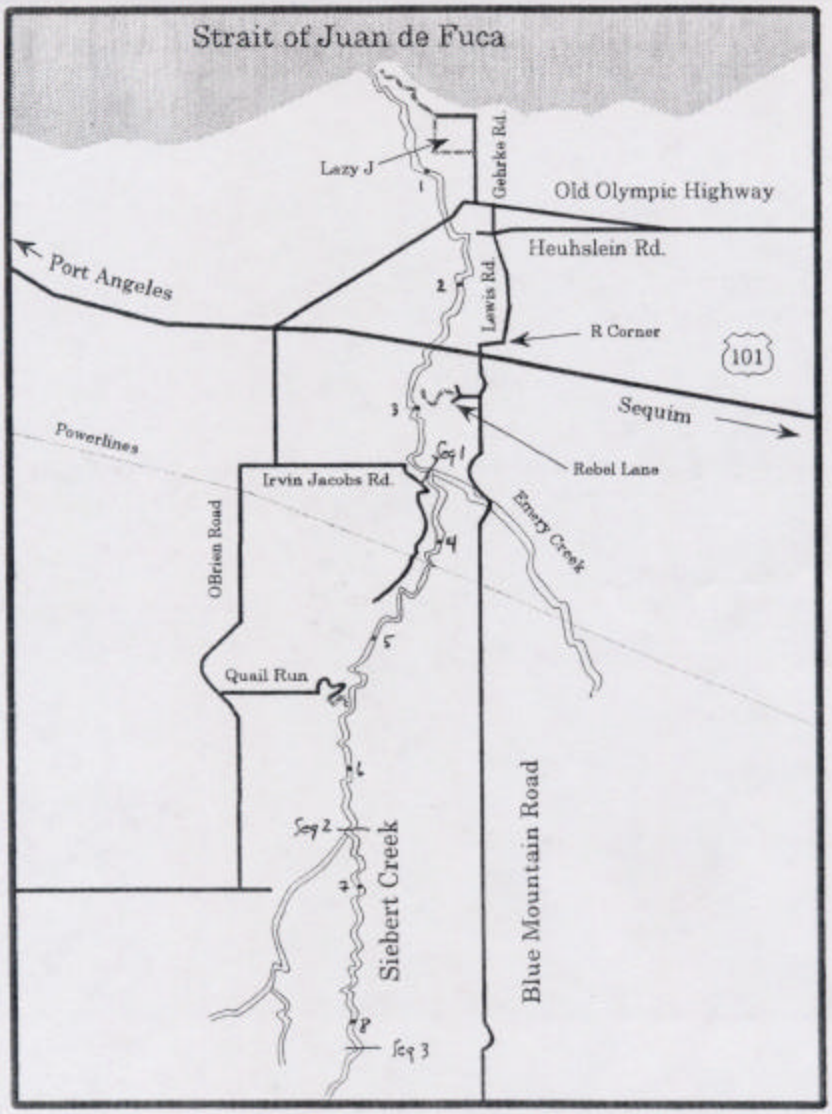
Appendix A. Maps of Study Streams

Point No Point Treaty Council
Ambient Monitoring Project



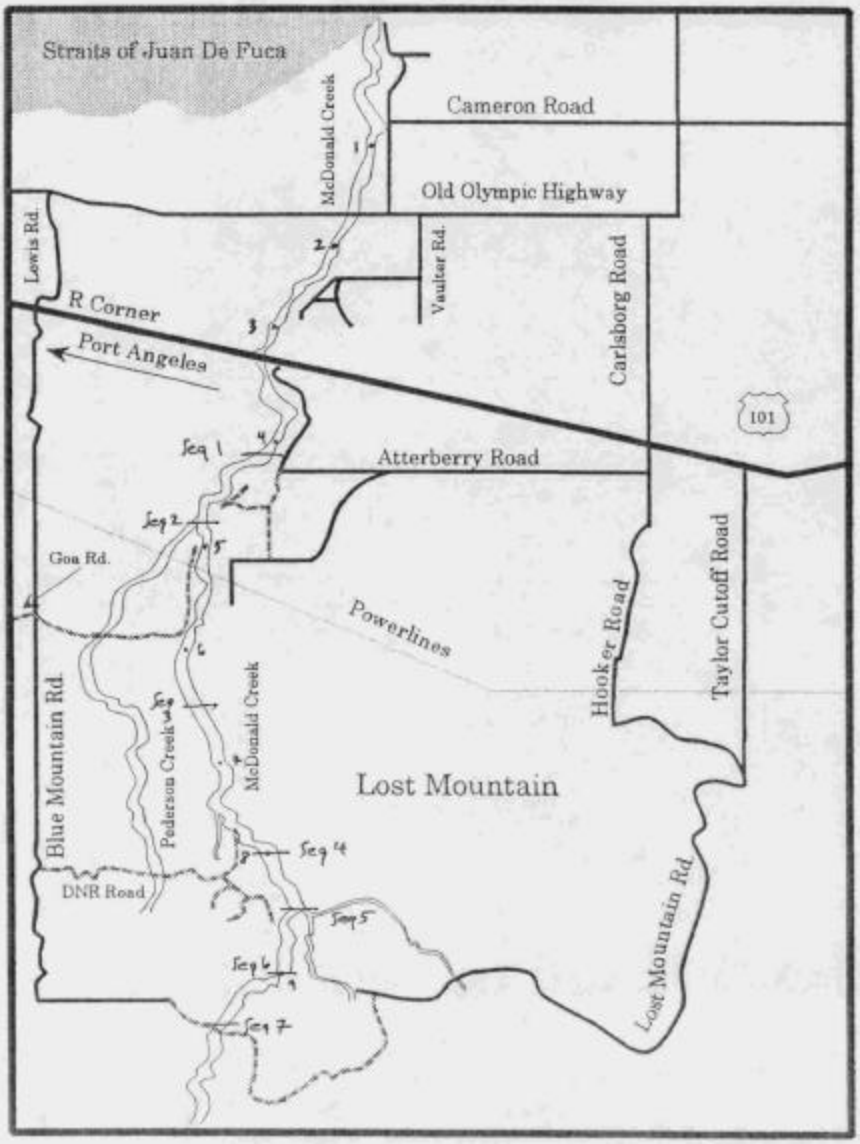
Appendix Figure 1

Siebert Cr.

Main Roads
Unimproved Roads
Watercourse

• 1 River mile
– Seg 2 Segment (Upper extent)

Point No Point Treaty Council
Ambient Monitoring Project

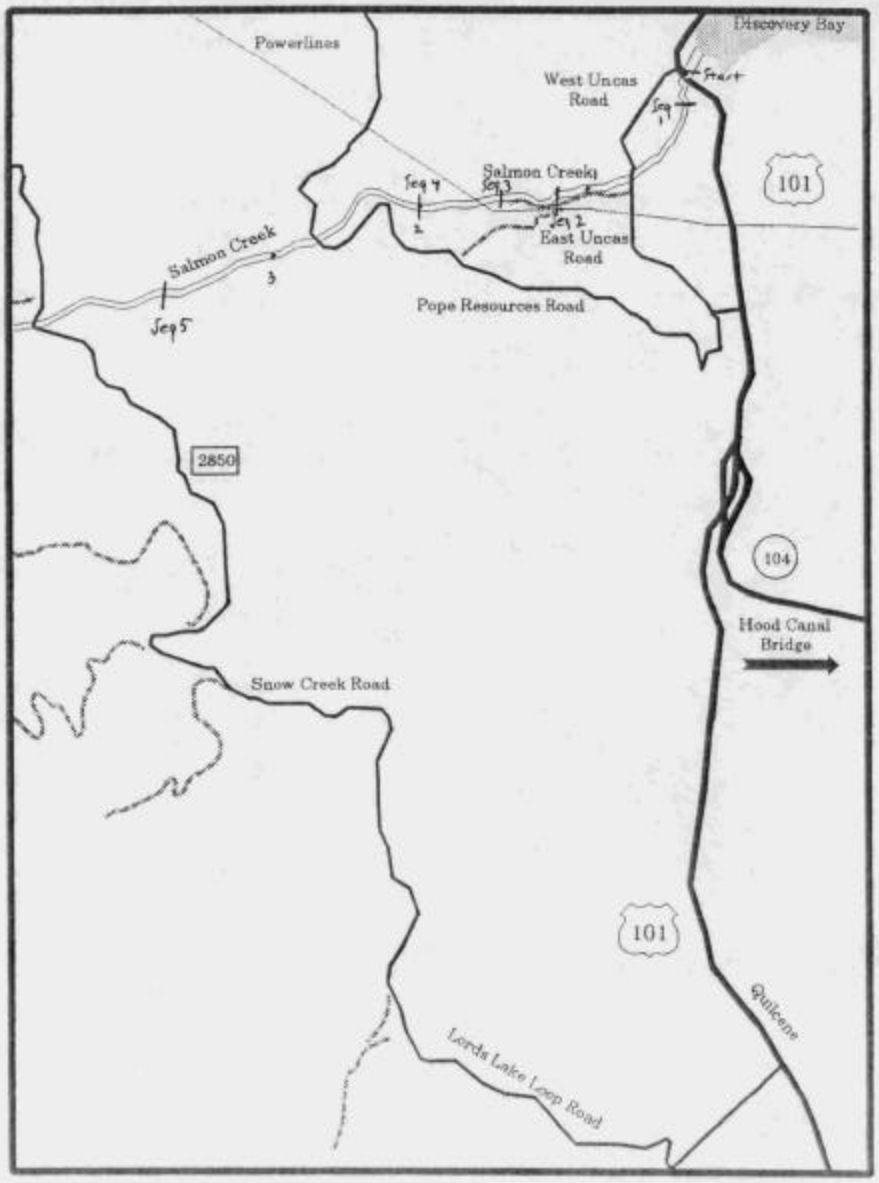


Appendix Figure 2

McDonald Cr. Main Roads Watercourse
Unimproved Roads

• 1 River mile
– Seg 2 Segment (upper extent)

