

## **APPENDIX F - REGIONAL REFERENCE AND DEQ SUMMARY STATISTICS CONSIDERED FOR SEDIMENT TARGET DEVELOPMENT– BITTERROOT TPA**

Table F-1. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Gradient.....	F-3
Table F-2. Summary Statistics for Percent Fines via Pebble Count by Reach Type <2mm and <6mm.....	F-4
.....	F-4
Table F-3. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Reach Type <2mm .....	F-5
.....	F-5
Table F-4. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Reach Type <6mm .....	F-6
.....	F-6
Table F-5. Summary Statistics for Percent Fines via Grid Toss in Riffles and Pool Tails <6mm .....	F-7
Table F-6. Summary Statistics for Width to Depth Ratio. ....	F-7
Table F-7. Summary statistics for residual pool depth (ft). ....	F-7
Table F-8. Summary statistics for pool frequency (pools/mile).....	F-8
Table F-9. Summary statistics for for LWD frequency (LWD/mile).....	F-8



**Table F-1. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Gradient**

Data Source	PebCnt reach average by ecoregion 2mm			PebCnt reach average by ecoregion 6mm			PebCnt reach average by gradient <2mm				PebCnt reach average by gradient <6mm												
	Idaho Bath (16)	M. Rockies (17)	N. Rockies (15)	Idaho Bath (16)	M. Rockies (17)	N. Rockies (15)	High Gradient Average (A&B) <2mm	Low Gradient Average (C) <2mm	High Gradient Average (A&B) <6mm	Low Gradient Average (C) <6mm	Idaho Bath. High Gradient Average (A&B) <2mm	Idaho Bath Low Gradient Average (C) <2mm	Mid. Rockies High Gradient Average (A&B) <2mm	Mid. Rockies Low Gradient Average (C) <2mm	N. Rockies High Gradient Average (A&B) <2mm	N. Rockies Low Gradient Average (C) <2mm	Idaho Bath. High Gradient Average (A&B) <6mm	Idaho Bath Low Gradient Average (C) <6mm	Mid. Rockies High Gradient Average (A&B) <6mm	Mid. Rockies Low Gradient Average (C) <6mm	N. Rockies High Gradient Average (A&B) <6mm	N. Rockies Low Gradient Average (C) <6mm	
DEQ Bitt. 2007 25th Percentile (excludes E channels-except by reach type)	5	10	4	10	14	15	3	7	6	13	3	7	6	10		4	6	14	10	17			15
DEQ Bitt. 2007 Median (excludes E channels-except by reach type)	8	12	5	14	23	16	8	12	12	20	7	12	8	13		5	11	21	14	26			16
DEQ Bitt. 2007 75th percentile (excludes E channels-except by reach type)	14	15	7	22	31	18	12	15	22	24	14	15	9	19		7	18	23	17	36			18
DEQ Bitt. 2007 (n)	16	10	3	16	10	3	12	17	12	17	9	7	2	8	0	3	9	7	2	8	0		3
BDNF Ref. median (excludes E channels-except by reach type)					11				10	27									10	17			
BDNF Ref. 75th%ile (excludes E channels-except by reach type)					22.5				21	29									21	29			
BDNF (n)					79				49	30									49	30			
BNF Ref. median - (excludes E channels-except by reach type)	17	16		23	20		20	19	19	30	17	19	16	24			21	33	19	30			
BNF Ref. 75th%ile - (excludes E channels-except by reach type)	24	24		33	29		22	24	29	36	24	22	21	27			32	39	24	34			
BNF (n)	49	26		49	26		92	15	92	15	42	7	21	4			42	7	21	4			
KNFLD Ref. median (excludes E channels-except by reach type)			4			7								5	3						8		7
KNFLD Ref 75th%tile (excludes E channels-except by reach type)			7			15								9	8						19		10
KNFLD (n)			69			76								48	5						51		6

