

MINISTERIO DE OBRAS PUBLICAS
DIRECCION GENERAL DE AGUAS

Boletín N° : 347
Mes : Marzo
Año : 2007

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 en tiempo real

NOTA: Datos provisorios sujetos a modificaciones posteriores

INFORME PLUVIOMETRICO NACIONAL N°03

ESTACIONES	MARZO	TOTALES AL 31 DE MARZO			EXCESO O DÉFICIT (%)
		2007 (mm)	2006 (mm)	PROMEDIO (mm)	
CENTRAL CHAPIQUÍNA	3 0	76.1	155.5	129.0*	- 41
EMBALSE CONCHI	0.0	3.0	33.2	15.7*	- 81
CALAMA	0.0	0.0	0.7	1.5	-100
ANTOFAGASTA	0.0	0.0	0.0	0.6	-100
COPIAPÓ	0.0	0.0	0.0	0.5	-100
EMBALSE LAUTARO	0.0	0.0	0.0	1.1	-100
VALLENAR	1.0	1.0	0.0	0.7	51
RIVADAVIA	0.0	0.0	0.0	1.1	-100
VICUÑA	0.0	0.0	0.0	0.9	-100
LA SERENA	0.0	0.0	0.0	0.4	-100
OVALLE	0.0	0.0	0.0	0.4	-100
EMBALSE PALOMA	0.0	0.0	0.0	0.4	-100
COGOTÍ 18	0.0	0.0	0.0	0.5	-100
HUINTIL	0.0	0.0	0.0	1.8	-100
COIRÓN	0.0	0.0	0.0	2.6	-100
VILCUYA	4.5	10.0	11.0	7.3	38
SAN FELIPE	0.3	6.4	0.0	1.8	>200
LAGO PEÑUELAS	0.0	23.0	2.0	4.4	>200
EMBALSE EL YESO	12.3	23.8	10.3	19.3	23
CERRO CALÁN	9.3	34.4	0.0	5.9	>200
SANTIAGO (MOP)	0.7	25.2	0.2	4.7	>200
RANCAGUA	10.5	39.7	0.0	9.7	>200
SAN FERNANDO	12.7	51.1	0.0	13.7	>200
CONVENTO VIEJO	6.0	44.0	1.5	12.4	>200
CURICO	4.5	46.9	1.0	17.4	169
TALCA	16.2	62.0	11.3	22.0	182
COLORADO	20.0	78.5	40.5	42.7	84
LINARES	16.1	101.3	20.7	35.6	185
PARRAL	11.5	65.5	32.6	43.4	51
EMBALSE DIGUA	17.4	131.4	66.5	63.0	109
CHILLÁN	12.8	54.1	41.0	55.3	- 2
CONCEPCIÓN	19.4	99.2	50.2	66.9	48
LOS ÁNGELES	8.0	69.0	66.2	69.4	- 1
CAÑETE	21.9	67.1	133.7	99.8	- 33
ANGOL	1.5	50.2	50.6	59.8	- 16
TEMUCO	29.1	102.0	143.6	131.2	- 22
VALDIVIA	54.7	112.4	229.2	222.0	- 49
OSORNO	21.3	77.9	181.2	182.3	- 57
PUERTO MONTT	69.0	163.7	484.5	309.5	- 47
COYHAIQUE	19.3	53.0	249.6	188.6	- 72
PUNTA ARENAS	53.5	141.4	166.8	94.6	49