Point No Point Treaty Council
Ambient Monitoring Project



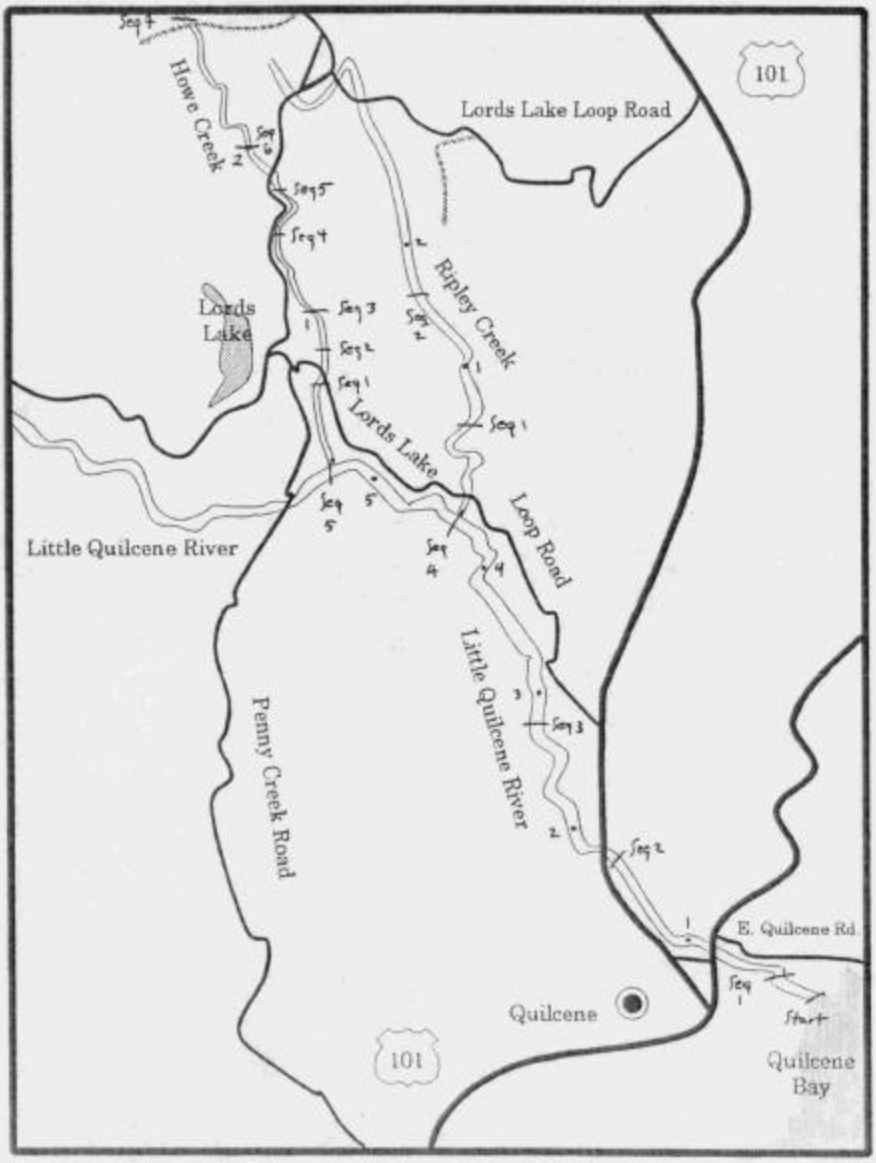
Appendix Figure 3

Salmon Cr.

Main Roads
Unimproved Roads
Watercourse

• 1 River mile
— Seg 2 Segment (upper extent)

