

Site No.	Site Name	Easting	Northing	Distance km	EC μS/cm	Cl mg/L	NO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	HCO <sub>3</sub> mg/L	Na mg/L	Mg mg/L	K mg/L	Ca mg/L
September 2009													
Ovens River													
SW19	Bundalong	042773	6007835	202	37.8	2.47	0.61	1.24	nm	3.31	1.23	0.95	1.47
SW18	Peechelba	043119	5997555	187	26.3	2.39	0.47	1.33	4	3.28	1.28	0.83	1.57
SW17	Killawara	043417	5984065	165	34.7	2.39	0.53	1.25	nm	3.3	1.24	0.79	1.54
SW16	Wangaratta	043861	5956675	140	33.1	2.34	0.57	1.1	nm	3.01	1.26	0.78	1.55
SW15	South Wang	044237	5974395	127	33.7	1.91	0.62	1.01	5	2.84	1.46	0.62	1.48
SW14	Tarrowingee	045113	5970115	115	30.4	1.81	0.47	0.91	12	2.83	1.47	0.60	1.45
SW13	Everton	045732	5966695	97	32.2	1.88	0.59	0.99	nm	2.79	1.42	0.58	1.46
SW12	Whorley	046451	5959045	80	31.7	1.9	0.6	0.99	nm	2.81	1.39	0.62	1.45
SW11	Whorley East	047013	5966685	72	32.4	1.96	0.78	1.11	nm	2.66	1.43	0.58	1.45
SW10	Myrtleford	047453	5952805	65	30.3	1.54	0.36	0.73	21	2.44	1.38	0.49	1.25
SW9	Salziers Ln	047837	5949855	57	30.1	1.61	0.43	0.78	nm	2.53	1.48	0.48	1.37
SW8	Ovens	048239	5947285	50	33	1.49	0.44	0.79	10	2.4	1.49	0.46	1.47
SW7	Eurobin	048684	5945025	47	39.3	1.47	0.27	0.8	nm	2.49	1.49	0.47	1.33
SW6	Porepunkah N	048833	5941035	39	29.7	1.5	0.37	0.85	nm	2.5	1.47	0.47	1.37
SW5	Porepunkah	049182	5938925	34	30.2	1.31	0.36	0.84	23	2.47	1.64	0.44	1.49
SW4	Bright	049936	5935505	22	31.6	1.39	0.38	0.83	74	2.49	1.7	0.43	1.6
SW3	Smoko	050568	5927365	11	24.7	1.09	0.01	0.73	18	2.16	1.55	0.36	1.49
SW2	Trout Farm	050560	5918975	5	30.4	0.99	0.2	0.78	11	2.09	1.68	0.36	1.49
SW1	Harrierville	050566	5917175	0	28.2	1.03	0.24	0.49	nm	1.87	1.35	0.31	1.43
Tributaries													
SW22	King @ Oxley	044442	5966735		33.0	2.77	0.56	1.01	nm	3.09	1.41	0.88	0.84
SW21	Buffalo @ Myrtleford	047182	5954215		34.8	2.12	0.7	1.08	nm	2.65	1.58	0.64	1.33
SW20	Buckland @ Porepunkah	049049	5938625		33.2	1.52	0.26	0.73	nm	2.49	1.38	0.49	1.41
March 2010													
Ovens River													
SW19	Bundalong	042773	6007835	202	39.9	2.30	0.04	1.16		4.52	1.77	0.85	1.58
SW18	Peechelba	043119	5997555	187	45.6	2.29	0.02	1.05		4.27	1.73	0.82	1.61

