

Appendix C

Hydrologic and Hydraulic Information

Project Name: Maple Hill Creek
 Project No.: 11115650
 Subject: Hydraulic Summary

Reach	River Sta	Profile	Q Right (m ³ /s)	Q Left (m ³ /s)	Q Total (m ³ /s)	Q Channel (m ³ /s)	Shear Chan (N/m ²)	Area Channel (m ²)	Top W Chnl (m)	W.P. Channel (m)	Vel Chnl (m/s)	E.G. Slope (m/m)	Invert Slope
Reach 1	104	2YR		0	1.05	1.05	27.31	1.01	3.94	4.17	1.04	0.011512	0.0107
Reach 1	104	5YR	0	0	1.51	1.51	34.16	1.25	4.06	4.29	1.2	0.01192	0.0107
Reach 1	104	25YR	0.02	0.02	3.05	3.01	54.42	1.86	4.06	4.29	1.62	0.012804	0.0107
Reach 1	104	100YR	0.14	0.12	6.33	6.07	93.69	2.69	4.06	4.29	2.26	0.015249	0.0107
Reach 1	104	Reg	0.04	0.04	3.85	3.77	64.88	2.09	4.06	4.29	1.8	0.013565	0.0107
Reach 1	103	2YR			1.05	1.05	51.35	0.77	4.04	4.16	1.37	0.028311	0.0377
Reach 1	103	5YR			1.51	1.51	58.32	1	4.3	4.45	1.5	0.026373	0.0377
Reach 1	103	25YR	0	0	3.05	3.05	77.94	1.63	4.56	4.74	1.87	0.023078	0.0377
Reach 1	103	100YR	0.07	0.05	6.33	6.21	101.45	2.68	4.56	4.74	2.31	0.018276	0.0377
Reach 1	103	Reg	0.01	0.01	3.85	3.83	83.91	1.93	4.56	4.74	1.99	0.021064	0.0377
Reach 1	102	2YR			1.05	1.05	75.55	0.63	3.35	3.47	1.65	0.042063	0.048
Reach 1	102	5YR			1.51	1.51	91.11	0.81	3.65	3.79	1.86	0.043455	0.048
Reach 1	102	25YR	0	0	3.05	3.05	134.74	1.27	4.03	4.18	2.4	0.045315	0.048
Reach 1	102	100YR	0.05	0.04	6.33	6.23	211.25	1.93	4.03	4.18	3.23	0.046645	0.048
Reach 1	102	Reg	0.01	0.01	3.85	3.84	157.42	1.45	4.03	4.18	2.65	0.046439	0.048
Reach 1	101	2YR			1.05	1.05	102.01	0.54	2.64	2.8	1.94	0.053747	0.0196
Reach 1	101	5YR			1.51	1.51	108.53	0.74	3.34	3.53	2.03	0.052522	0.0196
Reach 1	101	25YR	0.01	0	3.05	3.04	150.63	1.2	3.71	3.92	2.54	0.05031	0.0196
Reach 1	101	100YR	0.11	0.06	6.33	6.16	224.66	1.85	3.71	3.92	3.34	0.048645	0.0196
Reach 1	101	Reg	0.02	0.01	3.85	3.82	170.18	1.38	3.71	3.92	2.77	0.049244	0.0196
Reach 1	100	2YR			1.05	1.05	30.1	0.93	3	3.27	1.12	0.010754	0.0132
Reach 1	100	5YR			1.51	1.51	34.76	1.22	3.37	3.68	1.24	0.010703	0.0132
Reach 1	100	25YR	0	0.01	3.05	3.04	50.86	1.91	3.62	3.96	1.59	0.010763	0.0132
Reach 1	100	100YR	0.09	0.11	6.33	6.13	78.24	2.89	3.62	3.96	2.12	0.010912	0.0132
Reach 1	100	Reg	0.01	0.02	3.85	3.82	58.82	2.18	3.62	3.96	1.75	0.010898	0.0132
Reach 1	99	2YR			1.05	1.05	31.51	0.91	2.93	3.18	1.15	0.011198	0.0168
Reach 1	99	5YR			1.51	1.51	36.77	1.18	3.27	3.56	1.27	0.011288	0.0168
Reach 1	99	25YR	0	0	3.05	3.04	51.9	1.89	3.6	3.93	1.61	0.011007	0.0168
Reach 1	99	100YR	0.08	0.1	6.33	6.16	76.17	2.93	3.6	3.93	2.1	0.01041	0.0168