Point No Point Treaty Council
Ambient Monitoring Project



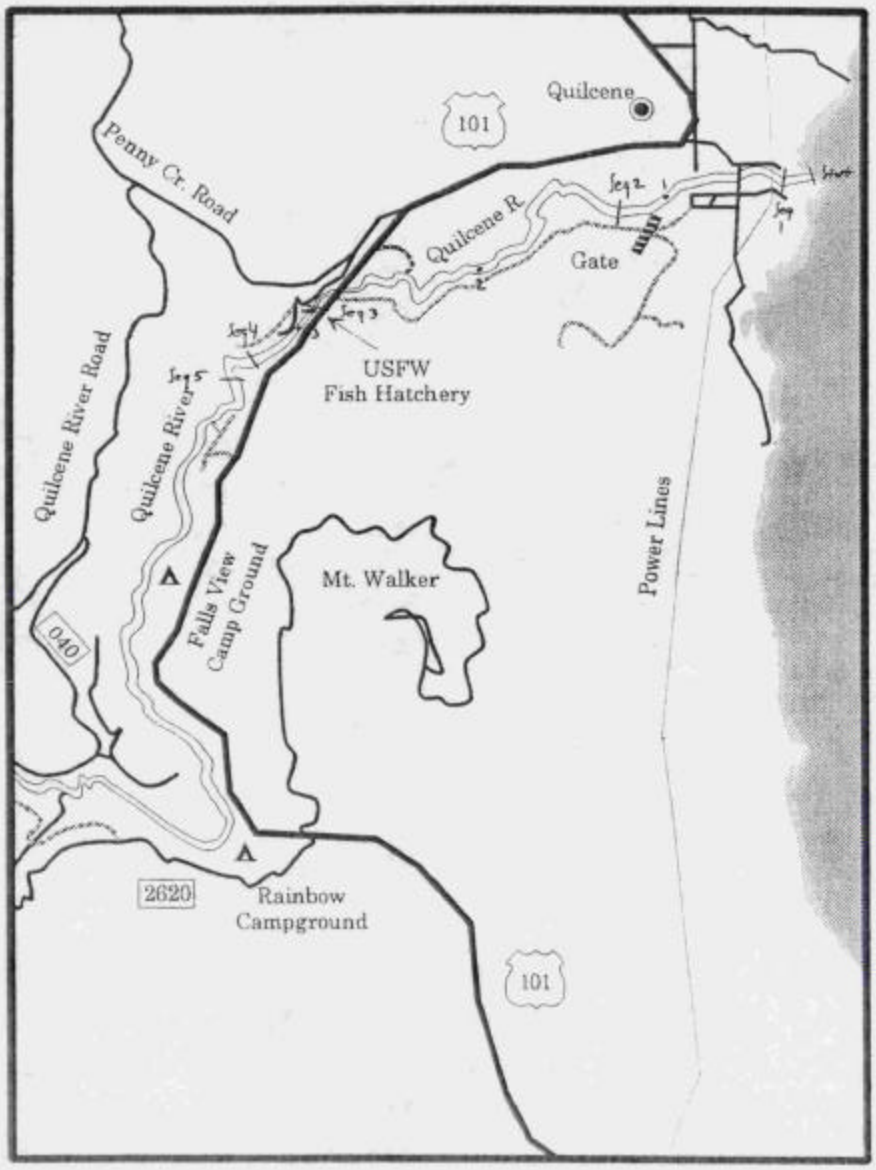
Appendix Figure 4

Little Quilcene R.
Howe Creek
Ripley Creek

Main Roads
Unimproved Roads

Watercourse

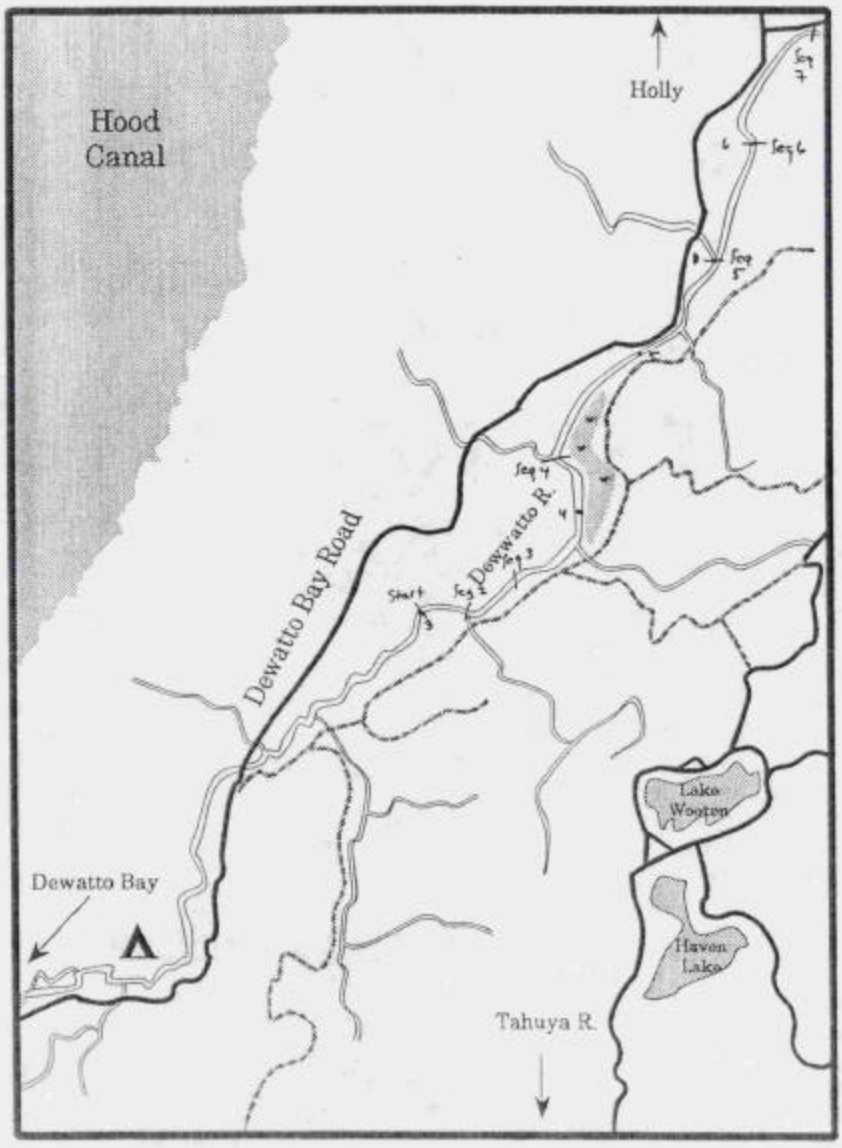
Point No Point Treaty Council
Ambient Monitoring Project



Appendix Figure 5 | Big Quilcene R. | Main Roads | Unimproved Roads | Watercourse

+1 River mile
– Seg 2 Segment (Upper Extent)

Point No Point Treaty Council
Ambient Monitoring Project



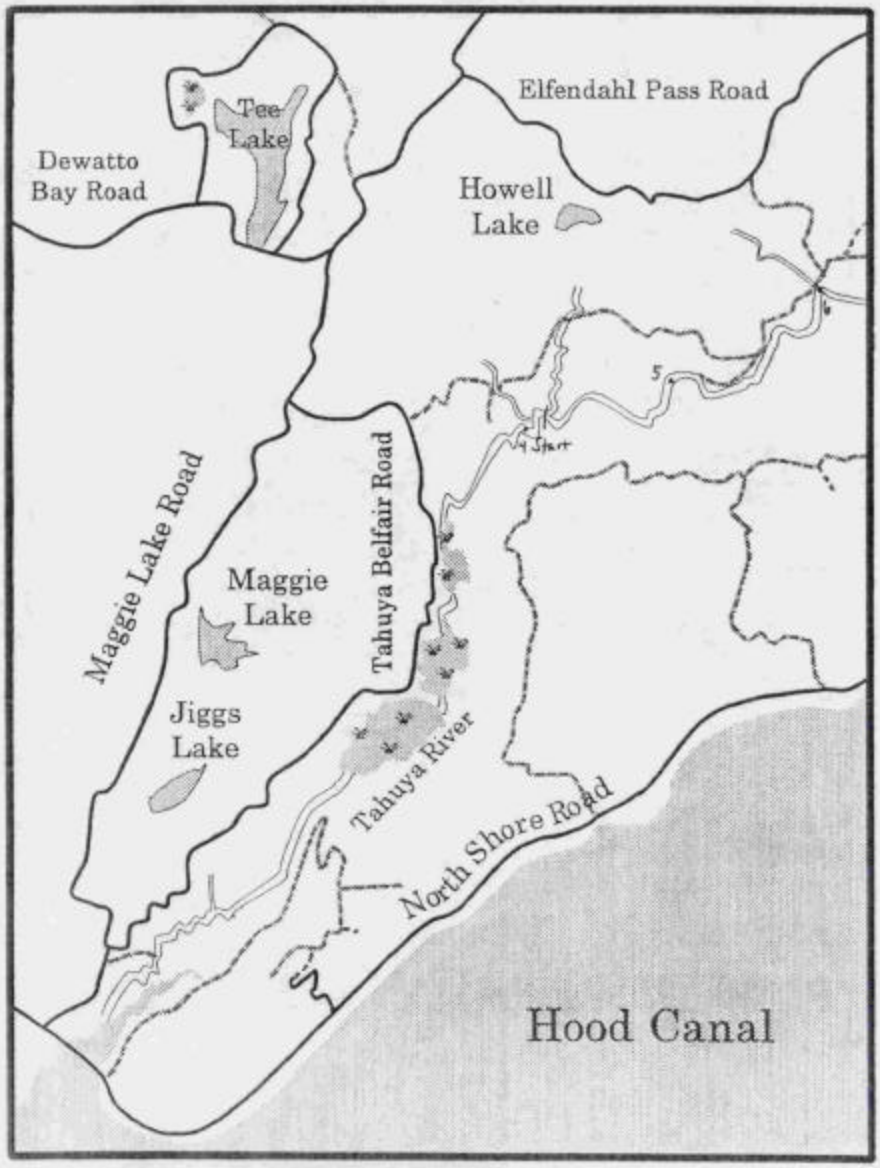
Appendix Figure 6

Dewatto R.

Main Roads
Unimproved Roads
Watercourse

.4 River mile
– Seg 4 Segment

Point No Point Treaty Council
Ambient Monitoring Project



Appendix Figure 7

Tahuya River — Main Roads — Watercourse; Unimproved Roads

•5 River mile
– Seg 9 segment (Upper extent)

Point No Point Treaty Council
Ambient Monitoring Project

Appendix Figure 8

Tahuya R.

Main Roads
Unimproved Roads
Watercourse

Appendix B. Large Woody Debris Condition (Percentage of Volume) by Species Class:

			Conifer			Deciduous		Unknown	
Stream	Seg.	Rotten	Moderate	Solid	Rotten	Moderate	Solid	rotten	total vol.
Big Quilcene	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Big Quilcene	2	0.27	0.01	0.03	0.01	0.03	0.65	0.00	17.7
Big Quilcene	3	0.10	0.08	0.49	0.02	0.05	0.26	0.00	57.1
Big Quilcene	5	0.05	0.00	0.05	0.80	0.07	0.05	0.00	8.8
Dewatto	2	0.09	0.55	0.00	0.07	0.14	0.00	0.15	18.8
Dewatto	3	0.12	0.63	0.01	0.13	0.11	0.00	0.01	36.3
Dewatto	5	0.18	0.74	0.00	0.02	0.04	0.00	0.02	175.4
Dewatto	6	0.06	0.07	0.00	0.26	0.24	0.00	0.38	9
Dewatto	8	0.60	0.28	0.00	0.01	0.05	0.00	0.06	182.4
Dewatto	10	0.56	0.29	0.00	0.00	0.13	0.00	0.02	91.1
Howe	1	0.81	0.01	0.04	0.02	0.03	0.09	0.00	172
Howe	2	0.39	0.03	0.26	0.08	0.04	0.19	0.01	53.3
Howe	4	0.27	0.11	0.34	0.11	0.02	0.08	0.06	84.1
Howe	6	0.05	0.13	0.00	0.17	0.04	0.00	0.61	39.1
Howe	7	0.05	0.06	0.00	0.09	0.23	0.05	0.52	45.6
Little Quilcene	1	0.00	0.27	0.73	0.00	0.00	0.00	0.00	4.4
Little Quilcene	2	0.07	0.26	0.11	0.01	0.07	0.48	0.00	47.9
Little Quilcene	3	0.00	0.07	0.24	0.00	0.25	0.43	0.00	68.3
Little Quilcene	4	0.09	0.40	0.02	0.00	0.08	0.42	0.00	86.5
Little Quilcene	5	0.04	0.52	0.00	0.00	0.33	0.11	0.00	39
McDonald	1	0.20	0.09	0.15	0.11	0.08	0.25	0.12	322.5
McDonald	2	0.05	0.00	0.65	0.03	0.00	0.18	0.10	93.8
McDonald	3	0.22	0.03	0.24	0.06	0.02	0.31	0.13	197.4
McDonald	4	0.56	0.20	0.00	0.02	0.13	0.00	0.10	61.7
McDonald	5	0.36	0.21	0.01	0.02	0.23	0.02	0.15	52.4
McDonald	6	0.66	0.02	0.00	0.03	0.08	0.00	0.22	38.2
Ripley	1	0.40	0.05	0.01	0.18	0.17	0.12	0.07	120.2
Salmon	2	0.04	0.82	0.00	0.03	0.08	0.02	0.00	166.3
Salmon	3	0.88	0.04	0.01	0.01	0.02	0.02	0.03	164.5
Salmon	5	0.39	0.02	0.01	0.05	0.19	0.05	0.29	212.7
Salmon	1	0.09	0.00	0.45	0.04	0.01	0.34	0.06	265.7
Salmon	2	0.14	0.00	0.74	0.01	0.00	0.10	0.00	353.8
Salmon	3	0.45	0.42	0.00	0.07	0.06	0.01	0.00	221.3
Tahuya	9	0.11	0.39	0.00	0.04	0.38	0.00	0.08	566.8
	total %	0.27	0.21	0.16	0.05	0.11	0.12	0.08	4074.1

Appendix C. Large Woody Debris Location (Percentage of Volume by Zone).