SW17	Killawara	043417	5984065	165	55.9	2.55	0.18	0.87	4.33	1.73	0.73	1.59
SW16	Wangaratta	043861	5956675	140	42.7	1.96	0.09	0.78	3.99	1.7	0.71	1.57
SW15	South Wang	044237	5974395	127	52.6	1.99	0.09	0.97	4.01	1.72	0.67	1.55
SW14	Tarrawingee	045113	5970115	115	40.5	1.78	0.09	0.90	4.04	1.7	0.69	1.54
SW13	Everton	045732	5966695	97	46.5	1.80	0.20	0.95	3.79	1.61	0.6	1.58
SW12	Whorley	046451	5959045	80	40.3	1.73	0.17	0.97	3.78	1.59	0.62	1.53
SW11	Whorley East	047013	5966685	72	40.6	1.68	0.24	0.95	3.71	1.56	0.65	1.51
SW10	Myrtleford	047453	5952805	65	47.9	1.37	0.13	0.77	3.67	1.49	0.57	1.58
SW9	Salziers Ln	047837	5949855	57	84.7	1.32	0.24	0.77	3.61	1.56	0.54	1.56
SW8	Ovens	048239	5947285	50	38.5	1.30	0.18	0.75	3.58	1.56	0.5	1.52
SW7	Eurobin	048684	5945025	47	53.7	1.43	0.16	0.68	3.52	1.52	0.51	1.54
SW6	Porepunkah N	048833	5941035	39	36.6	1.15	0.11	0.62	3.55	1.51	0.53	1.50
SW5	Porepunkah	049182	5938925	34	46.4	1.25	0.08	0.71	3.46	1.52	0.47	1.51
SW4	Bright	049936	5935505	22	44.4	1.03	0.01	0.70	3.32	1.35	0.43	1.68
SW3	Smoko	050568	5927365	11	39.7	0.85	0.02	0.79	3.17	1.49	0.40	1.57
SW2	Trout Farm	050560	5918975	5	41.9	0.82	0.01	0.86	3.03	1.47	0.39	1.57
SW1	Harrietville	050566	5917175	0	36.0	0.67	0.02	0.58	2.84	1.42	0.36	1.55
Tributaries												
SW22	King @ Oxley	044442	5966735		37.7	2.10	0.11	0.54	3.65	1.41	0.54	1.41
SW21	Buffalo @ Myrtleford	047182	5954215		37.3	1.64	0.35	0.85	3.21	1.58	0.52	1.39
SW20	Buckland @ Porepunkah	049049	5938625		34.1	1.05	0.11	0.61	3.43	1.38	0.35	1.31
June 2010												
Ovens River												
SW19	Bundalong	042773	6007835	202	47.3	1.62	0.12	0.84	5.69	1.56	0.90	1.68
SW18	Peechelba	043119	5997555	187	42.8	1.95	0.15	0.71	4.24	1.52	0.77	1.63
SW17	Killawara	043417	5984065	165	47.3	1.77	0.18	0.65	3.77	1.46	0.66	1.59
SW16	Wangaratta	043861	5956675	140	42.3	1.59	0.13	1.01	3.89	1.52	0.64	1.73
SW15	South Wang	044237	5974395	127	37.8	1.65	0.11	0.75	3.25	1.60	0.54	1.48
SW14	Tarrawingee	045113	5970115	115	36.8	1.63	0.09	0.88	3.16	1.56	0.52	1.44
SW13	Everton	045732	5966695	97	36.1	1.54	0.01	0.70	3.20	1.56	0.52	1.45
SW12	Whorley	046451	5959045	80	38.4	1.57	0.09	0.78	3.23	1.54	0.51	1.45