Reach 1	99	Reg	0.01	0.02	3.85	3.82	58.65	2.18	3.6	3.93	1.75	0.01078	0.0168
Reach 1	98	2YR			1.05	1.05	72.92	0.66	2.52	3.92	1.6	0.04445	0.0472
Reach 1	98	5YR			1.51	1.51	82.51	0.86	2.67	4.27	1.76	0.041819	0.0472
Reach 1	98	25YR			3.05	3.05	111.34	1.4	2.88	4.79	2.17	0.038741	0.0472
Reach 1	98	100YR	0.03	0.01	6.33	6.29	146.96	2.32	2.89	4.82	2.71	0.031134	0.0472
Reach 1	98	Reg	0	0	3.85	3.85	124.02	1.64	2.89	4.82	2.35	0.037211	0.0472
Reach 1	97	2YR			1.05	1.05	66.5	0.7	3.16	4.58	1.5	0.044501	0.0032
Reach 1	97	5YR			1.51	1.51	86.57	0.85	3.2	4.69	1.77	0.048525	0.0032
Reach 1	97	25YR	0	0	3.05	3.05	55.73	1.91	3.41	5.23	1.59	0.015542	0.0032
Reach 1	97	100YR	0.11	0.21	6.33	6.01	25.8	4.76	3.41	5.23	1.26	0.002892	0.0032
Reach 1	97	Reg	0	0	3.85	3.84	60.9	2.25	3.41	5.23	1.71	0.014468	0.0032
	96.5		Culvert										
WestVale SWMP	96	2YR	0.01		3.46	3.45	62.89	2.11	6.79	7.12	1.63	0.02166	0.0194
WestVale SWMP	96	5YR	0.33	0	6.04	5.71	62.47	3.31	7.52	7.89	1.73	0.015204	0.0194
WestVale SWMP	96	25YR	1.82	0.02	8.36	6.52	26.38	5.36	7.52	7.89	1.22	0.003958	0.0194
WestVale SWMP	96	100YR	4.66	0.2	11.92	7.06	7.19	10.02	7.52	7.89	0.7	0.000578	0.0194
WestVale SWMP	96	Reg	1.82	0.02	8.36	6.52	26.38	5.36	7.52	7.89	1.22	0.003958	0.0194
WestVale SWMP	95	2YR	0.94	0.77	3.46	1.75	2.76	4.43	6.27	6.39	0.39	0.000407	0.0072
WestVale SWMP	95	5YR	1.85	1.88	6.04	2.31	2.31	6.08	6.27	6.39	0.38	0.000247	0.0072
WestVale SWMP	95	25YR	2.86	3.01	8.36	2.5	1.21	8.56	6.27	6.39	0.29	0.000092	0.0072
WestVale SWMP	95	100YR	4.36	4.6	11.92	2.96	0.69	12.6	6.27	6.39	0.24	0.000036	0.0072
WestVale SWMP	95	Reg	2.86	3.01	8.36	2.5	1.21	8.56	6.27	6.39	0.29	0.000092	0.0072
WestVale SWMP	94	2YR	0.28	1.17	3.46	2.01	1.09	8.08	11.29	11.36	0.25	0.000157	0.0039
WestVale SWMP	94	5YR	0.59	2.5	6.04	2.94	1.12	11.05	11.29	11.36	0.27	0.000118	0.0039
WestVale SWMP	94	25YR	0.93	3.89	8.36	3.54	0.74	15.53	11.29	11.36	0.23	0.000055	0.0039
WestVale SWMP	94	100YR	1.48	5.93	11.92	4.51	0.49	22.8	11.29	11.36	0.2	0.000025	0.0039
WestVale SWMP	94	Reg	0.93	3.89	8.36	3.54	0.74	15.53	11.29	11.36	0.23	0.000055	0.0039
WestVale SWMP	93	2YR	0	0.33	3.46	3.13	83.65	1.57	3.27	3.79	1.99	0.020608	0.0088
WestVale SWMP	93	5YR	0.01	1.33	6.04	4.7	53.97	2.68	3.27	3.79	1.75	0.007769	0.0088
WestVale SWMP	93	25YR	0.08	2.4	8.36	5.89	29.69	4.2	3.27	3.79	1.4	0.002727	0.0088
WestVale SWMP	93	100YR	0.71	3.62	11.92	7.6	18.38	6.43	3.27	3.79	1.18	0.001105	0.0088
