

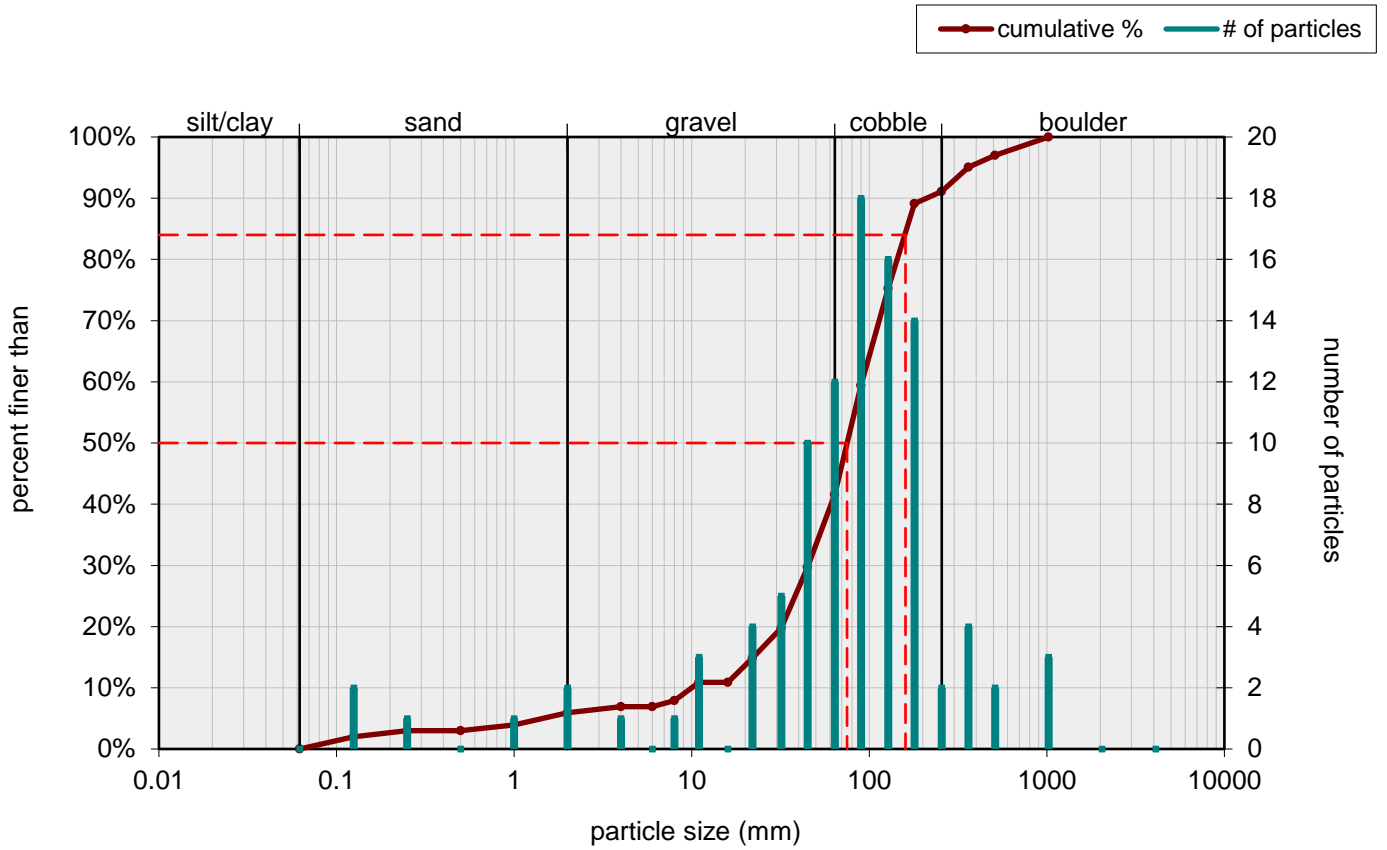
**SUPPLEMENTAL INFORMATION**

**FACTORS INFLUENCING OCCUPANCY AND DETECTION PROBABILITY OF LARVAL  
*CRYPTOBRANCHUS A. ALLEGANIENSIS* IN NORTH CAROLINA, USA**

*SHEM D. UNGER, LORI A. WILLIAMS, JOHN D. GROVES, AND CHARLES R. LAWSON*

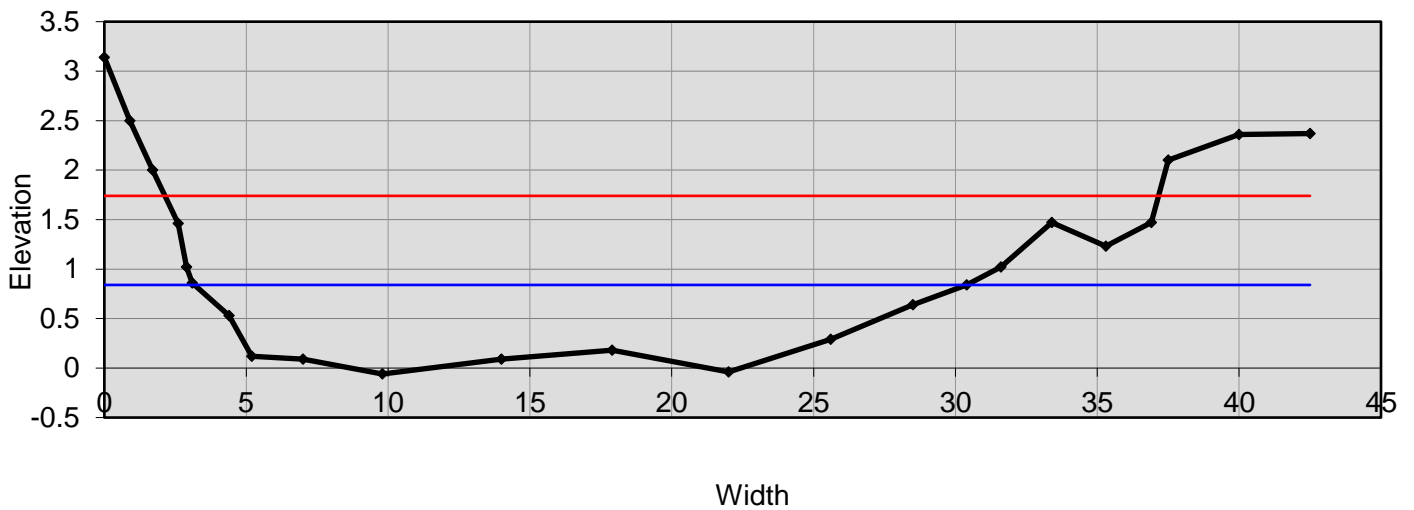
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### Site 1 (FB) Bed Surface Pebble Count

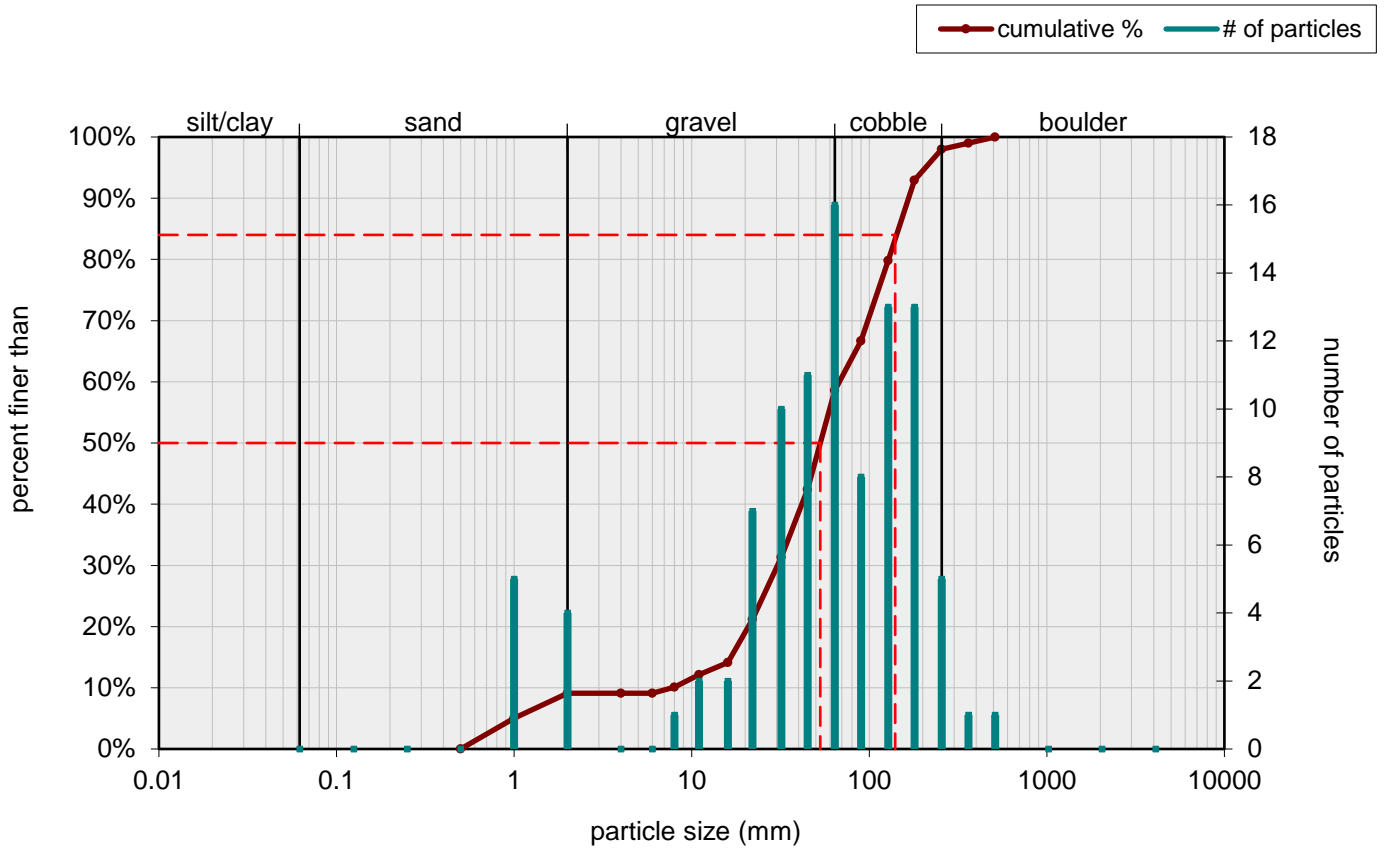


Size (mm)	Size Distribution	Type
D16 24	mean 62.0	silt/clay 0%
D35 53	dispersion 2.6	sand 6%
D50 75	skewness -0.09	gravel 36%
D65 100		cobble 50%
D84 160		boulder 9%
D95 360		

### Site 1, Riffle

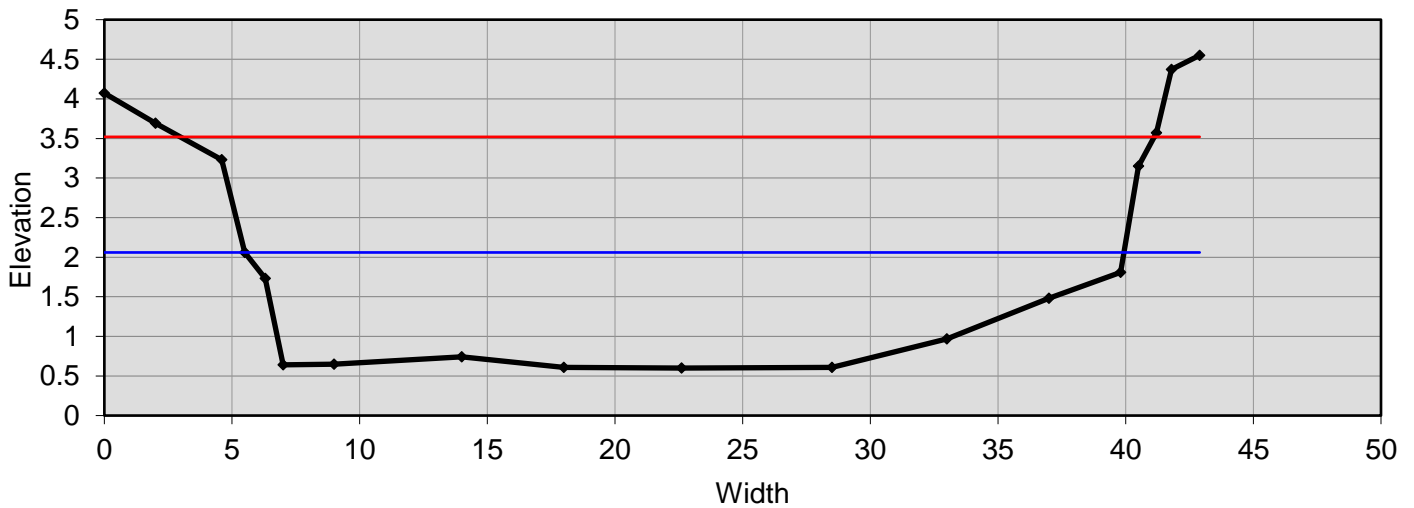


### Site 2 (FB) Bed Surface Pebble Count

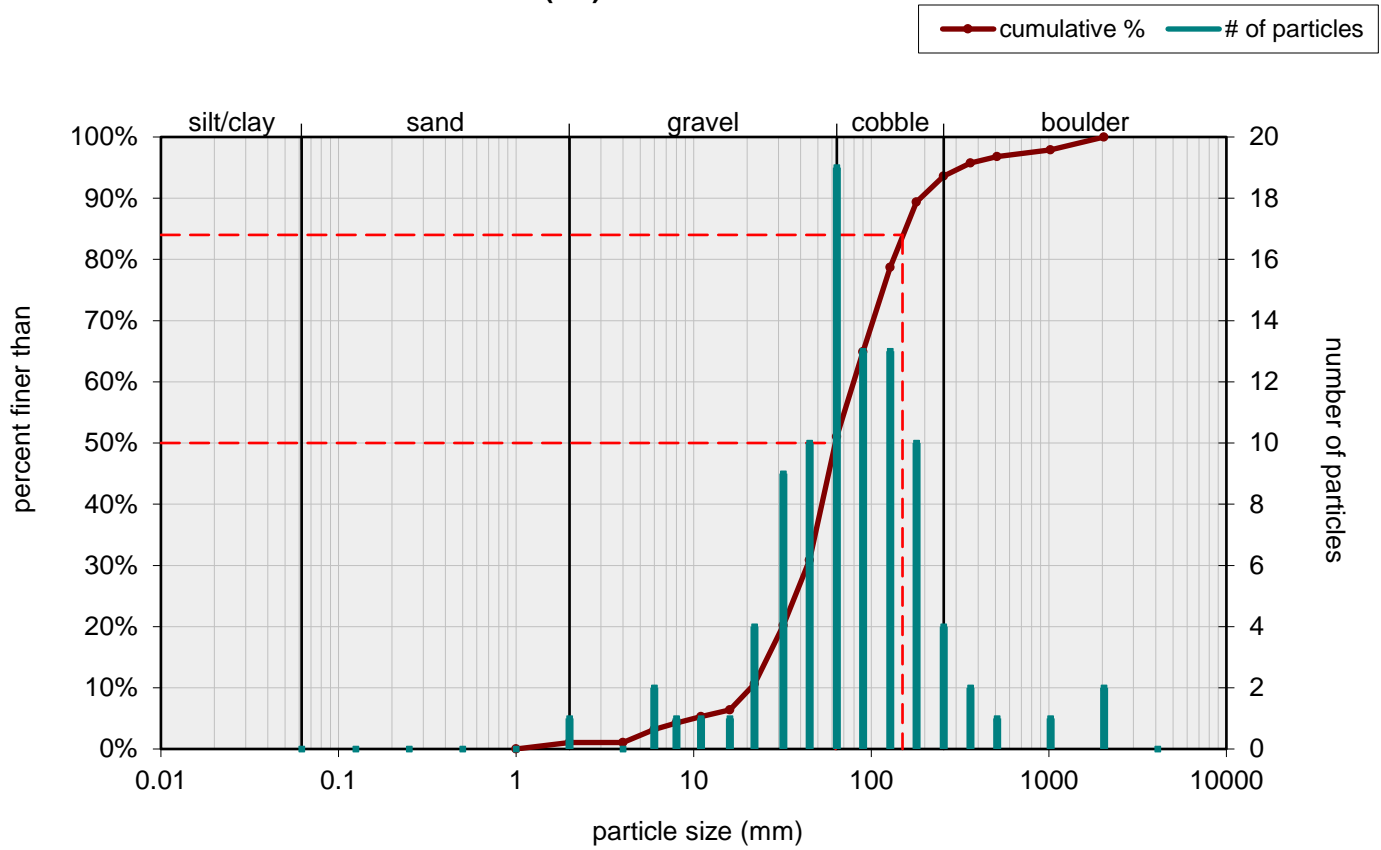


Size (mm)		Size Distribution		Type	
D16	17	mean	48.8	silt/clay	0%
D35	36	dispersion	2.9	sand	9%
D50	53	skewness	-0.04	gravel	47%
D65	84			cobble	37%
D84	140			boulder	2%
D95	210			bedrock	6%