SW11	Whorley East	047013	5966685	72	37.7	1.63	0.01	0.86	3.10	1.40	0.52	1.30
SW10	Myrtleford	047453	5952805	65	33.8	1.51	0.09	0.90	2.68	1.53	0.37	1.28
SW9	Salziers Ln	047837	5949855	57	33.2	1.52	0.17	0.97	3.08	1.67	0.37	1.37
SW8	Ovens	048239	5947285	50	32.7	1.47	0.04	0.88	2.70	1.64	0.35	1.39
SW7	Eurobin	048684	5945025	47	32.3	1.51	0.02	0.79	2.68	1.60	0.34	1.32
SW6	Porepunkah N	048833	5941035	39	33.7	1.48	0.18	0.75	2.72	1.61	0.34	1.33
SW5	Porepunkah	049182	5938925	34	34.1	1.42	0.35	0.85	2.95	1.96	0.34	1.67
SW4	Bright	049936	5935505	22	36.5	1.32	0.11	0.62	3.03	1.88	0.32	1.71
SW3	Smoko	050568	5927365	11	32.1	1.28	0.02	0.47	3.45	1.84	0.33	1.36
SW2	Trout Farm	050560	5918975	5	34.6	1.31	0.11	0.49	3.08	1.99	0.36	1.71
SW1	Harrietville	050566	5917175	0	30.6	1.25	0.09	0.41	2.52	1.58	0.21	1.50
Tributaries												
SW22	King @ Oxley	044442	5966735		42.6	2.21	0.31	0.32	4.15	1.20	0.87	2.08
SW21	Buffalo @ Myrtleford	047182	5954215		37.6	1.61	0.24	0.95	2.94	1.35	0.54	1.31
SW20	Buckland @ Porepunkah	049049	5938625		30.7	1.57	0.11	0.54	3.01	1.53	0.37	1.21

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September 2010

Ovens River

SW19	Bundalong	042773	6007835	202	50.5	2.51	0.32	0.37	4.14	1.86	1.00	1.92
SW18	Peechelba	043119	5997555	187	49.3	2.48	0.66	0.77	4.23	1.85	0.96	1.91
SW17	Killawara	043417	5984065	165	49.6	2.32	0.71	0.82	4.12	1.80	0.94	1.89
SW16	Wangaratta	043861	5956675	140	45.2	2.41	0.53	0.61	3.83	1.77	0.90	1.88
SW15	South Wang	044237	5974395	127	44.1	2.33	0.62	0.72	3.57	1.85	0.70	1.65
SW14	Tarrawingee	045113	5970115	115	42.4	2.35	0.29	0.34	3.49	1.83	0.71	1.64
SW13	Everton	045732	5966695	97	43.3	2.22	0.66	0.77	3.41	1.82	0.68	1.63
SW12	Whorley	046451	5959045	80	40.4	2.17	0.43	0.50	3.25	1.79	0.65	1.62
SW11	Whorley East	047013	5966685	72	38.1	2.26	0.83	0.96	3.31	1.79	0.63	1.42
SW10	Myrtleford	047453	5952805	65	34.2	2.20	0.60	0.70	2.72	1.63	0.53	1.35
SW9	Salziers Ln	047837	5949855	57	35.3	2.19	0.38	0.44	2.70	1.68	0.53	1.40
SW8	Ovens	048239	5947285	50	34.8	2.32	0.47	0.55	3.69	1.71	0.56	1.46
SW7	Eurobin	048684	5945025	47	33.3	2.13	0.20	0.23	2.67	1.62	0.50	1.31
SW6	Porepunkah N	048833	5941035	39	32.8	2.01	0.36	0.42	2.64	1.61	0.49	1.33

SW5	Porepukah	049182	5938925	34	36.1	1.98	0.43	0.50	2.69	1.80	0.49	1.50
SW4	Bright	049936	5935505	22	34.0	1.89	0.37	0.43	2.46	1.67	0.45	1.49
SW3	Smoko	050568	5927365	11	31.4	1.88	0.24	0.28	2.20	1.63	0.37	1.47
SW2	Trout Farm	050560	5918975	5	33.2	1.87	0.47	0.55	2.18	1.72	0.38	1.44
SW1	Harrierville	050566	5917175	0	32.9	1.92	0.01	0.01	2.18	1.38	0.32	1.29
Tributaries												
SW22	King @ Oxley	044442	5966735		43.7	2.31	0.57	0.66	3.87	1.34	1.10	1.99
SW21	Buffalo @ Myrtleford	047182	5954215		36.6	2.31	1.32	1.53	2.86	1.58	0.62	1.40
SW20	Buckland @ Porepukah	049049	5938625		30.0	1.76	1.36	1.58	2.51	1.40	0.48	1.15

