

**STUDY REPORT W&AR-04  
SPAWNING GRAVEL IN THE LOWER TUOLUMNE RIVER**

**ATTACHMENT C**

**2012 FINE BED MATERIAL FIELD MAPPING DATA**

**Table C-1. 2012 Fine Bed Material Field Mapping Data.**

RM	FBM No.	2012 Mesohabitat Unit	Geomorphic Unit	Texture Dominant	Texture Subdominant	Average Depth (ft)	Area within 600 cfs (ft <sup>2</sup> )	Area within 320 cfs (ft <sup>2</sup> )
51.8	2	Pool - 102	pool margin	SA	--	1.0	976	693
51.7	1	Pool - 102	pool margin	SA	--	1.0	1,419	1,398
51.7	3	Pool - 104	pool margin	SA	--	1.9	4,068	2,583
51.6	4	Pool - 110	pool margin	SA	--	0.7	1,380	1,380
51.5	5	Pool - 115	pool margin	SA	--	0.3	1,583	1,583
51.5	6	Pool - 115	pool margin	SA	--	1.3	1,373	1,373
51.4	7	Lateral Bar - 114	channel margin	SI	--	0.3	5,909	2,940
51.3	10	Pool - 115	channel margin	SA	--	0.7	2,641	2,621
51.3	8	Pool - 115	pool bottom	SA	GR	1.3	2,718	2,718
51.3	9	Pool - 115	pool margin	SA	--	1.1	3,939	3,939
51.2	11	Pool - 115	channel margin	SA	SI	0.5	5,547	5,074
51.2	12	Pool - 115	channel margin	SA	SI	1.5	5,562	5,562
51.1	13	Pool - 115	channel margin	SA	SI	1.0	2,747	2,747
51.0	15	Pool - 115	channel margin	SA	--	1.5	6,977	6,977
51.0	14	Pool - 115	pool margin	SA	--	0.8	13,253	13,252
50.8	16	Submerged lateral bar - 125	channel margin	SA	SI	0.8	15,372	1,761
50.8	17	Pool - 115	channel margin	SA	--	0.5	4,974	4,974
50.6	18	Pool - 123	channel margin	SA	--	1.1	5,311	5,311
50.5	19	Pool - 123	channel margin	SA	--	0.5	4,014	4,014
50.3	20	Deep Backwater - 130	pool margin	SA	SI	3.3	25,620	23,039
50.0	22	Deep Backwater - 138	alcove/ backwater	SA	SI	1.1	8,266	8,251
50.0	21	Pool - 135	channel margin	SA	--	3.3	39,188	33,294
49.9	23	Pool - 135	channel margin	SA	--	1.3	6,780	6,780
49.3	24	Pool - 142	alcove/ backwater	SA	GR	1.6	3,269	3,259
47.8	25	Pool - 168	alcove/ backwater	SA	SI	0.3	1,646	1,646
47.7	26	Pool - 168	pool margin	SA	GR	0.8	5,292	5,292
47.6	28	Pool - 177	pool bottom	SA	SI	0.5	1,578	1,578
47.6	27	Pool - 177	pool margin	SA	GR	3.3	7,759	7,361
47.5	29	Pool - 177	alcove/ backwater	SA	--	1.3	961	957
47.5	30	Pool - 177	pool margin	SA	--	1.1	9,586	8,394
47.4	31	Pool - 177	channel margin	SA	SI	0.8	4,254	4,254
47.3	32	Pool - 177	channel margin	SA	SI	2.0	4,239	4,132
47.2	33	Pool - 177	channel margin	SA	SI	0.3	2,051	2,024
47.2	34	Pool - 177	channel margin	SA	SI	0.3	13,846	13,430
46.4	35	Deep Backwater - 189	captured gravel pit	SI	--	1.8	41,088	1,149
46.3	36	Pool - 187	alcove/ backwater	SA	SI	1.0	1,765	1,271