### Site 2, Glide

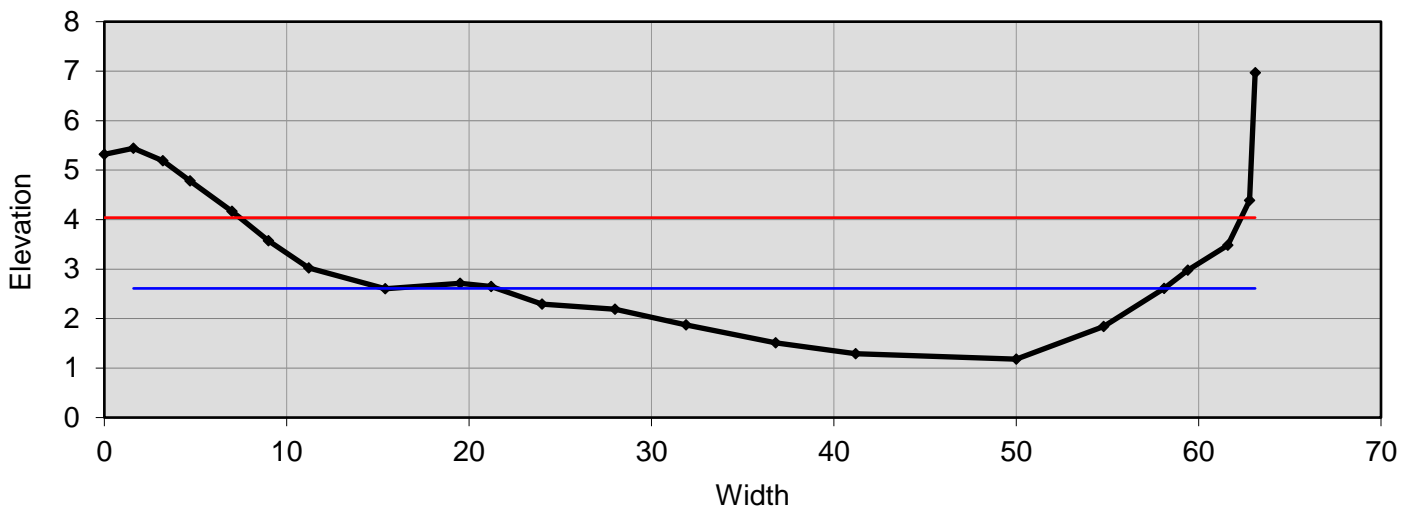


### Site 3 (FB) Bed Surface Pebble Count

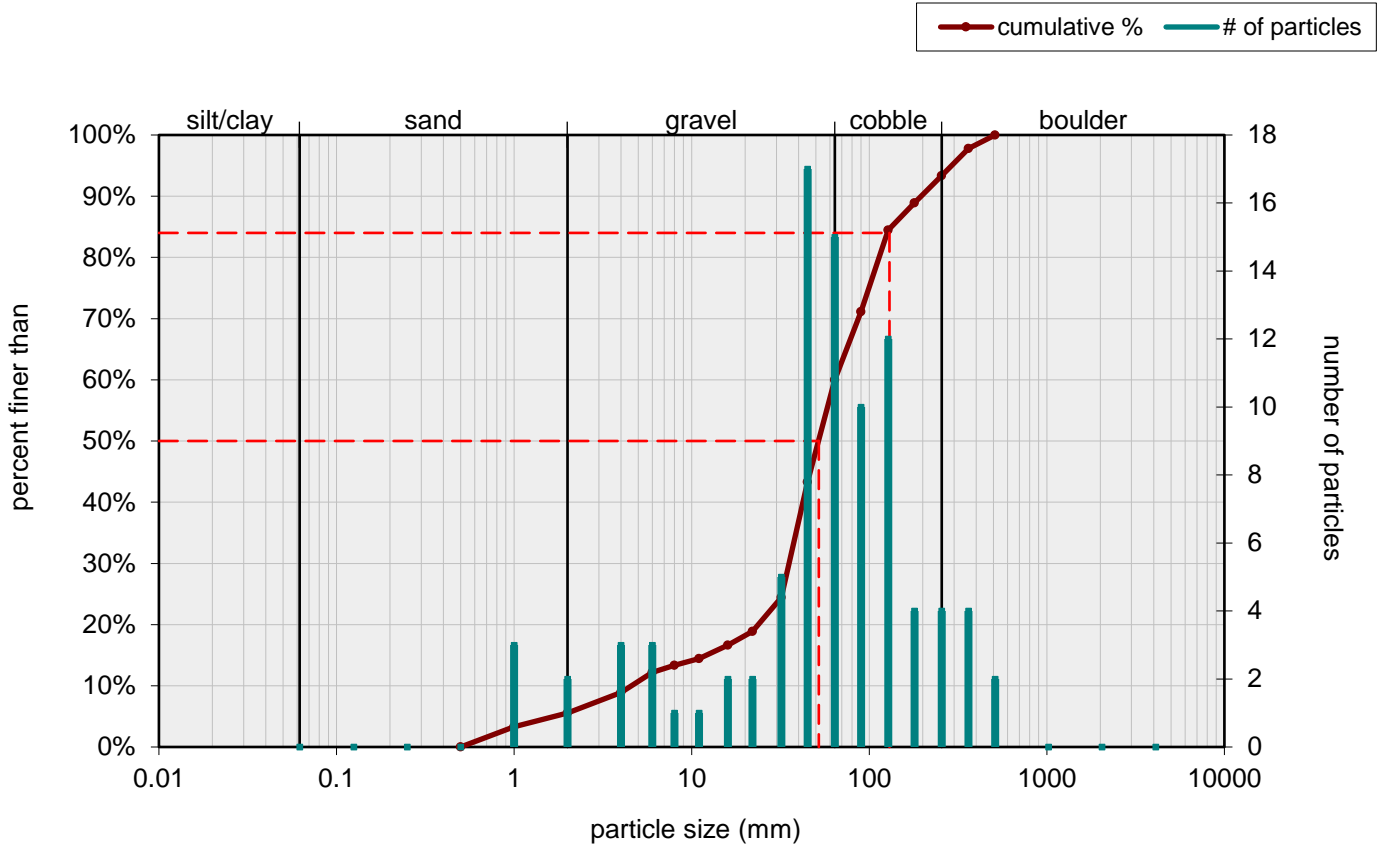


Size (mm)		Size Distribution		Type	
D16	27	mean	63.6	silt/clay	0%
D35	48	dispersion	2.4	sand	1%
D50	63	skewness	0.01	gravel	47%
D65	90			cobble	40%
D84	150			boulder	6%
D95	320			bedrock	6%

### Site 3, Riffle

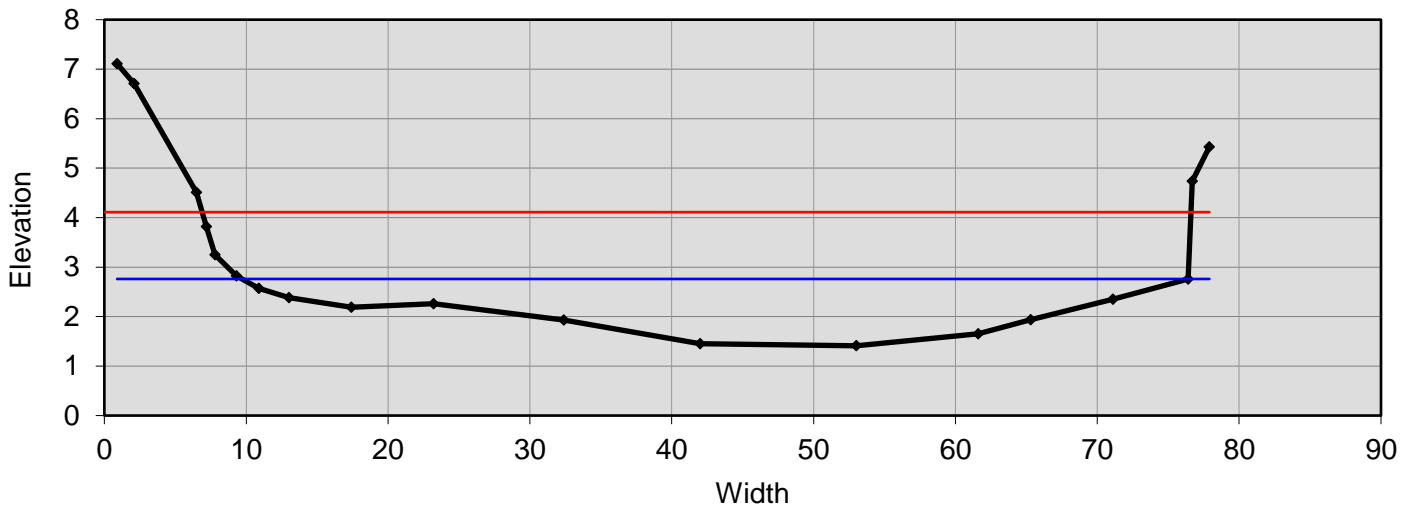


### Site 4 (FB) Bed Surface Pebble Count

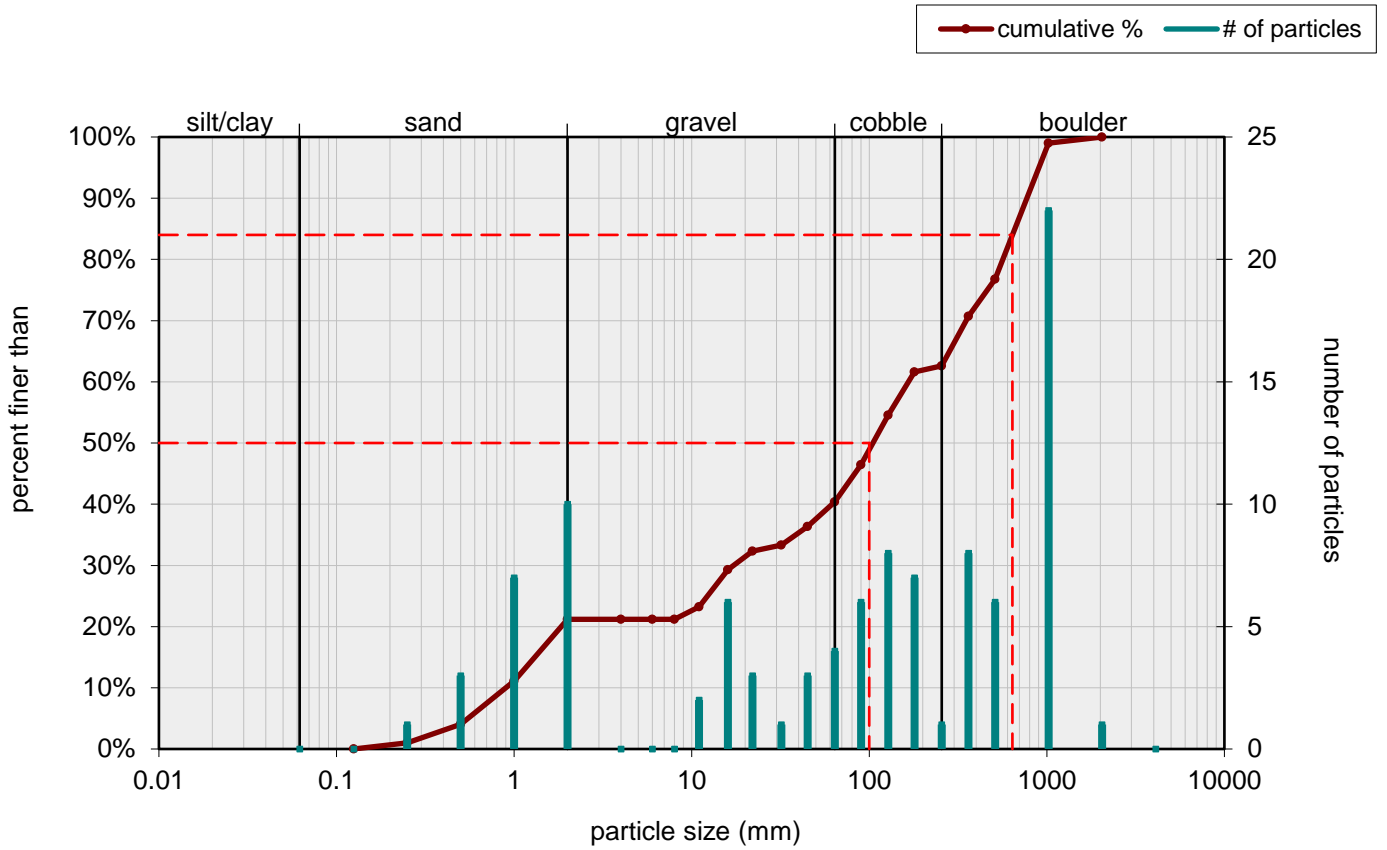


Size (mm)	Size Distribution	Type
D16	mean 42.7	silt/clay 0%
D35	dispersion 3.1	sand 6%
D50	skewness -0.09	gravel 54%
D65		cobble 33%
D84		boulder 7%
D95		