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

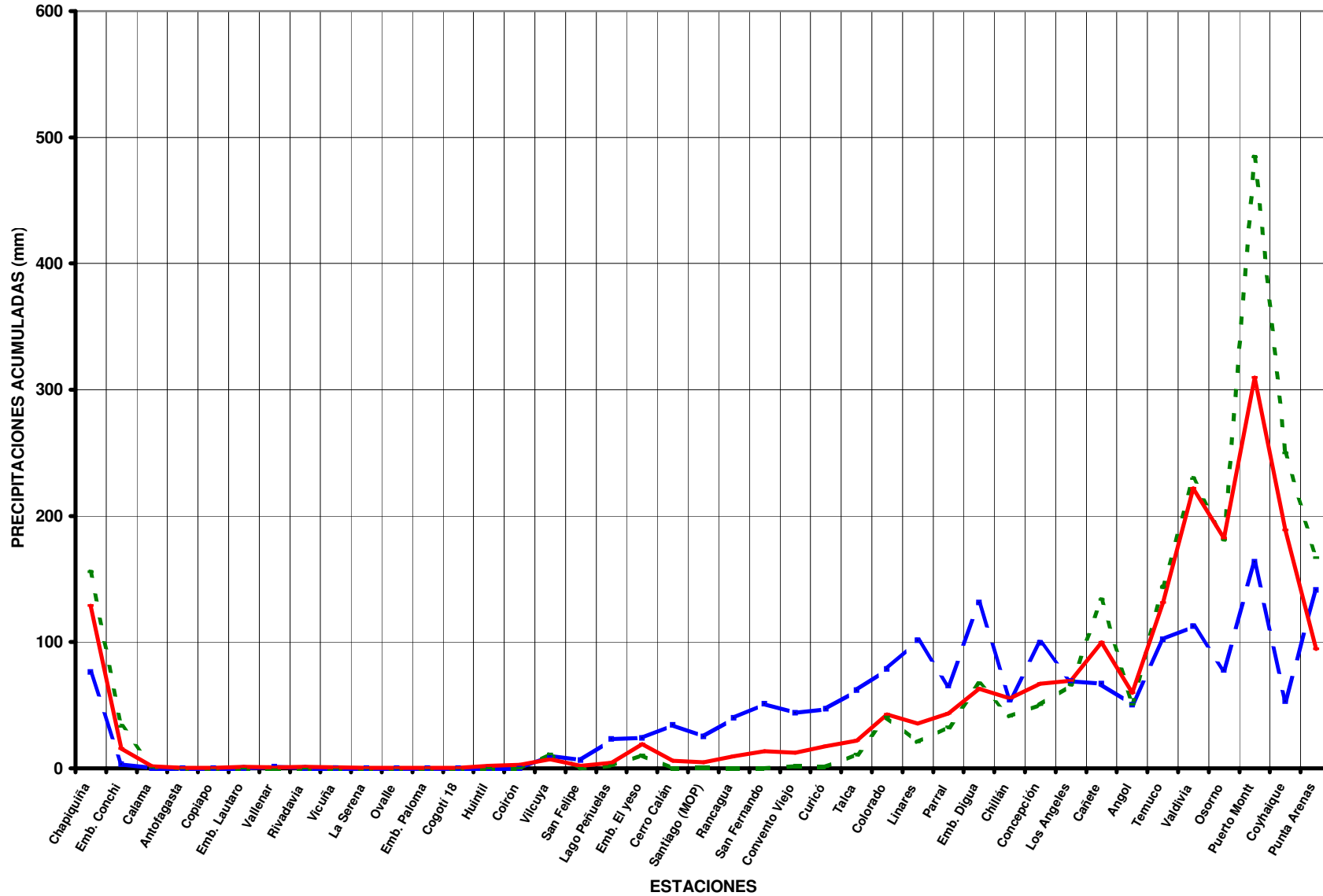
* : Promedios calculados para períodos inferiores a 30 años
Valores expresados en milímetros (1 mm = 1 lt x m2)

TOTALES DE LLUVIA HASTA EL
31 de Marzo de 2007

Normal

Año 2007

Año 2006



ESTADO DE EMBALSES

Ultimo día del mes
(Volúmenes en mill-m³)