#### December 2010

#### Ovens River

SW19	Bundalong	042773	6007835	202	nm	nm	nm	nm	nm	nm	nm	nm
SW18	Peechelba	043119	5997555	187	61.6	5.00	0.45	1.17	4.80	2.27	3.00	3.03
SW17	Killawara	043417	5984065	165	60.3	4.64	0.46	1.23	4.80	2.05	2.64	3.16
SW16	Wangaratta	043861	5956675	140	56.2	4.39	0.46	1.04	4.61	1.97	2.62	3.02
SW15	South Wang	044237	5974395	127	41	2.80	0.33	0.97	4.03	1.84	0.80	2.09
SW14	Tarrawingee	045113	5970115	115	57.6	3.64	0.57	1.01	4.26	1.59	2.65	2.93
SW13	Everton	045732	5966695	97	40	2.72	0.31	1.08	3.68	1.74	0.98	1.96
SW12	Whorley	046451	5959045	80	38.6	2.44	0.29	0.92	3.59	1.79	0.70	1.72
SW11	Whorley East	047013	5966685	72	37.5	2.38	0.41	0.85	3.70	1.83	0.73	1.79
SW10	Myrtleford	047453	5952805	65	35	1.50	0.33	0.69	3.34	1.81	0.60	1.64
SW9	Salziers Ln	047837	5949855	57	35.9	1.66	0.29	0.73	3.53	1.93	0.65	1.74
SW8	Ovens	048239	5947285	50	34.5	2.30	0.23	0.70	3.72	1.88	0.64	1.65
SW7	Eurobin	048684	5945025	47	34.2	1.41	0.24	0.66	3.25	1.84	0.52	1.55
SW6	Porepukah N	048833	5941035	39	34	1.38	0.09	0.65	3.24	1.85	0.51	1.58
SW5	Porepukah	049182	5938925	34	37.1	1.44	0.24	0.77	3.42	2.06	0.52	1.79
SW4	Bright	049936	5935505	22	36.8	1.56	0.13	0.69	3.10	2.03	0.51	1.88
SW3	Smoko	050568	5927365	11	33.8	1.27	0.07	0.76	2.85	2.00	0.42	1.74
SW2	Trout Farm	050560	5918975	5	34.2	1.00	0.07	0.89	2.78	2.10	0.42	1.77
SW1	Harrierville	050566	5917175	0	28.4	0.78	0.03	0.45	2.39	1.65	0.30	1.59

#### Tributaries

SW22	King @ Oxley	044442	5966735		43.1	3.02	0.40	0.97		4.14	1.83	0.85	2.00
SW21	Buffalo @ Myrtleford	047182	5954215		34.6	2.21	0.26	0.92		3.28	1.50	0.61	1.72
SW20	Buckland @ Porepunkah	049049	5938625		32.8	1.39	0.03	0.62		3.11	1.66	0.46	1.60