**Table F-2. Summary Statistics for Percent Fines via Pebble Count by Reach Type <2mm and <6mm**

Data Source	PebCnt reach average by reach type <2mm										PebCnt reach average by reach type <6mm									
	A	A3	A4	B	B3	B4	C	C3	C4	E	A	A3	A4	B	B3	B4	C	C3	C4	E
DEQ Bitt. 2007 25th Percentile (excludes E channels-except by reach type)				3	3	11	7	7	10	27				6	6	23	13	11	19	44
DEQ Bitt. 2007 Median (excludes E channels-except by reach type)				8	4	13	12	8	12	33				12	7	25	20	12	22	50
DEQ Bitt. 2007 75th percentile (excludes E channels-except by reach type)				12	8	14	15	10	19	46				22	12	26	24	14	30	63
DEQ Bitt. 2007 (n)				12	8	4	17	6	11	3				12	8	4	17	6	11	3
BDNF Ref. median (excludes E channels-except by reach type)											17	-	-	9	7	18	17	8	22	30
BDNF Ref. 75th%ile (excludes E channels-except by reach type)											24	-	-	20	12	25	29	14	29	44
BDNF (n)											9	-	-	40	26	14	30	11	19	113
BNF Ref. median - (excludes E channels-except by reach type)	19	15	21	11	11	17	19	9	21	30	25	18	30	14	14	20	30	12	31	39
BNF Ref. 75th%ile - (excludes E channels-except by reach type)	26	20	27	17	13	24	24	12	24	33	34	22	36	20	16	31	36	16	39	43
BNF (n)	61	19	39	70	43	25	19	5	14	2	61	19	39	70	43	25	19	5	14	2
KNFLD Ref. median (excludes E channels-except by reach type)	6	5	12	5	2	7	3	0	8	-	7	4	20	9	5	12	7	1	10	1
KNFLD Ref 75th%tile (excludes E channels-except by reach type)	8	6	12	10	4	13	8	0	12	-	17	7	24	18	12	21	10	2	15	1
KNFLD (n)	4	3	1	39	20	19	5	2	3	-	7	5	2	39	20	19	5	2	3	1

**Table F-3. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Reach Type <2mm**

Data Source	PebCnt reach average Idaho Bath by reach type 2mm										PebCnt reach average Mid Rockies by reach type 2mm										PebCnt reach average N. Rockies by reach type 2mm									
	A	A3	A4	B	B3	B4	C	C3	C4	E	A	A3	A4	B	B3	B4	C	C3	C4	E	A	A3	A4	B	B3	B4	C	C3	C4	E
DEQ Bitt. 2007 25th Percentile (excludes E channels-except by reach type)				3	3	14	7	6	12	20				7	4	10	11	9.3	14	39							3.5		3.5	
DEQ Bitt. 2007 Median (excludes E channels-except by reach type)				7	3	15	12	7	12	20				10	4	11	14	9.5	22	46							5		5	
DEQ Bitt. 2007 75th percentile (excludes E channels-except by reach type)				14	8	15	15	10	17	20				11	4	11	22	9.8	30	52							6.5		6.5	
DEQ Bitt. 2007 (n)				9	7	2	7	4	3	1				3	1	2	7	2	4	2							3		3	
BNF Ref. median - (excludes E channels-except by reach type)	26	-	25	11	15	13	19	19	13	25	18	14	19	12	11	37	24	-	24	35										
BNF Ref. 75th%ile - (excludes E channels-except by reach type)	30	-	29	21	19	21	22	19	13	25	22	19	22	15	13	37	27	-	27	35										
BNF (n)	15	-	14	27	15	12	7	1	6	1	15	7	8	6	5	1	4	-	4	1										
KNFLD Ref. median (excludes E channels-except by reach type)																					6	5	12	5	2	6.5	3	0	8	-
KNFLD Ref 75th%tile (excludes E channels-except by reach type)																					8.4	6	12	9.5	4.3	13	8	0	12	-
KNFLD (n)																					4	3	1	39	20	19	5	2	3	-