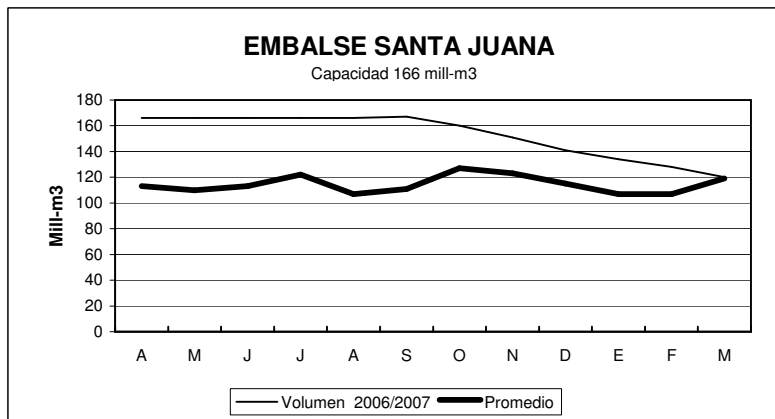
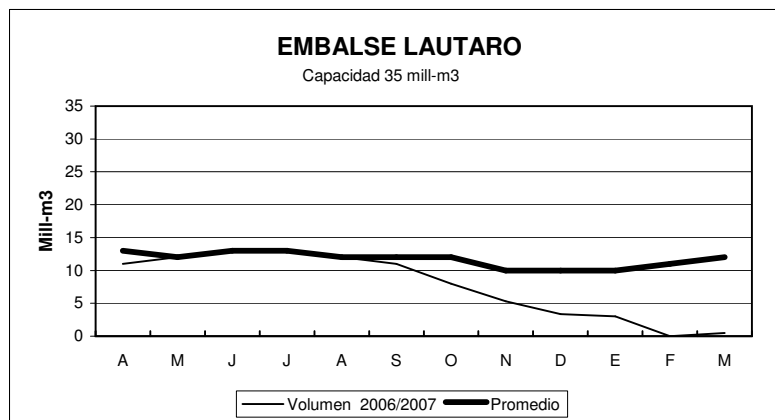
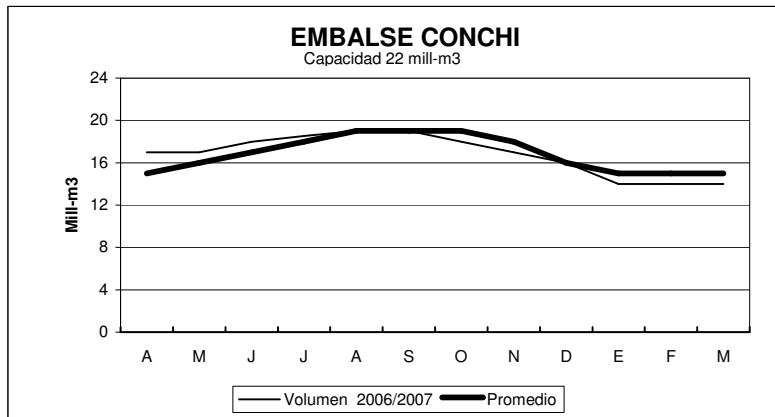
EMBALSE	REGION	CUENCA	CAPACIDAD	PROMEDIO	Marzo	
				HISTORICO MENSUAL	2007	2006
Conchi	II	Loa	22	15	14	16
Lautaro	III	Copiapó	35	12	0.5	10
Santa Juana	III	Huasco	166	119	120	166
La Laguna	IV	Elqui	40	24	28	28
Puclaro	IV	Elqui	200	117	191	200
Recoleta	IV	Limarí	100	58	68	92
La Paloma	IV	Limarí	748	395	465	542
Cogotí	IV	Limarí	150	75	47	86
Culimo	IV	Quilimarí	10	3.0	0.3	0.4
Corrales	IV	Illapel	50	39	43	49
Peñuelas	V	Peñuelas	95	22	20	22
El Yeso	RM	Maipo	256	200	212	249
Rungue	RM	Maipo	2.2	0.3	0.4	0.3
Rapel	VI	Rapel	695	579	500	530
Colbún	VII	Maule	1544	1057	945	1148
Lag. Maule	VII	Maule	1420	968	1376	1144
Bullileo	VII	Maule	60	3	6.5	0
Digua	VII	Maule	220	28	4	11
Tutuvén	VII	Maule	15	2.0	2	2.0
Coihueco	VIII	Itata	29	7	5.9	6.6
Lago Laja (&)	VIII	Bio-Bio	5582	3361	3024	2709

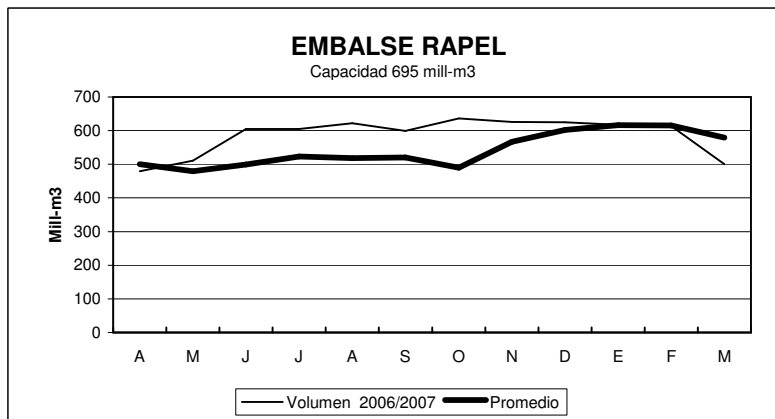
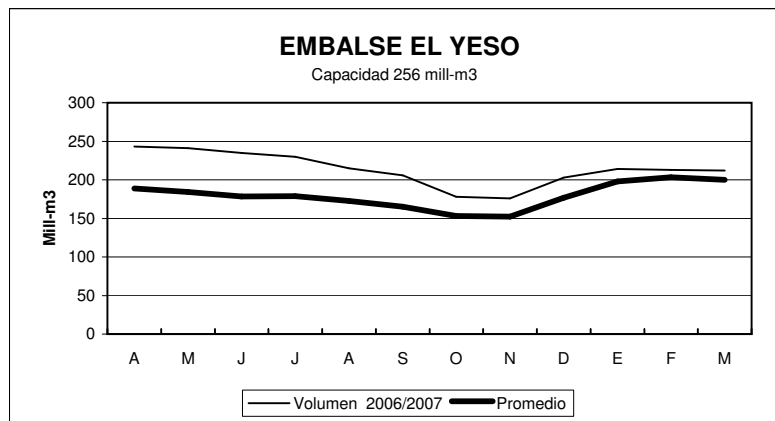
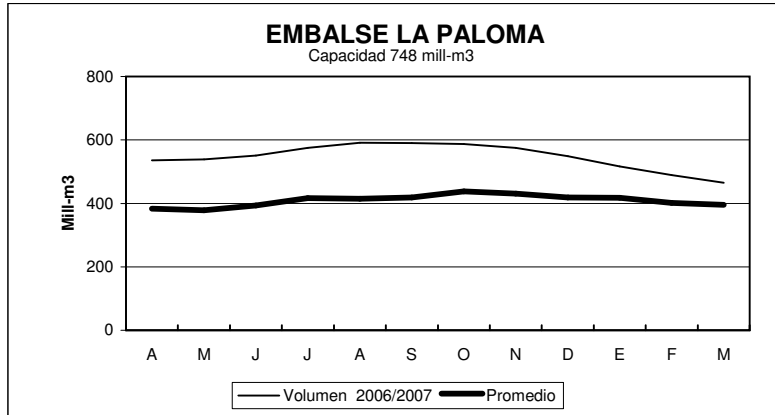
RESUMEN ANUAL