Stream	Segment	Total Vol (m3)	Zone 1	Zone 2	Zone 3	Zone 4
Howe Creek	1	172.00	0.22	0.25	0.31	0.21
Howe Creek	2	53.90	0.37	0.17	0.22	0.22
Howe Creek	4	84.10	0.34	0.16	0.20	0.31
Howe Creek	6	39.10	0.72	0.09	0.02	0.14
Howe Creek	7	45.60	0.23	0.30	0.13	0.32
McDonald Creek	3	28.20	0.03	0.30	0.35	0.31
McDonald Creek	4	61.70	0.08	0.27	0.30	0.33
McDonald Creek	5	52.40	0.06	0.16	0.41	0.37
McDonald Creek	6	40.00	0.06	0.27	0.34	0.33
Ripley Creek	1	120.20	0.17	0.16	0.24	0.43
Salmon Creek	3	164.50	0.09	0.08	0.22	0.60
Salmon Creek	5	213.30	0.32	0.18	0.14	0.37
Dewatto River	2	18.90	0.29	0.49	0.20	0.03
Dewatto River	3	36.30	0.41	0.31	0.28	0.00
Dewatto River	5	175.40	0.64	0.27	0.09	0.00
Dewatto River	6	9.00	0.64	0.30	0.03	0.00
Dewatto River	8	182.40	0.48	0.34	0.19	0.00
Dewatto River	10	91.10	0.59	0.12	0.16	0.12
Siebert Creek	3	221.30	0.07	0.66	0.17	0.09
Tahuya River	9	589.80	0.32	0.59	0.05	0.04

Appendix D. Details of McNeil Sediment Sample Results.

Measured Volume (ml) of Sample by Sieve (mm)																Total	Cumulative
Stream	Year	Seg.	No.	Loc.	75	25	9.50	3.35	2.00	1.00	0.850	0.500	0.250	0.106	<0.106	Vol.	%<0.850
					%	%	%	%	%	%	%	%	%	%	%	VL	%
McDonald	93	1	1	CT	18%	20%	19%	15%	5%	3%	1%	*	*	18%	2%	4,333	20%
McDonald	93	1	2	RB	0%	30%	18%	16%	9%	9%	16%	*	*	0%	1%	3,775	17%
McDonald	93	1	3	LB	16%	31%	18%	12%	3%	2%	0%	*	*	17%	2%	3,550	19%
McDonald	93	1	4	CT	0%	15%	27%	16%	5%	7%	3%	*	*	28%	1%	3,945	31%
McDonald	93	1	5	LB	0%	18%	15%	16%	10%	13%	3%	*	*	24%	1%	3,630	28%
McDonald	93	1	6	RB	0%	35%	27%	11%	4%	4%	1%	*	*	16%	1%	3,510	18%
McDonald	93	1	7	CT	8%	10%	23%	21%	8%	9%	2%	*	*	18%	1%	3,337	20%
McDonald	93	1	8	LB	0%	25%	21%	20%	6%	4%	1%	*	*	22%	1%	3,958	23%
McDonald	93	1	9	RB	0%	14%	15%	11%	5%	7%	2%	*	*	45%	1%	3,492	48%
McDonald	93	1	10	CT	0%	23%	15%	14%	8%	11%	3%	*	*	24%	1%	4,450	29%
McDonald	93	1	11	RB	0%	13%	11%	11%	7%	18%	10%	*	*	29%	1%	3,710	40%
McDonald	93	1	12	LB	12%	12%	18%	17%	7%	7%	2%	*	*	22%	1%	3,347	25%
McDonald	93	1	13	CT	10%	29%	19%	15%	7%	8%	1%	*	*	11%	1%	3,524	14%
McDonald	93	1	14	RB	14%	29%	17%	12%	5%	7%	1%	*	*	12%	2%	3,419	15%
McDonald	93	1	15	CT	0%	23%	24%	15%	7%	7%	2%	*	*	20%	2%	3,886	24%
McDonald	93	1	16	CT	0%	32%	27%	13%	4%	3%	1%	*	*	18%	2%	3,796	21%
McDonald	93	1	17	RB	0%	46%	23%	6%	2%	2%	1%	*	*	17%	3%	3,363	20%
McDonald	93	1	18	LB	0%	24%	27%	17%	6%	5%	1%	*	*	18%	2%	3,709	21%
McDonald	93	1	19	CT	12%	15%	23%	19%	8%	6%	1%	*	*	14%	2%	3,390	17%
McDonald	93	1	20	LB	0%	18%	26%	21%	6%	4%	1%	*	*	21%	3%	3,937	25%
McDonald	93	1	21	RB	12%	20%	20%	15%	6%	8%	1%	*	*	14%	3%	3,788	18%
McDonald	93	1	22	CT	0%	26%	17%	18%	8%	9%	1%	*	*	15%	6%	3,282	22%
McDonald	93	1	23	RB	23%	21%	17%	5%	4%	7%	1%	*	*	15%	7%	3,875	22%
McDonald	93	1	24	LB	11%	30%	19%	11%	3%	4%	1%	*	*	16%	5%	3,947	22%

Measured Volume (ml) of Sample by Sieve (mm)																Total	Cumulative
Stream	Year	Seg.	No.	Loc.	75	25	9.50	3.35	2.00	1.00	0.850	0.500	0.250	0.106	<0.106	Vol.	%<0.850
					%	%	%	%	%	%	%	%	%	%	%	VL	%
Siebert	93	1	1	CT	0%	46%	17%	12%	4%	3%	1%	*	*	15%	2%	3,973	18%
Siebert	93	1	2	RB	0%	16%	25%	18%	8%	9%	0%	*	*	21%	3%	3,623	25%
Siebert	93	1	3	LB	0%	20%	13%	53%	2%	1%	0%	*	*	9%	2%	7,294	11%
Siebert	93	1	4	CT	24%	26%	16%	11%	4%	5%	2%	*	*	11%	3%	3,677	16%
Siebert	93	1	5	LB	0%	40%	18%	13%	5%	6%	2%	*	*	14%	3%	3,438	18%
Siebert	93	1	6	CT	0%	17%	8%	9%	6%	16%	6%	*	*	32%	7%	3,670	45%
Siebert	93	1	7	RB	12%	35%	13%	12%	5%	6%	1%	*	*	11%	5%	3,755	17%
Siebert	93	1	8	LB	0%	16%	24%	13%	7%	12%	2%	*	*	22%	4%	3,293	28%
Siebert	93	1	9	CT	0%	9%	20%	25%	8%	11%	7%	*	*	16%	3%	3,685	27%
Siebert	93	1	10	RB	0%	22%	26%	16%	4%	4%	1%	*	*	23%	5%	3,351	29%
Siebert	93	1	11	LB	11%	8%	31%	17%	1%	4%	1%	*	*	23%	4%	2,832	27%
Siebert	93	1	12	CT	0%	19%	25%	19%	5%	8%	1%	*	*	16%	5%	3,470	22%
Siebert	93	1	13	RB	0%	24%	41%	11%	1%	1%	0%	*	*	17%	4%	3,583	22%
Siebert	93	1	14	LB	0%	14%	18%	19%	12%	11%	3%	*	*	15%	9%	3,915	27%
Siebert	93	1	15	CT	0%	46%	17%	9%	4%	5%	1%	*	*	10%	8%	3,635	20%
Siebert	93	1	16	RB	0%	32%	22%	16%	6%	8%	1%	*	*	9%	6%	3,587	16%
Siebert	93	1	17	RB	9%	24%	25%	13%	6%	7%	1%	*	*	14%	2%	3,334	17%
Siebert	93	1	18	LB	13%	22%	16%	15%	7%	3%	1%	*	*	16%	7%	3,990	24%