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46.1	37	Shallow Backwater - 191	alcove/backwater	SI	--	0.8	33,551	14,314
46.0	39	Pool - 187	alcove/backwater	SI	--	0.3	11,457	11,457
46.0	38	Pool - 187	channel margin	SA	SI	0.7	12,307	11,731
45.9	40	Pool - 187	alcove/backwater	SA	--	0.4	1,352	1,351
45.9	41	Pool - 187	channel margin	SA	SI	0.5	1,256	1,215
45.9	42	Pool - 187	channel margin	SA	--	1.3	3,009	1,280
45.8	43	Pool - 187	channel margin	SA	SI	1.6	3,628	3,079
45.7	44	Island - 240	channel margin	SA	--	0.5	822	766
45.7	45	Riffle - 243	channel margin	SA	SI	1.6	1,249	994
45.5	46	Pool - 254	alcove/backwater	SA	--	1.3	1,660	1,660
45.5	47	Pool - 235	side channel	SA	--	1.6	3,120	2,821
45.4	48	Deep Backwater - 255	channel margin	SA	--	2.6	16,741	14,219
45.3	51	Pool - 235	alcove/backwater	SA	--	0.8	973	973
45.3	49	Pool - 235	channel margin	SA	--	1.1	1,488	803
45.3	50	Pool - 235	channel margin	SA	--	1.3	1,975	1,975
45.3	52	Pool - 235	channel margin	SA	--	0.7	5,574	5,483
45.3	53	Pool - 235	channel margin	SA	--	1.3	5,210	5,052
45.2	56	Deep Backwater - 237	alcove/backwater	SA	--	1.0	383	383
45.2	54	Pool - 235	channel margin	SA	--	1.1	1,396	1,396
45.2	55	Pool - 235	channel margin	SA	--	1.5	33,481	32,030
45.1	57	Pool - 235	alcove/backwater	SA	--	1.3	792	792
45.1	58	Pool - 235	alcove/backwater	SA	SI	1.0	1,121	1,121
45.1	59	Pool - 235	channel margin	SA	--	1.1	1,283	1,283
45.1	60	Pool - 235	channel margin	SA	--	3.3	1,218	1,218
45.1	61	Island - 239	channel margin	SA	SI	2.1	32,255	31,821
45.0	64	Pool - 235	alcove/backwater	SA	SI	0.5	938	834
45.0	62	Pool - 235	channel margin	SA	--	0.8	812	735
45.0	63	Pool - 235	channel margin	SA	SI	0.7	1,214	1,214
45.0	65	Pool - 235	channel margin	SA	SI	0.8	1,993	1,993
44.9	66	Pool - 235	channel margin	SA	--	0.5	936	936
44.8	67	Run - 256	channel margin	SA	--	0.5	1,166	1,166
44.8	68	Run - 256	channel margin	SA	SI	0.8	923	923
44.7	74	Run - 262	alcove/backwater	SA	SA	0.3	1,330	506
44.7	69	Run - 256	channel margin	SA	SI	0.8	876	876
44.7	70	Pool - 260	channel margin	SA	SI	1.1	4,825	4,825
44.6	71	Pool - 264	channel margin	SA	SI	0.7	589	589

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44.6	72	Riffle - 265	channel margin	SA	SI	0.8	1,125	1,023
44.6	73	Run - 269	channel margin	SA	SI	0.7	1,522	1,522
44.6	75	Pool - 266	pool margin	SA	--	0.8	1,802	1,631
44.6	76	Pool - 266	pool margin	SA	--	3.3	2,577	2,577
44.5	77	Run - 198	alcove/ backwater	SA	--	1.1	2,275	2,039
44.4	78	Deep Backwater - 203	alcove/ backwater	SA	SA	1.0	3,970	3,970
44.3	79	Pool - 204	alcove/ backwater	SA	SA	0.7	7,411	7,339
44.3	80	Pool - 204	pool bottom	SA	--	1.3	16,726	14,299
44.3	81	Pool - 204	pool margin	SA	--	1.3	28,198	24,051
44.2	82	Run - 206	alcove/ backwater	SA	--	0.3	1,851	1,851
43.7	83	Special Run Pool - 210	pool margin	SA	SI	1.1	1,529	1,452
43.7	84	Special Run Pool - 210	pool margin	SA	SI	2.5	2,604	2,581
43.7	85	Special Run Pool - 210	pool margin	SA	SI	3.3	66,029	61,546
43.6	86	Special Run Pool - 210	pool margin	SI	SA	0.8	33,267	30,714
43.5	91	Deep Backwater - 305	alcove/ backwater	SA	SI	0.8	641	641
43.5	87	Special Run Pool - 210	pool margin	SA	--	0.3	1,828	1,828
43.5	88	Special Run Pool - 210	pool margin	SA	--	1.0	16,851	844
43.4	90	Deep Backwater - 215	alcove/ backwater	SA	SI	0.7	921	0
43.4	92	Deep Backwater - 305	alcove/ backwater	SI	SA	0.8	815	0
43.4	93	Deep Backwater - 305	alcove/ backwater	SI	SA	3.3	7,107	0
43.4	95	Deep Backwater - 214	alcove/ backwater	SA	SI	1.0	5,865	1,228
43.4	97	Deep Backwater - 213	alcove/ backwater	SA	SI	0.5	4,908	4,836
43.4	89	Special Run Pool - 210	pool margin	SA	--	1.0	6,102	6,003
43.4	94	Deep Backwater - 305	side channel	SA	SI	1.6	9,252	9,252