### Site 4, Run

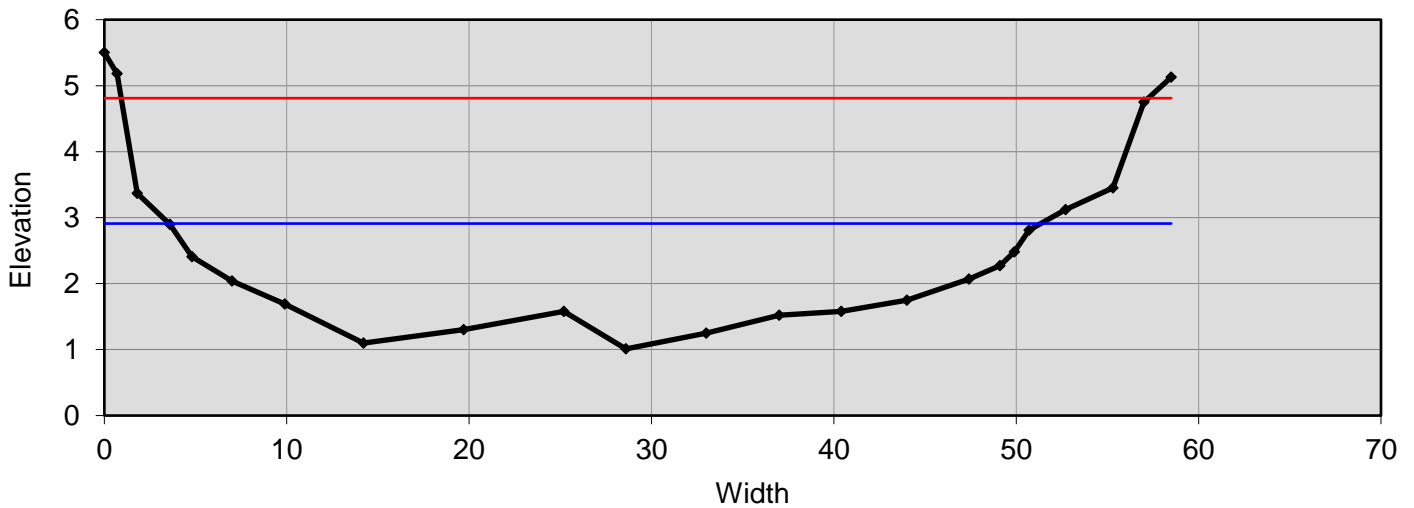


### Site 5 (FB) Bed Surface Pebble Count

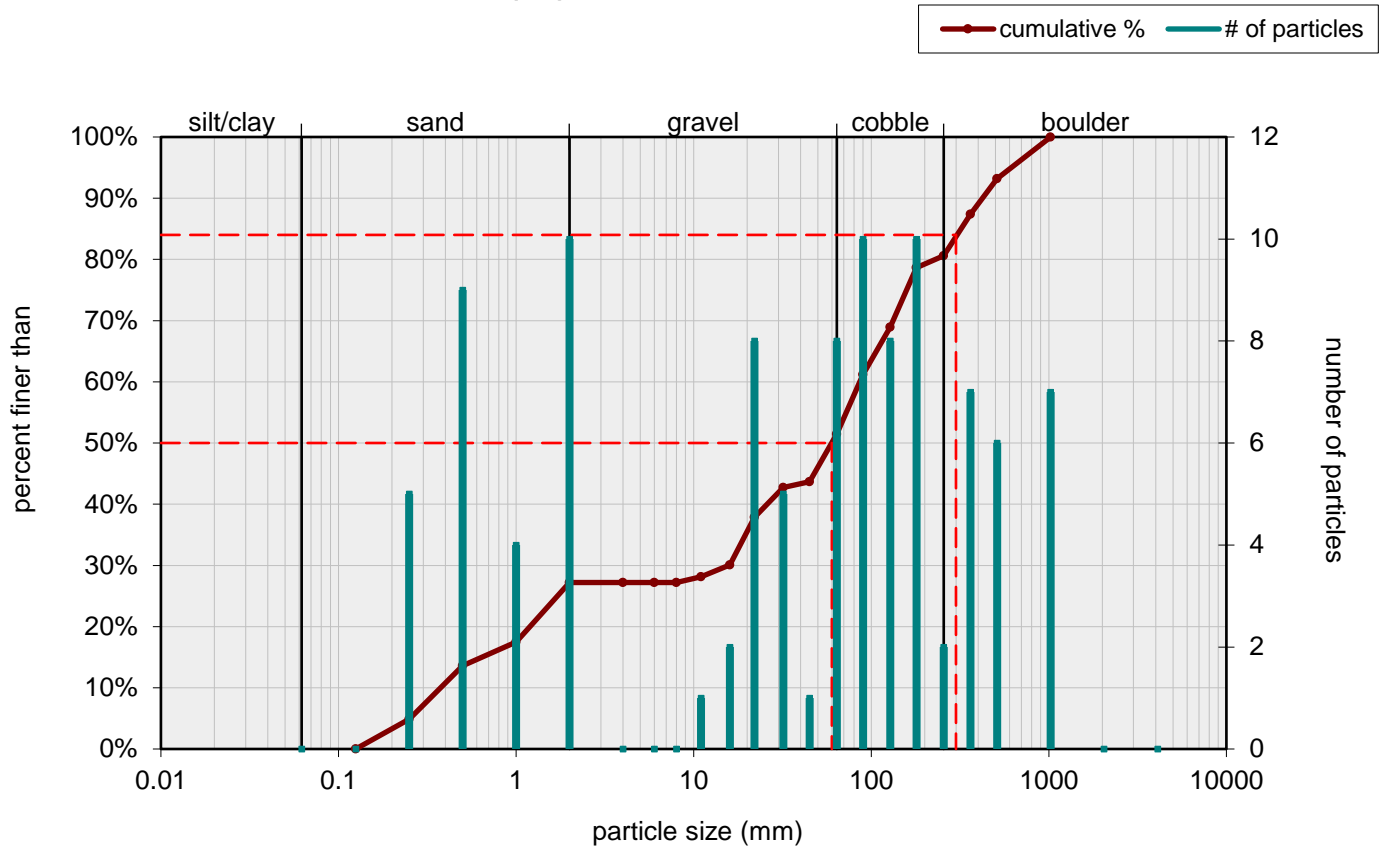


Size (mm)		Size Distribution		Type	
D16	1.4	mean	29.9	silt/clay	0%
D35	39	dispersion	38.9	sand	21%
D50	100	skewness	-0.32	gravel	19%
D65	280			cobble	22%
D84	640			boulder	37%
D95	900			bedrock	1%

### Site 5, Riffle

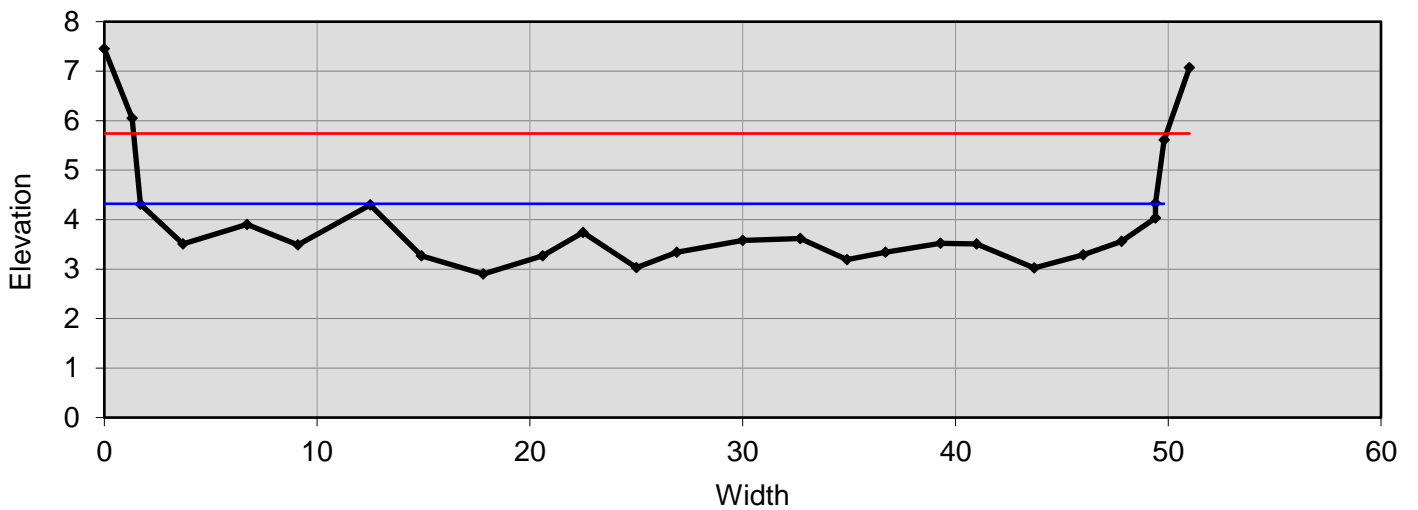


### Site 6 (FB) Bed Surface Pebble Count

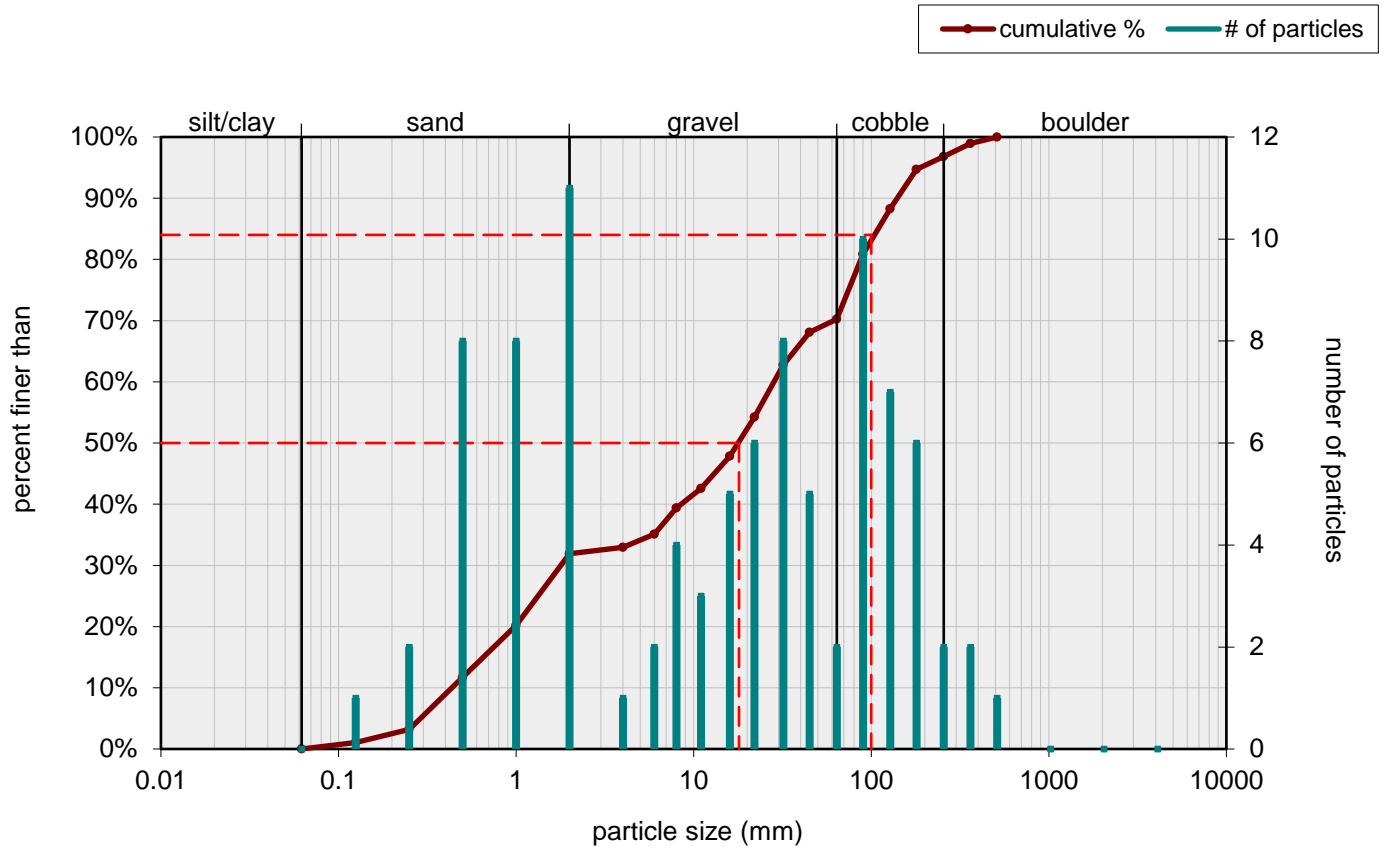


Size (mm)	Size Distribution	Type
D16 0.77	mean 15.2	silt/clay 0%
D35 20	dispersion 41.5	sand 27%
D50 60	skewness -0.37	gravel 24%
D65 110		cobble 29%
D84 300		boulder 19%
D95 610		

### Site 6, Riffle

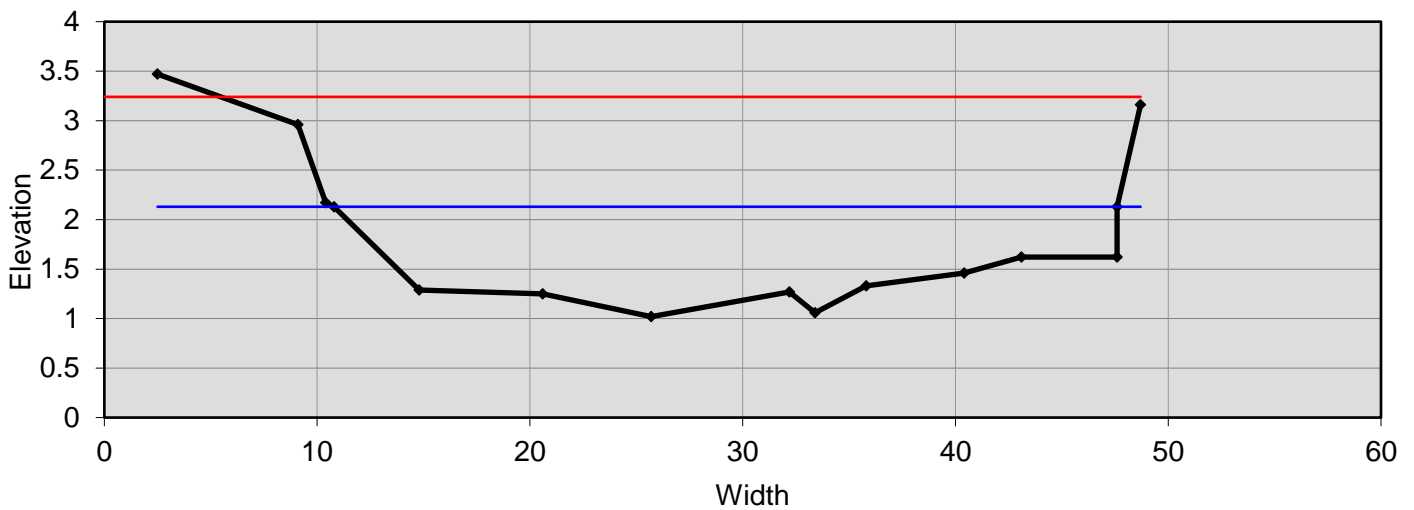


### Site 7 (FB) Bed Surface Pebble Count



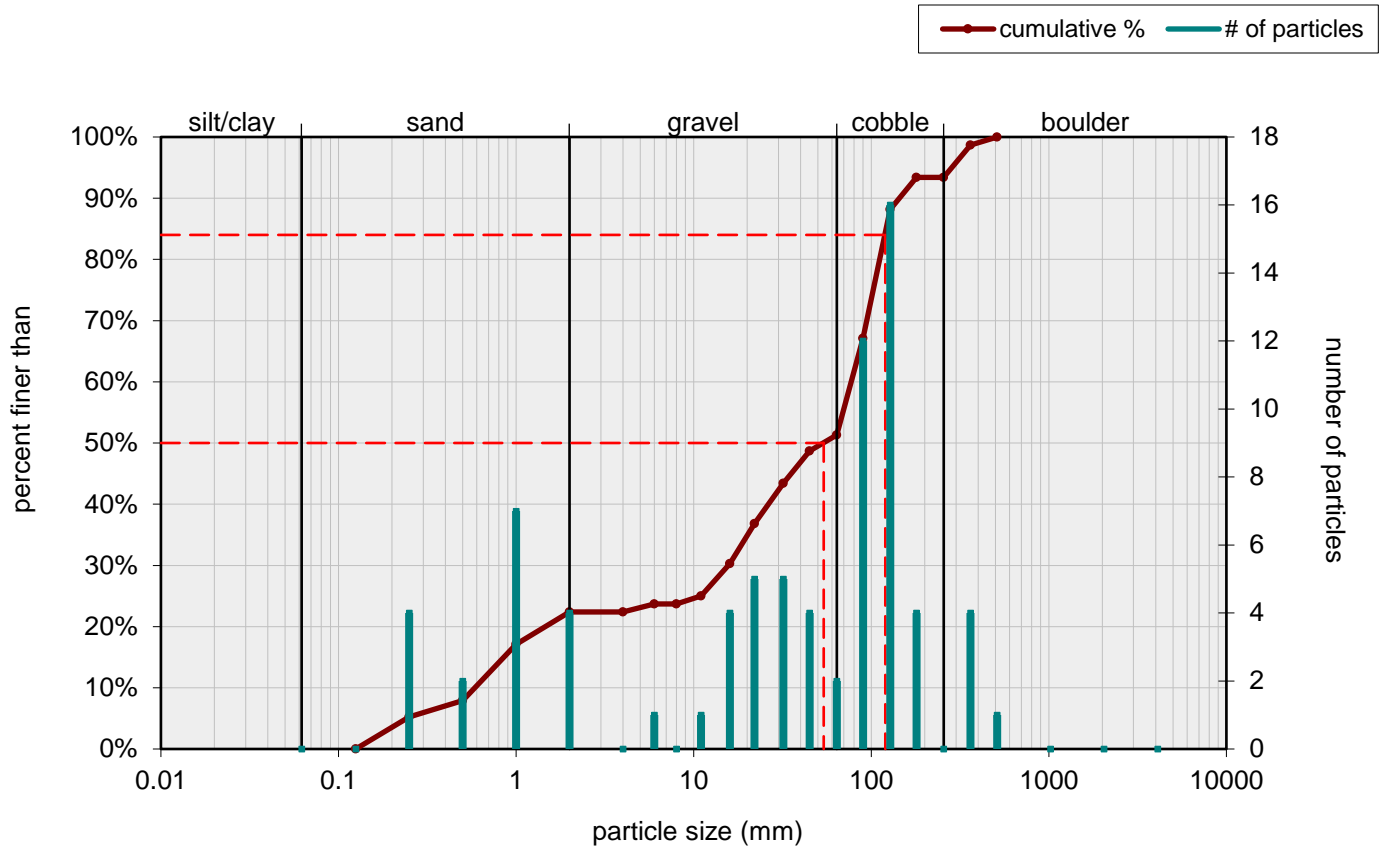
Size (mm)	Size Distribution		Type
D16 0.71	mean	8.4	silt/clay 0%
D35 5.9	dispersion	15.5	sand 29%
D50 18	skewness	-0.22	gravel 35%
D65 37			cobble 25%
D84 100			boulder 3%
D95 190			bedrock 8%