**Table F-4. Summary Statistics for Percent Fines via Pebble Count by Ecoregion and Reach Type <6mm**

Data Source	PebCnt reach average Idaho Bath by reach type 6mm										PebCnt reach average Mid Rockies by reach type 6mm										PebCnt reach average N. Rockies by reach type 6mm									
	A	A3	A4	B	B3	B4	C	C3	C4	E	A	A3	A4	B	B3	B4	C	C3	C4	E	A	A3	A4	B	B3	B4	C	C3	C4	E
DEQ Bitt. 2007 25th Percentile (excludes E channels-except by reach type)				6	6.3	25	14	12	22	37				14	6	23	15	11	29	56									15	15
DEQ Bitt. 2007 Median (excludes E channels-except by reach type)				11	7	25	21	14	22	37				21	6	24	24	12	41	63									16	16
DEQ Bitt. 2007 75th percentile (excludes E channels-except by reach type)				18	12	26	23	17	25	37				24	6	26	41	12	52	69									18	18
DEQ Bitt. 2007 (n)				9	7	2	7	4	3	1				3	1	2	7	2	4	2									3	3
BDNF Ref. median (excludes E channels-except by reach type)											17	-	-	9	7	18	17	8	22	30										
BDNF Ref. 75th%ile (excludes E channels-except by reach type)											24	-	-	20	12	25	29	14	29	44										
BDNF (n)											9	-	-	40	26	14	30	11	19	113										
BNF Ref. median - (excludes E channels-except by reach type)	36	-	35	15	15	16	33	20	36	31	22	16	10	15	14	41	30	-	30	47										
BNF Ref. 75th%ile - (excludes E channels-except by reach type)	45	-	40	26	22	30	39	20	40	31	25	22	10	16	15	41	34	-	34	47										
BNF (n)	15	-	14	27	15	12	7	1	6	1	15	7	8	6	5	1	4	-	4	1										
KNFLD Ref. median (excludes E channels-except by reach type)																					7	4	20	9	5	12	7	1	10	1
KNFLD Ref 75th%tile (excludes E channels-except by reach type)																					17	7	24	18	12	21	10	2	15	1
KNFLD (n)																					7	5	2	39	20	19	5	2	3	1

**Table F-5. Summary Statistics for Percent Fines via Grid Toss in Riffles and Pool Tails <6mm**

Data Source	Grid reach average – Pool Tail by ecoregion <6mm			Grid reach average - Riffle by ecoregion <6mm		
	Idaho Batholith	Middle Rockies	Northern Rockies	Idaho Batholith	Middle Rockies	Northern Rockies
DEQ Bitt. 2007 25th Percentile	7	6	24	4	2	6
DEQ Bitt. 2007 Median	9	10	31	6	15	6
DEQ Bitt. 2007 75th percentile	12	20	33	14	23	7
DEQ Bitt. 2007 (n)	13	8	3	15	10	3
PIBO Ref. 75th%ile	25	16	16			
PIBO Ref. median	17	9	8			
PIBO (n)	23	64	29			

**Table F-6. Summary Statistics for Width to Depth Ratio.**

Bankfull Width	Data Source	Summary Statistics			
		n	Median	75th	25th
≤ 35'	BNF Reference	93	11	16	8
	DEQ 2007	69	16	22	13
> 35'	BNF Reference	20	25	29	20
	DEQ 2007	57	31	40	26

**Table F-7. Summary statistics for residual pool depth (ft).**

Bankfull Width	Data Source	Summary Statistics			
		n	Median	75th	25th
<20'	KNFLD Reference	57	0.8		0.6
	PIBO Reference	40	1.0		0.8
	DEQ 2007	8	0.71	0.8	0.7
20-35'	KNFLD Reference	18	1.4		1.2
	PIBO Reference	50	1.4		1.1
	DEQ 2007	11	1.19	1.5	1.1
>35'	PIBO Reference	25	1.7		1.3
	DEQ 2007	13	1.5	1.7	1.2

**Table F-8. Summary statistics for pool frequency (pools/mile).**

Bankfull Width	Data Source	Summary Statistics			
		n	Median	75th	25th
<20'	KNFLD Reference	57	114		81
	PIBO Reference	40	<b>84</b>		64
	DEQ 2007	8	90	148	74
20-35'	KNFLD Reference	18	53		38
	PIBO Reference	50	<b>49</b>		36
	DEQ 2007	11	42	69	32
>35'	PIBO Reference	25	<b>26</b>		17
	DEQ 2007	13	13	29	21

**Table F-9. Summary statistics for for LWD frequency (LWD/mile).**

Bankfull Width	Data Source	Summary Statistics			
		n	Median	75th	25th
<20'	KNFLD Reference	57	359		183
	PIBO Reference	40	402		214
	DEQ 2007	8	153	573	106
20-35'	KNFLD Reference	18	242		92
	PIBO Reference	45	459		293
	DEQ 2007	11	222	380	106
>35'	PIBO Reference	24	662		387
	DEQ 2007	13	195	195	92