

Boletín N° : 328
Mes : Agosto
Año : 2005

DE : JAVIER NARBONA NARANJO
ING. JEFE DEPARTAMENTO DE HIDROLOGIA

*INFORMACION PLUVIOMETRICA, FLUVIOMETRICA,
ESTADO DE EMBALSES Y AGUAS SUBTERRANEAS*

Contenido :

- 1.- Informe pluviométrico
- 2.- Volúmenes de embalses
- 3.- Informe fluviométrico
- 4.- Informe aguas subterráneas

En Internet (www.dga.cl) se publica: .

- los informes de este boletín
- Caudales medios diarios de los principales ríos actualizados semanalmente
- Caudales en tiempo real

NOTA: Datos provisorios sujetos a modificaciones posteriores

INFORME PLUVIOMETRICO NACIONAL N°08

ESTACIONES	AGOSTO	TOTALES AL 31 DE AGOSTO			EXCESO O DÉFICIT (%)
		2005 (mm)	2004 (mm)	PROMEDIO (mm)	
CENTRAL CHAPIQUIÑA	0.0	96.5	137.5	135.6	- 29
EMBALSE CONCHI	0.0	23.0	15.0	17.3*	33
CALAMA	0.0	4.0	0.5	3.9	2
ANTOFAGASTA	0.0	0.5	0.1	3.1	- 84
COPIAPÓ	6.7	18.7	8.9	12.4	51
EMBALSE LAUTARO	4.0	29.5	30.5	28.2	5
VALLENAR	20.1	28.6	43.5	30.8	- 7
RIVADAVIA	20.0	73.0	79.0	85.7	- 15
VICUÑA	9.1	62.0	109.3	84.3	- 26
LA SERENA	17.9	58.9	114.3	72.1	- 18
OVALLE	11.6	46.3	130.2	93.3	- 50
EMBALSE PALOMA	15.8	62.1	155.8	122.3	- 49
COGOTÍ 18	50.0	97.5	212.0	167.1	- 42
HUINTIL	54.4	132.6	190.7	197.7	- 33
COIRÓN	117.9	220.3	150.7	295.1	- 25
VILCUYA	169.5	517.0	277.0	283.1	83
SAN FELIPE	68.4	219.9	202.1	178.6	23
LAGO PEÑUELAS	173.5	607.1	613.6	544.2	12
EMBALSE EL YESO	413.5	1205.6	259.0	449.5	168
CERRO CALAN	230.5	550.5	282.2	328.6	68
SANTIAGO (MOP)	160.9	453.4	282.6	263.1	72
RANCAGUA	135.5	496.8	386.1	340.4	46
SAN FERNANDO	273.1	969.4	494.6	591.7	64
CONVENTO VIEJO	242.0	1002.2	421.5	578.4	73
CURICO	214.4	880.5	404.3	586.9	50
TALCA	187.6	762.0	444.3	535.1	42
COLORADO	391.7	1611.2	1075.4	1125.3	43
LINARES	198.0	967.9	690.9	732.4	32
PARRAL	207.9	944.9	669.4	778.4	21
EMBALSE DIGUA	371.1	1574.5	1045.0	1168.0	35
CHILLÁN	218.8	1160.1	779.6	790.9	47
CONCEPCIÓN	187.0	1226.0	919.4	939.2	31
LOS ÁNGELES	195.6	1061.4	702.9	865.7	23
CAÑETE	201.3	1310.9	871.4	990.0	32
ANGOL	199.3	1273.3	988.3	873.7	46
TEMUCO	203.3	1233.7	923.7	896.9	38
VALDIVIA	329.5	1928.8	1411.2	1670.2	15
OSORNO	206.2	1173.1	952.3	1186.2	- 1
PUERTO MONTT	252.5	1758.6	1640.2	1410.1	25
COYHAIQUE	64.0	865.8	742.6	924.5*	- 6
PUNTA ARENAS	81.8	364.8	404.3	310.5	17

Promedios acumulados para el período 1961-1990 (D.G.A)

* : Promedios calculados para períodos inferiores a 30 años

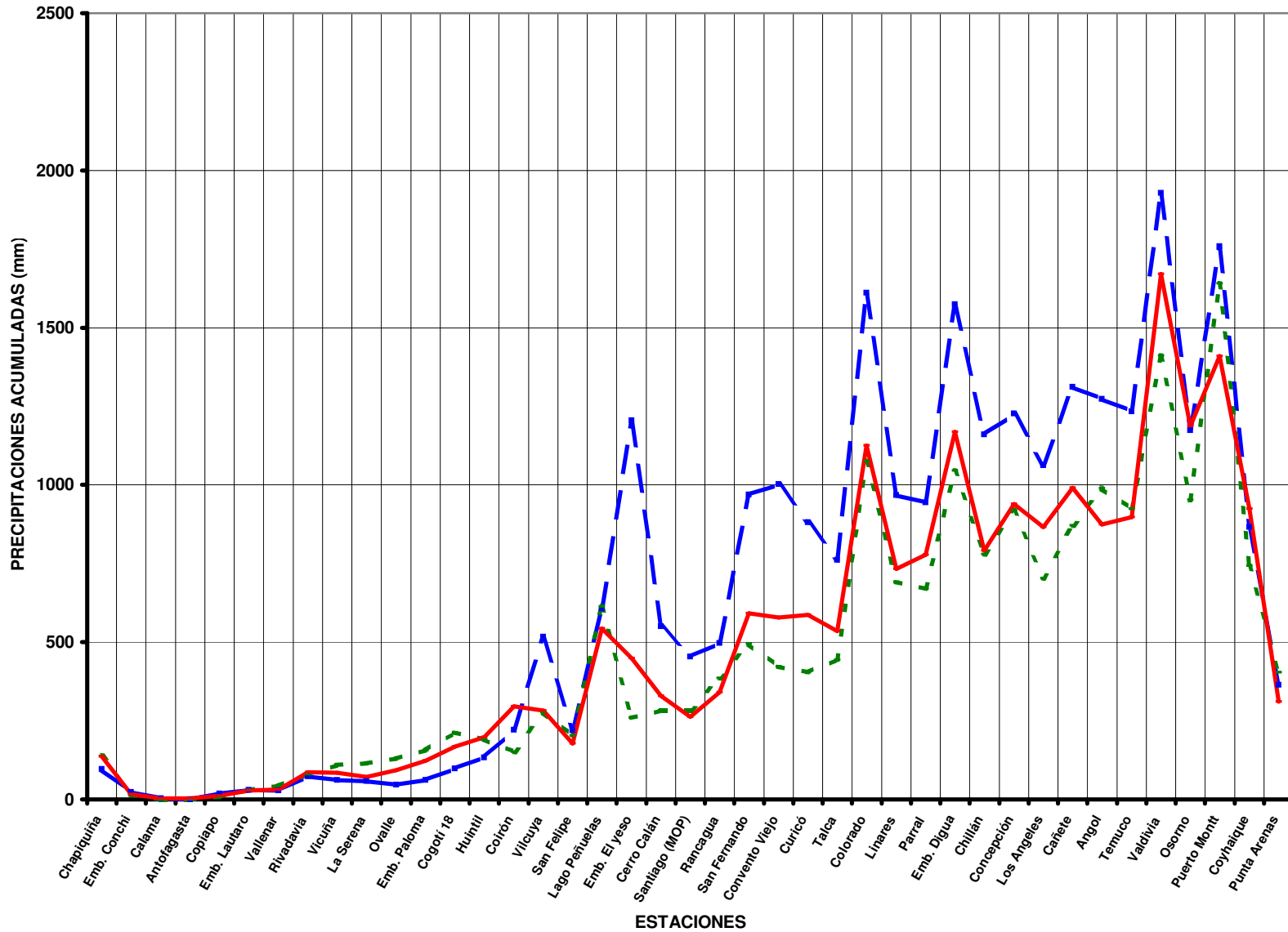
Valores expresados en milímetros (1 mm = 1 lt x m2)

TOTALES DE LLUVIA HASTA EL
31 de Agosto del 2005

Normal

Año 2005

Año 2004



ESTADO DE EMBALSES

Ultimo día del mes
(Volúmenes en mill-m³)