WestVale SWMP	93	Reg	0.08	2.4	8.36	5.89	29.69	4.2	3.27	3.79	1.4	0.002727	0.0088
	92.5		Culvert										
Reach 3	92	2YR			2.77	3.46	85.17	1.39	3.09	3.5	2.49	0.021928	0.0118
Reach 3	92	5YR			4.83	6.04	91.83	2.22	3.62	4.24	2.72	0.017845	0.0118
Reach 3	92	25YR	0	0	7.45	8.36	114.42	2.97	3.92	4.65	2.81	0.018253	0.0118
Reach 3	92	100YR	0.1	0.02	11.14	11.81	129.68	3.94	3.92	4.65	2.99	0.015587	0.0118
Reach 3	92	Reg	0	0	8.09	8.36	134.93	2.97	3.92	4.65	2.81	0.021523	0.0118

Reach 3	91	2YR			2.77	2.77	33.99	2.11	3.64	4.2	1.31	0.006896	0.007
Reach 3	91	5YR			4.83	4.83	45.29	3.11	4.58	5.3	1.55	0.007876	0.007
Reach 3	91	25YR	0	0	7.45	7.45	56.63	4.17	5.26	6.06	1.79	0.008391	0.007
Reach 3	91	100YR	0.04	0.01	11.14	11.1	74.58	5.22	5.26	6.06	2.13	0.008837	0.007
Reach 3	91	Reg	0	0	8.09	8.09	59.55	4.38	5.26	6.06	1.85	0.008404	0.007
Reach 3	90	2YR			2.77	2.77	79.78	1.47	3.94	4.26	1.89	0.023611	0.0165
Reach 3	90	5YR			4.83	4.83	97	2.23	4.66	5.09	2.17	0.0226	0.0165
Reach 3	90	25YR			7.45	7.45	112.11	3.1	5.36	5.9	2.4	0.021742	0.0165
Reach 3	90	100YR	0.01	0.01	11.14	11.12	130.01	4.11	5.43	5.98	2.7	0.01929	0.0165
Reach 3	90	Reg	0		8.09	8.09	117.87	3.27	5.43	5.98	2.48	0.022022	0.0165
Reach 3	89	2YR	0	0	2.77	2.77	20.45	2.74	5.38	5.7	1.01	0.004337	0.0064
Reach 3	89	5YR	0.02	0.02	4.83	4.79	27.18	3.88	5.38	5.7	1.23	0.004075	0.0064
Reach 3	89	25YR	0.11	0.09	7.45	7.25	34.19	5.02	5.38	5.7	1.45	0.00396	0.0064
Reach 3	89	100YR	0.33	0.42	11.14	10.4	40.86	6.33	5.38	5.7	1.64	0.003751	0.0064
Reach 3	89	Reg	0.14	0.11	8.09	7.84	35.71	5.27	5.38	5.7	1.49	0.003941	0.0064
Reach 3	88	2YR			2.77	2.77	54.24	1.73	3.89	4.22	1.6	0.013498	0.0177
Reach 3	88	5YR			4.83	4.83	71.09	2.53	4.44	4.89	1.91	0.014002	0.0177
Reach 3	88	25YR	0	0	7.45	7.45	83.59	3.47	4.81	5.35	2.15	0.013147	0.0177
Reach 3	88	100YR	0.03	0.07	11.14	11.04	102.6	4.45	4.81	5.35	2.48	0.012572	0.0177
Reach 3	88	Reg	0	0.01	8.09	8.08	85.73	3.68	4.81	5.35	2.2	0.012709	0.0177
Reach 3	87	2YR			2.77	2.77	51.72	1.75	3.43	3.92	1.59	0.011852	0.0075
Reach 3	87	5YR	0	0.01	4.83	4.81	42.14	3.12	3.93	4.51	1.54	0.006209	0.0075
Reach 3	87	25YR	0.03	0.13	7.45	7.29	54.13	4	3.93	4.51	1.82	0.006224	0.0075
Reach 3	87	100YR	0.37	1.32	11.14	9.45	45.7	5.38	3.93	4.51	1.76	0.003912	0.0075
Reach 3	87	Reg	0.07	0.33	8.09	7.68	47.82	4.42	3.93	4.51	1.74	0.004983	0.0075
Reach 3	86	2YR			2.77	2.77	20.35	2.7	4.46	4.99	1.03	0.003845	0.011
Reach 3	86	5YR	0.02	0.03	4.83	4.78	11.95	5.48	4.86	5.48	0.87	0.01219	0.011
Reach 3	86	25YR	0.06	0.1	7.45	7.29	18.01	6.6	4.86	5.48	1.1	0.001525	0.011