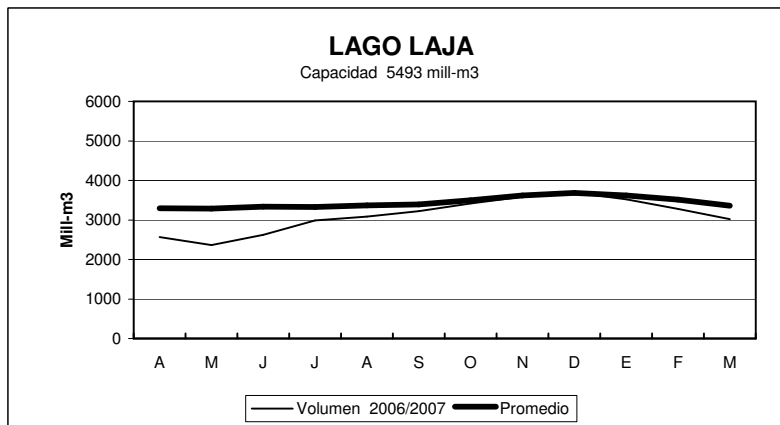
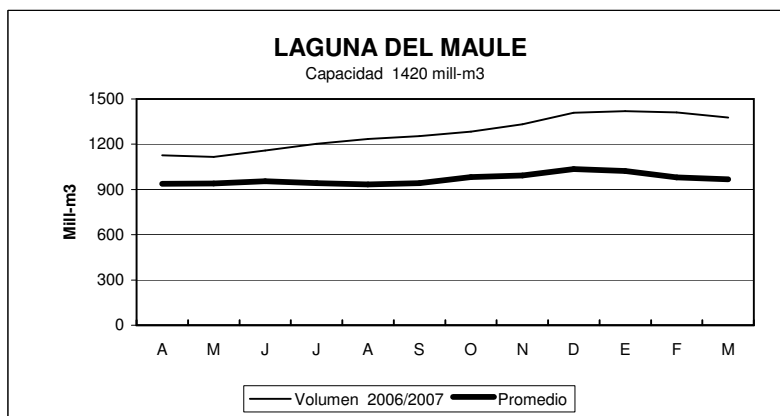
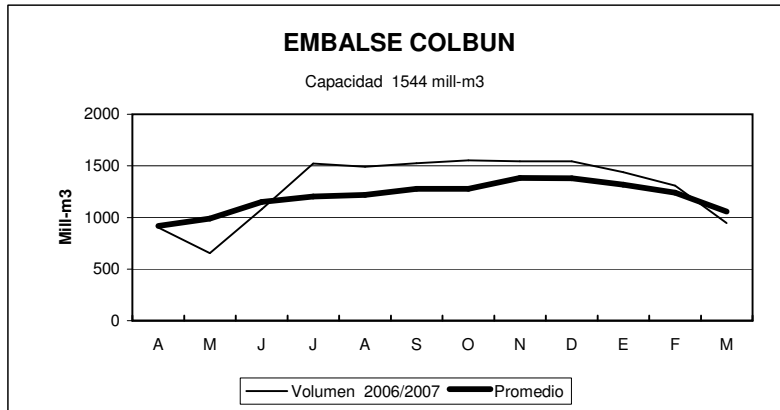
EMBALSE	2006-2007											
	A	M	J	J	A	S	O	N	D	E	F	M
Conchi	17	17	18	19	19	19	18	17	16	14	14	14
Lautaro	11	12	13	13	12	11	8	5	3	3	0	0.5
Santa Juana	166	166	166	166	166	167	160	151	141	134	128	120
La Laguna	32	34	33	32	31	32	35	35	35	33	29	28
Puclaro	200	200	196	197	197	192	189	192	195	196	197	191
Recoleta	94	95	97	97	95	91	87	82	79	75	71	68
La Paloma	536	539	551	575	591	590	587	575	549	517	489	465
Cogotí	82	79	79	83	85	82	81	75	67	59	53	47
Culimo	0.1	0.4	0.4	0.7	1.3	1.4	1.6	1.7	1.6	1.0	0.4	0.3
Corrales	48	48	48	50	51	50	50	50	49	48	47	43
Peñuelas	21	20	21	30	34	33	32	29	26	24	24	20
El Yeso	243	241	235	230	215	206	178	176	203	214	213	212
Rungue	0.2	0.2	0.3	2.0	2.0	2.0	2.0	1.8	1.3	1.0	0.7	0.4
Rapel	479	511	605	605	622	599	636	626	625	617	613	500
Colbún	902	654	1078	1522	1491	1525	1555	1544	1544	1439	1308	945
Lag. Maule	1127	1115	1159	1202	1234	1254	1283	1332	1408	1420	1411	1376
Bullileo	0	7	30	60	60	60	60	60	60	50	35	6.5
Digua	8.6	2.7	93	179	219	220	220	220	155	85	29	4
Tutuvén	3.4	3.0	10	11	12	12	14	15	10	6	4	2
Coihueco	3.9	6	10	16	27	29	30	29	27	20	13.4	5.9
Lago Laja (&)	2566	2365	2620	2989	3083	3224	3421	3590	3689	3522	3282	3024