March 2011

Ovens River

SW19	Bundalong	042773	6007835	202	54.7	4.03	0.66	1.26		7.31	2.35	1.64	3.84
SW18	Peechelba	043119	5997555	187	57.0	3.82	0.05	1.12		7.45	2.32	1.61	3.79
SW17	Killawara	043417	5984065	165	55.6	3.10	0.55	1.42		7.06	2.37	1.57	3.76
SW16	Wangaratta	043861	5956675	140	52.4	3.19	0.40	0.97		6.42	2.00	1.44	3.72
SW15	South Wang	044237	5974395	127	48.6	2.62	0.39	1.09		5.80	2.13	1.21	3.50
SW14	Tarrowingee	045113	5970115	115	50.9	5.61	6.25	1.31		5.64	1.64	1.66	3.37
SW13	Everton	045732	5966695	97	47.5	2.38	0.32	1.02		5.42	2.04	1.13	3.30
SW12	Whorley	046451	5959045	80	44.6	2.01	0.34	0.94		5.12	2.02	1.03	3.13
SW11	Whorley East	047013	5966685	72	43.5	1.89	0.40	0.85		4.98	1.97	1.04	3.10
SW10	Myrtleford	047453	5952805	65	39.2	1.23	0.34	0.84		4.50	2.01	0.90	2.86
SW9	Salziers Ln	047837	5949855	57	39.8	1.49	0.47	0.68		4.52	2.23	0.87	2.87
SW8	Ovens	048239	5947285	50	40.7	1.21	0.50	0.79		4.50	2.20	0.87	2.83
SW7	Eurobin	048684	5945025	47	38.9	1.44	0.43	0.60		4.60	2.36	0.88	2.87
SW6	Porepunkah N	048833	5941035	39	39.3	1.36	0.31	0.56		4.34	2.26	0.78	2.73
SW5	Porepunkah	049182	5938925	34	41.5	1.21	0.28	0.79		4.80	2.24	0.89	3.48
SW4	Bright	049936	5935505	22	39.7	1.03	0.12	0.71		3.80	2.23	0.68	2.68
SW3	Smoko	050568	5927365	11	37.4	0.75	0.09	0.84		3.81	2.33	0.56	2.85
SW2	Trout Farm	050560	5918975	5	37.1	0.69	0.02	0.00		3.89	2.37	0.66	3.03
SW1	Harrietville	050566	5917175	0	30.7	0.71	0.05	0.44		3.57	2.07	0.42	2.59

Tributaries

SW22	King @ Oxley	044442	5966735		50.8	3.20	0.45	1.15		6.18	2.20	1.21	3.42
SW21	Buffalo @ Myrtleford	047182	5954215		39.2	3.34	1.24	1.55		4.45	2.17	0.91	2.95
SW20	Buckland @ Porepunkah	049049	5938625		33.2	1.18	0.17	0.45		4.31	1.84	0.72	2.43

June 2011

Ovens River

SW19	Bundalong	042773	6007835	202	54.8	4.54	0.56	1.67	6.16	2.36	1.07	2.50
SW18	Peechelba	043119	5997555	187	53.4	4.30	0.63	1.65	5.89	1.99	0.99	2.70
SW17	Killawara	043417	5984065	165	61.9	3.89	0.63	1.37	5.35	1.98	0.89	2.35
SW16	Wangaratta	043861	5956675	140	47.0	3.34	0.60	1.31	5.16	2.07	0.94	2.80
SW15	South Wang	044237	5974395	127	48.8	2.61	0.50	1.29	4.47	2.13	0.84	2.69
SW14	Tarrowingee	045113	5970115	115	48.6	3.12	0.37	0.84	4.34	1.31	0.99	2.33
SW13	Everton	045732	5966695	97	46.6	2.48	0.65	1.27	4.42	2.15	0.72	2.19
SW12	Whorley	046451	5959045	80	33.7	2.02	0.70	1.17	3.85	2.05	0.70	2.11
SW11	Whorley East	047013	5966685	72	43.8	1.90	0.53	1.02	4.13	2.08	0.73	2.15
SW10	Myrtleford	047453	5952805	65	40.3	1.40	0.59	0.87	3.71	2.00	0.53	1.73
SW9	Salziers Ln	047837	5949855	57	38.2	1.39	0.50	0.88	3.67	2.08	0.55	1.94
SW8	Ovens	048239	5947285	50	37.6	1.39	0.54	0.85	3.51	2.09	0.51	1.83
SW7	Eurobin	048684	5945025	47	37.0	1.32	0.40	0.73	3.66	2.04	0.48	1.72
SW6	Porepunkah N	048833	5941035	39	35.9	1.35	0.33	0.80	3.40	1.83	0.44	1.81
SW5	Porepunkah	049182	5938925	34	41.0	1.25	0.41	0.75	3.79	2.06	0.45	2.18
SW4	Bright	049936	5935505	22	39.0	1.21	0.14	0.87	3.71	2.22	0.47	2.04
SW3	Smoko	050568	5927365	11	36.9	0.92	0.27	0.72	3.36	2.21	0.39	2.09
SW2	Trout Farm	050560	5918975	5	39.0	0.95	0.33	0.97	3.14	2.33	0.35	1.91
SW1	Harrietville	050566	5917175	0	31.1	0.81	0.25	0.62	2.89	1.86	0.38	2.03
Tributaries												
SW22	King @ Oxley	044442	5966735		85.2	3.14	0.63	1.36	4.82	2.36	0.78	2.37
SW21	Buffalo @ Myrtleford	047182	5954215		39.4	1.80	0.50	0.99	3.98	1.95	0.66	2.11
SW20	Buckland @ Porepunkah	049049	5938625		31.6	1.17	0.46	0.72	3.41	1.75	0.44	1.48