Reach 3	86	100YR	0.54	0.31	11.14	10.29	20	8.48	4.86	5.48	1.21	0.001318	0.011
Reach 3	86	Reg	0.15	0.14	8.09	7.8	16.56	7.24	4.86	5.48	1.08	0.001276	0.011
Reach 3	85	2YR			2.77	2.77	11.65	3.49	5.03	5.69	0.79	0.001938	0.0093
Reach 3	85	5YR	0.03	0.01	4.83	4.79	7.94	6.66	5.48	6.28	0.72	0.000763	0.0093
Reach 3	85	25YR	0.1	0.05	7.45	7.29	12.26	7.93	5.48	6.28	0.92	0.000989	0.0093
Reach 3	85	100YR	0.49	0.21	11.14	10.44	14.45	10.06	5.48	6.28	1.04	0.00092	0.0093
Reach 3	85	Reg	0.16	0.09	8.09	7.84	11.54	8.67	5.48	6.28	0.9	0.000852	0.0093
	84.5			Culvert									
Reach 3	84	2YR	0	0	6.95	6.95	97.95	3.02	4.22	5	2.3	0.016517	0.0121
Reach 3	84	5YR	0.4	0.49	14.68	13.8	116.07	5.06	4.22	5	2.73	0.011695	0.0121
Reach 3	84	25YR	1.08	1.19	18.21	15.93	115.12	5.75	4.22	5	2.77	0.010215	0.0121
Reach 3	84	100YR	3.32	3.34	25.25	18.59	95.79	7.1	4.22	5	2.62	0.006883	0.0121
Reach 3	84	Reg	1.42	1.52	20.93	17.99	137.81	5.9	4.22	5	3.05	0.011906	0.0121
Reach 3	83	2YR	0.01	0	6.95	6.94	97.25	2.99	4.05	4.56	2.32	0.015129	0.0152
Reach 3	83	5YR	0.27	0.23	14.68	14.18	162.81	4.42	4.05	4.56	3.2	0.017121	0.0152
Reach 3	83	25YR	0.8	0.68	18.21	16.74	180.68	4.88	4.05	4.56	3.43	0.017233	0.0152
Reach 3	83	100YR	1.92	2.21	25.25	21.12	215.62	5.52	4.05	4.56	3.83	0.018174	0.0152
Reach 3	83	Reg	1.31	1.2	20.93	18.42	187.89	5.21	4.05	4.56	3.54	0.016785	0.0152
Reach 3	82	2YR			6.95	6.95	102.88	2.99	4.87	5.39	2.32	0.018878	0.0204
Reach 3	82	5YR	0.03	0.45	14.68	14.2	155.33	4.63	4.87	5.39	3.07	0.018434	0.0204
Reach 3	82	25YR	0.1	1.22	18.21	16.89	173.22	5.13	4.87	5.39	3.3	0.018562	0.0204
Reach 3	82	100YR	0.45	3.27	25.25	21.52	191.06	6.05	4.87	5.39	3.56	0.017347	0.0204
Reach 3	82	Reg	0.19	1.91	20.93	18.83	187.48	5.44	4.87	5.39	3.46	0.018934	0.0204
Reach 3	81	2YR	0.01	0.01	6.95	6.93	113.04	2.82	4.4	4.78	2.46	0.019528	0.0247
Reach 3	81	5YR	0.51	0.14	14.68	14.03	168.9	4.34	4.4	4.78	3.23	0.018935	0.0247
Reach 3	81	25YR	1.37	0.21	18.21	16.63	185.58	4.83	4.4	4.78	3.45	0.018723	0.0247
Reach 3	81	100YR	3.5	0.58	25.25	21.17	219.77	5.52	4.4	4.78	3.83	0.019385	0.0247
Reach 3	81	Reg	2.22	0.31	20.93	18.39	196.62	5.13	4.4	4.78	3.58	0.018654	0.0247
Reach 3	80	2YR	0	0	6.95	6.95	36.8	4.73	5.01	6.04	1.47	0.004797	0.0031
Reach 3	80	5YR	0.01	0.03	14.68	14.65	77.8	6.5	5.01	6.04	2.25	0.007376	0.0031
Reach 3	80	25YR	0.04	0.09	18.21	18.08	96.41	7.1	5.01	6.04	2.55	0.008367	0.0031
Reach 3	80	100YR	0.28	0.41	25.25	24.56	131.61	8.08	5.01	6.04	3.04	0.010036	0.0031