### Site 7, Riffle



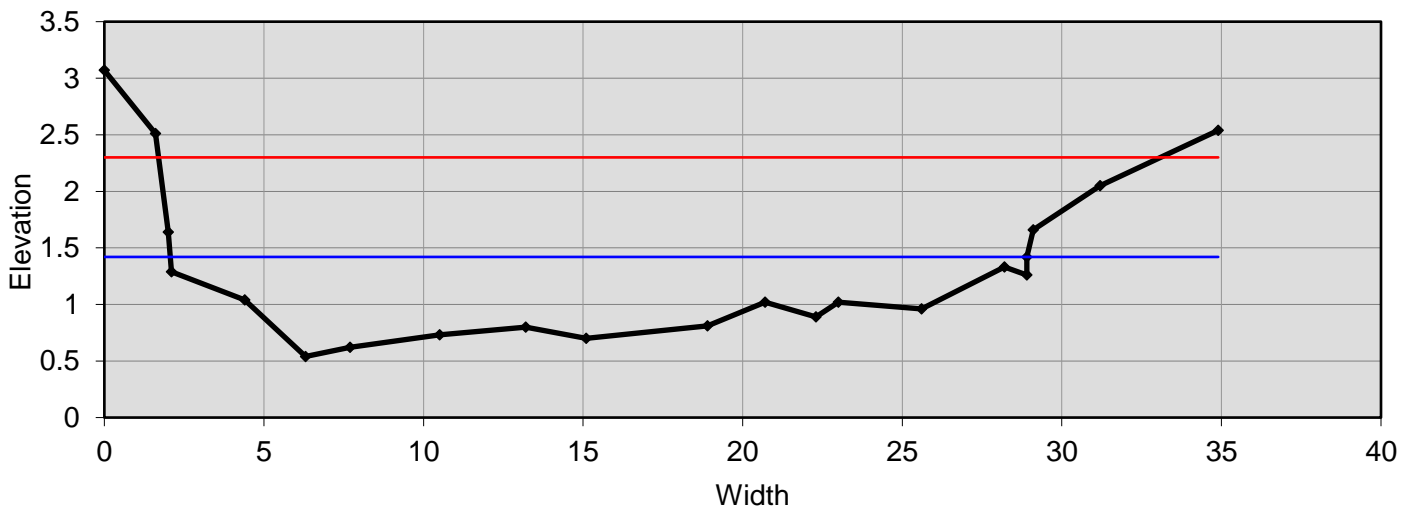


### Site 8 (FB) Bed Surface Pebble Count

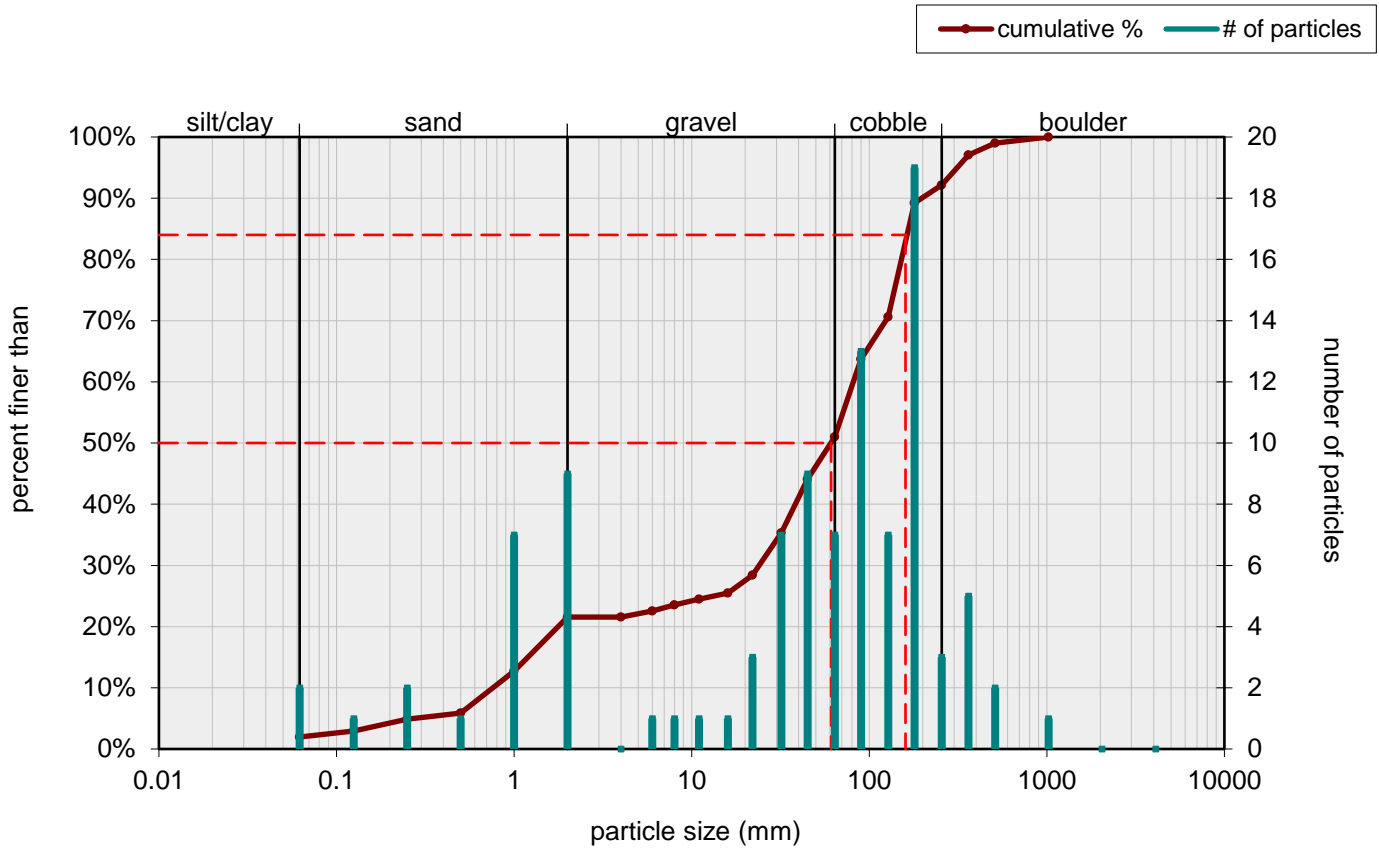


Size (mm)	Size Distribution	Type
D16 0.92	mean 10.5	silt/clay 0%
D35 20	dispersion 30.5	sand 17%
D50 54	skewness -0.49	gravel 22%
D65 86		cobble 32%
D84 120		boulder 5%
D95 280		bedrock 24%

### Site 8, Riffle

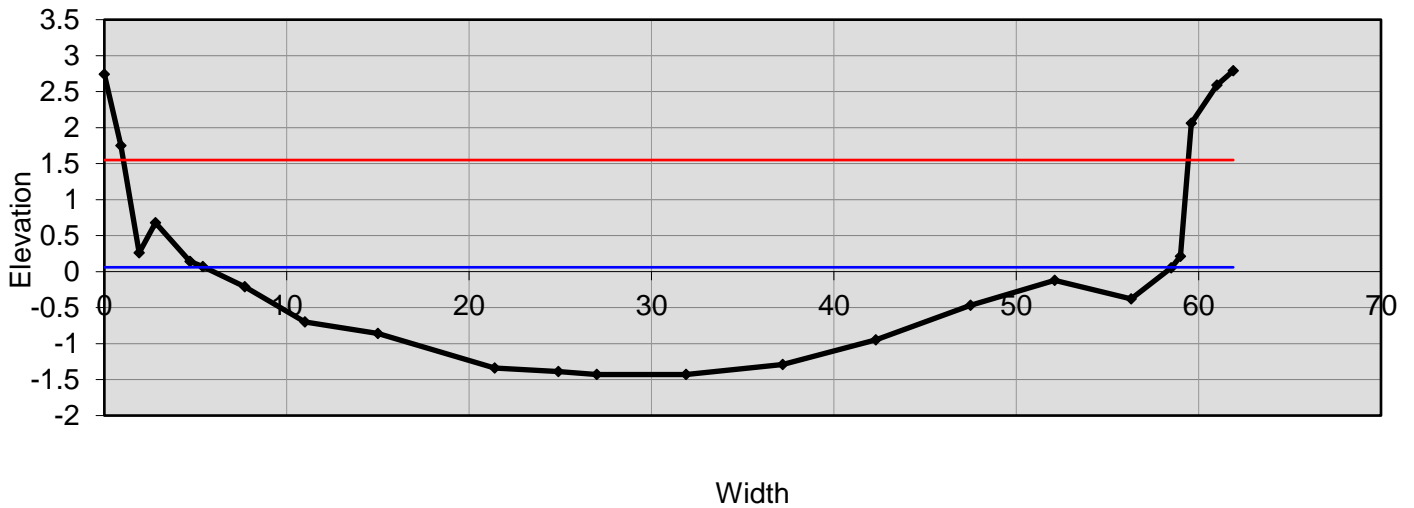


### Site 9 (FB) Bed Surface Pebble Count

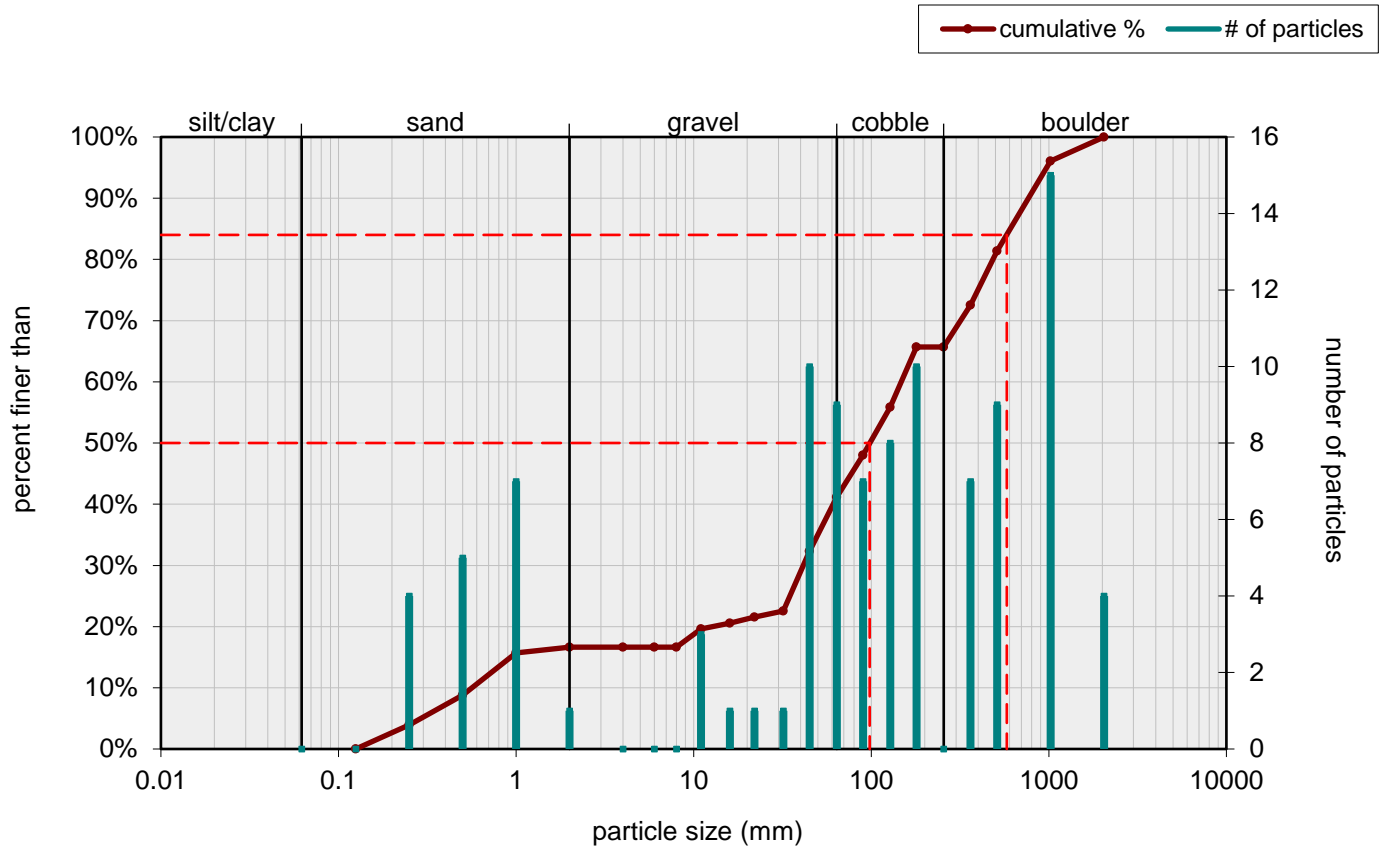


Size (mm)		Size Distribution		Type	
D16	1.3	mean	14.4	silt/clay	2%
D35	31	dispersion	24.8	sand	20%
D50	61	skewness	-0.43	gravel	29%
D65	96			cobble	41%
D84	160			boulder	8%
D95	310				