Measured Volume (ml) of Sample by Sieve (mm)																Total	Cumulative
Stream	Year	Seg.	No.	Loc.	75	25	9.50	3.35	2.00	1.00	0.850	0.500	0.250	0.106	<0.106	Vol.	%<0.850
					%	%	%	%	%	%	%	%	%	%	%	VL	%
Dewatto	94	5	1	RB	0%	6%	45%	28%	5%	4%	1%	4%	4%	1%	2%	3,098	11%
Dewatto	94	5	2	CT	0%	16%	43%	24%	4%	4%	1%	3%	4%	1%	1%	3,713	10%
Dewatto	94	5	3	LB	0%	30%	40%	13%	4%	4%	1%	3%	3%	1%	2%	3,168	10%
Dewatto	94	5	4	CT	0%	17%	34%	19%	7%	3%	0%	2%	4%	1%	12%	3,905	19%
Dewatto	94	5	5	RB	0%	13%	29%	24%	9%	7%	1%	3%	4%	1%	7%	3,478	17%
Dewatto	94	5	6	RB	0%	36%	35%	8%	0%	0%	0%	0%	3%	2%	15%	3,327	21%
Dewatto	94	5	7	CT	0%	30%	37%	8%	1%	1%	0%	0%	3%	3%	18%	4,014	24%
Dewatto	94	5	8	LB	0%	9%	34%	24%	7%	9%	1%	4%	3%	0%	9%	3,688	18%
Dewatto	94	5	9	LB	0%	26%	37%	20%	6%	4%	0%	1%	1%	1%	5%	3,225	8%
Dewatto	94	5	10	RB	0%	25%	30%	19%	6%	6%	1%	3%	3%	1%	6%	3,546	14%
Dewatto	94	5	11	RB	0%	20%	31%	18%	6%	5%	1%	5%	4%	1%	10%	3,581	21%
Dewatto	94	5	12	CT	0%	39%	30%	15%	4%	3%	1%	2%	1%	0%	5%	3,318	9%
Dewatto	95	2	1	RB	0%	6%	19%	27%	10%	11%	3%	9%	8%	2%	5%	3,778	27%
Dewatto	95	2	2	CT	0%	33%	18%	15%	8%	6%	1%	4%	4%	1%	9%	3,379	20%
Dewatto	95	2	3	RB	11%	16%	7%	8%	4%	9%	1%	12%	9%	2%	21%	3,998	44%
Dewatto	95	2	4	CT	11%	15%	16%	20%	8%	6%	1%	4%	4%	3%	12%	3,904	23%
Dewatto	95	2	5	NA	15%	27%	19%	14%	7%	6%	0%	3%	2%	0%	6%	2,617	11%
Dewatto	95	2	6	NA	6%	20%	20%	17%	9%	9%	1%	4%	2%	0%	11%	3,871	19%
Dewatto	95	2	7	NA	0%	34%	20%	17%	8%	7%	1%	3%	2%	1%	7%	3,771	14%
Dewatto	95	2	8	NA	0%	8%	25%	20%	8%	12%	3%	10%	7%	1%	7%	3,603	28%
Dewatto	95	2	9	NA	0%	32%	16%	18%	6%	7%	1%	5%	3%	0%	12%	3,618	21%
Dewatto	95	2	10	NA	0%	21%	27%	18%	7%	8%	1%	4%	4%	1%	8%	3,381	18%
Dewatto	95	2	11	NA	0%	22%	27%	19%	9%	11%	2%	4%	2%	1%	3%	3,632	12%
Dewatto	95	2	12	NA	0%	26%	28%	21%	10%	7%	1%	2%	1%	0%	5%	3,201	9%

Measured Volume (ml) of Sample by Sieve (mm)																Total	Cumulative
Stream	Year	Seg.	No.	Loc.	75	25	9.50	3.35	2.00	1.00	0.850	0.500	0.250	0.106	<0.106	Vol.	%<0.850
					%	%	%	%	%	%	%	%	%	%	%	VL	%
Salmon	94	1	1	RB	0%	15%	46%	24%	4%	2%	1%	1%	1%	1%	5%	3,250	9%
Salmon	94	1	1	LB	0%	3%	21%	28%	7%	11%	5%	13%	6%	1%	4%	3,310	29%
Salmon	94	1	5	RB	12%	28%	19%	6%	2%	6%	2%	8%	8%	3%	5%	3,005	26%
Salmon	94	1	5	CT	17%	33%	14%	10%	4%	5%	1%	4%	5%	2%	5%	3,482	17%
Salmon	94	1	6	RB	8%	20%	20%	23%	7%	6%	1%	3%	4%	2%	6%	3,771	16%
Salmon	94	1	4	LB	10%	32%	23%	16%	6%	0%	5%	1%	2%	2%	3%	3,072	13%
Salmon	94	1	2	LB	0%	7%	19%	24%	16%	19%	1%	7%	4%	1%	1%	3,444	14%
Salmon	94	1	6	LB	16%	20%	26%	23%	6%	4%	1%	0%	0%	0%	4%	3,223	6%
Salmon	94	1	3	LB	0%	23%	23%	19%	8%	10%	1%	6%	5%	2%	4%	3,728	18%
Salmon	94	1	4	RB	16%	41%	20%	12%	1%	2%	0%	0%	2%	2%	3%	2,948	8%
Salmon	94	1	2	RB	0%	48%	27%	9%	2%	2%	0%	3%	5%	2%	2%	3,235	12%
Salmon	94	1	3	RB	0%	42%	22%	13%	3%	5%	1%	6%	4%	1%	2%	3,734	14%
Salmon	94	1	5	LB	0%	37%	25%	13%	3%	5%	1%	3%	4%	2%	6%	2,897	17%
Salmon	94	1	2	CT	0%	28%	38%	19%	3%	1%	0%	3%	5%	1%	2%	3,231	12%

Measured Volume (ml) of Sample by Sieve (mm)																Total	Cumulative
Stream	Year	Seg.	No.	Loc.	75	25	9.50	3.35	2.00	1.00	0.850	0.500	0.250	0.106	<0.106	Vol.	%<0.850
					%	%	%	%	%	%	%	%	%	%	%	VL	%
Tahuya	94	9	1	RB	17%	38%	14%	11%	4%	3%	1%	3%	4%	1%	3%	3,377	12%
Tahuya	94	9	2	LB	13%	39%	24%	12%	2%	2%	1%	2%	2%	1%	2%	2,377	8%
Tahuya	94	9	3	LB	0%	35%	24%	16%	8%	4%	1%	4%	5%	1%	1%	3,784	12%
Tahuya	94	9	4	CT	0%	50%	27%	10%	1%	0%	0%	0%	6%	2%	4%	3,241	12%
Tahuya	94	9	5	RB	10%	44%	27%	7%	2%	1%	0%	0%	4%	2%	3%	3,177	9%
Tahuya	94	9	6	LB	21%	27%	16%	13%	6%	7%	1%	5%	2%	0%	2%	2,951	11%
Tahuya	94	9	7	CT	11%	25%	22%	17%	6%	7%	1%	4%	3%	0%	2%	3,350	10%
Tahuya	94	9	8	RB	0%	16%	28%	24%	8%	7%	1%	8%	3%	1%	4%	3,465	17%
Tahuya	94	9	9	LB	14%	28%	30%	12%	4%	4%	1%	2%	2%	1%	3%	2,977	9%
Tahuya	94	9	10	RB	0%	45%	36%	14%	2%	0%	0%	0%	0%	0%	2%	2,821	3%
Tahuya	94	9	11	LB	13%	30%	22%	15%	4%	4%	1%	4%	4%	1%	2%	3,025	12%
Tahuya	94	9	12	CT	12%	30%	29%	15%	4%	3%	0%	1%	3%	1%	3%	2,751	7%
Tahuya	94	9	13	RB	9%	25%	25%	16%	6%	6%	1%	4%	6%	1%	3%	3,410	15%

Seg. is segment.
No. is sample number.
Loc. is sample location in the channel.
VL is volume.
* is for sieves unavailable in 1993 field season.
NA is for information not available.

Appendix E. Pool Forming Factors.