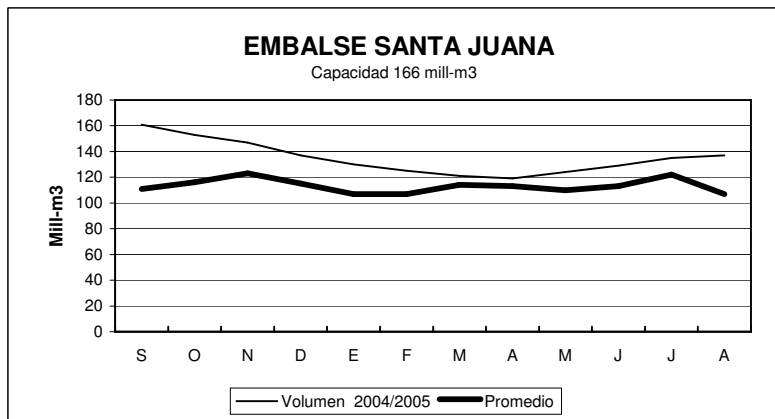
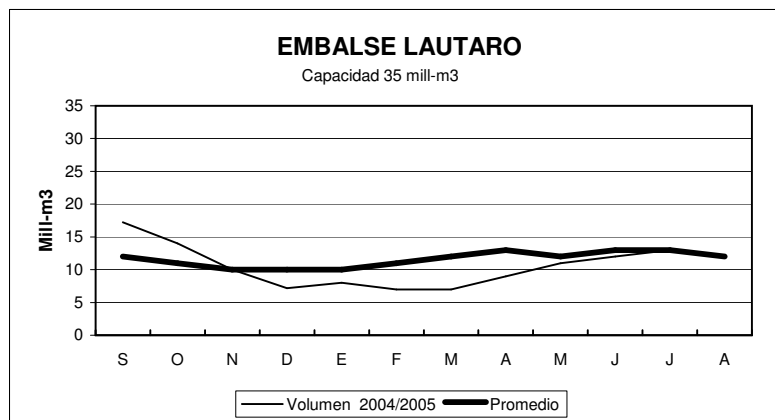
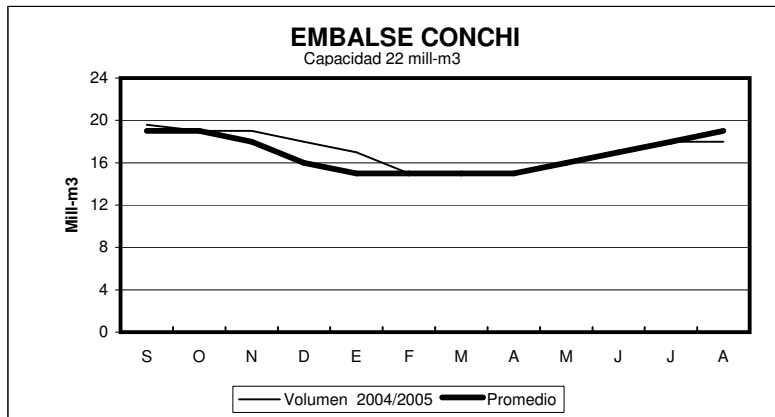
EMBALSE	REGION	CUENCA	CAPACIDAD	PROMEDIO	Agosto	
				HISTORICO MENSUAL	2005	2004
Conchi	II	Loa	22	19	18	19
Lautaro	III	Copiapó	35	13	12	19
Santa Juana	III	Huasco	166	107	137	165
La Laguna	IV	Elqui	40	24	31	38
Puclaro	IV	Elqui	200	71	140	200
Recoleta	IV	Limarí	100	67	77	97
La Paloma	IV	Limarí	748	415	456	596
Cogotí	IV	Limarí	150	85	63	85
Culimo	IV	Quilimarí	10	5.4	1.3	4.3
Corrales	IV	Illapel	50	31	37	50
Peñuelas	V	Peñuelas	95	32	35	45
El Yeso	RM	Maipo	256	173	203	180
Rungue	RM	Maipo	2.2	1.5	2.0	2.0
Rapel	VI	Rapel	695	518	645	519
Colbún	VII	Maule	1544	1180	1506	879
Lag. Maule	VII	Maule	1420	939	829	917
Bullileo	VII	Maule	60	53	60	60
Digua	VII	Maule	220	200	219	212
Tutuvén	VII	Maule	15	10.8	15	14
Coihueco	VIII	Itata	29	22	28.3	25
Lago Laja (&)	VIII	Bio-Bio	5582	3367	2365	2112

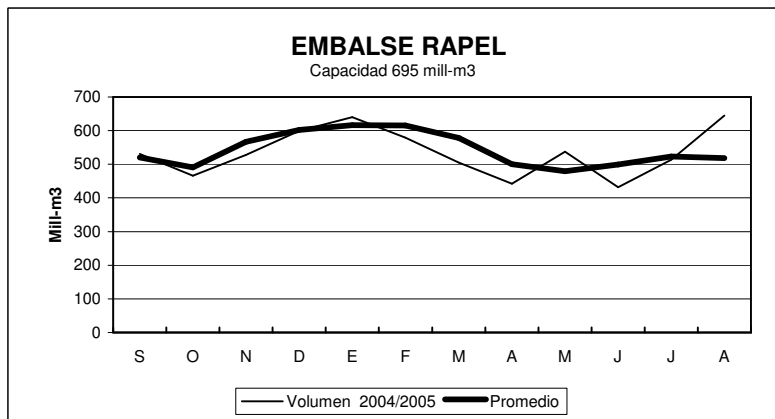
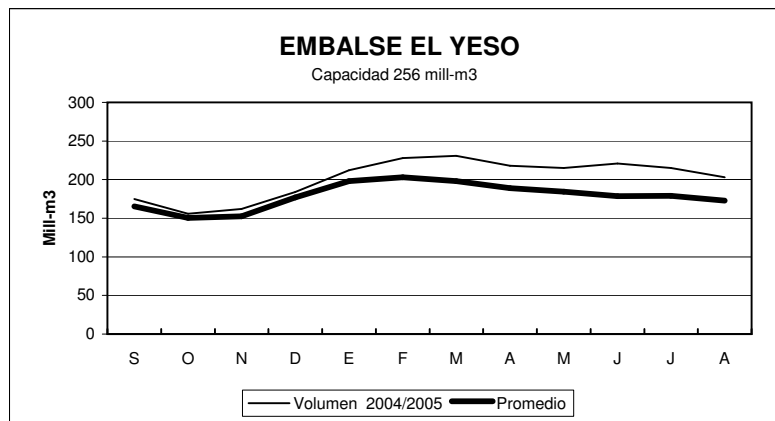
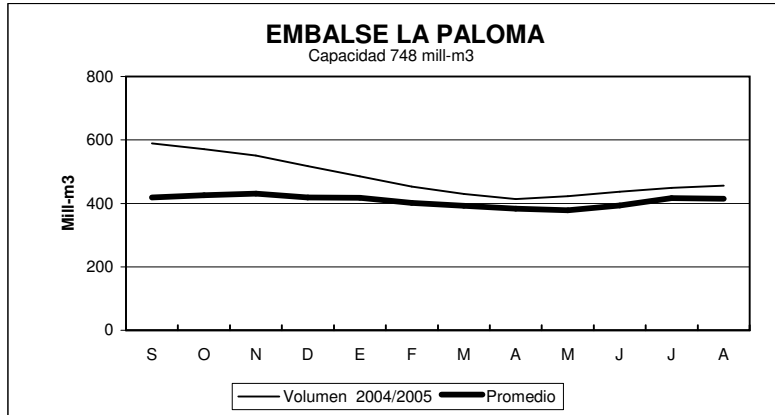
RESUMEN ANUAL

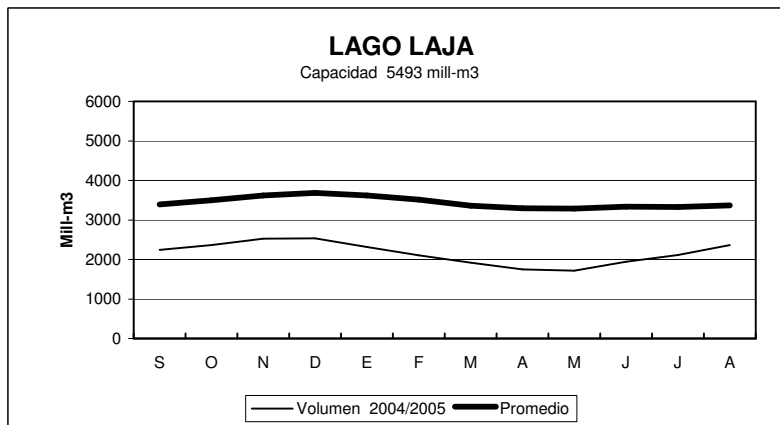
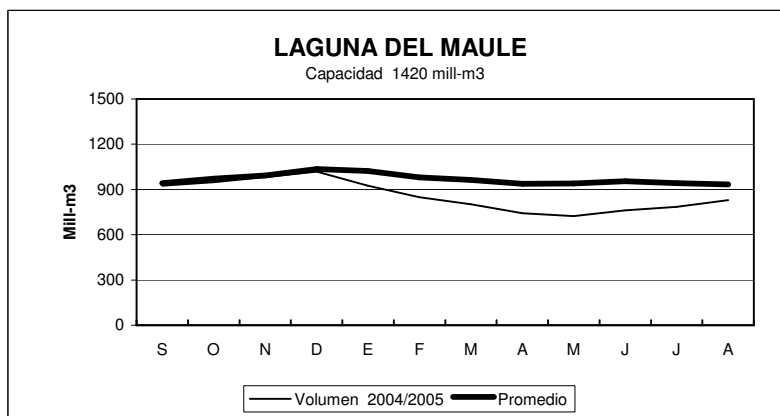
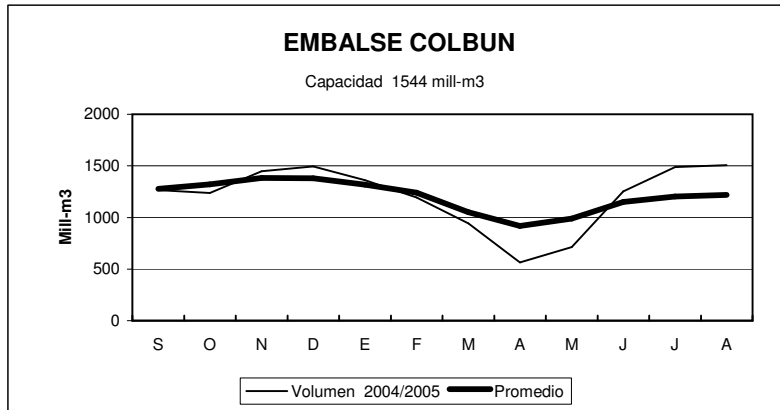
EMBALSE	2004 2005											
	S	O	N	D	E	F	M	A	M	J	J	A
Conchi	20	19	19	18	17	15	15	15	16	17	18	18
Lautaro	17	14	10	7	8	7	7	9	11	12	13	12
Santa Juana	161	153	147	137	130	125	121	119	124	129	135	137
La Laguna	38	38	36	33	31	30	25	26	25	27	29	31
Puclaro	200	190	179	162	153	142	134	128	133	137	140	140
Recoleta	96	93	89	83	77	72	68	65	69	73	75	77
La Paloma	589	571	551	518	485	453	430	414	423	437	449	456
Cogotí	87	85	81	75	66	60	56	53	54	58	61	63
Culimo	5.2	5.4	5.0		3.3	1.96	0.6		0.0	0.0	0.0	1.3
Corrales	50	50	50	49	47	40	33	31	31	32	32	37
Peñuelas		42	40	36	33	31	29	27	28	29	30	35
El Yeso	175	156	162	184	212	228	231	218	215	221	215	203
Rungue	2.0		1.8	1.3	0.8	0.4	0.2	0.1	0.1	0.6	1.2	2.0
Rapel	531	466	528	599	640	579	505	442	537	432	514	645
Colbún	1264	1237	1447	1496	1361	1195	942	565	714	1253	1488	1506
Lag. Maule	924	948	983	1018	924	849	802	743	723	761	786	829
Bullileo	60	60	60	38	40	16	1.3	0	19	44	60	60
Digua	220	220	220	170	91	28	6.5	4.0	28	105	160	219
Tutuvén	14	14	13	10.1	8.1	4	2.1	0	3	15	13	15
Coihueco	29	29	29	27	20	13	6	1.4	1.6	13.4	24	28.3
Lago Laja (&)	2240	2365	2525	2532	2314	2108	1923	1748	1716	1943	2110	2365