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43.3	98	Deep Backwater - 213	alcove/backwater	SA	--	0.3	1,706	1,706
43.3	96	Pool - 212	channel margin	SA	SI	1.0	1,819	1,223
43.3	99	Pool - 212	pool margin	SA	--	1.6	3,477	1,985
43.2	200	Deep Backwater - 227	alcove/backwater	SA	SI	2.3	19,681	18,912
43.1	201	Riffle - 228	alcove/backwater	SA	--	0.3	2,303	2,303
43.1	202	Pool - 225	pool margin	SA	--	0.8	1,927	1,677
42.9	203	Pool - 223	alcove/backwater	SA	SI	1.0	2,523	2,523
42.9	204	Pool - 223	alcove/backwater	SA	--	1.0	5,712	5,631
42.8	205	Pool - 223	side channel	SI	SA	3.3	2,100	1,974
42.6	206	Riffle - 219	alcove/backwater	SA	--	0.8	2,247	2,062
42.6	207	Pool - 220	channel margin	SA	--	1.0	3,451	3,451
42.2	208	Pool - 276	channel margin	SA	--	0.3	1,630	1,630
42.0	209	Deep Backwater - 294	alcove/backwater	SA	--	0.5	2,019	2,019
41.9	101	Pool - 296	channel margin	SI	--	1.0	4,449	4,449
41.7	102	Pool - 314	channel margin	GR	SA	0.3	4,206	4,206
41.4	104	Special Run Pool - 303	channel margin	SA	--	0.7	2,256	0
41.4	103	Special Run Pool - 303	side channel	SI	SA	0.7	1,675	1,675
41.3	105	Special Run Pool - 303	channel margin	SA	SI	2.0	6,646	6,646
41.2	106	Special Run Pool - 303	channel margin	SA	--	1.8	19,702	19,659
41.1	107	Special Run Pool - 303	side channel	SA	--	0.5	1,051	1,051
41.0	108	Special Run Pool - 303	channel margin	SA	--	0.5	3,048	3,048
41.0	109	Special Run Pool - 303	pool margin	SA	--	0.7	29,756	29,074
40.9	110	Riffle - 320	channel margin	SA	--	0.3	937	937
40.9	111	Riffle - 320	channel margin	SA	--	0.8	1,027	1,027
40.6	112	Pool - 322	pool margin	SA	--	0.3	8,687	8,498
40.6	113	Pool - 322	pool margin	SA	--	1.3	12,693	12,693
40.3	114	Mid-channel Bar - 306	side channel	SA	--	0.9	1,890	1,890
40.0	115	Pool - 54	channel margin	SA	--	1.1	10,472	10,275
39.8	116	Pool - 54	channel margin	SA	--	2.1	38,850	33,630
39.4	117	Pool - 54	pool margin	SA	GR	0.3	1,753	1,753
39.1	118	Glide - 48	channel margin	SA	--	0.7	3,573	3,573
38.6	120	Pool - 45	channel margin	SA	--	0.5	14,525	14,525

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38.6	119	Pool - 45	pool bottom	SA	--	3.3	10,732	10,732
38.0	121	Pool - 27	channel margin	SA	--	0.7	8,701	8,698
37.9	122	Deep Backwater - 20	alcove/ backwater	SA	--	2.0	2,918	2,907
37.7	123	Deep Backwater - 3	alcove/ backwater	GR	SA	0.7	10,181	3,132
36.9	124	Pool - 76	alcove/ backwater	GR	SA	2.0	1,565	1,518
36.8	127	Pool - 57	channel margin	SA	--	1.0	578	391
36.8	126	Lateral Bar - 75	side channel	SA	--	0.8	2,632	2,632
36.7	125	Pool - 57	captured gravel pit	SA	SI	1.3	3,135	2,469
36.7	128	Riffle - 64	channel margin	SA	--	1.6	3,971	3,821
36.7	129	Pool - 63	channel margin	SA	--	3.3	44,185	42,964
36.5	130	Pool - 60	captured gravel pit	SA	--	3.3	50,742	39,408
36.4	131	Pool - 58	channel margin	GR	SA	0.5	3,747	3,314