### Site 9, Riffle

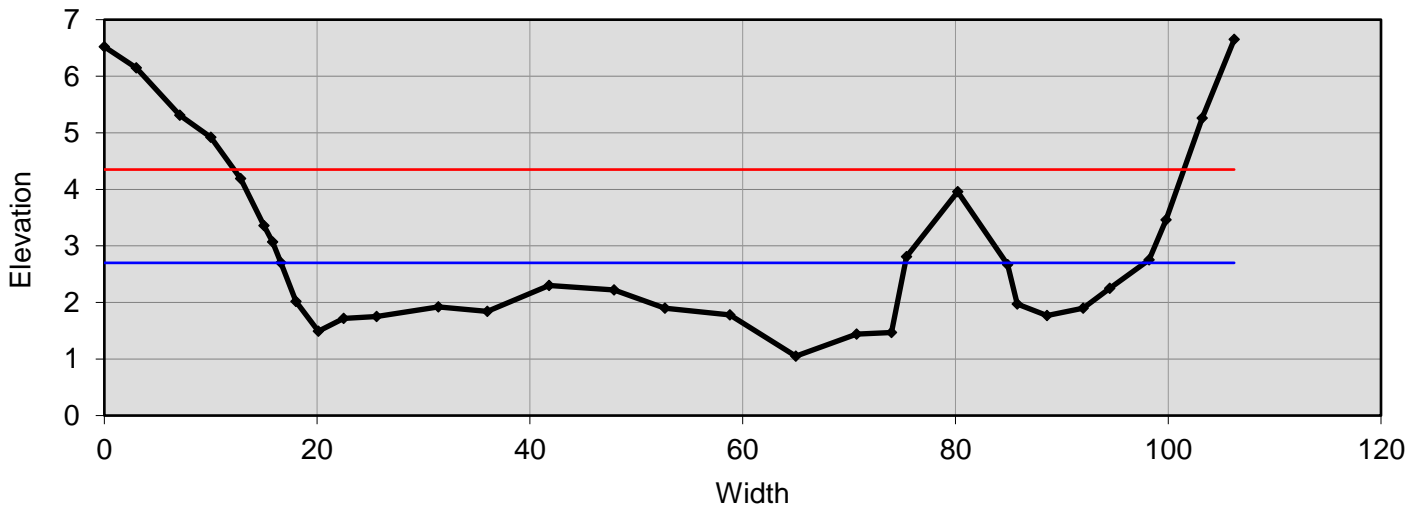


### Site 10 (FB) Bed Surface Pebble Count

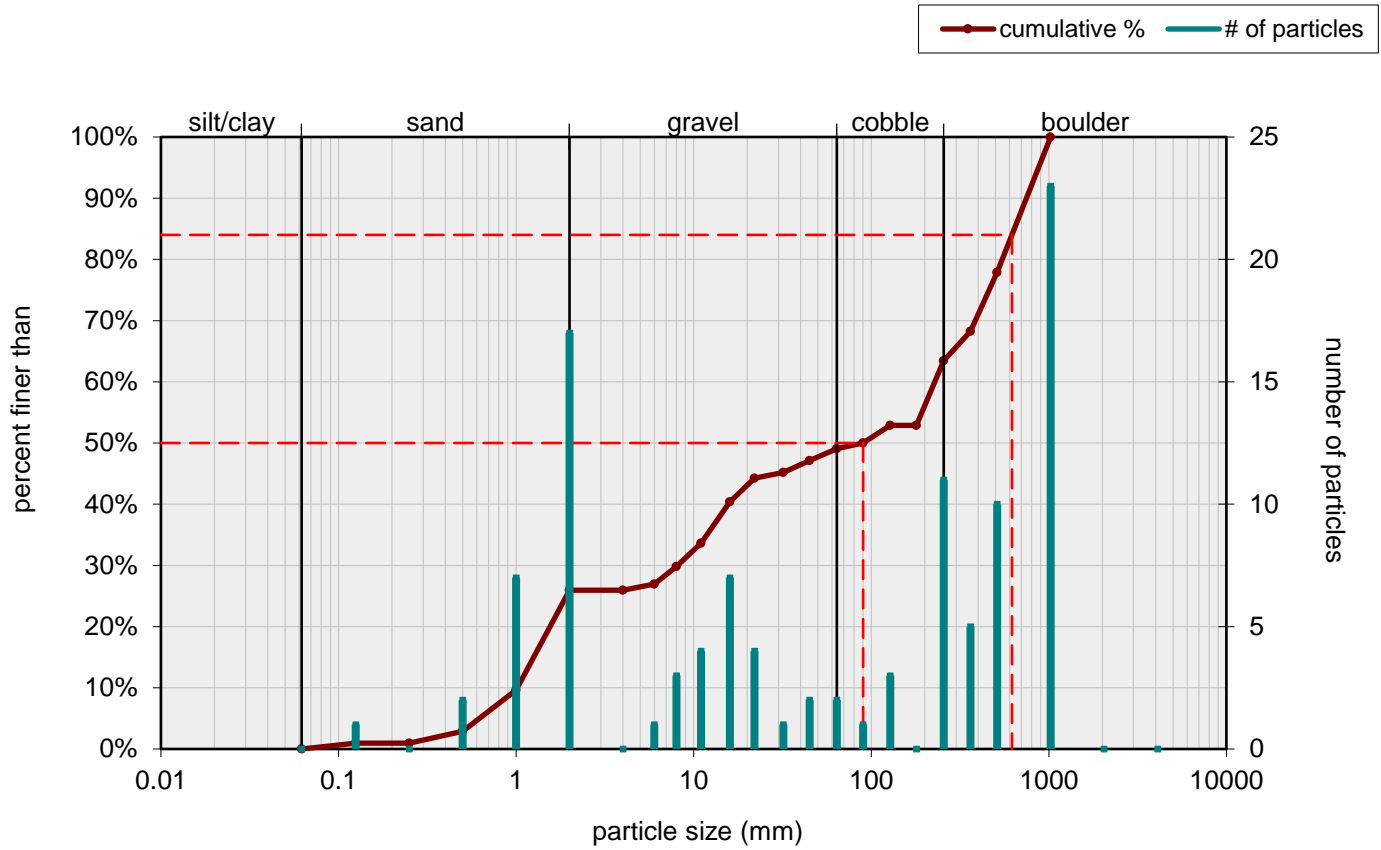


Size (mm)		Size Distribution		Type	
D16	1.2	mean	26.4	silt/clay	0%
D35	50	dispersion	43.8	sand	17%
D50	98	skewness	-0.35	gravel	24%
D65	180			cobble	24%
D84	580			boulder	34%
D95	970			bedrock	1%

### Site 10, Run

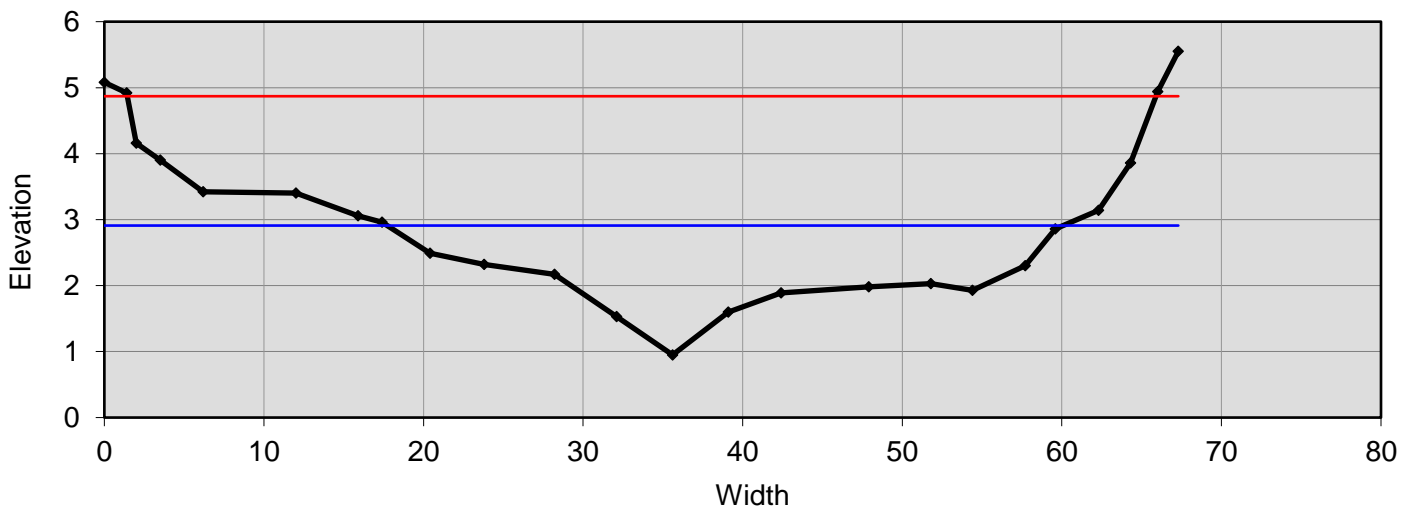


### Site 11 (FB) Bed Surface Pebble Count

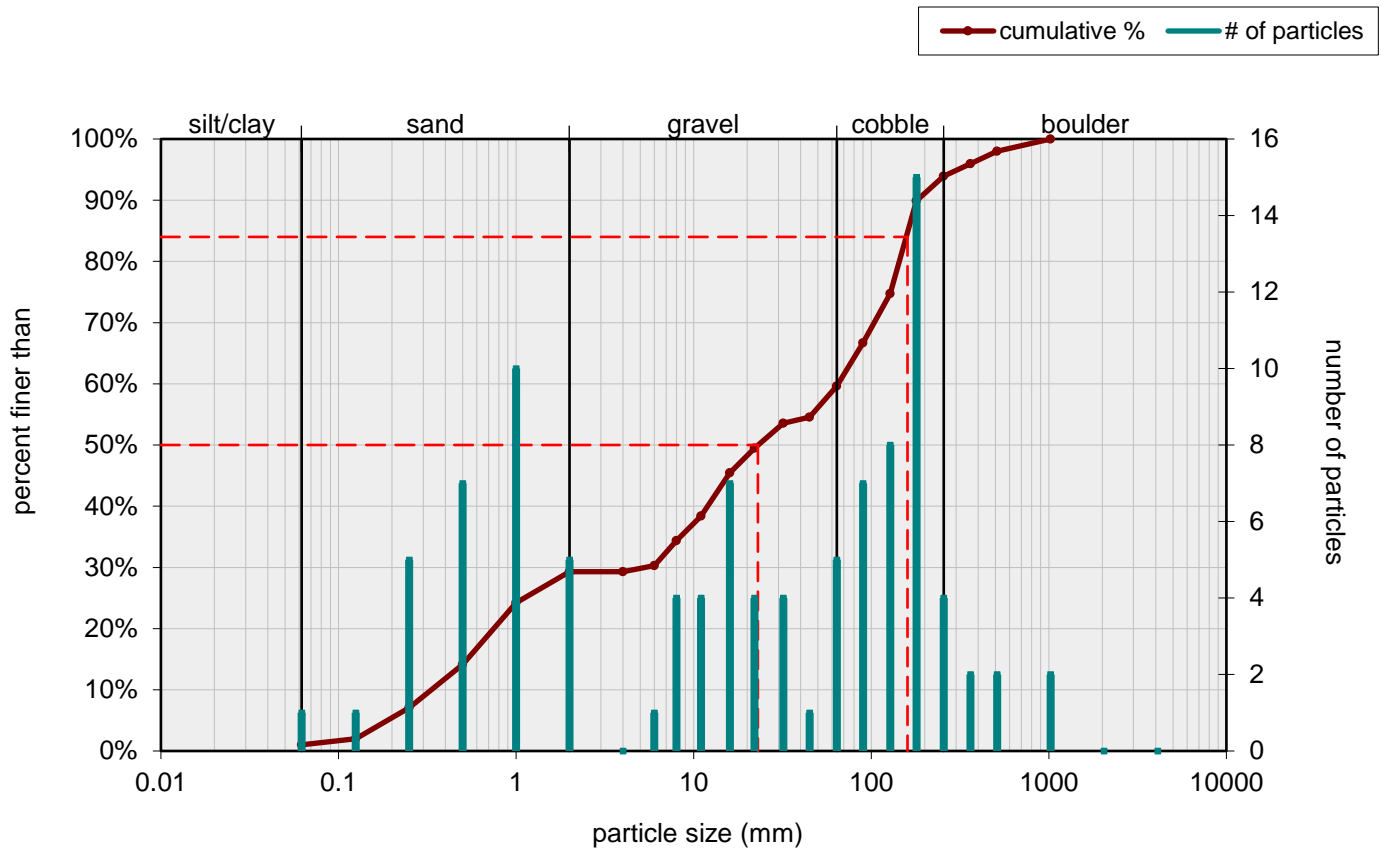


Size (mm)	Size Distribution		Type		
D16	1.3	mean	28.4	silt/clay	0%
D35	12	dispersion	38.1	sand	25%
D50	90	skewness	-0.31	gravel	23%
D65	290			cobble	14%
D84	620			boulder	36%
D95	880			bedrock	2%

### Site 11, Riffle

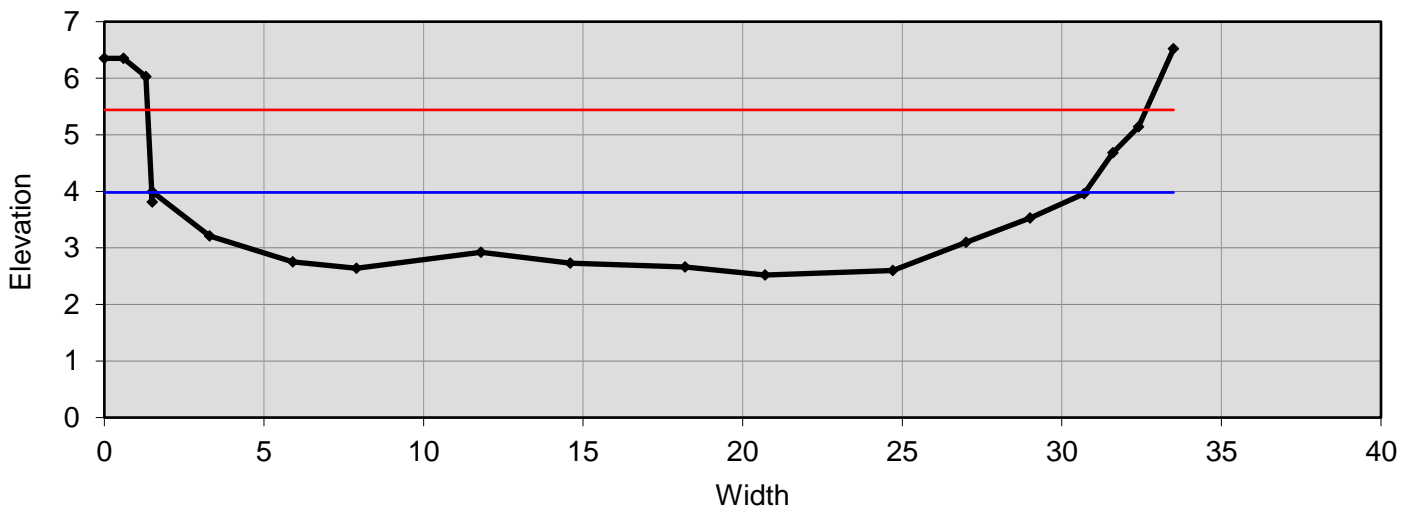


### Site 12 (FB) Bed Surface Pebble Count

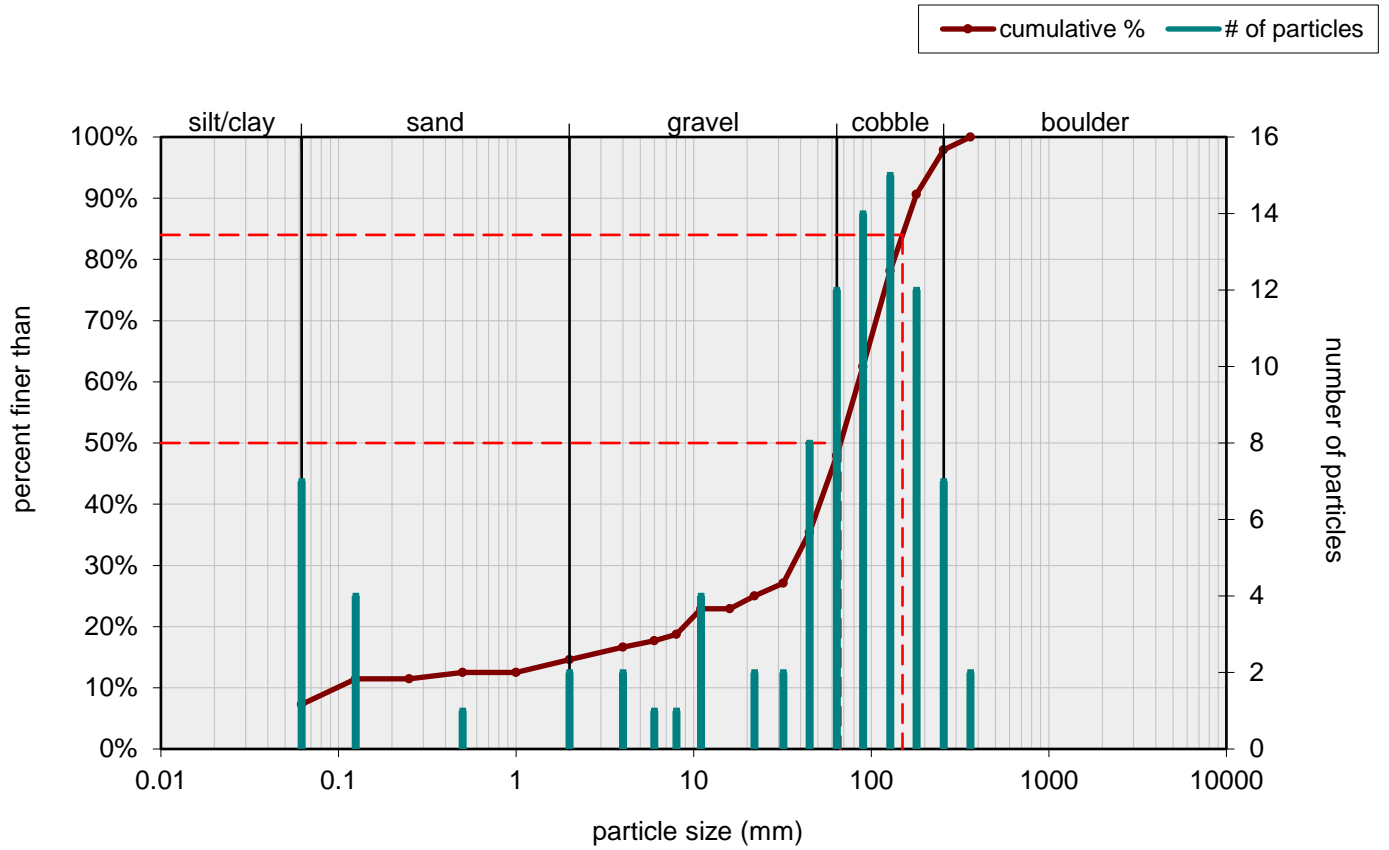


Size (mm)		Size Distribution		Type	
D16	0.57	mean	9.5	silt/clay	1%
D35	8.4	dispersion	23.7	sand	28%
D50	23	skewness	-0.24	gravel	30%
D65	83			cobble	34%
D84	160			boulder	6%
D95	310			bedrock	1%