(&) : Volumen sobre cota 1300 msnm

ESTADO DE EMBALSES



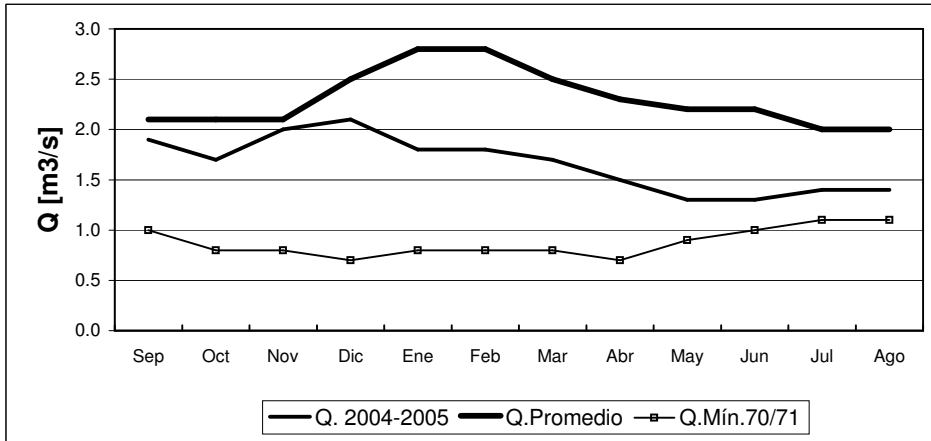




INFORME FLUVIOMETRICO
Caudales medios mensuales en m3/seg

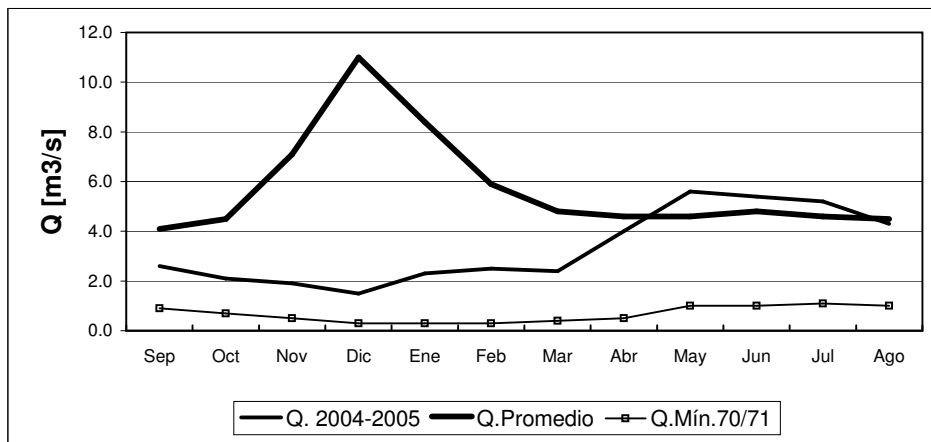
Ago-05

RIO COPIAPO EN LA PUERTA



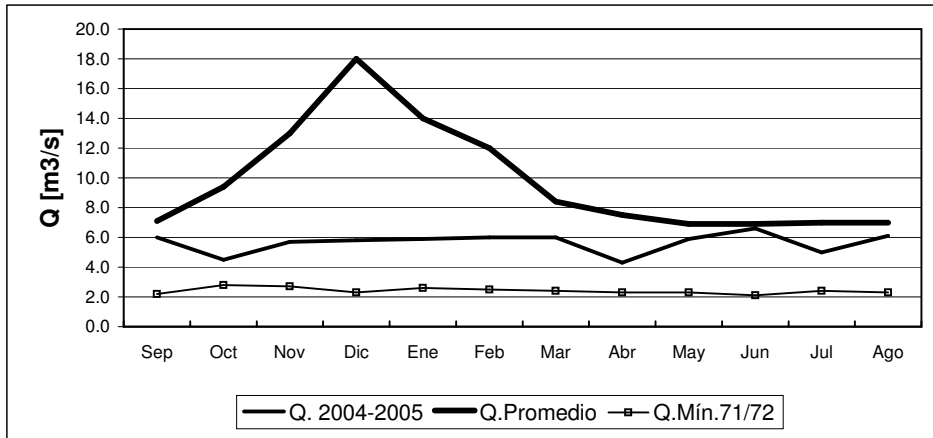
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	1.9	1.7	2.0	2.1	1.8	1.8	1.7	1.5	1.3	1.3	1.4	1.4
Q. Promedio	2.1	2.1	2.1	2.5	2.8	2.8	2.5	2.3	2.2	2.2	2.0	2.0
Q. Mín.70/71	1.0	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.9	1.0	1.1	1.1

RIO HUASCO EN ALGODONES



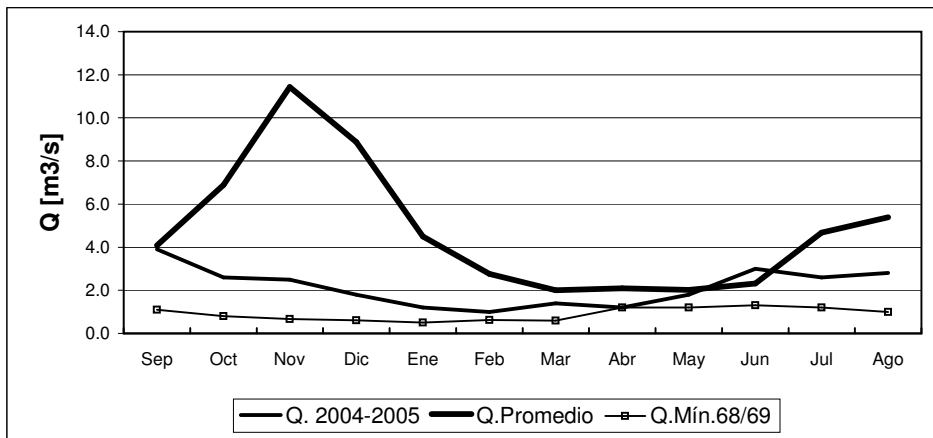
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	2.6	2.1	1.9	1.5	2.3	2.5	2.4	4.0	5.6	5.4	5.2	4.3
Q. Promedio	4.1	4.5	7.1	11.0	8.4	5.9	4.8	4.6	4.6	4.8	4.6	4.5
Q. Mín.70/71	0.9	0.7	0.5	0.3	0.3	0.3	0.4	0.5	1.0	1.0	1.1	1.0