Reach 3	80	Reg	0.11	0.18	20.93	20.63	110.35	7.5	5.01	6.04	2.75	0.00906	0.0031
Reach 4	79	2YR			6.95	6.95	55.14	4.18	8.32	8.63	1.66	0.011605	0.0122
Reach 4	79	5YR	0.01	0.03	14.68	14.64	82.66	6.72	8.78	9.13	2.18	0.011464	0.0122
Reach 4	79	25YR	0.04	0.07	18.21	18.1	93.32	7.65	8.78	9.13	2.37	0.011368	0.0122
Reach 4	79	100YR	0.13	0.26	25.25	24.86	112.52	9.26	8.78	9.13	2.68	0.011317	0.0122
Reach 4	79	Reg	0.07	0.13	20.93	20.73	101.03	8.3	8.78	9.13	2.5	0.011335	0.0122
Reach 4	78	2YR	0	0.01	6.95	6.94	31.15	5.42	9.32	9.59	1.28	0.005623	0.0071
Reach 4	78	5YR	0.04	0.13	14.68	14.51	49.99	8.32	9.32	9.59	1.74	0.005874	0.0071
Reach 4	78	25YR	0.09	0.25	18.21	17.87	56.96	9.41	9.32	9.59	1.9	0.005922	0.0071
Reach 4	78	100YR	0.23	0.65	25.25	24.37	68.79	11.32	9.32	9.59	2.15	0.005944	0.0071
Reach 4	78	Reg	0.14	0.38	20.93	20.41	61.81	10.18	9.32	9.59	2	0.005938	0.0071
Reach 4	77	2YR			6.95	6.95	52.19	4.32	8.9	9.24	1.61	0.011373	0.0091
Reach 4	77	5YR	0.06	0.06	14.68	14.56	71.59	7.13	8.97	9.32	2.04	0.009541	0.0091

Reach 4	77	25YR	0.14	0.14	18.21	17.93	79	8.17	8.97	9.32	2.2	0.009188	0.0091
Reach 4	77	100YR	0.38	0.39	25.25	24.47	92.66	9.96	8.97	9.32	2.46	0.008839	0.0091
Reach 4	77	Reg	0.22	0.23	20.93	20.49	84.37	8.9	8.97	9.32	2.3	0.009005	0.0091
Reach 4	76	2YR	0.12	0.07	6.95	6.76	39.89	4.54	6.46	6.9	1.49	0.006176	0.0088
Reach 4	76	5YR	0.7	0.52	14.68	13.47	60.24	6.88	6.46	6.9	1.96	0.006162	0.0088
Reach 4	76	25YR	1.11	0.9	18.21	16.19	64.69	7.81	6.46	6.9	2.07	0.005824	0.0088
Reach 4	76	100YR	2.16	2.08	25.25	21.01	69.94	9.44	6.46	6.9	2.22	0.00521	0.0088
Reach 4	76	Reg	1.48	1.29	20.93	18.16	67.49	8.46	6.46	6.9	2.15	0.00561	0.0088
Reach 4	75	2YR	0	0.88	6.95	6.07	51.66	3.54	4.35	4.96	1.72	0.007384	0.0095
Reach 4	75	5YR	0.04	3.75	14.68	10.89	59.74	5.49	4.35	4.96	1.98	0.005505	0.0095
Reach 4	75	25YR	0.08	5.2	18.21	12.93	63.14	6.21	4.35	4.96	2.08	0.005141	0.0095
Reach 4	75	100YR	0.27	8.11	25.25	16.87	72.21	7.36	4.35	4.96	2.29	0.004958	0.0095
Reach 4	75	Reg	0.14	6.31	20.93	14.48	66.88	6.67	4.35	4.96	2.17	0.005067	0.0095
Reach 4	74	2YR	0.04	0.58	6.95	6.33	26.74	4.94	4.81	5.53	1.28	0.003052	0.0025
Reach 4	74	5YR	0.36	2.24	14.68	12.07	39.71	7.25	4.81	5.53	1.66	0.003085	0.0025
Reach 4	74	25YR	0.59	3.09	18.21	14.53	44.8	8.07	4.81	5.53	1.8	0.003129	0.0025
Reach 4	74	100YR	1.11	4.81	25.25	19.33	57.24	9.28	4.81	5.53	2.08	0.003476	0.0025
Reach 4	74	Reg	0.78	3.74	20.93	16.41	49.94	8.55	4.81	5.53	1.92	0.00329	0.0025
Reach 5	73	2YR	0.18	0.9	6.95	5.87	51.07	3.31	3.16	3.68	1.77	0.005791	0.0064
