

Maerewhenua River at Kellys Gully

M:\22163\Data Tables\71106[Maerewhenua River at Kellys Gully.xls]Summary

All values are flows in cubic metres per second

Date: 13/12/04

Site No.71106

Version: 1

Catchment Area (km²)

187

Data period

1970 - 2004

Low Flow Statistics

(Provided by Environment Canterbury, 2004)

Mean Annual Low Flow (MALF) (m³/s)

0.59

5 Year Low Flow (m³/s)

0.44

10 Year Low Flow (m³/s)

0.4

Monthly Statistics

Full Record Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Means
90% Highest (m ³ /s)	5.29	4.31	4.66	3.98	3.22	6.14	4.74	6.23	6.67	7.48	4.56	5.16	3.84
Mean Flow (m³/s)	2.77	2.06	2.18	1.99	2.09	2.83	3.29	3.55	3.76	3.87	2.60	2.85	2.83
Median Flow (m ³ /s)	1.51	1.36	1.51	1.37	1.89	1.70	2.56	2.92	2.91	3.09	2.41	1.96	3.03
10% Lowest (m ³ /s)	0.75	0.61	0.53	0.61	0.86	0.93	1.13	1.15	1.63	1.50	1.07	0.96	1.82

1980 - 2003 Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Means
90% Highest (m ³ /s)	5.74	4.12	6.11	3.52	2.86	6.14	3.98	6.33	7.40	7.29	4.74	5.16	3.79
Mean Flow (m³/s)	3.19	1.98	2.27	1.89	1.85	3.03	3.06	3.53	3.57	3.50	2.50	3.04	2.73
Median Flow (m ³ /s)	1.71	1.45	1.44	1.41	1.66	1.70	2.57	2.67	2.38	2.64	1.80	2.32	2.68
10% Lowest (m ³ /s)	0.79	0.61	0.60	0.60	0.73	0.87	1.14	1.03	1.58	1.37	1.08	0.97	1.41

