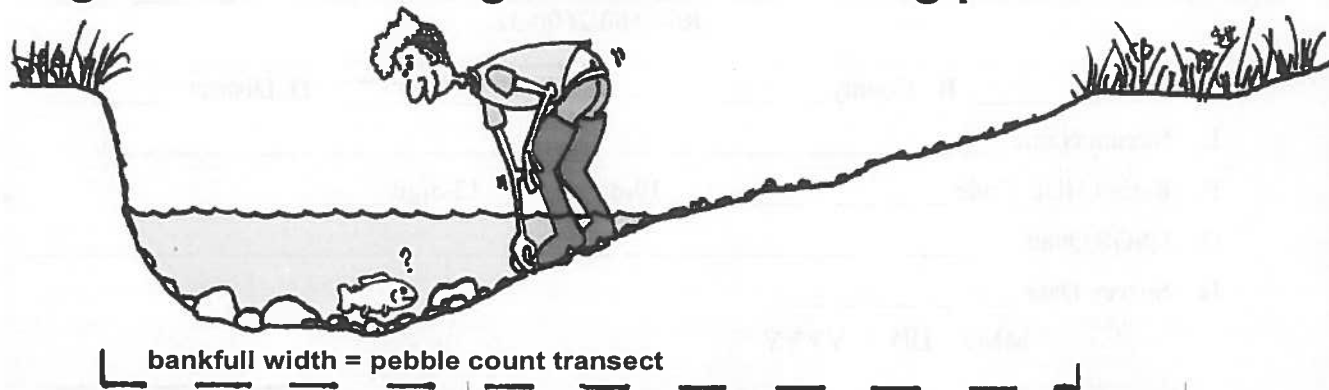


Figure 19: General guidelines for doing pebble counts



Pebble Count "Hints":

- 1) Always begin a transect at the edge of the bankfull channel and end each transect at the opposite edge of the bankfull channel.
- 2) Measure at least 100 "pebbles" (but, don't stop measuring until you reach the end of the transect atop the bankfull indicator).
- 3) Measure the first "substrate element" you touch at each designated sample location.
- 4) Substrate is measured across the intermediate axis, (neither the longest nor shortest of the three mutually perpendicular axes).
- 5) Pebble counts are usually done in riffles (twice per reach).
- 6) If you don't get 100 measurements on a transect, continue to do transects within the riffle until you meet or exceed 100 measurements.
- 7) Two pebble counts should be done for each reach, in riffle habitats. The riffles should be located about 1/3 and 2/3 of the total length of each reach. Use your map (developed during the completion of the Preliminary Reach Form) to locate the section of stream in which the sample riffles will be located.

* for additional information, see Harrelson, et al. 1994.

References:

- King, R, Potyandi, J. 1993. *Statistically Testing Wolman Pebble Counts: Changes in Percent Fines!* Stream Notes, USDA Forest Service.
- Rosgen, D.L. 1996. *Applied River Morphology*. Wildland Hydrology,
- Wolman, M.G. 1954. *A method of sampling coarse river-bed material*. Transactions of the American Geophysical Union. 35(6): 951-9

WOLMAN FORM
R6-2500/2600-32

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- A. State _____ B. County _____ C. Forest _____ D. District _____
 E. Stream Name _____
 F. 8-digit HUC Code ____, ____, ____, ____ 10-digit ____ 12-digit ____
 G. USGS Quad _____
 H. Survey Date ____ / ____ / ____
 MM / DD / YYYY

PEBBLE COUNT							
SO #:		Channel Unit #		# of Transects:			
Surveyor:				Reach:		% Gradient:	
Inches	PARTICLE	Millimeters		Particle Count	Total #	Item %	% Cum
<.08	<input type="checkbox"/> Sand	< 2	S/C/S				
.08 - .16	Very Fine	2 - 4	G R A V E L S				
.16 - .22	Fine	4 - 5.7					
.22 - .31	Fine	5.7 - 8					
.31 - .44	Medium	8 - 11.3					
.44 - .63	Medium	11.3 - 16					
.63 - .89	Coarse	16 - 22.6					
.89 - 1.26	Coarse	22.6 - 32					
1.26 - 1.77	Vry Coarse	32 - 45					
1.77 - 2.5	Vry Coarse	45 - 64					
2.5 - 3.5	Small	64 - 90	C O B B				
3.5 - 5.0	Small	90 - 128					
5.0 - 7.1	Large	128 - 180					
7.1 - 10.1	Large	180 - 256					
10.1 - 14.3	Small	256 - 362	B L D R S				
14.3 - 20	Small	362 - 512					
20 - 40	Medium	512 - 1024					
40 - 80	Large	1024 - 2048					
80 - 160	Vry Large	2048 - 4096					
	Bedrock		BDRK				
				Totals:			
Total Tally:							