(&) : Volumen sobre cota 1300 msnm

ESTADO DE EMBALSES



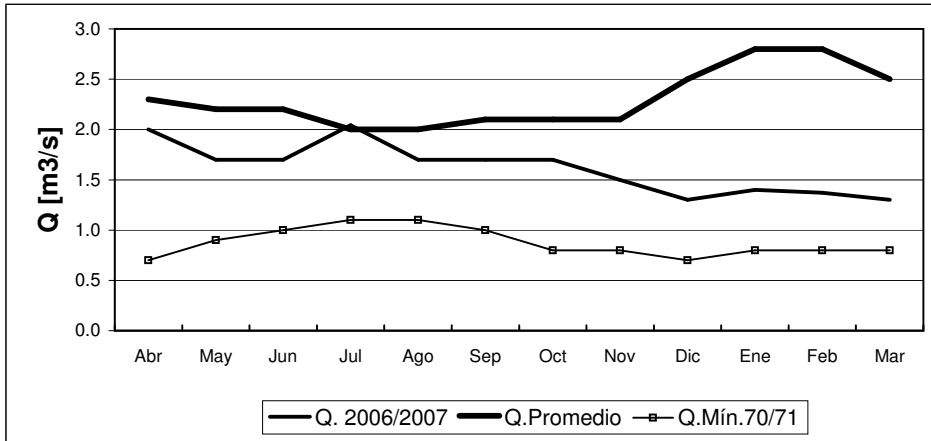




INFORME FLUVIOMETRICO
Caudales medios mensuales en m3/seg

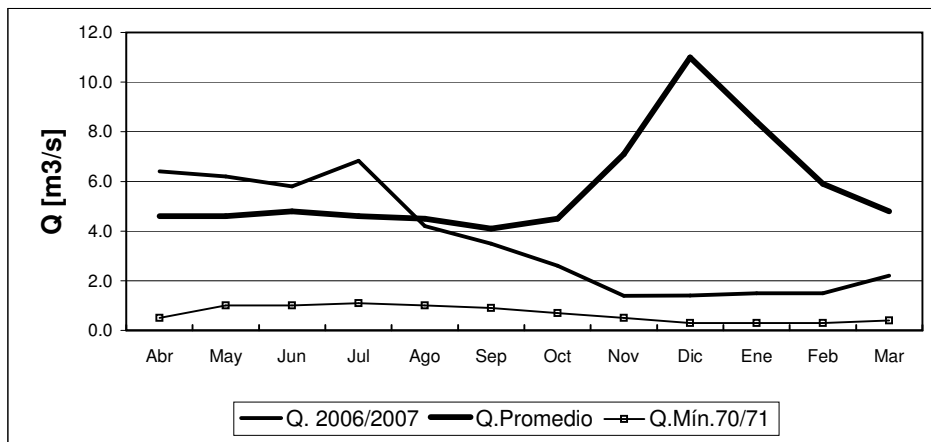
Mar-07

RIO COPIAPO EN LA PUERTA



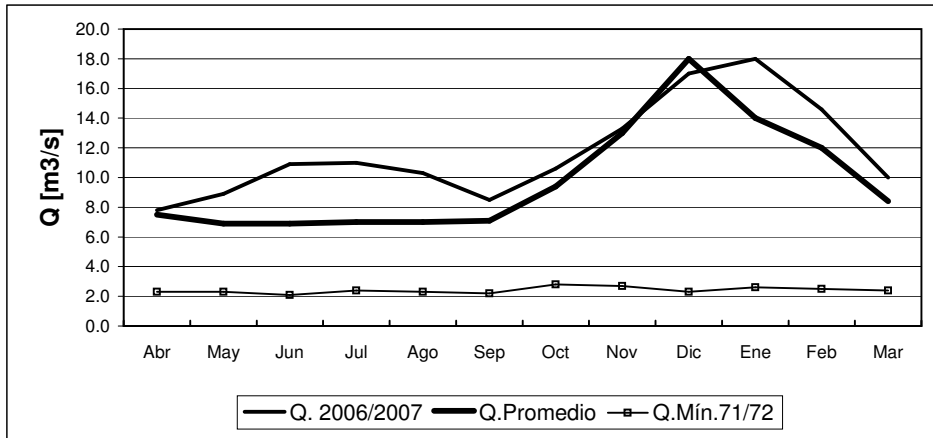
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	2.0	1.7	1.7	2.0	1.7	1.7	1.7	1.5	1.3	1.4	1.4	1.3
Q. Promedio	2.3	2.2	2.2	2.0	2.0	2.1	2.1	2.1	2.5	2.8	2.8	2.5
Q. Min. 70/71	0.7	0.9	1.0	1.1	1.1	1.0	0.8	0.8	0.7	0.8	0.8	0.8

RIO HUASCO EN ALGODONES