Reach 5	73	5YR	0.81	3.23	14.68	10.64	70.61	4.8	3.16	3.68	2.22	0.005521	0.0064
Reach 5	73	25YR	1.18	4.48	18.21	12.55	76.53	5.34	3.16	3.68	2.35	0.005377	0.0064
Reach 5	73	100YR	1.89	6.8	25.25	16.56	105.39	5.91	3.16	3.68	2.8	0.006696	0.0064
Reach 5	73	Reg	1.44	5.35	20.93	14.14	88.66	5.56	3.16	3.68	2.55	0.005988	0.0064
Reach 5	72	2YR	0.06	0.16	6.95	6.72	84.31	3.08	4.02	4.37	2.19	0.01221	0.0139
Reach 5	72	5YR	0.52	0.95	14.68	13.21	134.65	4.49	4.02	4.37	2.94	0.013356	0.0139
Reach 5	72	25YR	0.91	1.3	18.21	16.01	147.55	5.09	4.02	4.37	3.15	0.012916	0.0139
Reach 5	72	100YR	2	3.52	25.25	19.73	131.45	6.4	4.02	4.37	3.08	0.009153	0.0139
Reach 5	72	Reg	1.35	2.15	20.93	17.43	132.63	5.73	4.02	4.37	3.04	0.01031	0.0139
Reach 5	71	2YR	0.44	0.26	6.95	6.25	114.33	2.43	3.04	3.24	2.57	0.015534	0.0192
Reach 5	71	5YR	1.71	1.2	14.68	11.77	151.01	3.71	3.04	3.24	3.17	0.013439	0.0192
Reach 5	71	25YR	2.37	1.71	18.21	14.13	173.87	4.08	3.04	3.24	3.46	0.014058	0.0192
Reach 5	71	100YR	3.88	2.86	25.25	18.51	212.01	4.73	3.04	3.24	3.92	0.014807	0.0192
Reach 5	71	Reg	2.89	2.1	20.93	15.94	197.35	4.29	3.04	3.24	3.72	0.01519	0.0192
Reach 5	70	2YR	0.01	0.08	6.95	6.86	69.53	3.55	4.88	5.95	1.93	0.011868	0.0077
Reach 5	70	5YR	0.1	1.53	14.68	13.05	84.62	5.66	4.88	5.95	2.3	0.009059	0.0077
Reach 5	70	25YR	0.18	2.64	18.21	15.39	85.6	6.49	4.88	5.95	2.37	0.007991	0.0077
Reach 5	70	100YR	0.39	5.39	25.25	19.47	83.65	8.02	4.88	5.95	2.43	0.006322	0.0077
Reach 5	70	Reg	0.26	3.6	20.93	17.07	85.54	7.1	4.88	5.95	2.4	0.007307	0.0077
Reach 5	69	2YR	0.11	0.09	6.95	6.76	27.36	5.13	4.46	5.21	1.32	0.002833	0.0051
Reach 5	69	5YR	0.64	0.44	14.68	13.6	50.38	7.19	4.46	5.21	1.89	0.003722	0.0051
Reach 5	69	25YR	1	0.66	18.21	16.55	58.72	7.97	4.46	5.21	2.08	0.003914	0.0051
Reach 5	69	100YR	1.89	1.06	25.25	22.3	74.95	9.27	4.46	5.21	2.41	0.004297	0.0051
Reach 5	69	Reg	1.32	0.83	20.93	18.78	64.78	8.52	4.46	5.21	2.21	0.004042	0.0051
Reach 5	68	2YR	0.14	0.07	6.95	6.75	25.47	5.25	4.26	5	1.28	0.002474	-0.004
Reach 5	68	5YR	0.69	0.43	14.68	13.57	54.78	6.88	4.26	5	1.97	0.004059	-0.004
Reach 5	68	25YR	1.08	0.68	18.21	16.45	64.89	7.55	4.26	5	2.18	0.004383	-0.004
Reach 5	68	100YR	2.05	1.2	25.25	21.99	84.5	8.65	4.26	5	2.54	0.004982	-0.004
Reach 5	68	Reg	1.44	0.91	20.93	18.58	71.61	8.04	4.26	5	2.31	0.004545	-0.004
Reach 5	67	2YR	0.47	0.04	6.95	6.44	32.74	4.54	4.76	5.04	1.42	0.003712	-0.0021
Reach 5	67	5YR	1.48	0.11	14.68	13.09	94.06	5.3	4.76	5.04	2.47	0.009128	-0.0021