### Site 12, Riffle

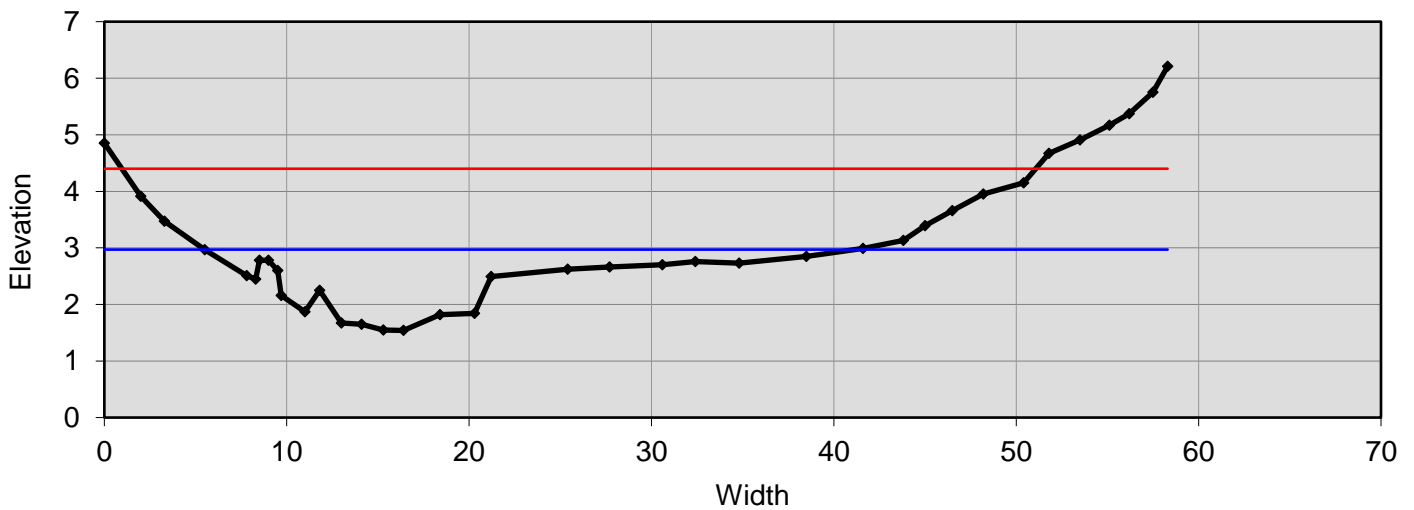


### Site 13 (FB) Bed Surface Pebble Count

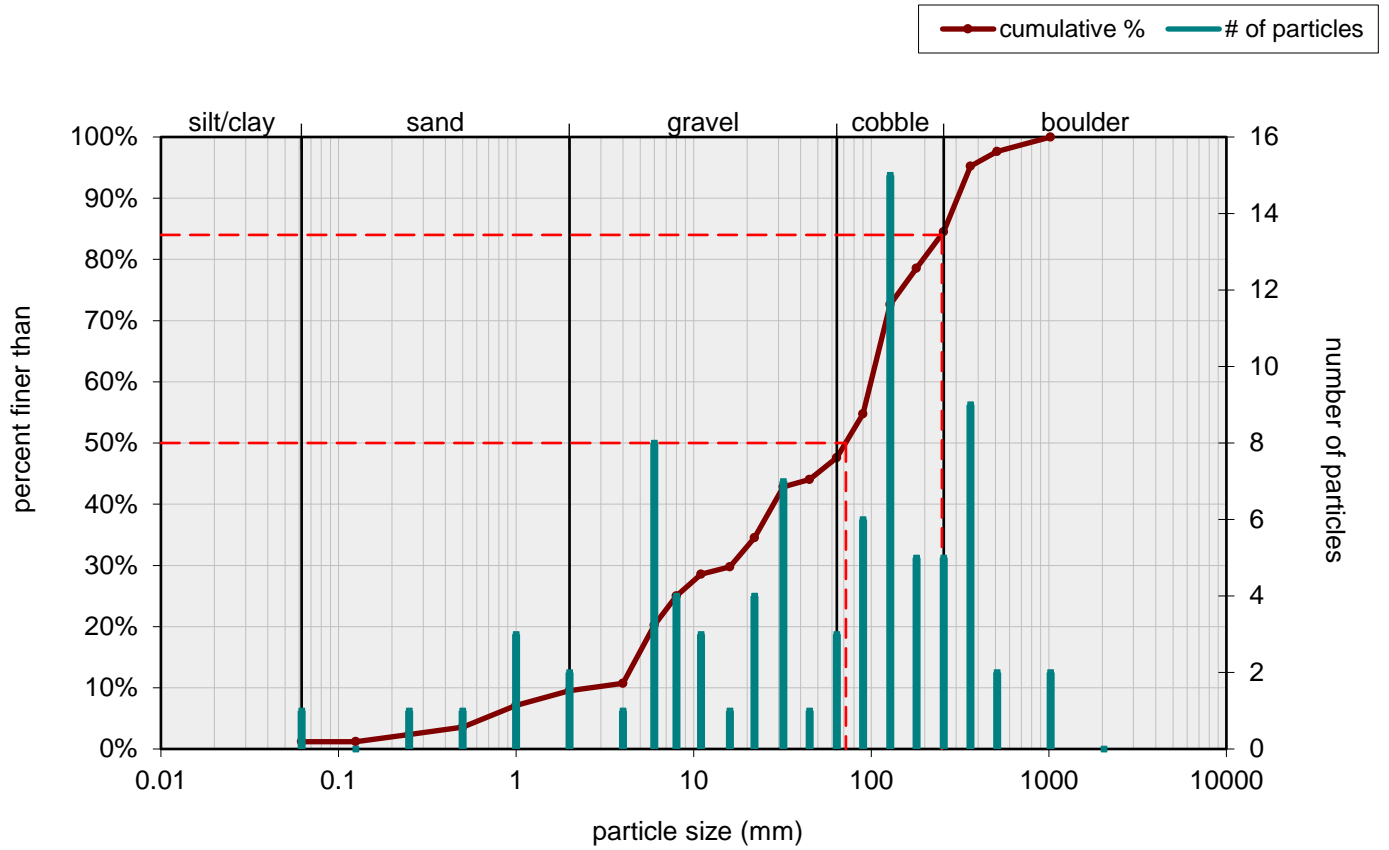


Size (mm)		Size Distribution		Type	
D16	3.2	mean	21.9	silt/clay	7%
D35	44	dispersion	11.6	sand	7%
D50	67	skewness	-0.38	gravel	32%
D65	95			cobble	48%
D84	150			boulder	2%
D95	220			bedrock	5%

### Site 13, Riffle

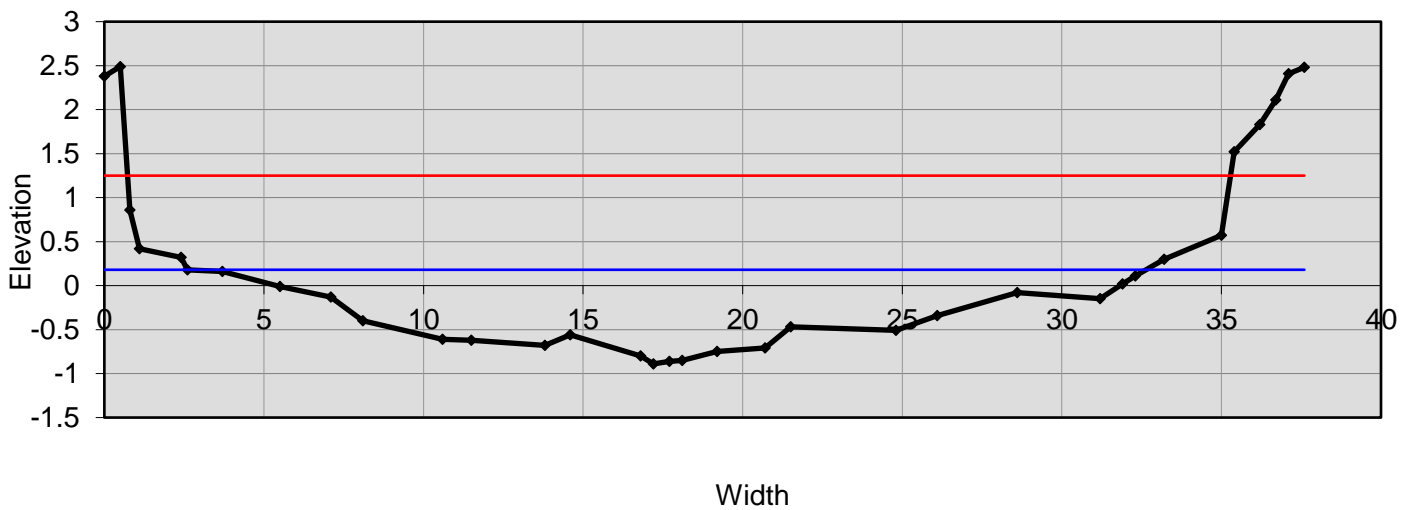


### Site 14 (FB) Bed Surface Pebble Count

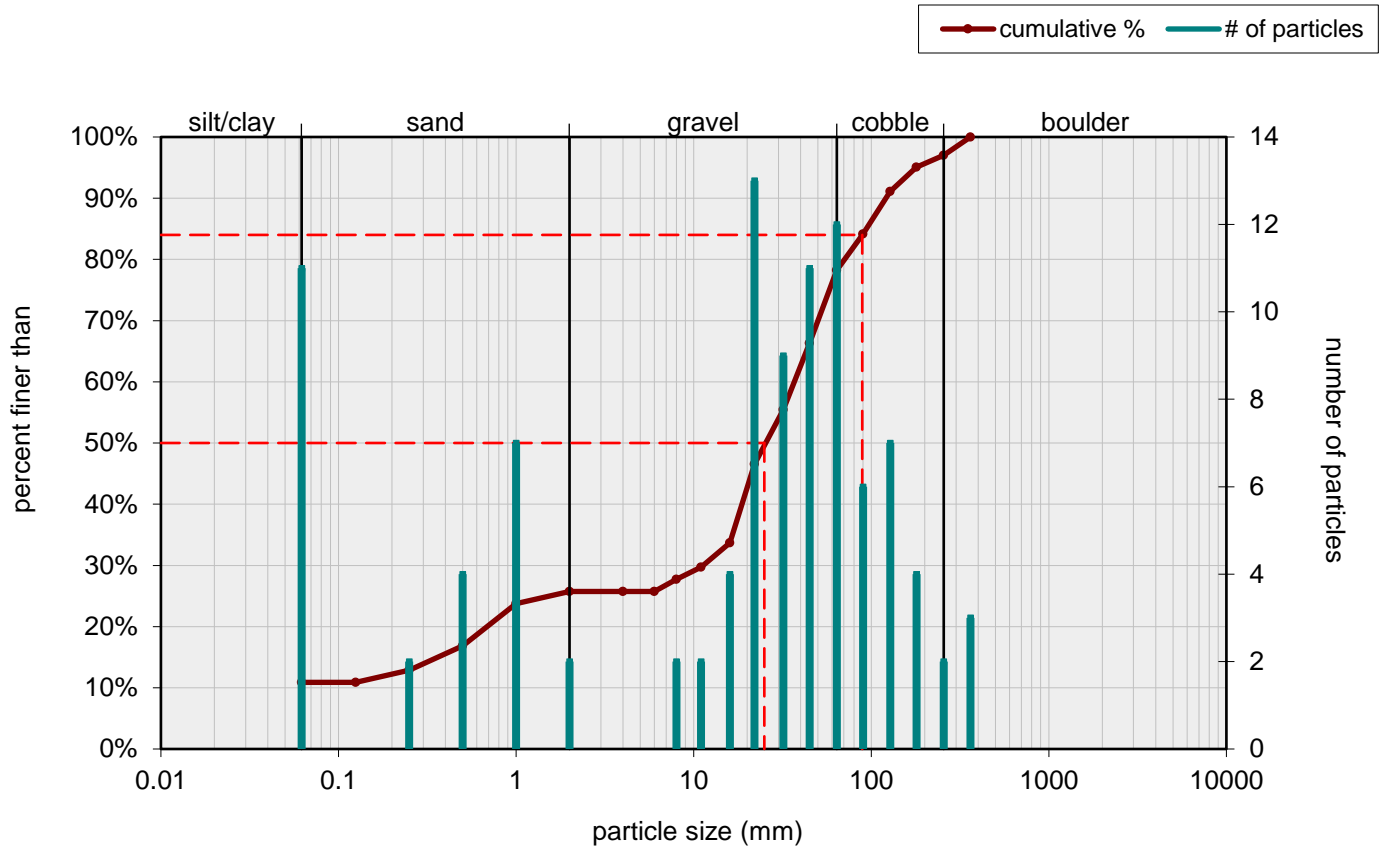


Size (mm)	Size Distribution	Type
D16 5	mean 35.4	silt/clay 1%
D35 22	dispersion 8.9	sand 7%
D50 72	skewness -0.24	gravel 31%
D65 110		cobble 30%
D84 250		boulder 13%
D95 360		Bedrock 18%

