

Lower Waitaki I.S. at Bortons

M:\22163\Data Tables\71193\[Lower Waitaki I.S. at Bortons.xls]Summary

All values are flows in cubic metres per second

Site No.71193

Catchment Area (km²)

Data period

n/a
1991 - 2004

Date: 17/12/04

Version: 1

Low Flow Statistics (Provided by Environment Canterbury, 2004)

Mean Annual Low Flow (MALF) (m³/s) Not Available
 5 Year Low Flow (m³/s) Not Available
 10 Year Low Flow (m³/s) Not Available

Monthly Statistics

Full Record Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Means
90% Highest (m ³ /s)	16.4	16.1	16.1	14.6	7.5	4.5	4.2	5.9	12.0	14.8	15.2	16.0	10.9
Mean Flow (m³/s)	13.9	14.1	13.9	10.8	5.5	3.7	3.7	4.9	8.8	11.9	13.5	14.3	9.90
Median Flow (m ³ /s)	13.6	14.7	14.4	10.0	5.2	3.7	3.9	4.9	8.9	12.5	13.7	14.8	10.5
10% Lowest (m ³ /s)	10.4	11.6	12.2	7.5	3.2	2.8	2.9	3.6	4.6	6.8	11.4	13.0	9.3

1980 - 2003 Statistics **Insufficient Data**

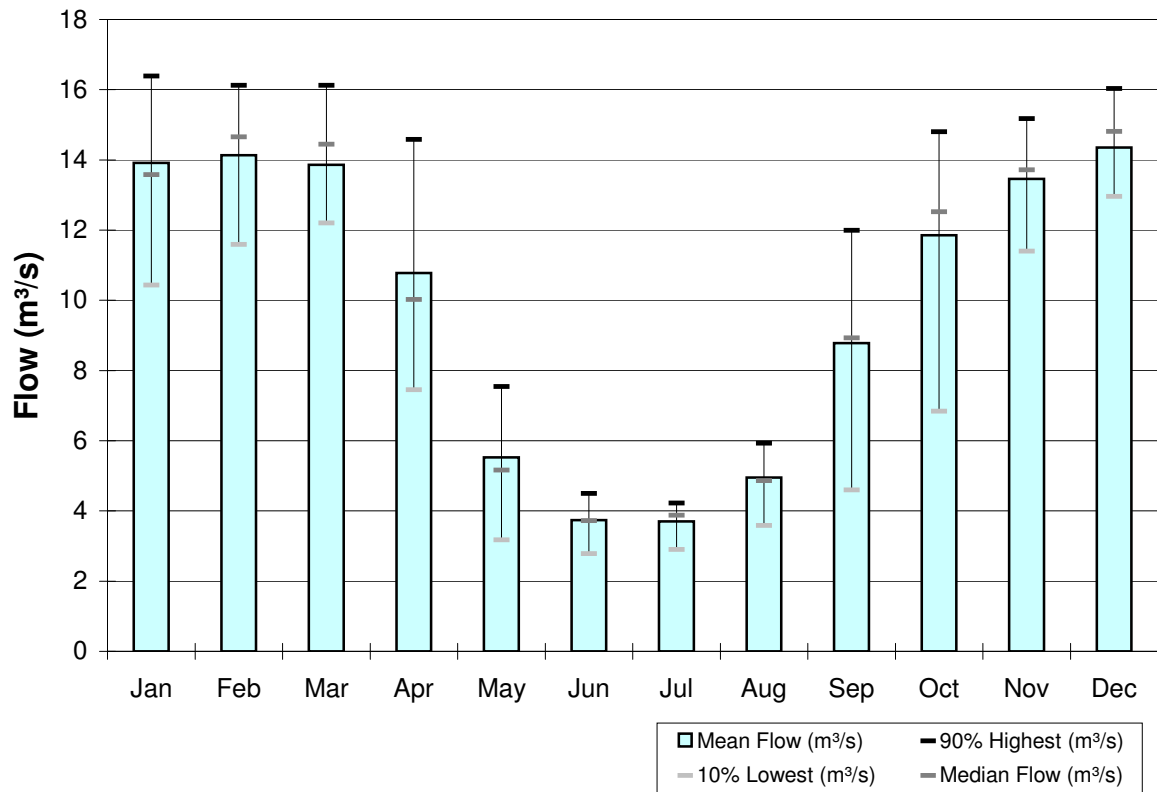
Seasonal Statistics

Full Record Statistics

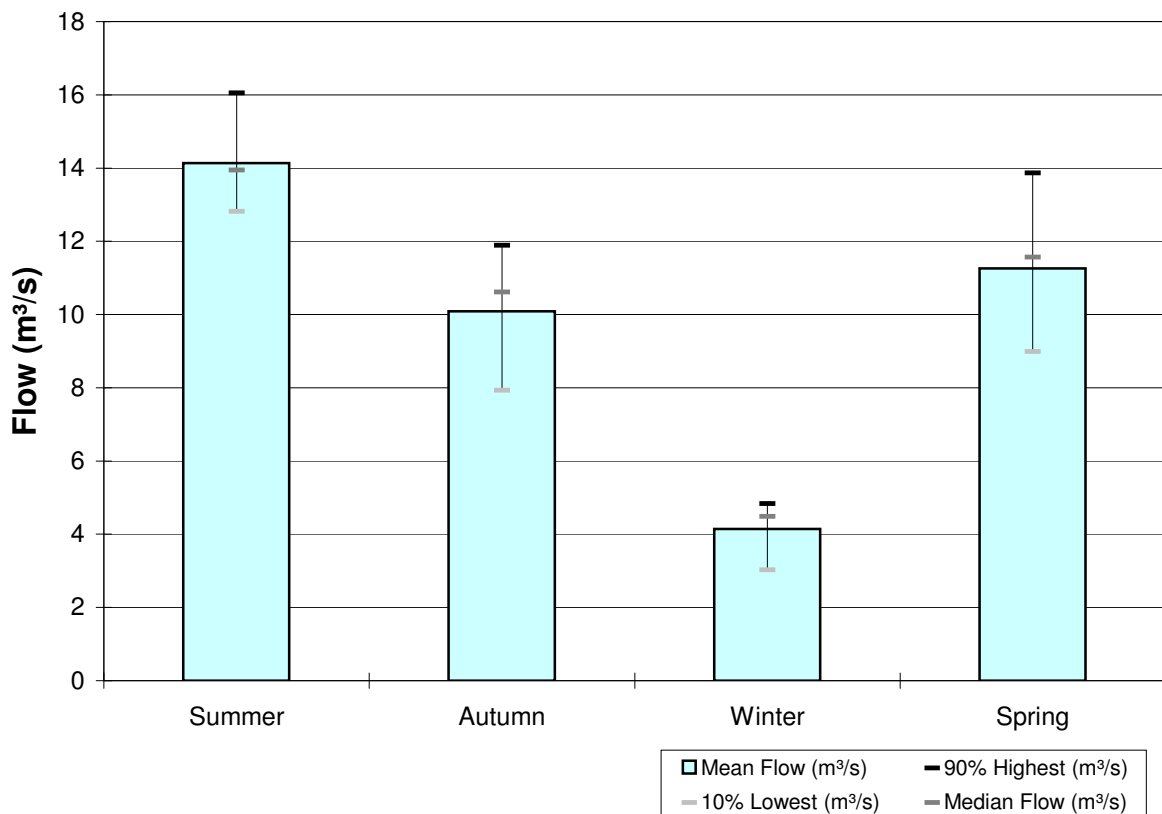
	Summer	Autumn	Winter	Spring	
90% Highest (m ³ /s)	16.0	11.9	4.8	13.9	Summer = Dec, Jan, Feb
Mean Flow (m ³ /s)	14.1	10.1	4.1	11.3	Autumn = Mar, Apr, May
Median Flow (m ³ /s)	13.9	10.6	4.5	11.6	Winter = Jun, Jul, Aug
10% Lowest (m ³ /s)	12.8	7.9	3.0	9.0	Spring = Sep, Oct, Nov