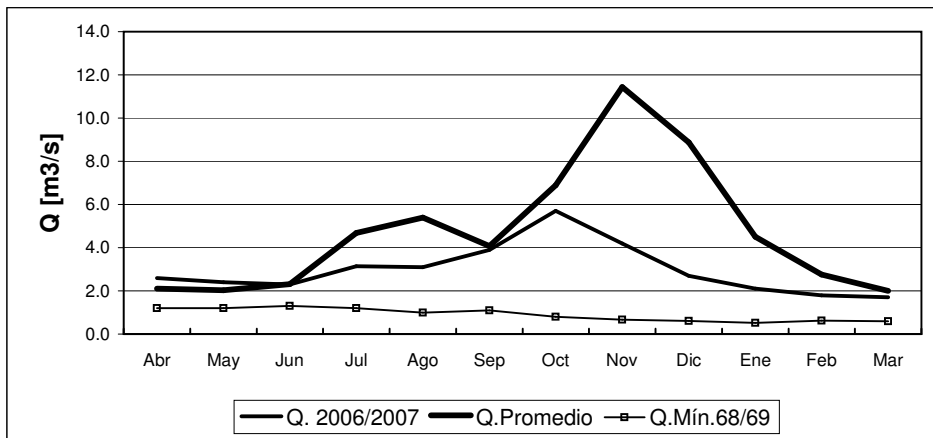
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	6.4	6.2	5.8	6.8	4.2	3.5	2.6	1.4	1.4	1.5	1.5	2.2
Q. Promedio	4.6	4.6	4.8	4.6	4.5	4.1	4.5	7.1	11.0	8.4	5.9	4.8
Q. Min. 70/71	0.5	1.0	1.0	1.1	1.0	0.9	0.7	0.5	0.3	0.3	0.3	0.4

RIO ELQUI EN ALGARROBAL



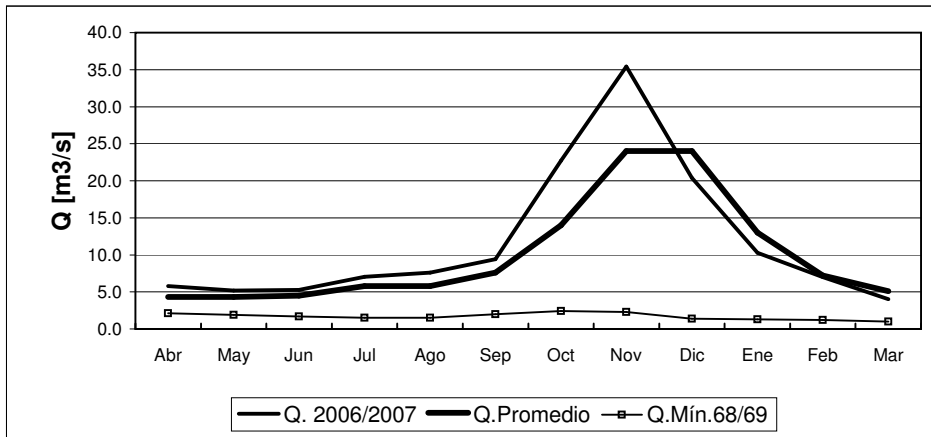
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	7.8	8.9	10.9	11.0	10.3	8.5	10.6	13.3	17.0	18.0	14.6	10.0
Q.Promedio	7.5	6.9	6.9	7.0	7.0	7.1	9.4	13.0	18.0	14.0	12.0	8.4
Q.Mín.71/72	2.3	2.3	2.1	2.4	2.3	2.2	2.8	2.7	2.3	2.6	2.5	2.4