Reach 5	67	25YR	2.07	0.16	18.21	15.98	120.96	5.65	4.76	5.04	2.83	0.011019	-0.0021
Reach 5	67	100YR	3.64	0.36	25.25	21.24	149.87	6.58	4.76	5.04	3.23	0.011723	-0.0021
Reach 5	67	Reg	2.58	0.2	20.93	18.16	140.49	5.91	4.76	5.04	3.07	0.01223	-0.0021
Reach 5	66	2YR	0.03	1.19	6.95	5.72	44.67	3.66	5.6	5.74	1.57	0.007152	0.0305
Reach 5	66	5YR	0.12	7.12	14.68	7.44	38.08	4.9	5.6	5.74	1.52	0.004548	0.0305
Reach 5	66	25YR	0.21	10.66	18.21	7.34	25.54	5.75	5.6	5.74	1.28	0.0026	0.0305
Reach 5	66	100YR	0.36	16.6	25.25	8.29	22.62	6.73	5.6	5.74	1.23	0.001968	0.0305
Reach 5	66	Reg	0.27	13.08	20.93	7.58	22.76	6.21	5.6	5.74	1.22	0.002144	0.0305
Reach 5	65	2YR	0.27	0.1	6.95	6.58	22.43	5.42	4.35	4.97	1.21	0.002096	0.0098
Reach 5	65	5YR	1.58	0.79	14.68	12.32	26.99	8.57	4.35	4.97	1.44	0.001596	0.0098
Reach 5	65	25YR	2.18	0.93	18.21	15.1	35.35	9.1	4.35	4.97	1.66	0.001969	0.0098
Reach 5	65	100YR	3.06	1.28	25.25	20.91	66.66	9.16	4.35	4.97	2.28	0.003688	0.0098
Reach 5	65	Reg	2.58	1.07	20.93	17.28	44.53	9.25	4.35	4.97	1.87	0.00244	0.0098
	64.5	Culvert											
Reach 6	64	2YR	0	0	6.95	6.95	37.1	4.83	6.53	7.21	1.44	0.005644	0.0067
Reach 6	64	5YR	0	0	14.68	14.68	56.98	7.63	6.53	7.21	1.92	0.005489	0.0067
Reach 6	64	25YR	0	0	18.21	18.21	62.27	8.83	6.53	7.21	2.06	0.005181	0.0067
Reach 6	64	100YR	0	0.01	25.25	25.24	81.73	10.4	6.53	7.21	2.43	0.005774	0.0067
Reach 6	64	Reg	0	0	20.93	20.92	68.38	9.56	6.53	7.21	2.19	0.005257	0.0067
Reach 6	63	2YR	0.01	0	6.95	6.94	55.87	3.95	5.49	6.07	1.76	0.008757	0.0081
Reach 6	63	5YR	0.31	0.1	14.68	14.27	92.52	5.9	5.49	6.07	2.42	0.009707	0.0081
Reach 6	63	25YR	0.44	0.15	18.21	17.62	132.02	6.08	5.49	6.07	2.9	0.01346	0.0081
Reach 6	63	100YR	1.31	0.43	25.25	23.5	149.56	7.37	5.49	6.07	3.19	0.012569	0.0081

Reach 6	63	Reg	0.68	0.23	20.93	20.02	145.37	6.5	5.49	6.07	3.08	0.013846	0.0081
Reach 6	62	2YR	0.02	0.01	6.95	6.92	50.16	4.07	5.24	5.54	1.7	0.006956	0.0131
Reach 6	62	5YR	1.2	0.15	14.68	13.34	86.62	5.66	5.24	5.54	2.36	0.008651	0.0131
Reach 6	62	25YR	3.38	1.93	18.21	12.9	51.94	6.85	5.24	5.54	1.88	0.004287	0.0131
Reach 6	62	100YR	4.19	1.3	25.25	19.76	133.62	6.58	5.24	5.54	3	0.01147	0.0131
Reach 6	62	Reg	3.5	1.15	20.93	16.27	89.96	6.6	5.24	5.54	2.47	0.007701	0.0131
Reach 6	61	2YR	0.04	0.06	6.95	6.85	51.78	3.86	3.9	4.46	1.77	0.006092	0.0044
Reach 6	61	5YR	0.57	2.75	14.68	11.36	75.32	5.07	3.9	4.46	2.24	0.006744	0.0044
Reach 6	61	25YR	0.68	3.33	18.21	14.21	119.29	5.05	3.9	4.46	2.82	0.01074	0.0044
