0.00044
0.063	18	0%	0%	8.8E-05
0.003	14	0%	0%	2.4E-05
pan	19,232			94.14 mm
				0.3089 ft



Speelyai Creek - Upper Sediment Samples

Station Upper Speelyai Canal Sample 3

Armor Layer Size (mm)	Percent	Cum %	Dg	No.
1	1%	1%	0.01	1
2	1%	2%	0.03	1
4	2%	4%	0.11	2
8	8%	12%	0.99	9
16	12%	24%	2.86	13
32	23%	47%	11.01	25
64	23%	70%	22.02	25
128	28%	98%	54.61	31
256	2%	100%	2.35	2
			93.98 mm	109
			0.3083 ft	

Sub-Armor Layer

Size (mm)	Weight (g)	Percent	Cum %	Avg size
128	0	0%	100%	0
64	1,159	8%	100%	8.07431
31.5	3,399	25%	92%	11.7781
16	2,428	18%	67%	4.18469
9.5	1,690	12%	49%	1.56368
4.75	1,779	13%	37%	0.91984
2	1,755	13%	24%	0.42983
1	910	7%	11%	0.09906
0.5	377	3%	5%	0.02052
0.25	148	1%	2%	0.00403
0.125	60	0%	1%	0.00082
0.063	36	0%	1%	0.00025
0.003	39	0%	0%	9.3E-05
pan	13,780		27.08 mm	
			0.0888 ft	