### Site 14, Riffle

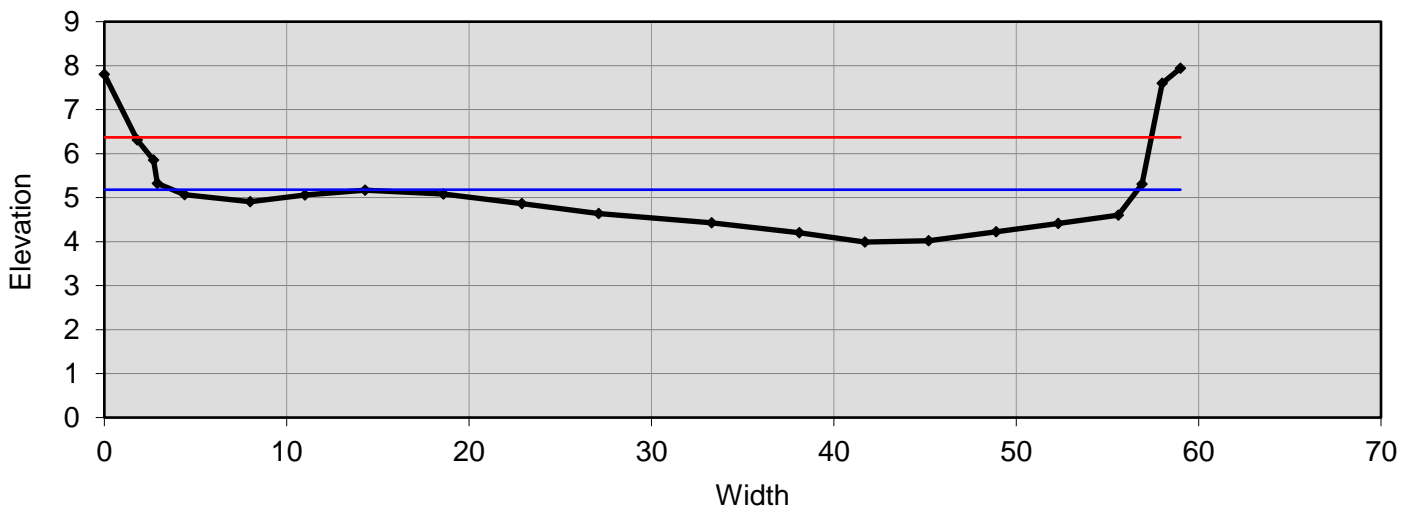


### Site 15 (Hiw) Bed Surface Pebble Count



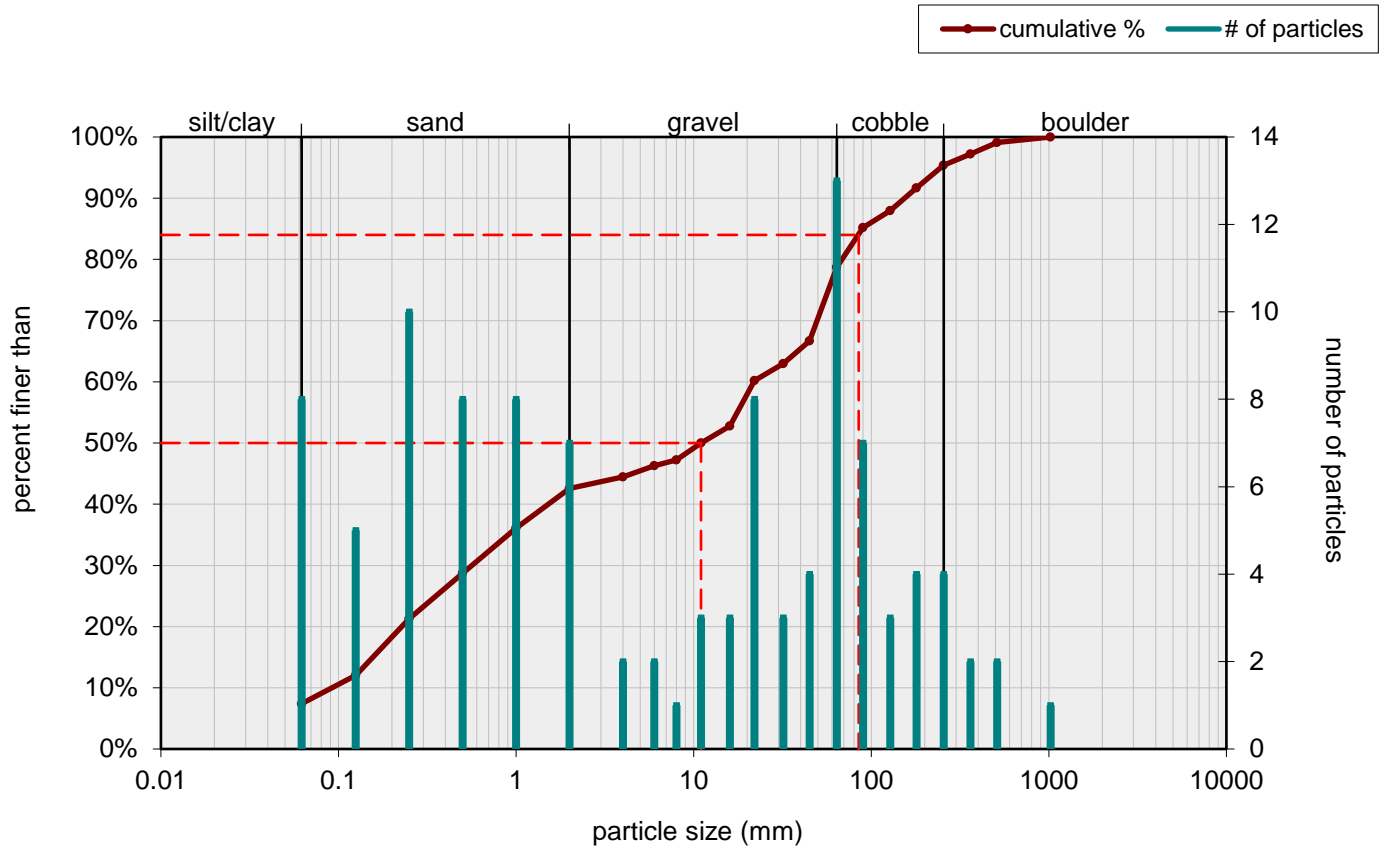
Size (mm)	Size Distribution	Type
D16 0.43	mean 6.2	silt/clay 11%
D35 17	dispersion 30.8	sand 15%
D50 25	skewness -0.40	gravel 52%
D65 43		cobble 19%
D84 89		boulder 3%
D95 180		

### Site 15, Riffle





### Site 16 (Hiw) Bed Surface Pebble Count

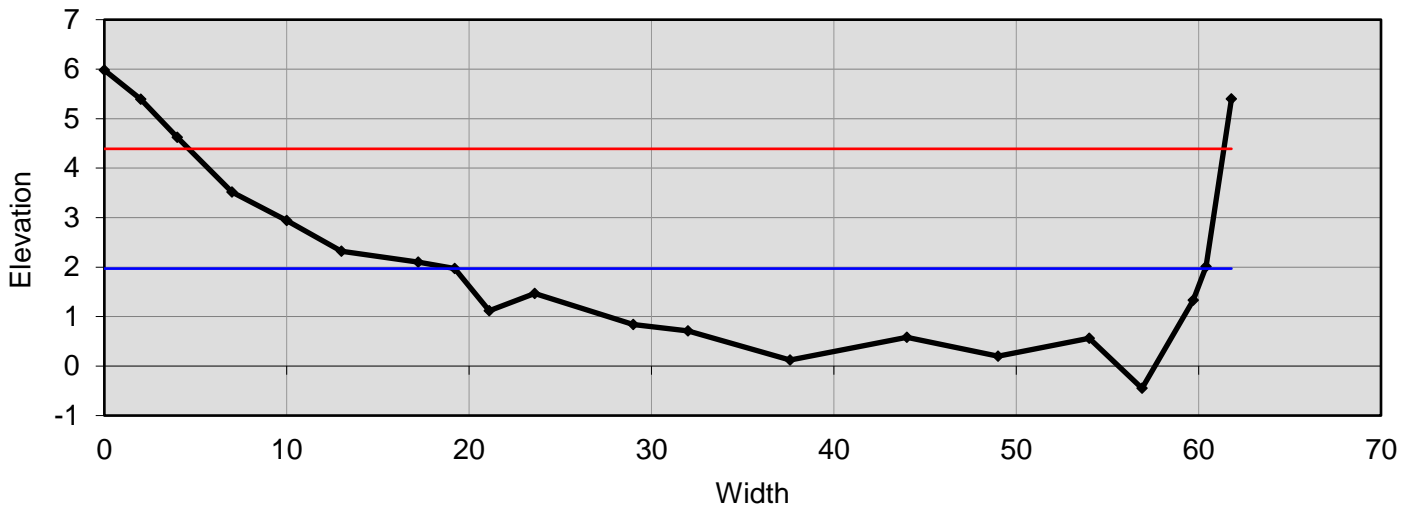


Size (mm)	Size Distribution	Type
D16	0.17	silt/clay 7%
D35	0.9	sand 35%
D50	11	gravel 36%
D65	39	cobble 17%
D84	85	boulder 5%
D95	250	bedrock 1%

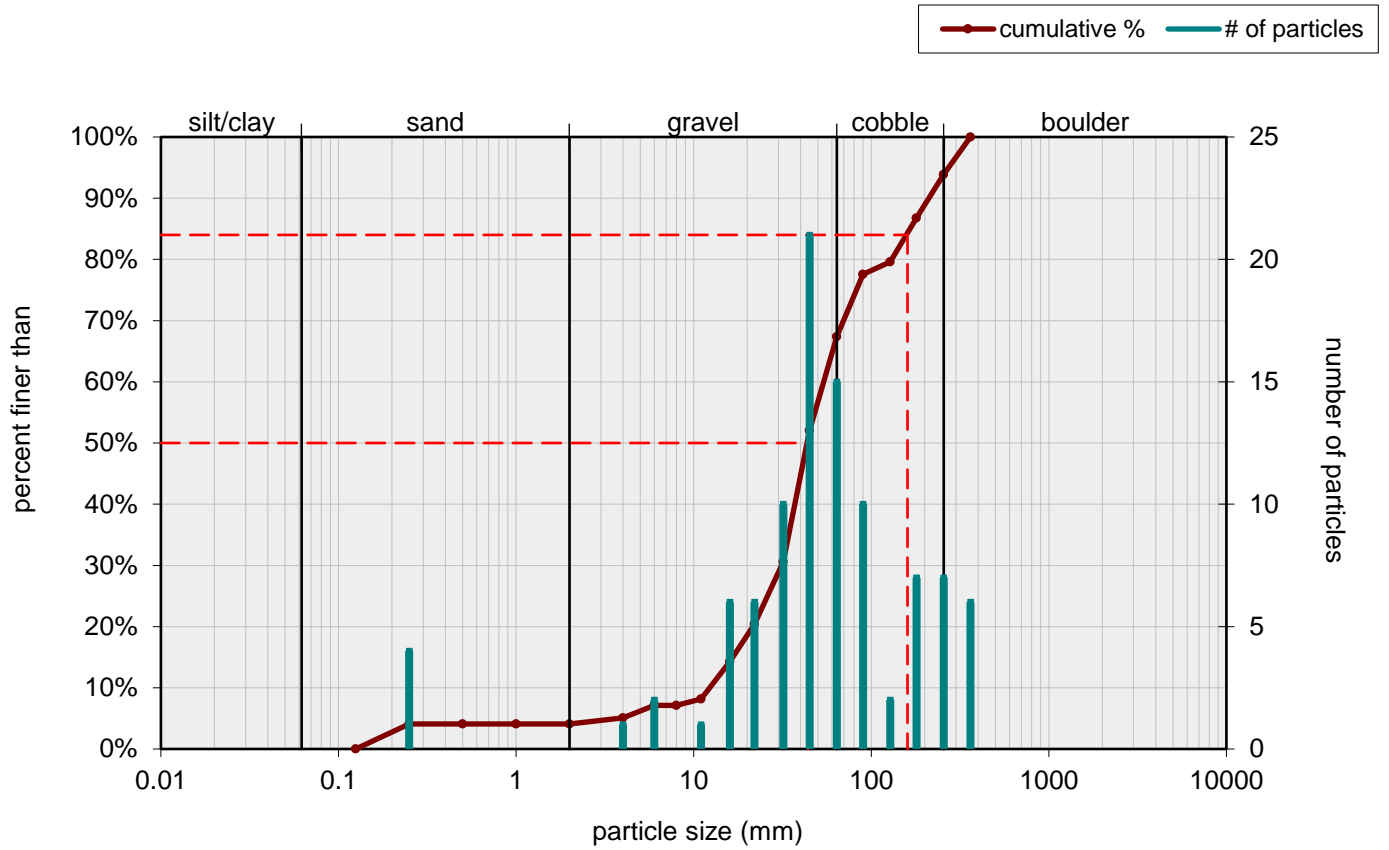
  

Size Distribution	
mean	3.8
dispersion	36.2
skewness	-0.28

### Site 16, Riffle

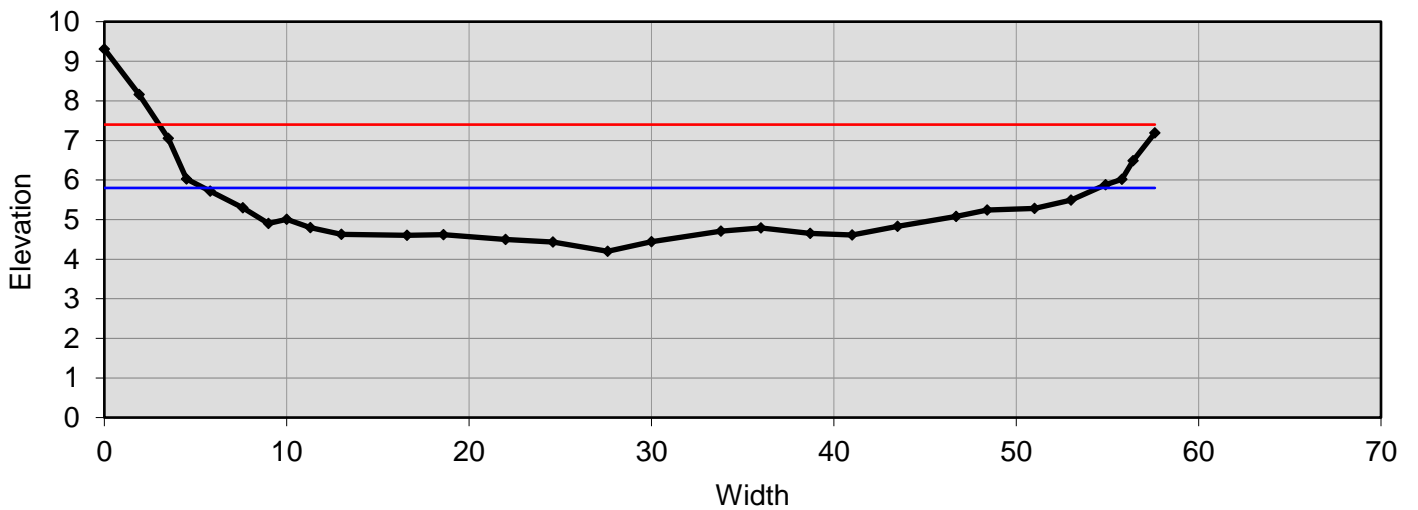


### Site 17 (Hiw) Bed Surface Pebble Count

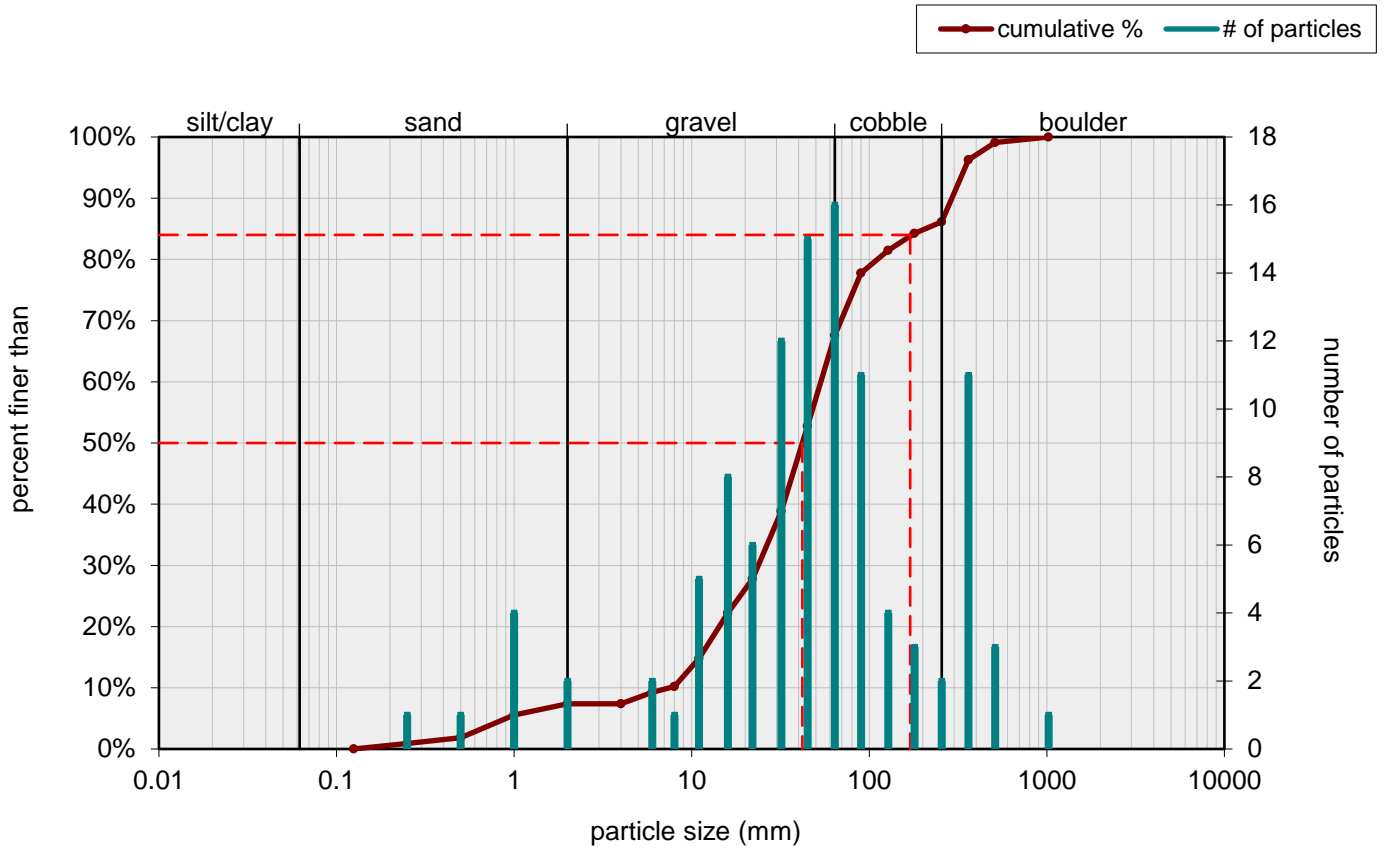


Size (mm)	Size Distribution	Type
D16	mean 52.2	silt/clay 0%
D35	dispersion 3.1	sand 4%
D50	skewness 0.07	gravel 61%
D65		cobble 26%
D84		boulder 6%
D95		bedrock 3%