RIO ELQUI EN ALGARROBAL



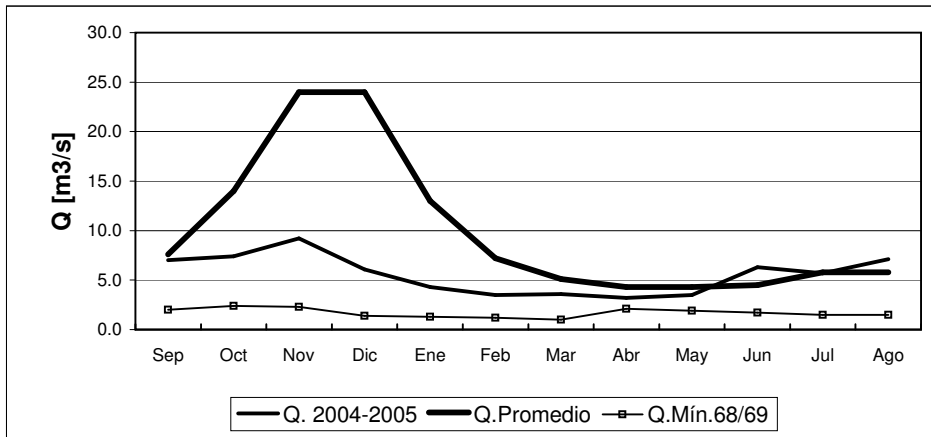
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Q. 2004-2005	6.0	4.5	5.7	5.8	5.9	6.0	6.0	4.3	5.9	6.6	5.0	6.1
Q. Promedio	7.1	9.4	13.0	18.0	14.0	12.0	8.4	7.5	6.9	6.9	7.0	7.0
Q. Mín. 71/72	2.2	2.8	2.7	2.3	2.6	2.5	2.4	2.3	2.3	2.1	2.4	2.3

RIO GRANDE EN LAS RAMADAS



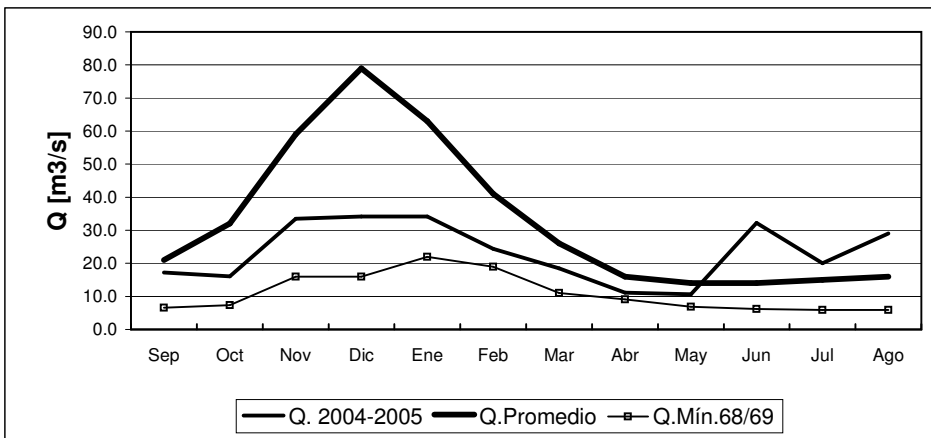
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Q. 2004-2005	3.9	2.6	2.5	1.8	1.2	1.0	1.4	1.2	1.8	3.0	2.6	2.8
Q. Promedio	4.1	6.9	11.4	8.9	4.5	2.8	2.0	2.1	2.0	2.3	4.7	5.4
Q. Mín. 68/69	1.1	0.8	0.7	0.6	0.5	0.6	0.6	1.2	1.2	1.3	1.2	1.0

RIO CHOAPA EN CUNCUMEN



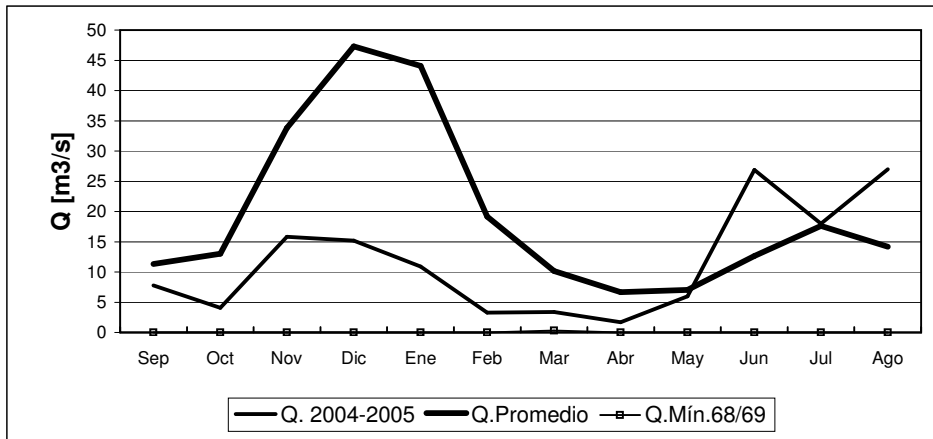
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Q. 2004-2005	7.0	7.4	9.2	6.1	4.3	3.5	3.6	3.2	3.5	6.3	5.7	7.1
Q.Promedio	7.6	14.0	24.0	24.0	13.0	7.2	5.1	4.3	4.3	4.5	5.8	5.8
Q.Mín.68/69	2.0	2.4	2.3	1.4	1.3	1.2	1.0	2.1	1.9	1.7	1.5	1.5

RIO ACONCAGUA EN CHACABUQUITO



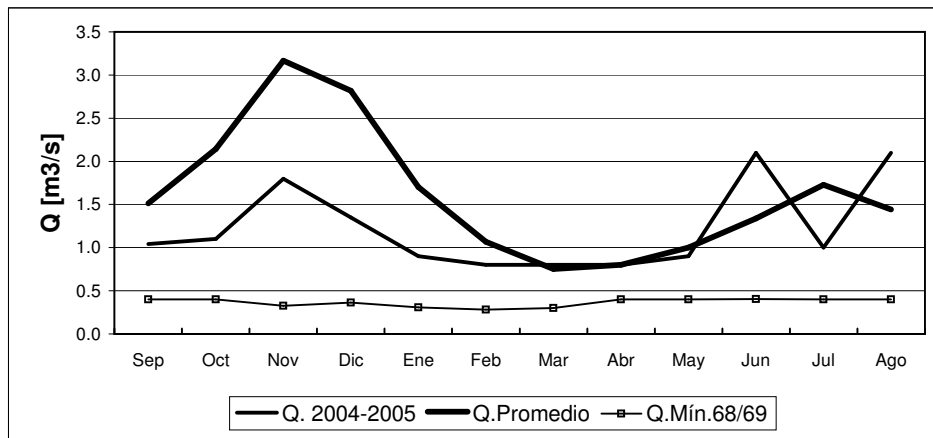
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Q. 2004-2005	17.2	16.1	33.5	34.2	34.2	24.4	18.5	11.1	10.6	32.2	20.0	29.0
Q.Promedio	21.0	32.0	59.0	79.0	63.0	41.0	26.0	16.0	14.0	14.0	15.0	16.0
Q.Mín.68/69	6.6	7.4	16.0	16.0	22.0	19.0	11.0	9.1	6.9	6.2	5.9	5.9

RIO ACONCAGUA EN SAN FELIPE



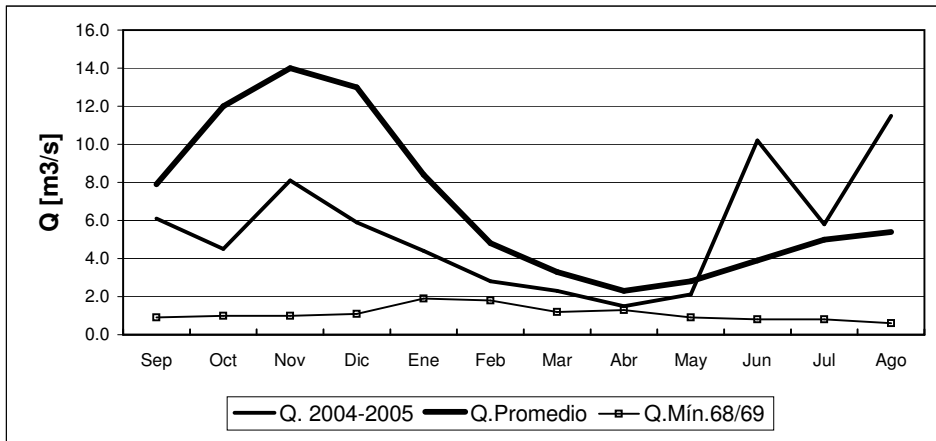
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Q. 2004-2005	7.8	4.1	15.8	15.2	10.9	3.3	3.4	1.7	6.0	26.9	18.0	27
Q.Promedio	11.3	13.0	33.8	47.3	44.1	19.1	10.2	6.7	7.1	12.7	17.6	14.2
Q.Mín.68/69	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

ESTERO ARRAYAN EN LA MONTOSA



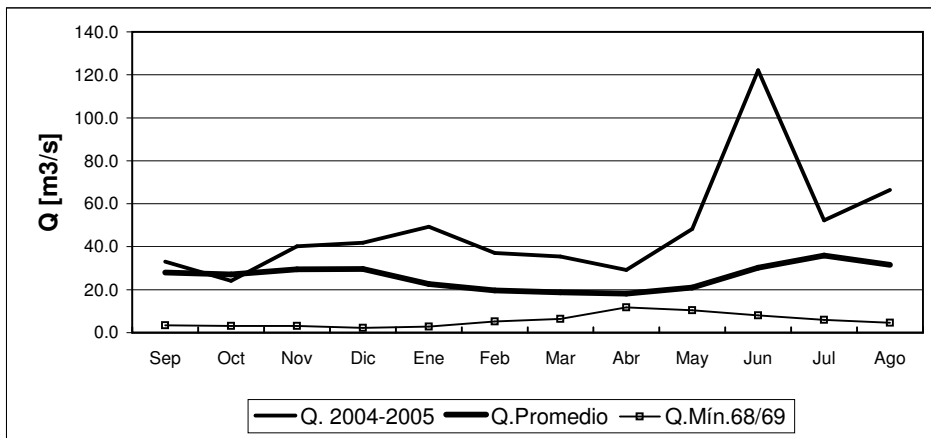
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Q. 2004-2005	1.0	1.1	1.8	1.4	0.9	0.8	0.8	0.8	0.9	2.1	1.0	2.1
Q.Promedio	1.5	2.1	3.2	2.8	1.7	1.1	0.8	0.8	1.0	1.3	1.7	1.4
Q.Mín.68/69	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4