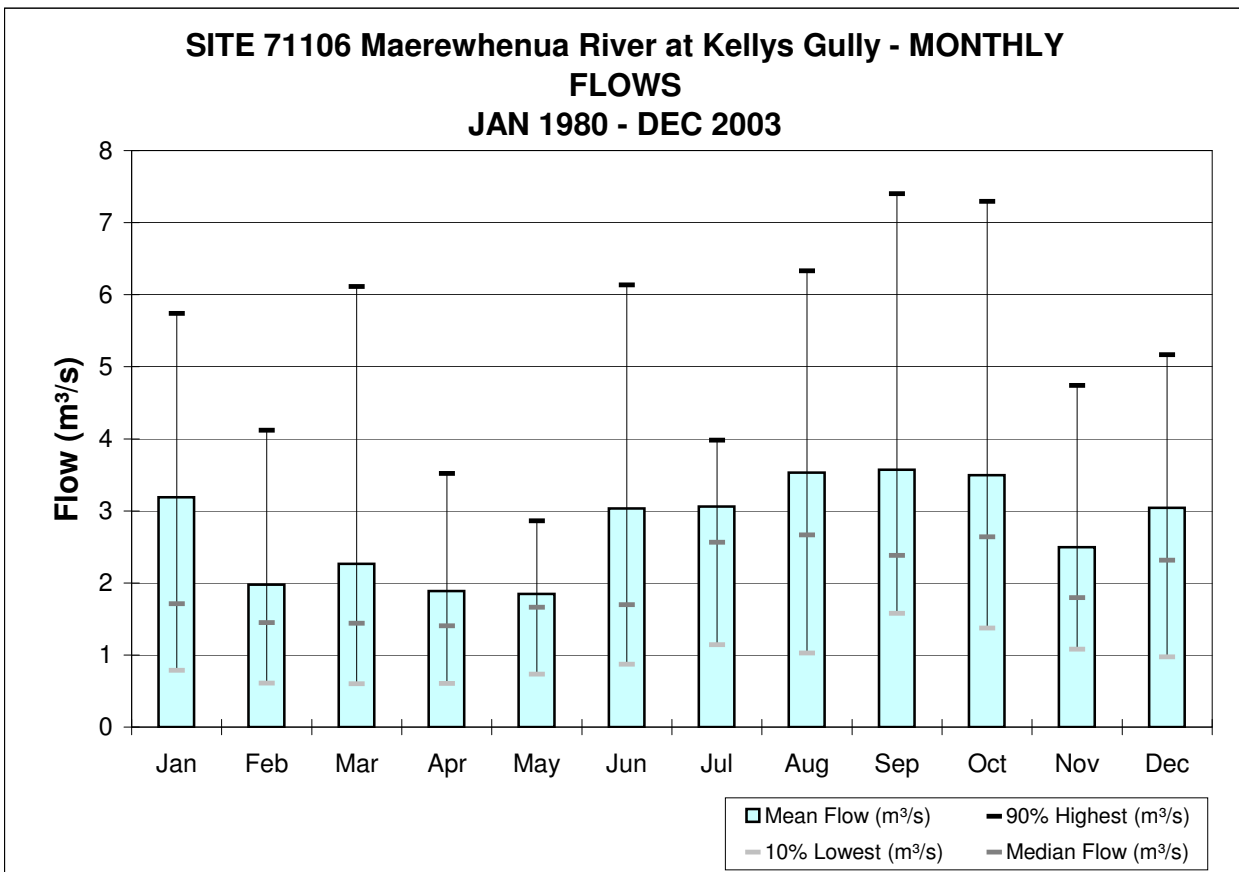