### Site 17, Riffle

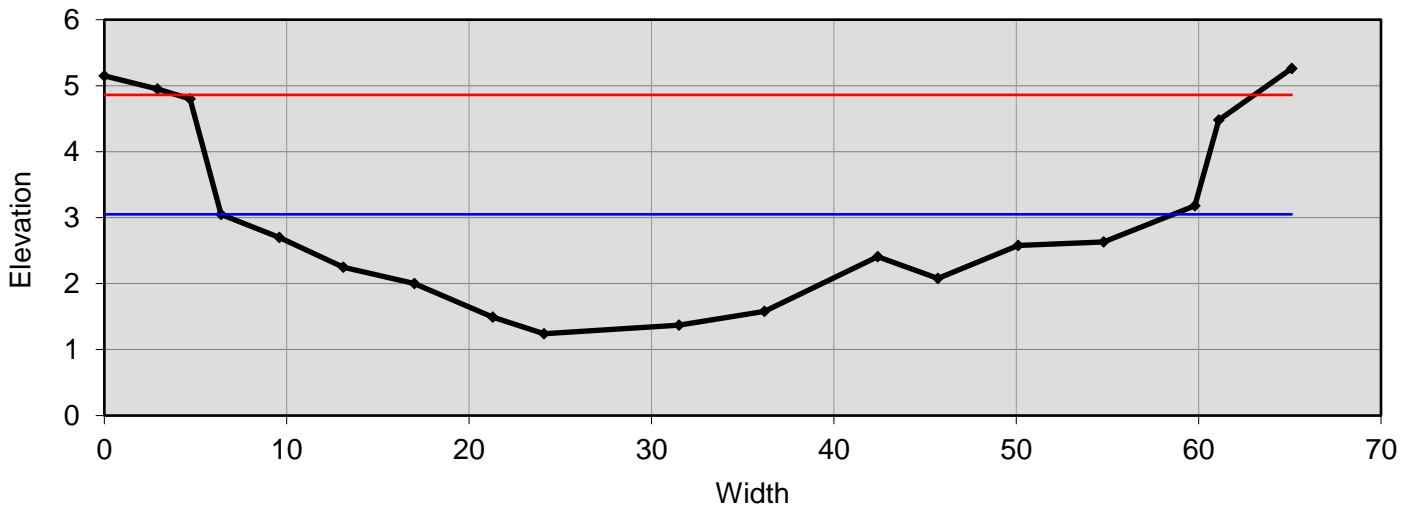


### Site 18 (Hiw) Bed Surface Pebble Count

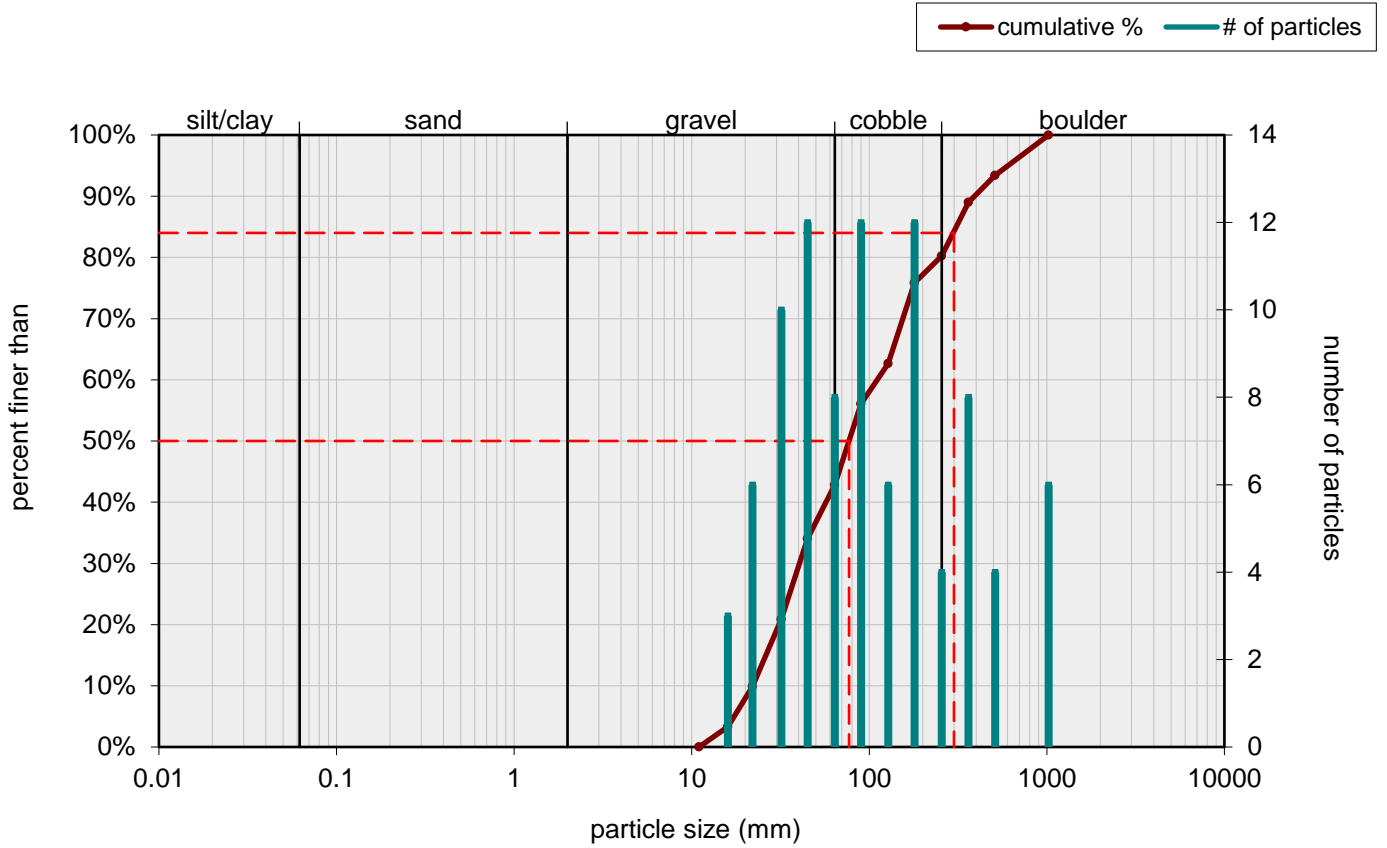


Size (mm)		Size Distribution		Type	
D16	12	mean	45.2	silt/clay	0%
D35	28	dispersion	3.8	sand	7%
D50	42	skewness	0.03	gravel	60%
D65	60			cobble	19%
D84	170			boulder	14%
D95	350				

### Site 18, Riffle

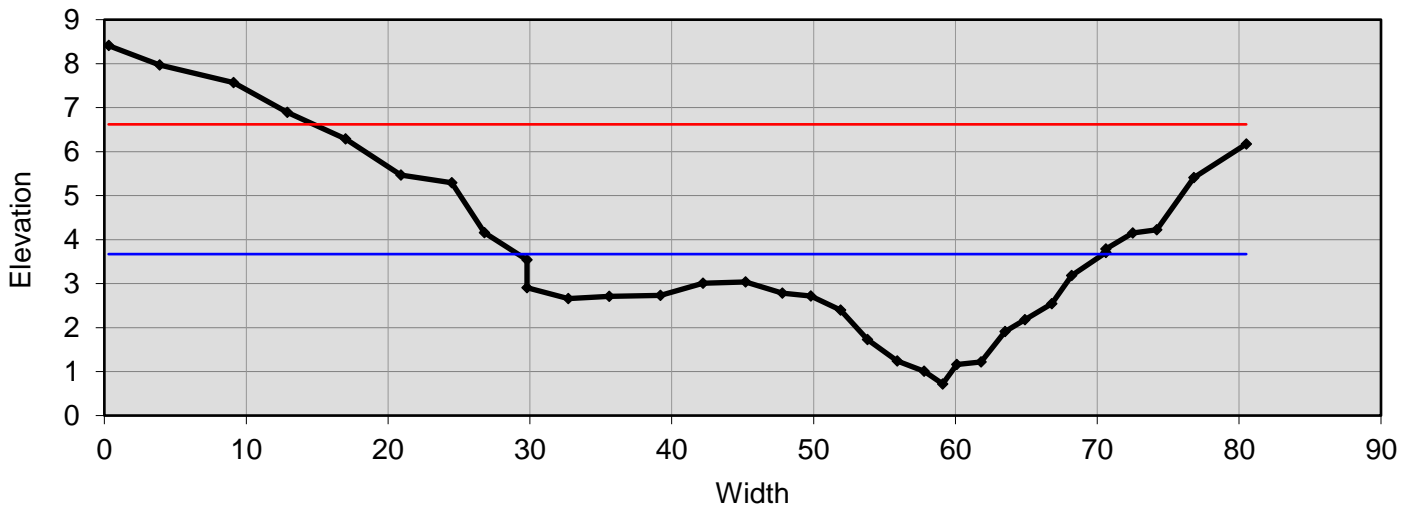


### Site 19 (Hiw) Bed Surface Pebble Count

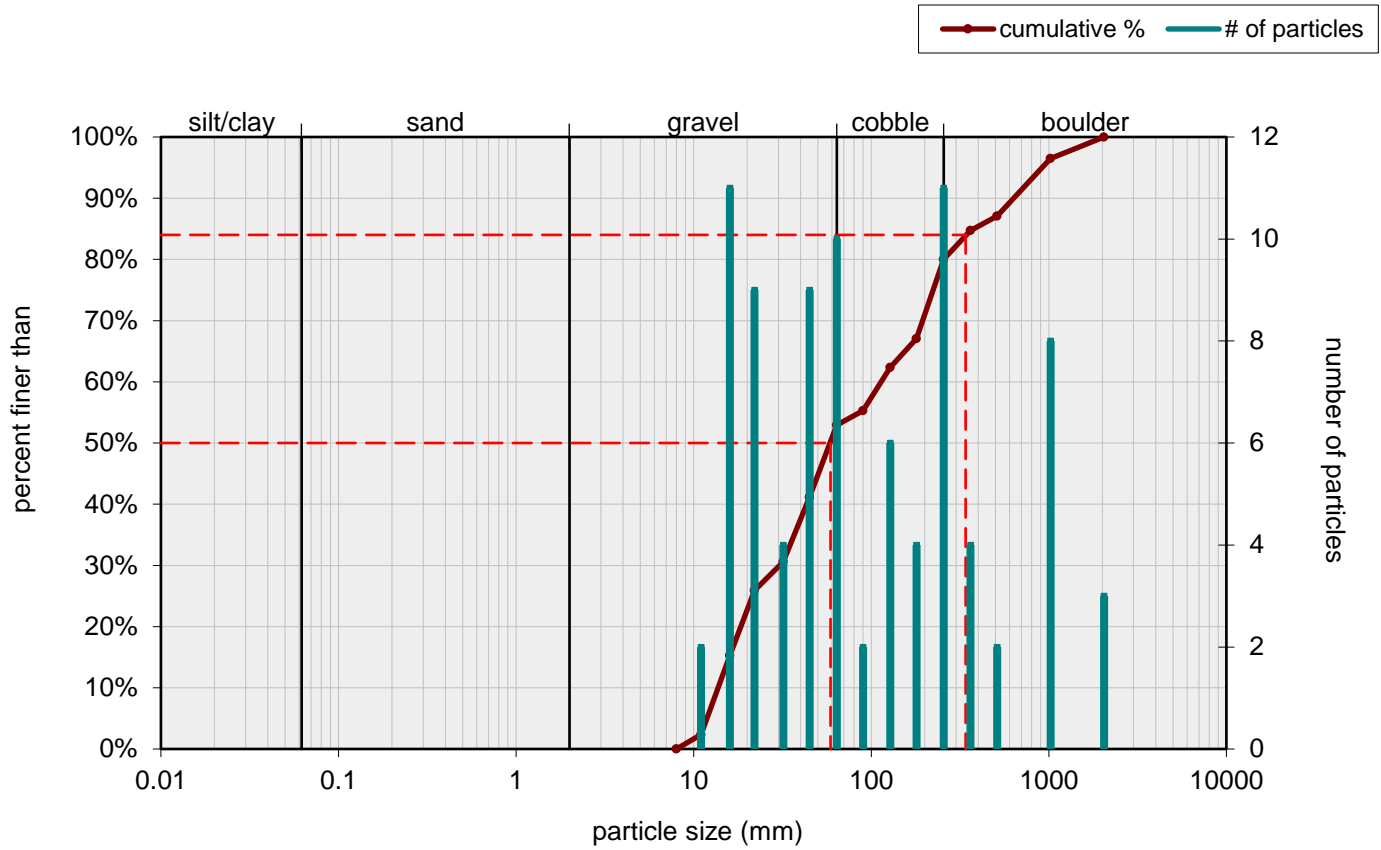


Size (mm)	Size Distribution	Type
D16	mean 90.0	silt/clay 0%
D35	dispersion 3.4	sand 0%
D50	skewness 0.07	gravel 39%
D65		cobble 34%
D84		boulder 18%
D95		bedrock 10%

### Site 19, Riffle

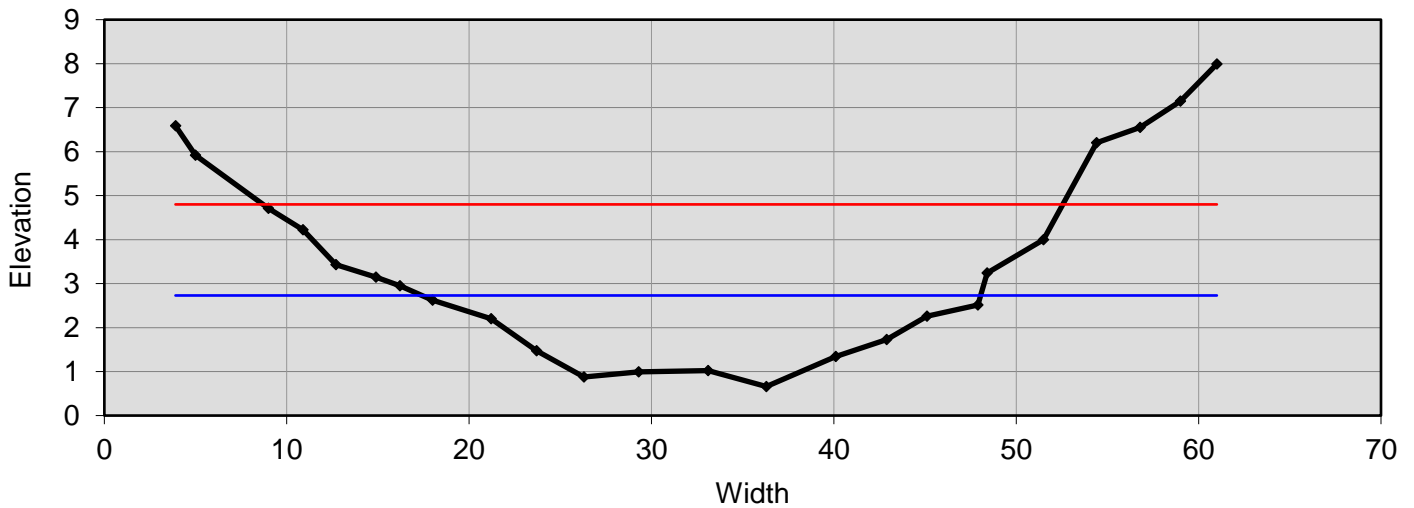


### Site 20 (Hiw) Bed Surface Pebble Count



Size (mm)	Size Distribution	Type
D16	mean 73.8	silt/clay 0%
D35	dispersion 4.7	sand 0%
D50	skewness 0.08	gravel 44%
D65		cobble 23%
D84		boulder 17%
D95		bedrock 17%

### Site 20, Riffle



**FIGURE S1.** Series of cross-sectional graphs and summary information of stream habitat and substrate at *Cryptobranchus a. alleganiensis* larval sites surveyed (n=20) in the Upper French Broad River (FB) sub-basin and the Hiwassee River (Hiw) sub-basin in western North Carolina, USA, 2016–2017.