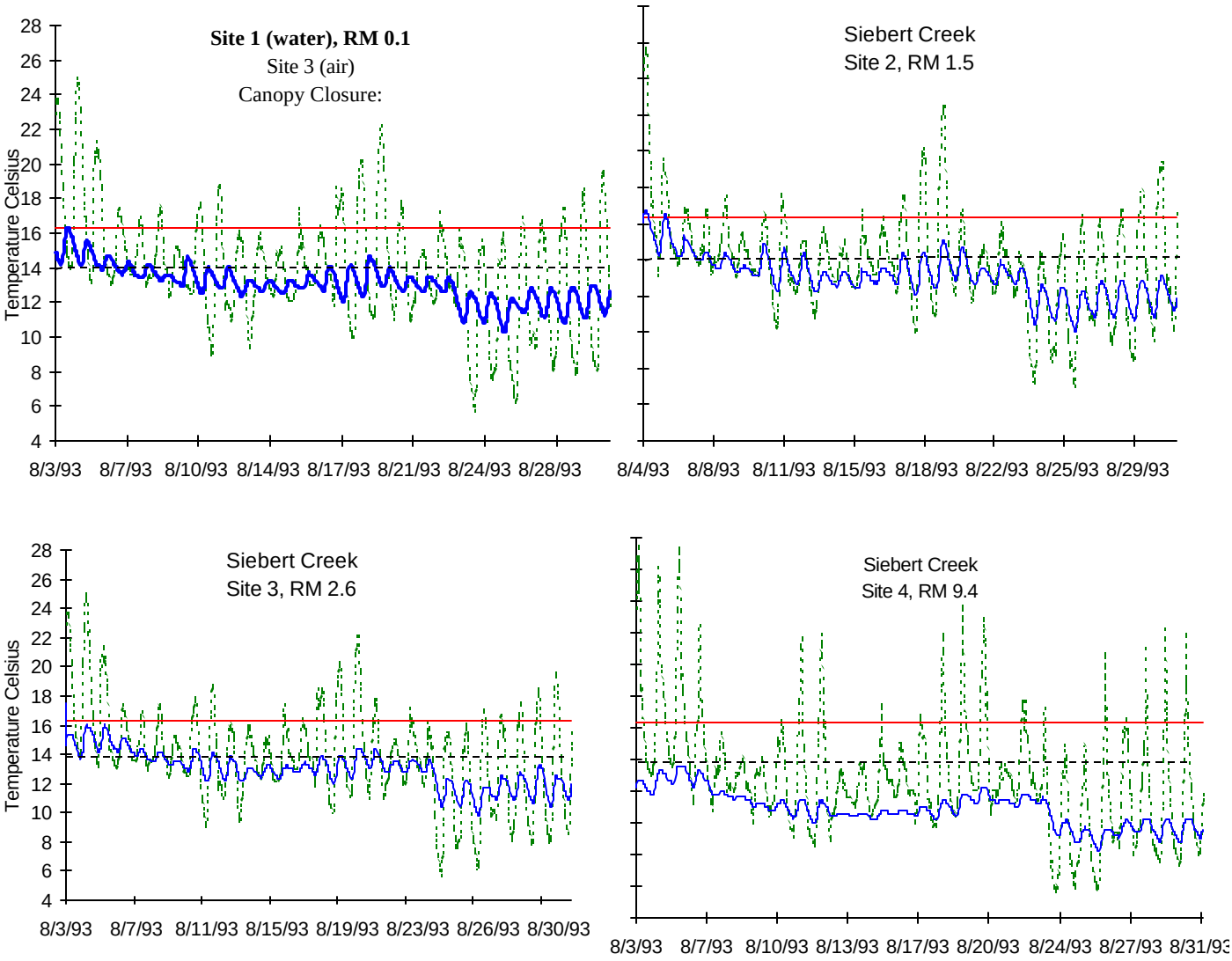
Stream	Seg	Total Number of Pools	Artificial Bank Protection	Beaver Dam	Bedform	Bedrock Outcrop	Debris Jam	Logs	Other	Rock or Boulders	Roots of Standing Tree	Scour Assoc w/ Resistant Bank
Dewatto River	2	7	0	0	0	0	3	1	0	0	3	0
Dewatto River	3	6	0	0	1	0	0	1	0	2	2	0
Dewatto River	5	93	0	3	0	0	7	14	5	0	62	2
Dewatto River	6	33	0	10	3	0	3	10	0	0	3	4
Dewatto River	8	49	0	0	2	0	26	13	0	0	7	1
Dewatto River	10	19	1	1	0	0	8	6	2	0	1	0
Howe Creek	1	39	0	1	0	0	10	11	8	6	2	1
Howe Creek	2	18	0	2	0	0	4	6	3	0	1	2
Howe Creek	4	55	0	4	0	0	8	24	4	1	6	8
Howe Creek	6	26	0	0	1	0	3	10	1	0	4	7
Howe Creek	7	65	0	0	1	0	5	25	2	6	16	10
McDonald Creek	3	29	0	0	4	0	0	3	0	15	7	0
McDonald Creek	4	101	0	0	11	55	0	7	2	25	1	0
McDonald Creek	5	55	0	0	2	13	2	11	2	21	4	0
McDonald Creek	6	41	0	0	4	1	0	12	1	19	4	0
Ripley Creek	1	58	0	0	0	5	14	16	0	6	6	11
Salmon Creek	3	26	0	0	0	0	6	3	0	13	3	1
Salmon Creek	5	121	0	1	1	0	16	64	9	4	9	17
Siebert Creek	3	150	0	0	47	0	14	8	1	74	4	2
Tahuya River	9	177	1	11	13	0	34	30	15	1	48	24
Total		1168										

Appendix F. Substrate at Bed Surface Based on Visual Examination.

Stream	Seg	Silt/Mud	Sand	Gravel	Cobble	Boulder	Bedrock	Total Area (m2)
		%	%	%	%	%	%	
Big Quilcene River	1	0%	0%	100%	0%	0%	0%	3,465
	2	0%	11%	89%	0%	0%	0%	9,678
	3	0%	20%	80%	0%	0%	0%	19,363
	5	0%	42%	58%	0%	0%	0%	706
Big Quilcene River Total		0%	16%	84%	0%	0%	0%	33,212
Dewatto River	2	0%	0%	15%	85%	0%	0%	1,821
	3	0%	0%	31%	64%	0%	5%	3,404
	5	2%	48%	43%	4%	0%	3%	7,763
	6	1%	40%	59%	0%	0%	0%	2,389
	8	0%	61%	39%	0%	0%	0%	3,427
	10	8%	88%	2%	2%	0%	0%	920
Dewatto River Total		1%	38%	38%	21%	0%	2%	19,722
Howe Creek	1	5%	27%	47%	9%	13%	1%	4,835
	2	1%	62%	37%	0%	0%	0%	814
	4	4%	34%	62%	0%	0%	0%	2,739
	5	1%	6%	93%	0%	0%	0%	886
	7	0%	4%	95%	0%	0%	0%	2,092
Howe Creek Total		3%	25%	62%	4%	5%	0%	11,366
Little Quilcene River	1	0%	54%	46%	0%	0%	0%	1,483
	2	6%	20%	73%	1%	0%	0%	10,776
	3	5%	17%	79%	0%	0%	0%	6,157
	4	0%	14%	85%	0%	0%	0%	9,671
	5	0%	8%	92%	0%	0%	0%	5,183
Little Quilcene River Total		3%	17%	79%	0%	0%	0%	33,269
McDonald Creek	1	0%	36%	63%	1%	0%	0%	11,281
	2	0%	45%	55%	0%	0%	0%	4,883
	3	0%	33%	52%	4%	9%	2%	9,604
	4	0%	3%	9%	2%	7%	79%	5,880
	5	0%	15%	49%	9%	1%	26%	2,948
	6	0%	6%	76%	11%	4%	3%	2,113
McDonald Creek Total		0%	28%	50%	3%	4%	15%	36,710
Ripley Creek	1	0%	25%	47%	15%	0%	13%	811
Ripley Creek Total		0%	25%	47%	15%	0%	13%	811
Salmon Creek	2	0%	24%	75%	0%	1%	1%	5,997
	3	0%	7%	47%	14%	0%	32%	767
	5	4%	7%	85%	3%	0%	1%	4,812
Salmon Creek Total		2%	16%	77%	2%	0%	3%	11,577
Siebert Creek	1	0%	42%	58%	0%	0%	0%	21,124
	2	0%	31%	67%	2%	0%	0%	12,988
	3	0%	16%	7%	29%	24%	24%	8,813
Siebert Creek Total		0%	33%	50%	7%	5%	5%	42,924
Tahuya River	9	0%	14%	79%	6%	0%	0%	40,350
Tahuya River Total		0%	14%	79%	6%	0%	0%	40,350

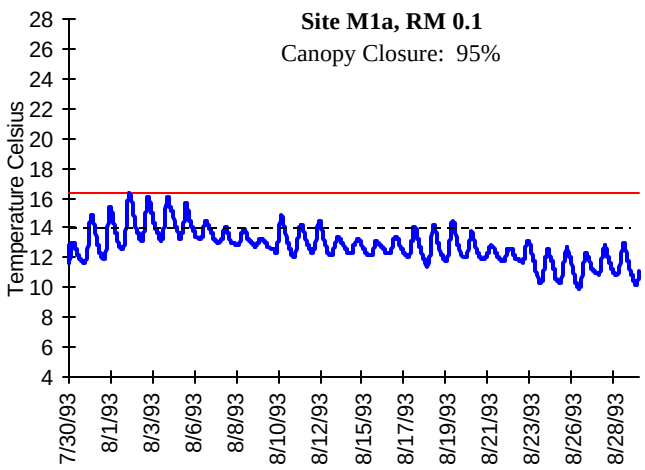
Appendix G. Thermograph Results for Siebert, McDonald, Tahuya, and Dewatto Watersheds.

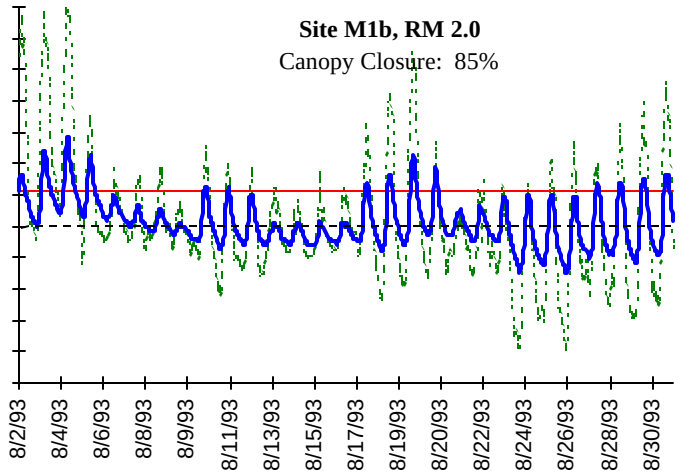
Siebert Creek Air and Water Temperature
1992-1993