1980 - 2003 Statistics **Insufficient Data**

**SITE 71193 Lower Waitaki I.S. at Bortons - MONTHLY FLOWS
FULL RECORD (Aug 1991 - Sep 2004)**



**SITE 71193 Lower Waitaki I.S. at Bortons - SEASONAL FLOWS
FULL RECORD (Aug 1991 - Sep 2004)**



All values are flows in cubic metres per second

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
1991	?	?	?	?	?	?	?	4.03	6.13	10.14	13.45	13.52	?
1992	13.43	14.97	15.18	12.58	?	?	?	?	3.28	5.70	10.11	12.82	?
1993	13.58	12.62	13.99	7.34	3.17	2.78	4.12	8.11	9.63	12.52	12.69	10.03	9.20
1994	9.71	10.74	5.84	7.90	7.54	3.72	?	?	?	13.97	15.09	14.81	?
1995	15.42	14.89	13.48	9.81	8.53	3.51	?	?	7.31	6.01	13.43	13.81	?
1996	13.40	14.06	14.55	10.02	2.87	2.70	2.91	2.76	8.93	14.39	11.18	14.47	9.34
1997	13.51	12.60	13.14	6.42	4.17	2.91	2.89	3.58	11.68	14.90	15.29	16.05	9.75
1998	16.82	17.24	16.22	14.35	5.16	4.50	?	4.09	12.07	11.97	14.76	14.92	?
1999	14.43	15.53	14.44	10.59	4.54	4.97	3.49	4.86	10.11	14.23	14.04	14.95	10.48
2000	12.60	13.24	11.97	8.08	?	?	?	5.93	4.21	13.50	15.19	15.22	?
2001	15.48	15.66	15.73	15.53	6.70	4.39	3.85	5.42	11.07	11.46	12.26	13.93	10.92
2002	9.89	14.65	15.45	13.25	4.01	4.29	4.46	5.49	13.81	15.11	13.76	15.94	10.81
2003	16.42	16.24	16.36	9.59	6.78	3.80	3.99	5.77	7.03	10.23	13.71	16.06	10.47
2004	16.25	11.34	13.80	14.64	7.32	3.52	3.90	4.38	8.90	?	?	?	?