RIO GRANDE EN LAS RAMADAS



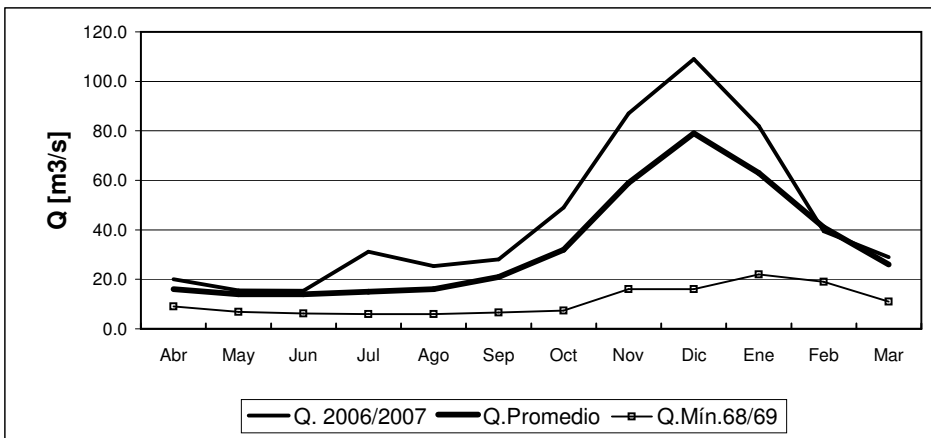
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	2.6	2.4	2.3	3.1	3.1	3.9	5.7	4.2	2.7	2.1	1.8	1.7
Q.Promedio	2.1	2.0	2.3	4.7	5.4	4.1	6.9	11.4	8.9	4.5	2.8	2.0
Q.Mín.68/69	1.2	1.2	1.3	1.2	1.0	1.1	0.8	0.7	0.6	0.5	0.6	0.6

RIO CHOAPA EN CUNCUMEN



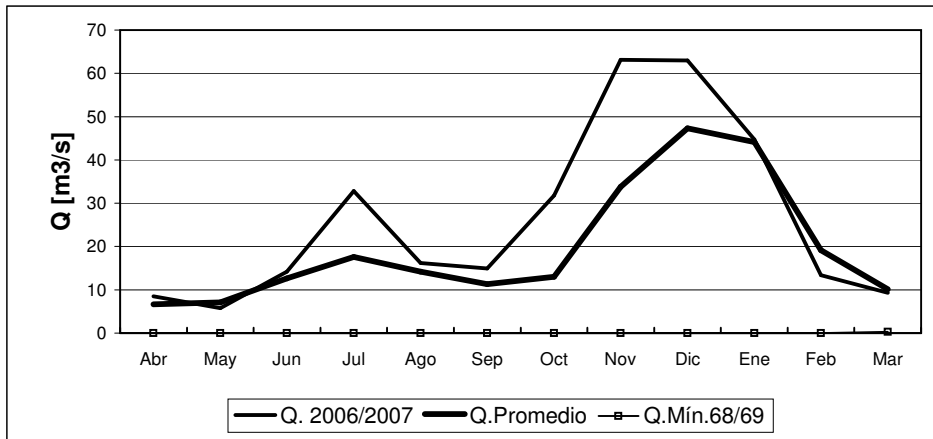
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	5.8	5.2	5.3	7.1	7.6	9.4	22.7	35.4	20.4	10.3	7.0	4.0
Q.Promedio	4.3	4.3	4.5	5.8	5.8	7.6	14.0	24.0	24.0	13.0	7.2	5.1
Q.Mín.68/69	2.1	1.9	1.7	1.5	1.5	2.0	2.4	2.3	1.4	1.3	1.2	1.0