RIO MAPOCHO EN LOS ALMENDROS



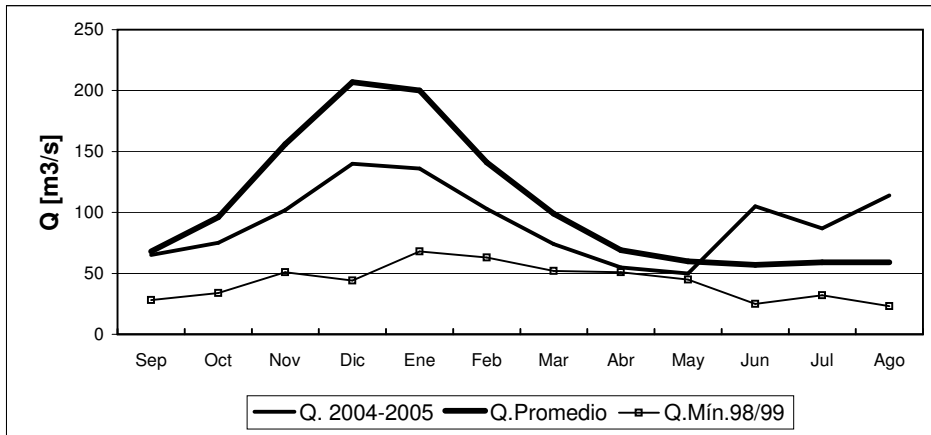
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Q. 2004-2005	6.1	4.5	8.1	5.9	4.4	2.8	2.3	1.5	2.1	10.2	5.8	11.5
Q.Promedio	7.9	12.0	14.0	13.0	8.4	4.8	3.3	2.3	2.8	3.9	5.0	5.4
Q.Mín.68/69	0.9	1.0	1.0	1.1	1.9	1.8	1.2	1.3	0.9	0.8	0.8	0.6

RIO MAPOCHO EN RINCONADA DE MAIPU



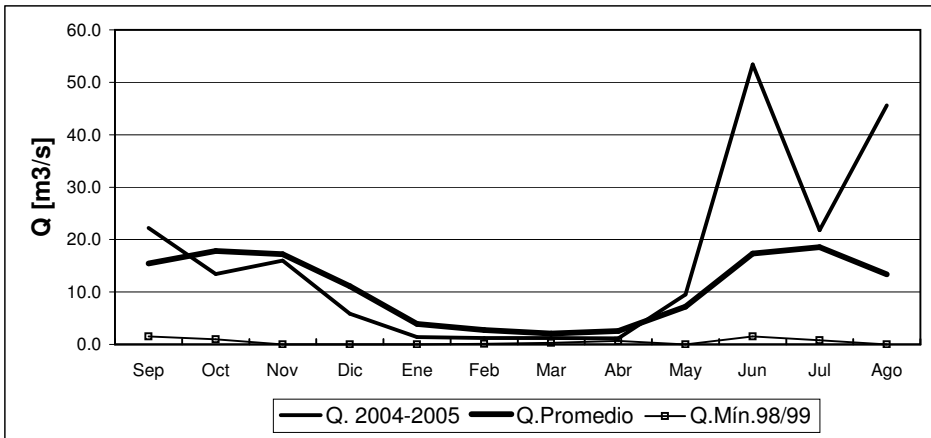
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Q. 2004-2005	33.1	24.1	40.2	41.8	49.3	37.1	35.5	29.2	48.2	122.1	52.3	66.5
Q.Promedio	28.0	27.1	29.5	29.7	22.6	19.6	18.7	18.1	21.0	30.3	35.9	31.6
Q.Mín.68/69	3.4	3.2	3.1	2.2	2.9	5.3	6.5	11.8	10.4	8.1	6.0	4.6

RIO MAIPO EN EL MANZANO



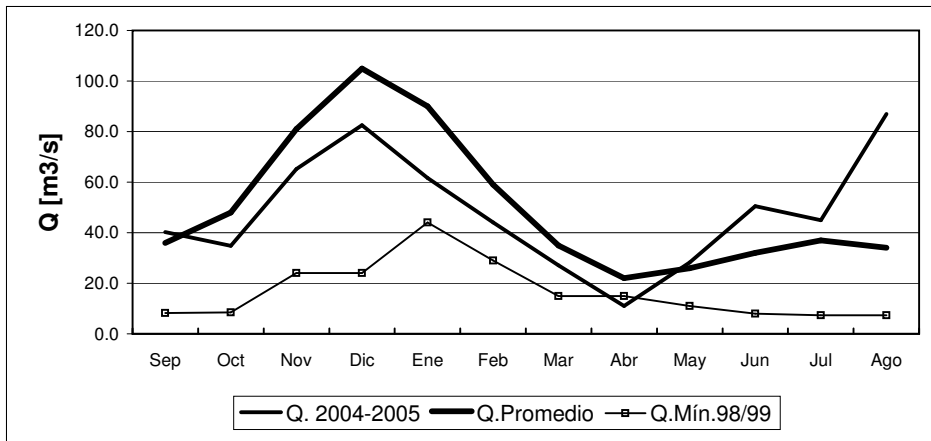
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	65	75	102	140	136	103	74	55	50	105	87	114
Q.Promedio	68	96	156	207	200	141	99	69	60	57	59	59
Q.Mín.98/99	28	34	51	44	68	63	52	51	45	25	32	23

RIO CLARO EN EL VALLE 2



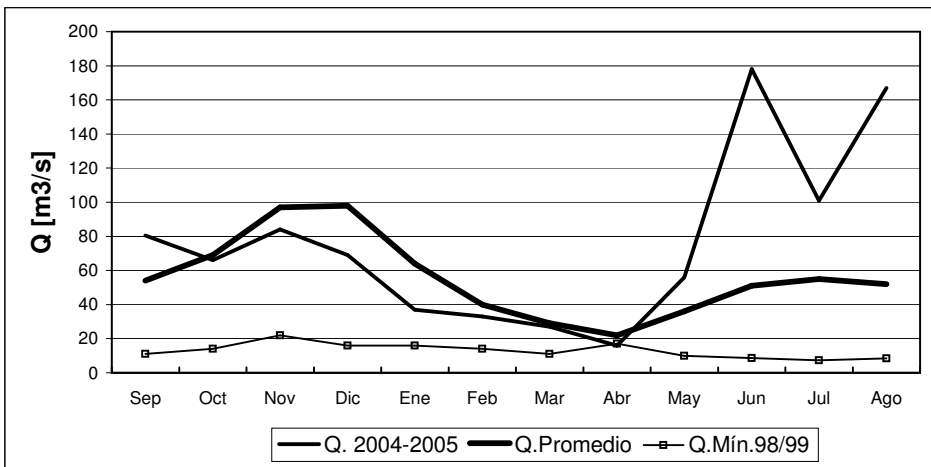
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Q. 2004-2005	22.2	13.4	16.0	5.8	1.4	1.2	1.2	1.1	9.5	53.4	21.8	45.6
Q.Promedio	15.5	17.9	17.2	11.1	3.9	2.7	2.1	2.6	7.2	17.3	18.6	13.4
Q.Mín.98/99	1.5	1.0	0.0	0.0	0.0	0.1	0.3	0.7	0.0	1.5	0.8	0.0

RIO TINGUIRIRICA BAJO BRIONES



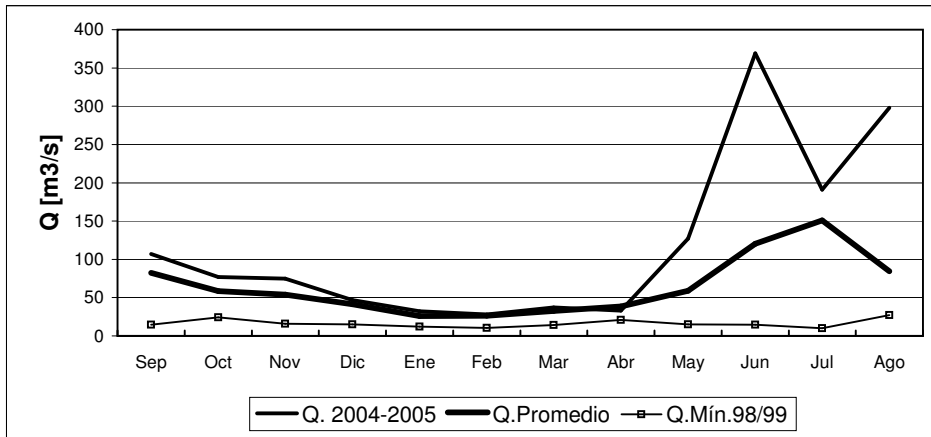
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Q. 2004-2005	40.2	34.8	65.2	82.5	61.7	44.0	27.1	11.0	28.2	50.5	44.9	86.9
Q. Promedio	36.0	48.0	81.0	105.0	90.0	59.0	35.0	22.0	26.0	32.0	37.0	34.0
Q. Mín. 98/99	8.2	8.5	24.0	24.0	44.0	29.0	15.0	15.0	11.0	8.0	7.4	7.4