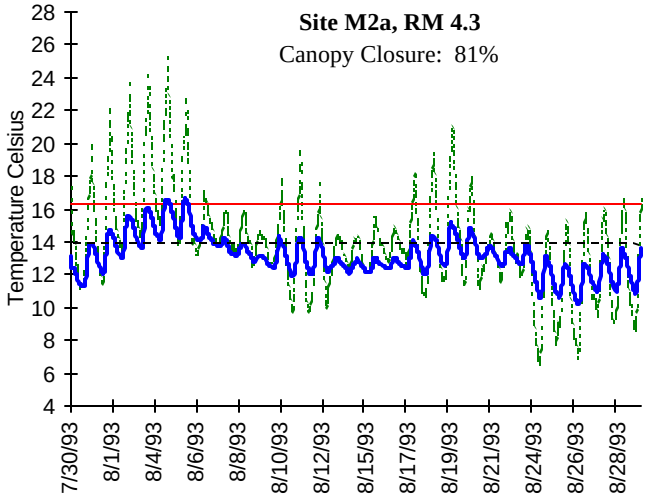


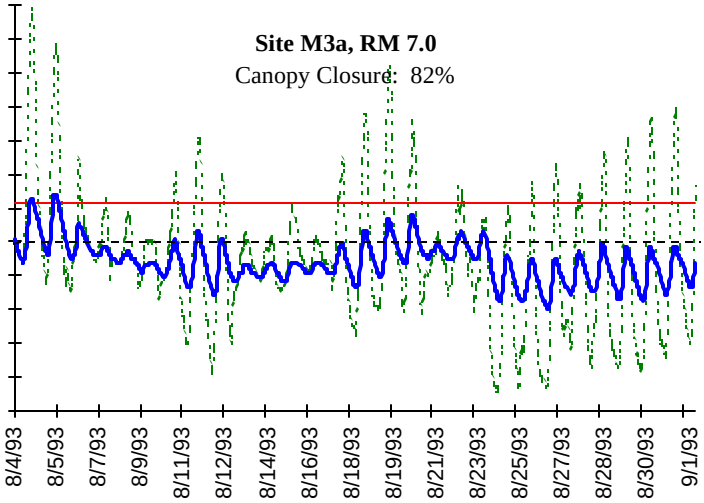
McDonald Creek Air and Water Temperature