October 2011

Ovens River

SW19	Bundalong	042773	6007835	202	72.4	4.93	0.00	1.98	5.16	1.74	1.12	2.76
SW18	Peechelba	043119	5997555	187	73.1	5.05	0.05	2.55	5.07	1.71	1.09	2.64
SW17	Killawara	043417	5984065	165	65.4	4.32	0.01	2.11	4.58	1.55	1.00	2.53
SW16	Wangaratta	043861	5956675	140	59.2	3.90	0.01	1.34	3.97	1.54	1.01	2.61
SW15	South Wang	044237	5974395	127	61.1	3.71	0.02	1.40	3.97	1.72	0.97	2.45

SW14	Tarrawingee	045113	5970115	115	54.3	3.05	0.03	1.35	3.72	1.65	0.94	2.42
SW13	Everton	045732	5966695	97	52.7	3.11	0.13	1.23	3.50	1.51	0.93	2.28
SW12	Whorley	046451	5959045	80	47.2	2.23	0.08	1.18	3.38	1.50	1.02	2.44
SW11	Whorley East	047013	5966685	72	45.9	2.10	0.02	1.04	3.17	1.47	0.89	2.23
SW10	Myrtleford	047453	5952805	65	38.8	1.47	0.18	0.84	2.97	1.46	1.06	2.17
SW9	Salziers Ln	047837	5949855	57	39.1	1.45	0.02	0.84	2.63	1.47	0.75	1.95
SW8	Ovens	048239	5947285	50	40.1	1.40	0.06	0.79	2.63	1.46	0.74	1.93
SW7	Eurobin	048684	5945025	47	37.9	1.38	0.11	0.71	2.56	1.40	0.72	1.91
SW6	Porepunkah N	048833	5941035	39	38.8	1.35	0.01	0.71	2.65	1.44	0.72	1.92
SW5	Porepunkah	049182	5938925	34	43.0	1.34	0.01	0.78	2.83	1.69	0.73	2.28
SW4	Bright	049936	5935505	22	41.5	1.15	0.32	0.86	2.65	1.64	0.69	2.26
SW3	Smoko	050568	5927365	11	37.7	0.90	0.01	0.87	2.70	1.66	0.70	2.39
SW2	Trout Farm	050560	5918975	5	N/A	0.89	0.09	0.96	2.82	1.67	0.73	2.44
SW1	Harrietville	050566	5917175	0	32.9	0.76	0.02	0.60	2.42	1.43	0.61	2.20
Tributaries												
SW22	King @ Oxley	044442	5966735		51.9	3.46	0.02	0.88	4.04	1.05	1.27	2.75
SW21	Buffalo @ Myrtleford	047182	5954215		41	1.87	0.11	1.21	2.74	1.26	0.81	2.08
SW20	Buckland @ Porepunkah	049049	5938625		34.9	1.20	0.01	0.63	2.43	1.18	0.68	1.74