RIO TENO DESPUES DE JUNTA



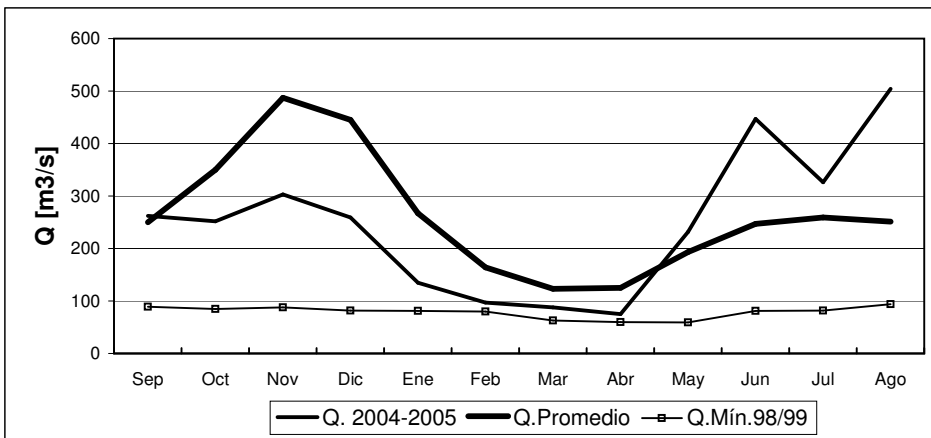
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	80	66	84	69	37	33	27	16	56	178	101	167
Q. Promedio	54	69	97	98	64	40	29	22	36	51	55	52
Q. Mín. 98/99	11	14	22	16	16	14	11	17	10	8.6	7.4	8.4

RIO CLARO EN RAUQUEN



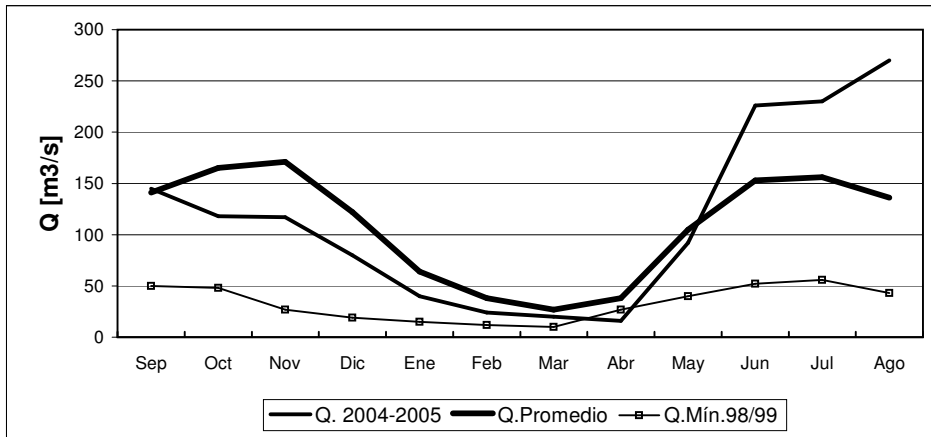
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	107	77	75	47	32	28	37	33	127	369	191	298
Q. Promedio	82	58	54	41	26	26	33	39	59	121	151	84
Q. Mín.98/99	15	24	16	15	12	10	14	21	15	15	10	27

RIO MAULE EN ARMERILLO



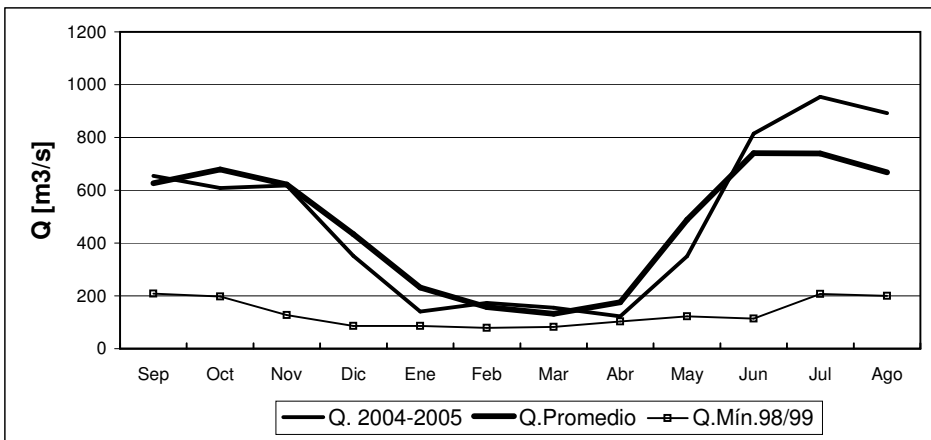
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	262	252	303	259	135	97	88	75	232	447	326	504
Q. Promedio	250	350	487	445	267	164	123	125	193	247	259	251
Q. Mín.98/99	89	85	88	82	81	80	63	60	59	81	82	94

RIO ÑUBLE EN SAN FABIAN



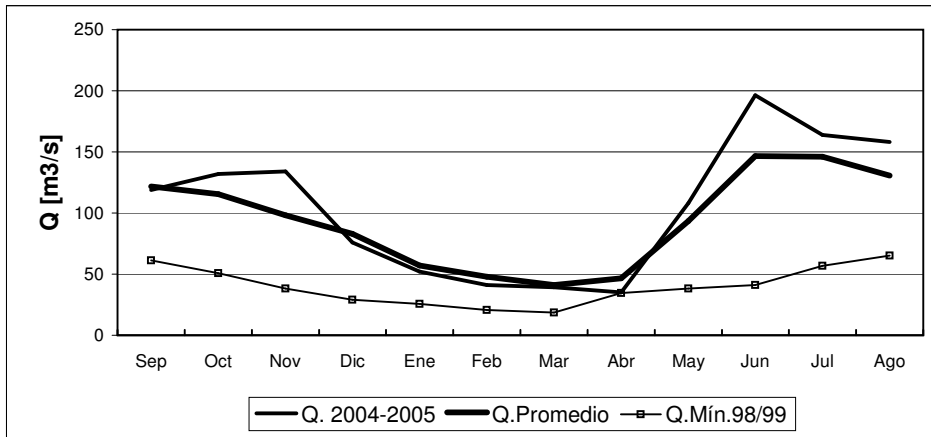
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	145	118	117	80	40	24	20	16	92	226	230	270
Q. Promedio	141	165	171	122	64	38	27	38	105	153	156	136
Q. Mín.98/99	50	48	27	19	15	12	10	27	40	52	56	43

RIO BIO-BIO EN RUCALHUE



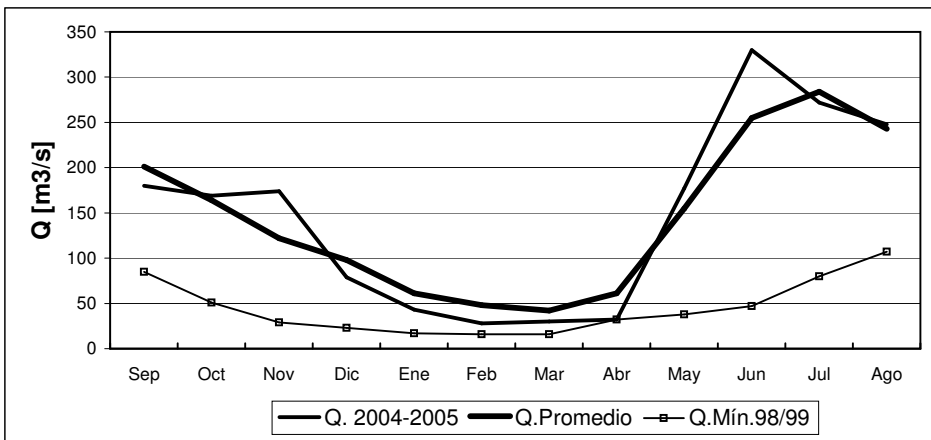
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	655	609	618	352	141	173	155	123	350	815	954	892
Q. Promedio	627	679	622	434	231	158	132	176	489	741	740	668
Q. Mín.98/99	208	197	127	86	86	79	82	103	122	114	207	200

RIO CAUTIN EN RARI-RUCA



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	119	132	134	76	52	41	39	35	108	196	164	158
Q. Promedio	122	116	98	83	57	48	41	47	93	147	146	131
Q. Mín.98/99	61	51	38	29	26	21	19	35	38	41	57	65