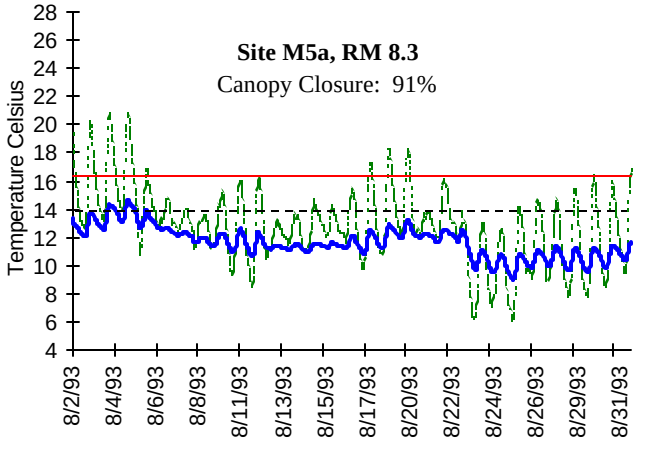
1993

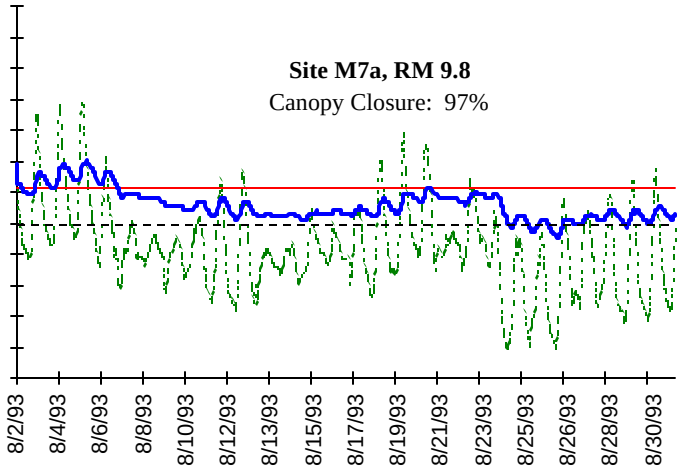






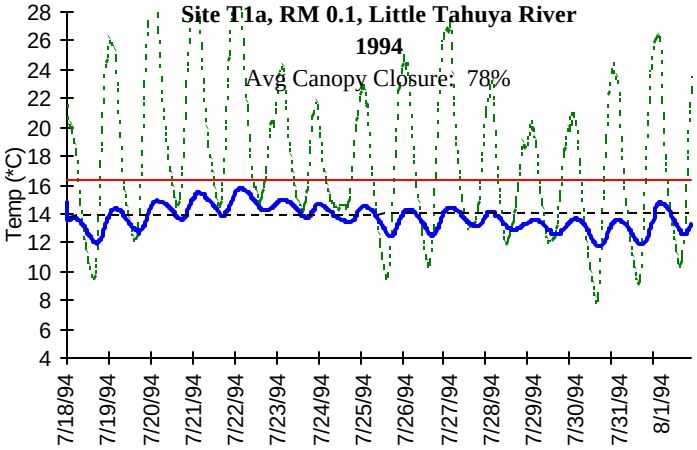


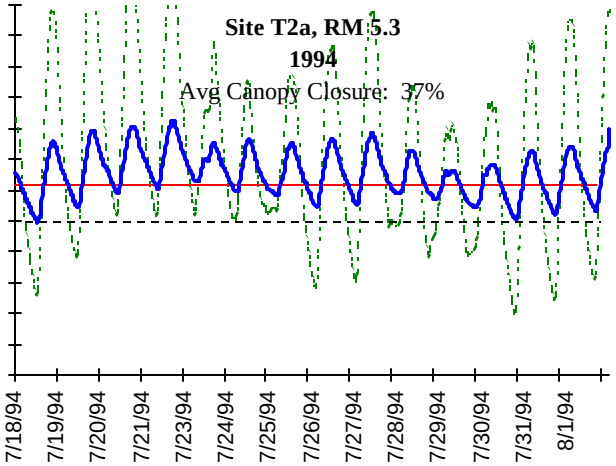


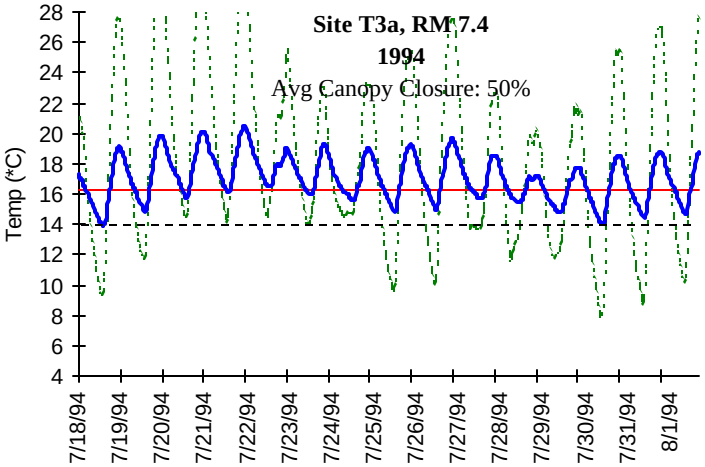


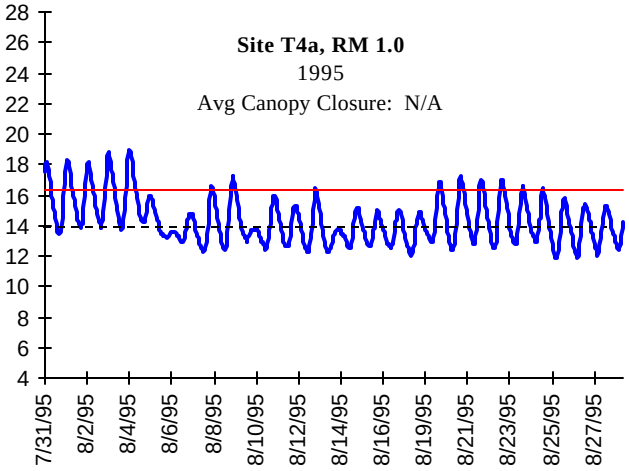
Tahuya River Air and Water Temperature

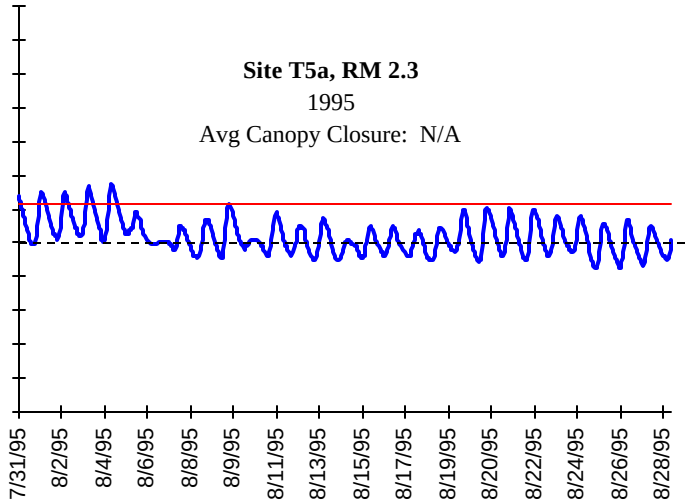
1994-1995



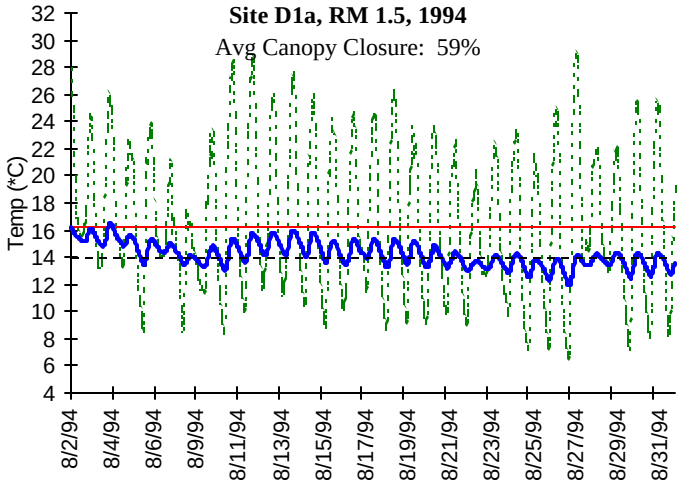


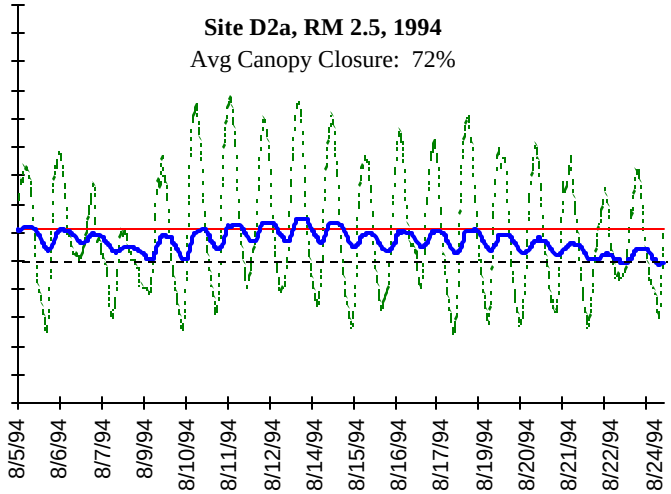


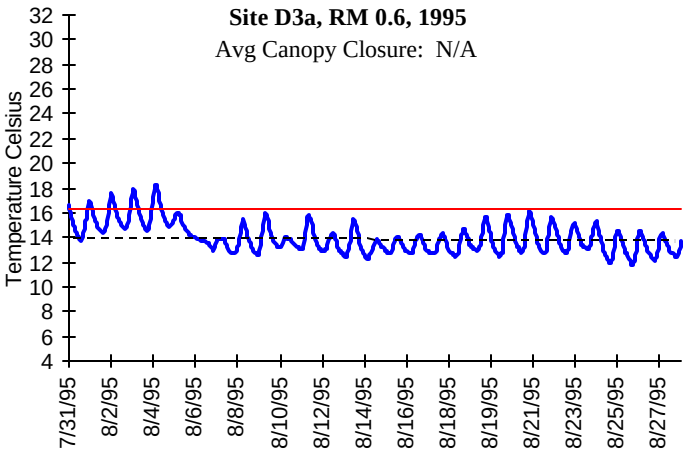


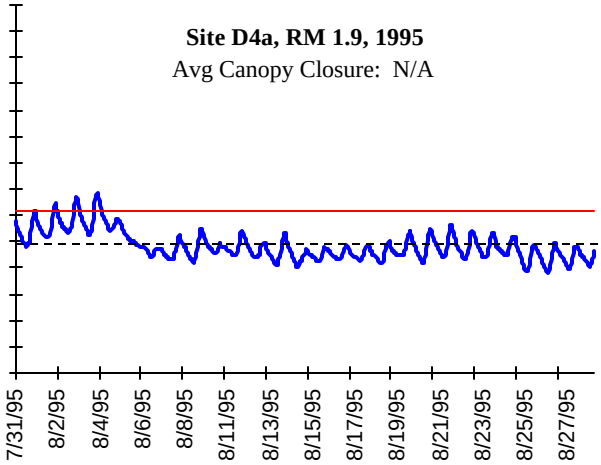


Dewatto River Air and Water Temperature
1994-1995









Appendix H. Macroinvertebrate Site Information.

Sample number	Seg	Ref Pt	River mile	Substrate	Vegetation	Velocity	Date	Comments
McDonald 1	1	2	0.1	60%cobble	no leaves, fine detritus	cascade	10/6/94	
2	2	3	4.2	50%cobble	alder lvs, cedar	slow	10/6/94	substrate compact
3	1	25	1.7	70%cobble	alder lvs, twigs	?	10/7/94	
4	1	33	2.1	50% cobble	alder, misc deciduous	slow	10/7/94	
5	1	35	2.3	90% gravel	small detritus	fast	10/6/93	narrow spot, gravel/cobble clean
6	1	68	3.9	40% cobble	alder, conifer needles		10/7/94	cobble clean
Siebert 1	1	0	0.1	60%cobble	fine detritus, lvs,	fast	10/4/93	
2	1	12	0.9	no data		?	10/4/94	
3	1	13	0.8	90% gravel	fine detritus, sediment	fast	10/5/94	below cattle access, wide RC, packed hard
4	1	14	1	60%cobble	fine detritus, smallsed	slow	10/5/94	50 m above cattle access
5	1	24	1.5	70%gravel	alder lvs, twigs, sed	slow	10/5/94	mass wasting on LB; 75 meter upstream 101 bridge
6	1	44	2.5	90% gravle	alder lvs, some sed	fast	10/5/94	mass wasting 25 m upstream
7	1	52	2.6	50% gravel	fine detritus, lots sed		10/4/93	
8	2	2	3.5	70% cobble	conifer needles	?	9/30/94	
9	2	9	3.9	50% gravel		?	9/30/94	
Tahuya 1	9	5	4.1	no data	fine detritus	?	9/30/94	
2	9	5	4.1	50%cobble	algae, sm maple lvs	?	10/3/94	
3	9	6	4.1	no data	fine detritus, algae	?	10/3/94	

4	9	40	6.5	80%gravel	fine detritus, twigs, alder lvs	?	9/28/94	
5	9	66	7.2	70%cobble	Alder lvs, alga, conifer	?	9/29/94	
Dewatto 1	5	8	5	90%gravel	lots sed, lvs, twigs	slow	10/6/94	
2	5	10	5.1	no data	algae, twigs, conf neddles	slow	10/7/94	

Appendix I. List of Benthic Macroinvertebrate Taxa Collected from the Tahuya River, Dewatto River, Siebert Creek, And McDonald Creek.

Phylum	Class	Order	Taxon	Taxonomic Level	Common
Arthropod	Insecta	Ephemeropte	Ephemerella	Genus (family	May flies
			Cinygmula	Genus (family	May flies
			Ameletus	Genus (family Ameletidae)	May flies
			Paraleptophiebi	Genus (family	May flies
			Epeorus	Genus (family	May flies
			Rithrogina	Genus (family Ironodes)	May flies
		Plecoptera	Perlidae	Family	Stone flies
			Chloroperlidae	Family	Stone flies
			Malenka	Genus (family Nemouridae)	Stone flies
			Perlodidae	Family	Stone flies
		Trichoptera	Limnephilidae	Family	Caddis flies
			Polycentropus	Genus (family	Caddis flies
			Rhyacophilidae	Family	Caddis flies
			Brachycentrida	Family	Caddis flies
			Glossosomatid	Family	Caddis flies
			Hydropsychida	Family	Caddis flies
		Diptera	Tipulidae	Family	Crane flies
			Chironomidae	Family	Midges
			Empididae	Family	True flies
			Tabanidae	Family	Horse/deer
			Simuliidae	Family	Black flies
			Psychodidae	Family	True flies
			Pelecorhynchid	Family	True flies
		Coleoptera	Narpus	Genus (family Elmidae)	Beetle
	Hydracarin		Hydracarina	Class	Water mites
Annelida	Oligochaet		Oligochaeta	Class	Aquatic
Mullusca	Pelecypod		Pelecypoda	Class	Clams
Mullusca	Gastropod		Gastropoda	Class	Snails

Appendix J. Summary of Benthic Macroinvertebrate Community Metrics From Dewatto (D-segments) and Tahuya (T) Rivers (Hood Canal), and McDonald (M) and Siebert (S) Creeks (Strait Of Juan De Fuca).

Segment	Ephemeroptera Richness	Plecoptera Richness	Trichoptera Richness	EPT Taxa Richness	All Taxa Richness	% Dominance (3 Taxa)
D-1	4	3	1	8	10	52
D-2	4	4	2	10	15	45
T-1	1	1	1	3	6	61
T-2	3	3	3	9	12	64
T-3	3	1	3	7	8	71
T-4	4	3	3	10	16	42
T-5	3	3	2	8	12	59
M-1	4	2	3	9	12	53
M-2	4	4	3	11	18	37
M-3	4	2	4	10	14	49
M-4	3	1	3	7	11	75
M-5	3	0	2	5	7	87
M-6	0	0	0	0	2	100
S-1	4	2	2	8	14	64
S-2	3	1	3	7	11	62
S-3	3	1	4	8	13	52
S-4	5	2	4	11	17	49
S-5	4	1	2	7	10	58
S-6	5	3	2	10	16	55
S-7	3	2	2	7	10	67
S-8	4	1	2	7	9	64
S-9	5	3	4	12	16	44
Max	5	4	4	12	18	100
Min	0	0	0	0	2	37
Mean	3.5	2.0	2.5	7.9	11.8	59.6
St. Dev.	1.2	1.2	1.1	2.7	3.9	14.7