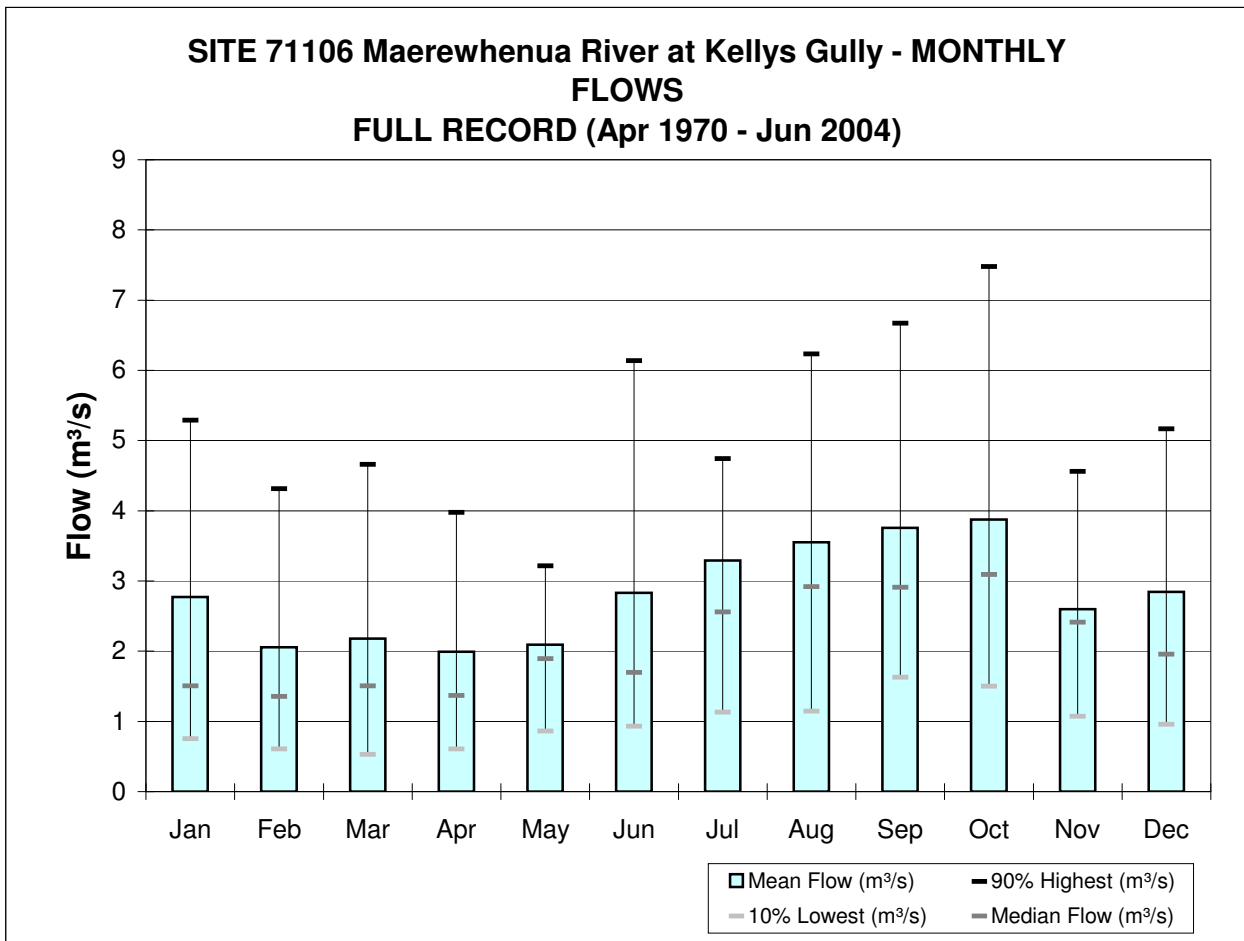
Seasonal Statistics