RIO CAUTIN EN CAJON

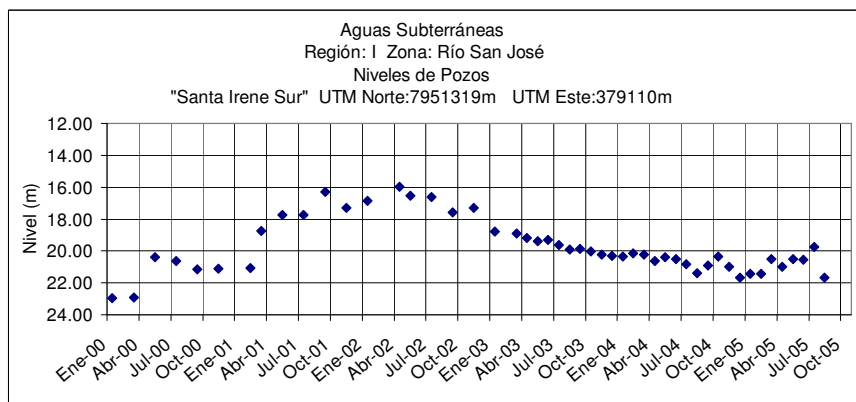


	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2004-2005	180	169	174	79	43	28	30	32	177	330	272	248
Q. Promedio	201	164	122	98	61	48	42	61	155	255	284	243
Q. Mín.98/99	85	51	29	23	17	16	16	32	38	47	80	107

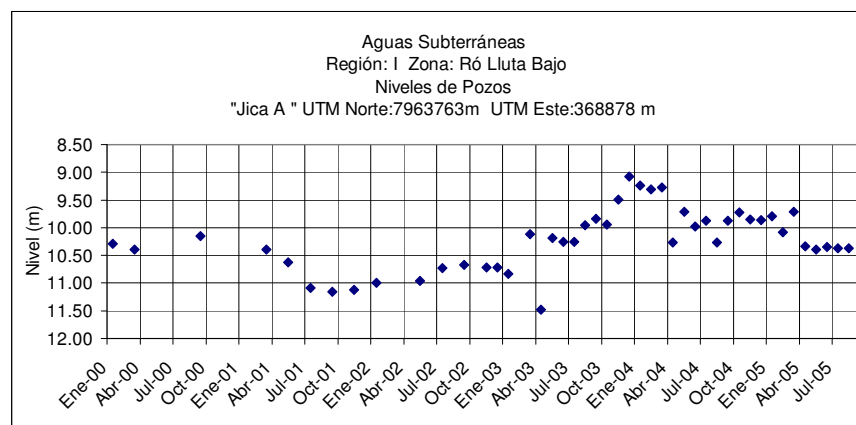
Informe de Aguas Subterráneas

Niveles de Pozos en metros

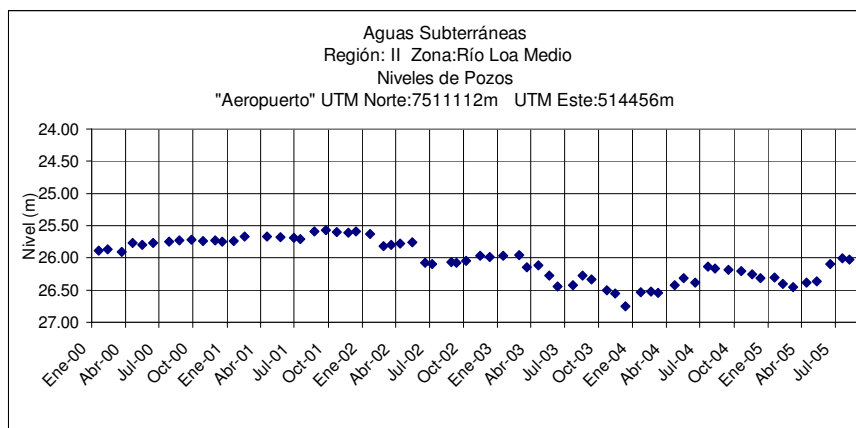
*Gráficos de últimos cinco años.



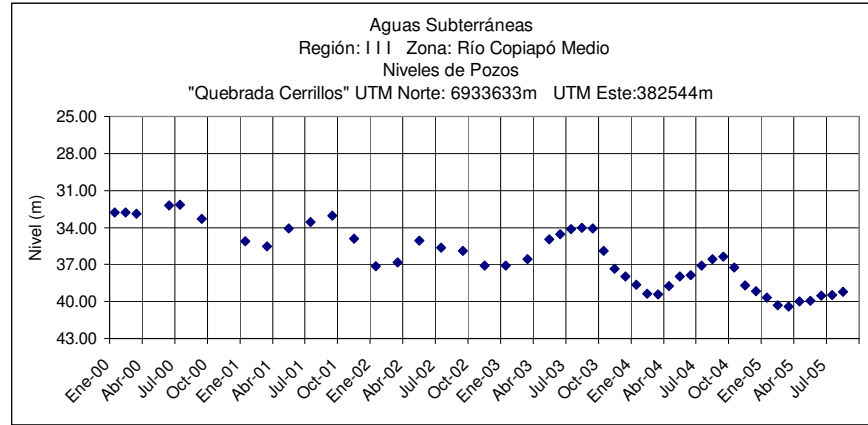
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	20.91	20.35	20.98	21.66	21.43	21.43	20.50	21.00	20.52	20.54	19.75	21.67



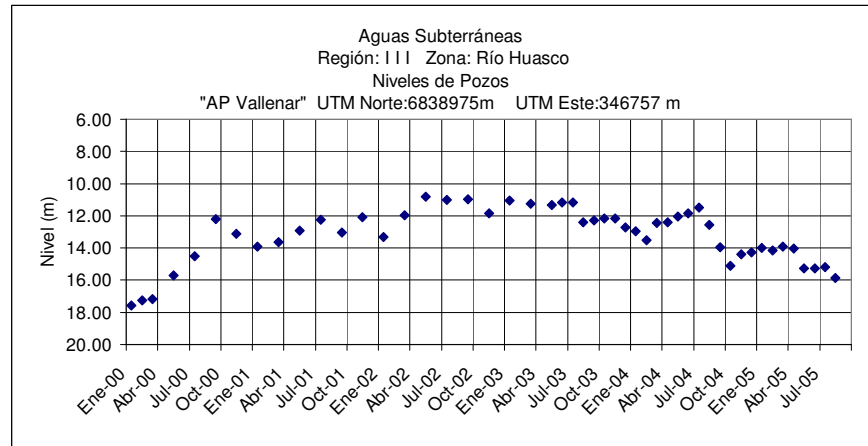
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	9.88	10.23	9.85	9.86	9.79	10.08	9.71	10.34	10.39	10.35	10.37	10.37



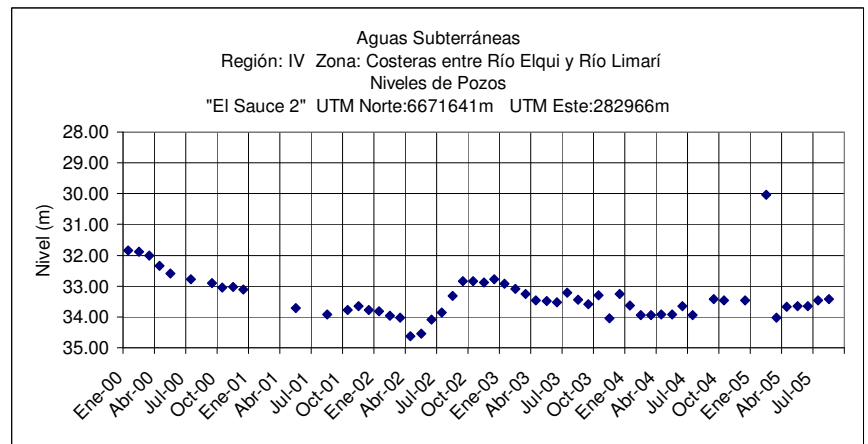
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	26.19	26.21	26.25	26.31	26.30	26.40	26.45	26.38	26.36	26.10	26.01	26.03



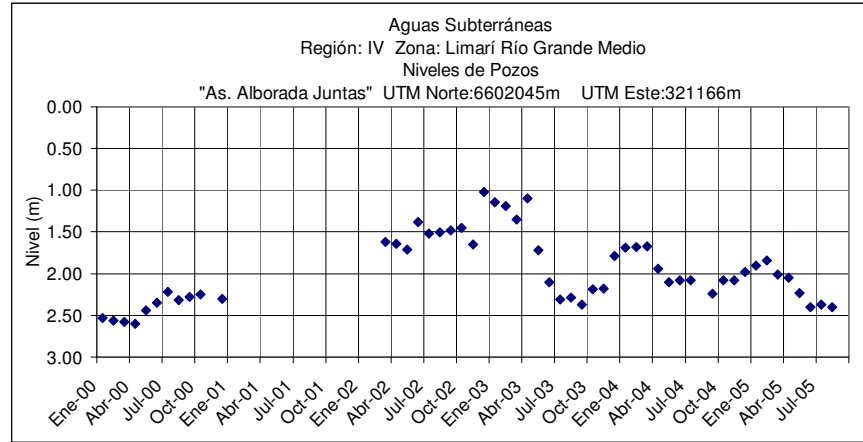
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	36.37	37.26	38.71	39.18	39.68	40.31	40.42	39.98	39.92	39.51	39.46	39.19