**Supplementary Table 1.** Major ion chemistry of the Ovens River in the study period of September 2009 – October 2011.

Bore No.	Location	Area	Easting	Northing	Bore Screen Depth m	EC μS/cm	Cl mg/L	NO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	HCO <sub>3</sub> mg/L	Na mg/L	Mg mg/L	K mg/L	Ca mg/L
September 2009														
B51743	Bright	Upper	499291	5935508	5-11	82.1	2.80	2.89	0.55	40	5.35	4.30	0.75	3.37
B51747	Bright	Upper	499190	5935414	2-20	58.1	3.10	5.36	0.21	13	3.03	2.01	0.61	1.66
B51745	Bright	Upper	499139	5935375	5-11	63.1	2.16	2.41	0.75	19	2.25	2.51	0.85	1.83
B51744	Bright	Upper	498933	5934911	6-12	56.3	2.73	7.33	1.00	30	5.21	3.11	0.99	3.20
B51737	Bright	Upper	498445	5935658	36-42	110	2.41	0.14	0.62	60	7.57	6.02	0.81	4.64
B51738	Bright	Upper	498397	5935420	58-63	199	2.39	0.01	0.27	88	16.6	6.21	0.95	4.70
B51735	Bright	Upper	498391	5935314	30-42	74.4	3.58	0.79	0.60	28	4.88	2.69	0.84	2.46
B51736	Bright	Upper	498382	5935299	20-26	53.1	3.29	1.30	0.26	23	4.53	2.48	0.72	1.69
B109461	Bright	Upper	497818	5935267	20-26	82.8	3.42	4.52	0.54	43	5.88	4.04	1.30	4.19
B109462	Bright	Upper	497818	5935267	45-51	100	3.48	0.40	0.30	44	5.88	4.41	0.91	4.58
B88271	Porepunkah	Upper	493294	5938062	8-14	99.5	3.98	0.42	2.57	49	3.53	6.93	0.75	4.90
B88274	Porepunkah	Upper	493256	5938067	35-53	64.3	1.85	0.22	0.78	30	4.24	3.59	0.70	2.14
B48069	Eurobin	Middle	487803	5944698	5-8	129	3.59	0.07	9.60	35	8.39	3.35	1.14	2.36
B48068	Eurobin	Middle	487657	5944643	7-13	74.3	3.52	0.09	2.63	20	3.39	2.36	1.99	1.73
B48067	Eurobin	Middle	487519	5944594	12.0	92.1	4.14	14.2	0.71	15	4.16	3.57	1.08	2.91
B48066	Eurobin	Middle	487411	5944553	9-15	77.9	3.90	17.1	0.69	9	3.28	2.92	1.35	2.45
B83232	Myrtleford	Middle	474884	5953288	6-12	107	9.33	2.59	6.64	33	10.9	3.97	1.67	3.17
B83231	Myrtleford	Middle	474704	5953010	8-14	49.1	2.08	1.46	3.19	24	3.53	2.48	0.72	2.09
B83229	Myrtleford	Middle	474607	5952916	8-14	86.7	2.01	0.71	0.43	38	3.13	4.06	0.80	4.12
B83230	Myrtleford	Middle	474604	5952937	8-14	45.1	1.87	0.57	1.56	22	3.21	2.13	0.59	1.86
B102783	Whorouly	Middle	464087	5959833	5.1- 11.27 18.5-44	107	2.06	0.28	0.07	63	10.3	5.67	0.66	4.52
B110738	Oxley	Lower	444240	5966742		106	27.0	0.05	0.16	35	15.4	0.78	2.71	2.2
B11326	Wangaratta	Lower	439879	5982755	23.7	1341	298	30.5	25.3	389	192	59.8	3.07	33.0
B11493	Wangaratta	Lower	439422	5982189	16.5	920	134	0.00	14.8	322	134	27.1	0.64	12.4
B302296	Boorhamman				70.5-77	567	115	0.03	0.91	123	95.2	4.52	2.53	7.40