Reach 6	61	100YR	2.37	7.55	25.25	15.33	99.18	5.83	3.9	4.46	2.63	0.00773	0.0044
Reach 6	61	Reg	1.33	4.96	20.93	14.65	108.92	5.39	3.9	4.46	2.72	0.009189	0.0044
Reach 6	60	2YR	0.04	0.97	6.95	5.93	20.88	5.15	4.45	5.19	1.15	0.002145	0.0072
Reach 6	60	5YR	0.97	5.76	14.68	7.95	20.81	6.62	4.45	5.19	1.2	0.001663	0.0072
Reach 6	60	25YR	1.15	7.03	18.21	10.03	33.9	6.56	4.45	5.19	1.53	0.002733	0.0072
Reach 6	60	100YR	2.07	10.81	25.25	12.37	44.54	6.99	4.45	5.19	1.77	0.003374	0.0072
Reach 6	60	Reg	1.52	8.53	20.93	10.88	37.11	6.77	4.45	5.19	1.61	0.002902	0.0072
Reach 6	59	2YR	0.17	0.53	6.95	6.26	81.73	2.77	2.53	2.98	2.26	0.008942	0.0075
Reach 6	59	5YR	1.05	3.93	14.68	9.7	111.15	3.54	2.53	2.98	2.74	0.009526	0.0075
Reach 6	59	25YR	1.48	8.65	18.21	8.08	63.15	3.86	2.53	2.98	2.09	0.004967	0.0075
Reach 6	59	100YR	2.22	14.39	25.25	8.65	62.54	4.11	2.53	2.98	2.11	0.004622	0.0075
Reach 6	59	Reg	1.73	10.54	20.93	8.66	69.82	3.92	2.53	2.98	2.21	0.005404	0.0075
Reach 6	58	2YR	0.03	0.02	6.95	6.9	118.98	2.67	3.55	3.95	2.58	0.017903	0.0093
Reach 6	58	5YR	0.47	2.64	14.68	11.57	70.92	5.2	3.55	3.95	2.23	0.005487	0.0093
Reach 6	58	25YR	0.62	4.38	18.21	13.22	83.54	5.43	3.55	3.95	2.43	0.006188	0.0093
Reach 6	58	100YR	0.95	9.59	25.25	14.71	82.56	5.98	3.55	3.95	2.46	0.00555	0.0093
Reach 6	58	Reg	0.77	6.61	20.93	13.55	77.73	5.72	3.55	3.95	2.37	0.005464	0.0093
Reach 6	57	2YR	0.02	0.05	6.95	6.89	24.07	5.79	6.86	7.39	1.19	0.003132	0.005
Reach 6	57	5YR	0.13	0.35	14.68	14.2	34.52	9.23	6.86	7.39	1.54	0.002819	0.005
Reach 6	57	25YR	0.17	0.82	18.21	17.21	45.45	9.67	6.86	7.39	1.78	0.003542	0.005
Reach 6	57	100YR	0.29	2.3	25.25	22.66	67.18	10.35	6.86	7.39	2.19	0.00489	0.005
Reach 6	57	Reg	0.21	1.25	20.93	19.47	54.86	9.91	6.86	7.39	1.96	0.004171	0.005
Reach 6	56	2YR	0.03	0.02	6.95	6.9	58.55	3.76	4.6	5.11	1.84	0.008105	0.0054
Reach 6	56	5YR	0.18	0.09	14.68	14.42	146.92	4.77	4.6	5.11	3.03	0.01605	0.0054
Reach 6	56	25YR	0.47	3.31	18.21	14.43	67.76	6.65	4.6	5.11	2.17	0.005308	0.0054
Reach 6	56	100YR	0.64	9.07	25.25	15.54	61.85	7.36	4.6	5.11	2.11	0.004372	0.0054
Reach 6	56	Reg	0.54	6.29	20.93	14.1	54.29	7.16	4.6	5.11	1.97	0.003946	0.0054
Reach 6	55	2YR	0.03	0.21	6.95	6.71	38.69	4.45	5.16	5.64	1.51	0.005007	
Reach 6	55	5YR	0.11	4.56	14.68	10.01	49.14	5.65	5.16	5.64	1.77	0.005003	
Reach 6	55	25YR	0.14	6.96	18.21	11.1	52.32	6.02	5.16	5.64	1.85	0.005006	
Reach 6	55	100YR	0.23	11.84	25.25	13.18	58	6.67	5.16	5.64	1.98	0.005007	
Reach 6	55	Reg	0.17	8.89	20.93	11.87	54.42	6.26	5.16	5.64	1.89	0.005003	