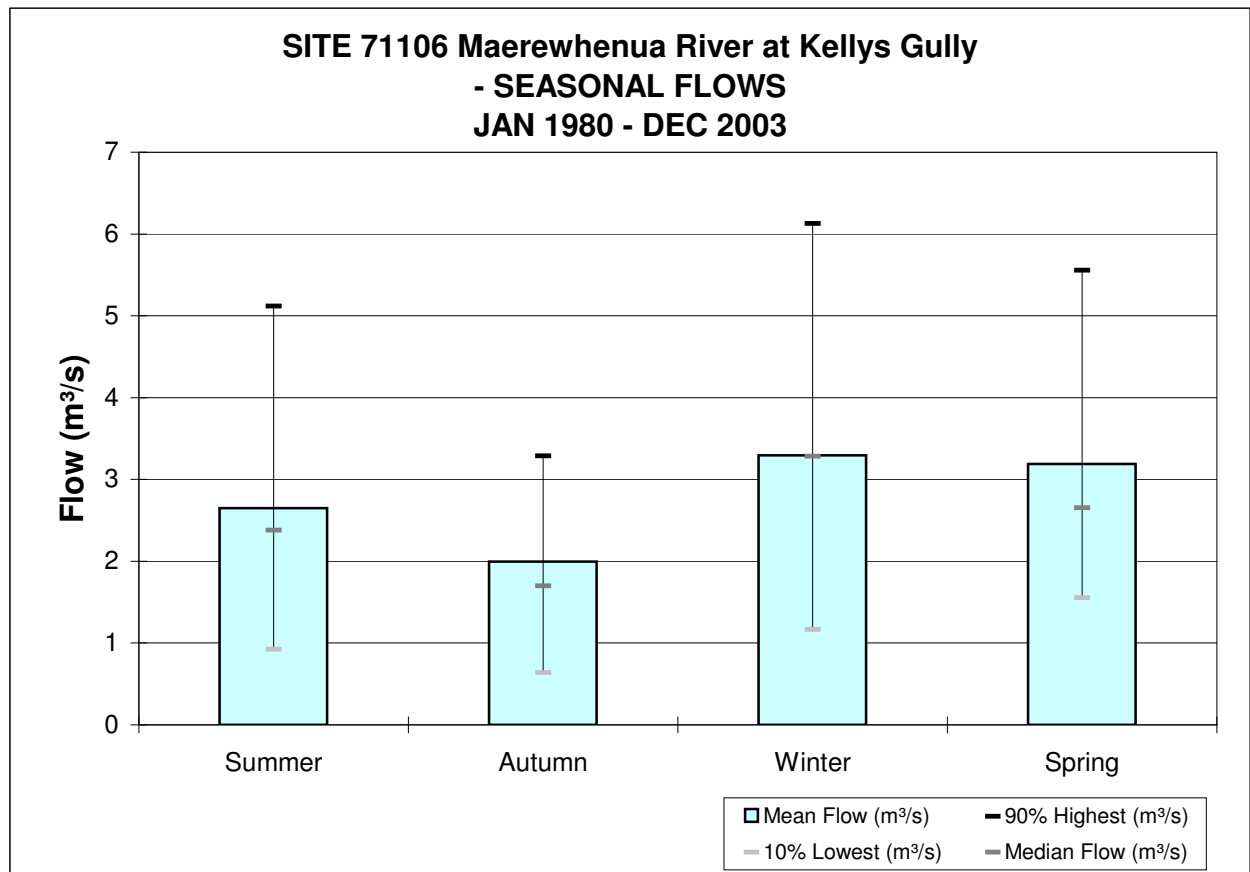
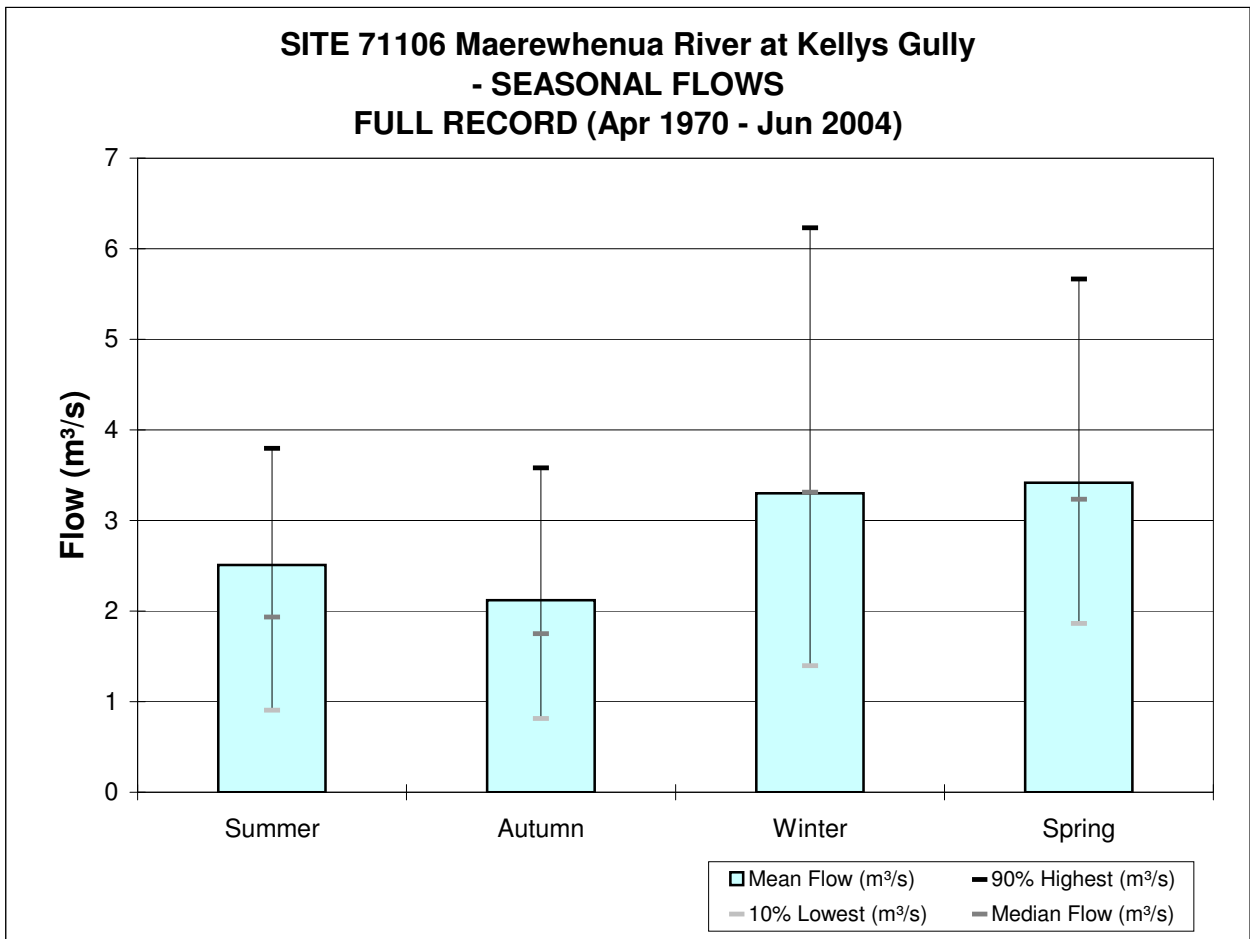
Full Record Statistics