	East	Lower	437925	5992950										
	Boorhamman													
B11323	East	Lower	437924	5992953	17.4	536	95.9	0.62	4.80	155	89.2	3.93	1.40	27
B50788	Boorhamman	Lower	442072	5999081	60-72	3800	923	1.67	214	333	654	61.4	7.02	59
B50789	Boorhamman	Lower	442072	5999081	18-30	12020	3830	3.44	879	1250	2331	356	13.2	357
B11306	Peechelba	Lower	432684	5994603	15.8	1194	299	2.36	37.7	151	163.5	51.0	1.70	10.6
		Lower	427007	6005559	16.2					171.				
B11311	Bundalong					2270	628	36.2	8	218	389	56.6	2.38	20.1
B11310	Bundalong	Lower	427237	6005560	13.9	2250	570	31.3	159	220	378	61.0	3.14	25.0
March 2011														
B1	Bright	Upper	499270	5935517	2-4	94.7	2.95	0.48	0.35	32	7.34	3.82	0.85	4.52
B2	Bright	Upper	499260	5935513	2-4	82.0	2.87	0.78	0.30	24	7.42	3.56	0.92	4.28
B51743	Bright	Upper	499291	5935508	5-11	75.9	3.32	3.00	0.46	33	9.25	4.54	1.05	5.20
B51744	Bright	Upper	498933	5934911	6-12	60.0	4.51	6.23	1.46	24	6.97	3.29	1.54	3.31
B88271	Porepunkah	Upper	493294	5938062	8-14	107	3.75	0.38	2.47	nm	6.36	8.52	1.09	8.21
M1	Myrtleford	Middle	474605	5952919	4-6	90.0	2.37	0.29	4.96	17	7.46	3.18	0.96	3.44
M2	Myrtleford	Middle	474605	5952936	4-6	67.6	2.43	3.54	4.87	23	8.21	4.67	1.39	5.25
T1	Tarrawingee	Lower	451112	5970209	5-7	367	46.9	0.50	0.24	52	52	8.13	2.25	9.51
T2	Tarrawingee	Lower	451121	5970212	5-7	364	47.8	1.05	0.36	45	54.9	7.39	3.76	10.5
T3	Tarrawingee	Lower	451136	5970245	6-8	315	46	1.53	0.28	45	53.7	8.73	3.15	10.3
B48066	Eurobin	Middle	487411	5944553	9-15	70.3	3.97	19	0.64	nm	6.19	4.13	2.38	4.01
B48067	Eurobin	Middle	487519	5944594	12	77.4	3.24	21.6	0.74	nm	6.29	4.40	1.50	4.78
B48068	Eurobin	Middle	487657	5944643	7-13	68.9	3.42	18.5	0.96	nm	7.50	4.47	1.16	4.00
B48069	Eurobin	Middle	487803	5944698	5-8	122	4.07	0.10	7.50	nm	12.9	4.22	1.37	3.78

10 **Supplementary Table 2.** Major ion chemistry of groundwater in the Ovens Catchment in September 2009 and March 2010

Site No.	Site Name	EC μS/cm	Cl mg/L	NO <sub>3</sub> mg/L	SO <sub>4</sub> mg/L	Na mg/L	Mg mg/L	K mg/L	Ca mg/L
March 2011									
SR	Spring fed Stream	48.6	1.57	2.15	1.75	5.78	2.83	1.67	3.34
SS	Spring	64.1	1.85	0.02	1.02	4.91	4.15	2.01	5.72
June 2011									
SR	Spring fed Stream	49.0	2.15	1.62	1.56	3.94	2.96	1.19	2.435
SS	Spring	52.2	2.21	1.26	0.65	4.13	3.26	0.91	2.943

15 **Supplementary Table 3.** Major ion chemistry of spring and spring fed stream at Location BC8