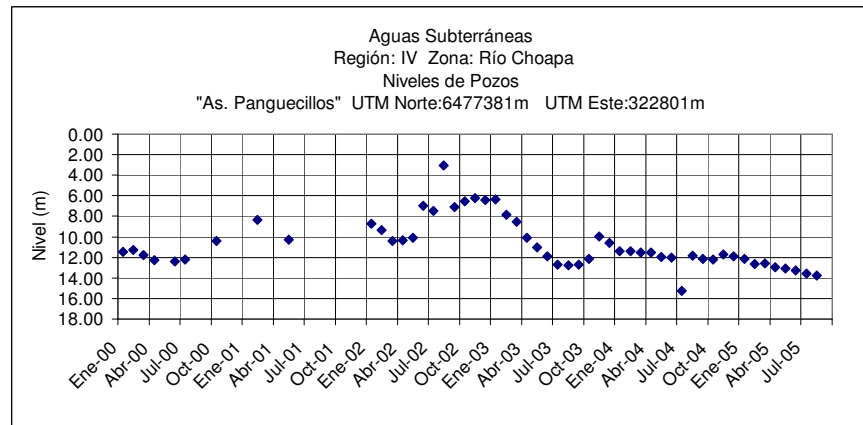
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	13.96	15.09	14.38	14.27	13.99	14.16	13.90	14.02	15.28	15.26	15.17	15.87



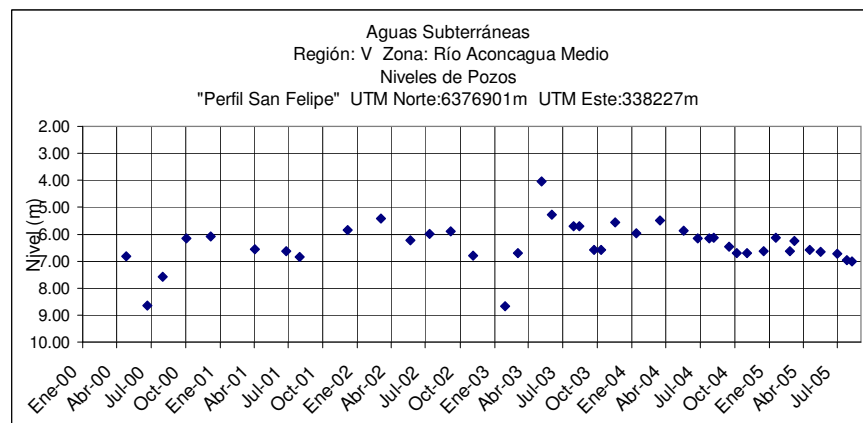
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	33.43	33.46	.	33.25	32.56	30.03	34.03	33.68	33.64	33.66	33.46	33.43



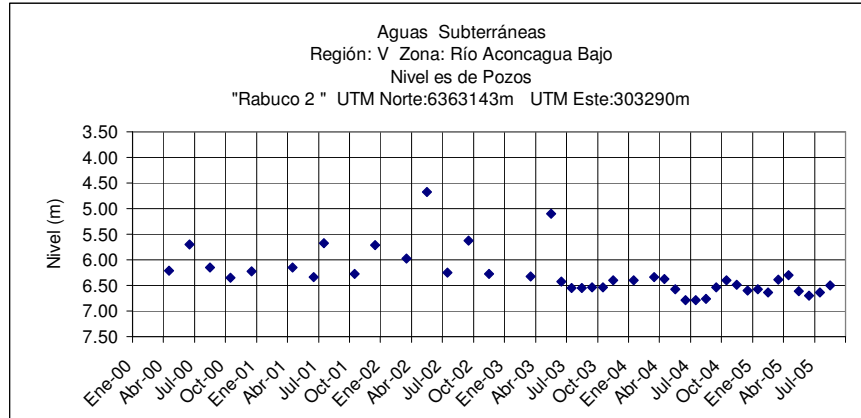
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	2.44	2.08	2.08	1.98	1.90	1.84	2.01	2.05	2.23	2.40	2.37	2.40



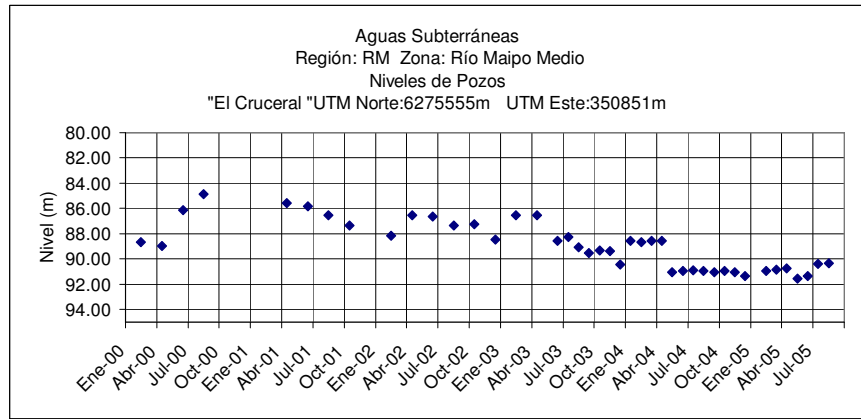
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	12.17	12.22	11.70	11.88	12.17	12.62	12.60	12.96	13.08	13.27	13.55	13.78



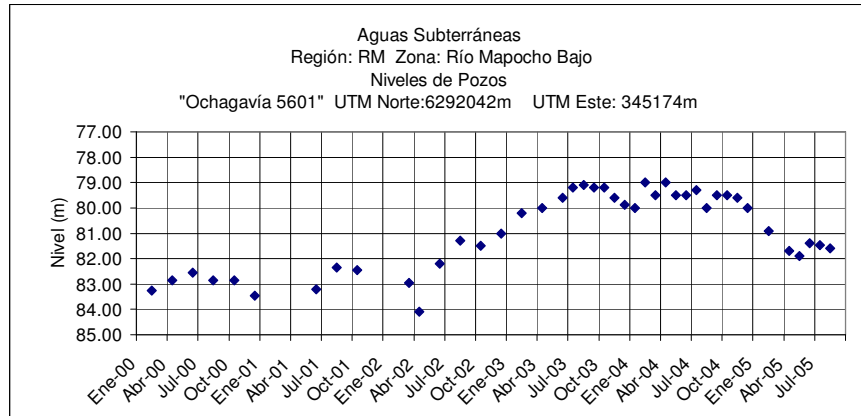
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	6.46	6.70	6.71	6.62	6.13	6.62	6.24	6.57	6.65	6.72	6.97	7.02



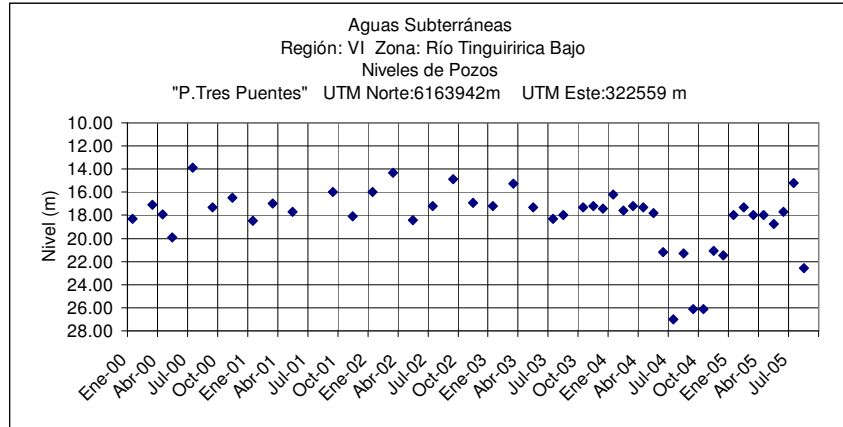
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	6.54	6.40	6.49	6.60	6.57	6.64	6.39	6.30	6.61	6.70	6.64	6.50



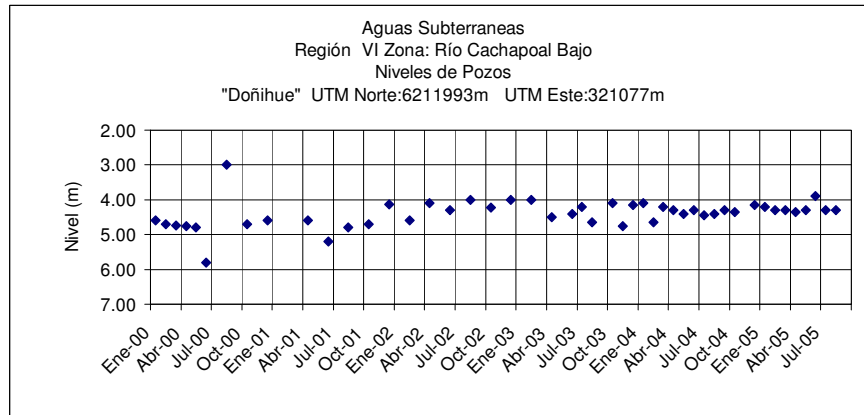
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	91.05	90.95	91.05	91.35	.	90.95	90.85	90.75	91.55	91.35	90.40	90.35



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	79.50	79.50	79.60	80.00	.	80.90	.	81.70	81.90	81.40	81.47	81.60



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	26.10	26.10	21.10	21.45	17.95	17.30	18.00	18.00	18.75	17.70	15.20	22.55



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2004-2005	4.30	4.35	.	4.15	4.20	4.30	4.30	4.35	4.30	3.90	4.30	4.30