	Summer	Autumn	Winter	Spring	
90% Highest (m ³ /s)	3.79	3.58	6.23	5.66	Summer = Dec, Jan, Feb Autumn = Mar, Apr, May Winter = Jun, Jul, Aug Spring = Sep, Oct, Nov
Mean Flow (m ³ /s)	2.51	2.12	3.30	3.42	
Median Flow (m ³ /s)	1.93	1.75	3.31	3.23	
10% Lowest (m ³ /s)	0.90	0.81	1.39	1.86	

1980 - 2003 Statistics

	Summer	Autumn	Winter	Spring
90% Highest (m ³ /s)	5.12	3.29	6.13	5.56
Mean Flow (m ³ /s)	2.65	2.00	3.30	3.19
Median Flow (m ³ /s)	2.38	1.70	3.28	2.65
10% Lowest (m ³ /s)	0.92	0.64	1.17	1.55





All values are flows in cubic metres per second

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
1970	?	?	?	1.03	1.06	1.89	2.16	2.28	3.88	2.00	0.88	1.03	?
1971	1.12	0.83	2.00	1.31	1.53	6.96	3.08	2.81	2.87	6.83	3.27	1.44	2.85
1972	1.15	?	?	0.79	?	?	?	?	6.00	5.00	2.16	1.02	?
1973	0.72	0.43	0.52	0.99	2.28	1.24	0.75	3.72	3.90	1.90	4.34	0.98	1.82
1974	0.78	2.25	3.54	7.11	2.75	2.01	4.74	3.14	2.95	7.85	3.14	0.72	3.42
1975	2.81	8.27	4.76	2.60	2.74	1.13	1.90	4.10	4.52	3.07	?	1.57	3.37
1976	1.37	2.23	0.75	0.55	2.28	1.46	2.35	6.20	6.96	8.02	4.61	4.25	3.43
1977	4.94	1.18	0.77	0.77	4.23	3.48	5.15	3.27	3.28	4.21	2.41	2.71	3.06
1978	2.53	0.92	0.49	6.20	1.80	2.14	12.77	5.06	5.90	5.54	2.49	8.08	4.53
1979	1.58	0.74	2.82	1.91	6.02	1.69	1.74	1.97	1.81	3.41	2.57	1.97	2.37
1980	4.62	1.76	7.38	7.16	2.77	15.94	2.53	3.26	1.96	2.34	3.86	1.93	4.61
1981	0.89	0.84	3.75	1.46	0.98	8.18	2.70	2.02	2.37	2.56	1.15	0.95	2.32
1982	1.46	0.65	0.59	1.37	1.49	1.03	?	1.35	2.39	5.06	4.90	2.89	2.12
1983	2.98	1.45	2.79	2.96	3.35	5.03	3.20	2.92	8.02	8.91	3.37	5.50	4.22
1984	1.55	0.95	2.41	1.07	2.90	1.48	2.33	3.48	2.03	2.46	1.05	2.51	2.03
1985	1.17	1.00	0.63	0.46	0.53	0.63	2.42	1.11	2.08	1.85	3.10	8.60	1.98
1986	6.30	?	?	2.43	1.69	1.50	3.99	10.05	3.54	7.00	3.77	1.94	?
1987	0.98	4.40	7.92	1.41	5.30	3.64	3.91	2.22	3.45	3.11	1.20	4.38	3.50
1988	3.40	1.62	0.92	1.01	0.69	0.92	2.57	1.29	0.99	0.72	0.82	0.61	1.30
1989	0.93	1.64	1.61	1.03	2.43	3.36	?	1.71	3.35	5.04	1.28	2.39	2.24
1990	1.87	1.00	0.91	0.95	2.42	0.84	1.50	17.74	3.37	7.42	2.84	1.25	3.55
1991	0.93	2.39	2.57	4.12	1.98	1.26	2.56	2.72	10.20	2.54	1.46	3.98	3.05
1992	2.78	1.14	0.67	0.79	1.25	1.69	3.52	6.24	4.38	7.50	5.71	3.66	3.29
1993	2.77	2.53	1.13	1.40	2.36	1.66	0.99	0.72	1.28	1.50	1.49	13.41	2.62
1994	4.25	2.30	6.70	1.74	1.52	1.70	13.75	3.09	2.46	2.39	1.24	1.04	3.52
1995	1.10	1.26	1.57	2.87	0.83	6.61	2.16	3.12	5.95	4.85	3.21	2.86	3.03
1996	3.73	4.68	1.44	1.36	1.91	4.63	3.70	2.06	2.30	1.76	5.69	3.23	3.03
1997	5.44	7.94	3.67	3.76	1.87	1.84	1.13	2.09	1.57	1.27	0.96	1.03	2.68
1998	0.74	0.60	0.64	0.63	1.14	0.85	1.57	0.99	1.60	3.68	1.58	1.41	1.29
1999	0.71	0.53	0.90	1.70	1.57	1.71	3.73	3.31	2.50	1.32	1.89	2.24	1.85
2000	5.87	2.98	1.91	1.83	1.63	2.44	1.24	6.37	14.06	2.72	1.15	1.25	3.61
2001	1.29	0.72	0.47	0.38	0.93	1.44	4.11	2.61	1.84	2.87	4.36	4.21	2.11
2002	20.09	2.49	1.11	2.81	2.24	3.49	2.99	3.46	2.30	1.50	2.12	1.16	3.84
2003	0.67	0.59	0.44	0.59	0.56	0.95	0.74	0.79	1.69	3.52	1.70	0.59	1.07
2004	0.78	3.51	1.95	1.11	2.19	1.50	?	?	?	?	?	?	?