RIO ACONCAGUA EN CHACABUQUITO



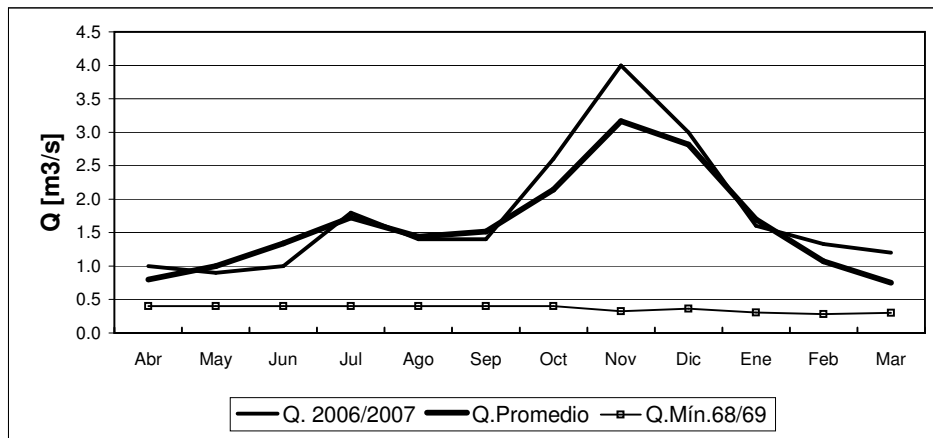
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	20.0	15.5	15.4	31.2	25.4	28.0	49.0	87.0	109.0	82.0	39.4	29.0
Q.Promedio	16.0	14.0	14.0	15.0	16.0	21.0	32.0	59.0	79.0	63.0	41.0	26.0
Q.Mín.68/69	9.1	6.9	6.2	5.9	5.9	6.6	7.4	16.0	16.0	22.0	19.0	11.0

RIO ACONCAGUA EN SAN FELIPE



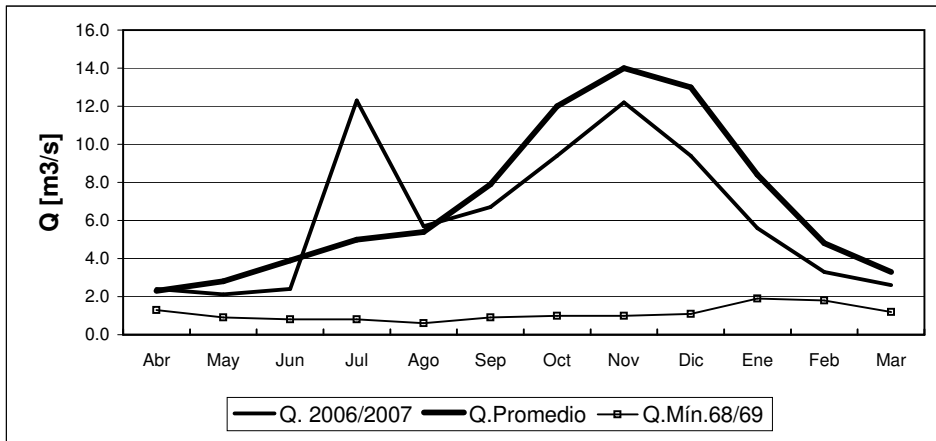
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	8.5	5.8	14.2	32.8	16.2	14.9	31.8	63.1	63.0	44.7	13.4	9.3
Q.Promedio	6.7	7.1	12.7	17.6	14.2	11.3	13.0	33.8	47.3	44.1	19.1	10.2
Q.Mín.68/69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

ESTERO ARRAYAN EN LA MONTOSA



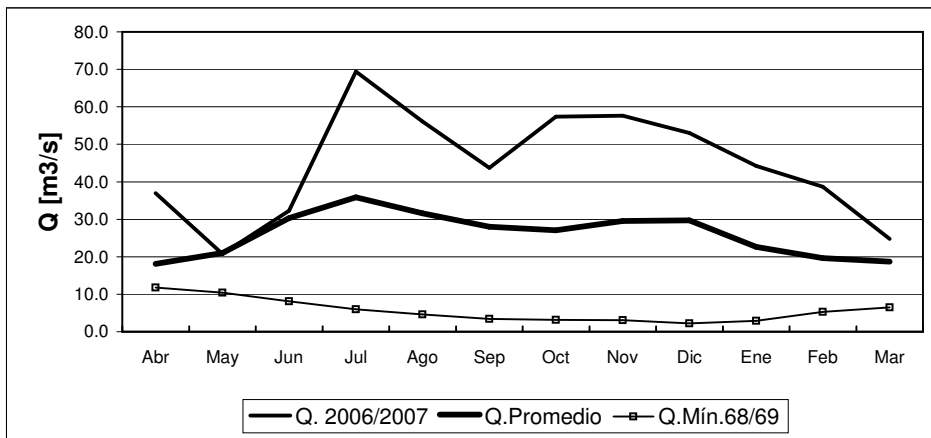
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	1.0	0.9	1.0	1.8	1.4	1.4	2.6	4.0	3.0	1.6	1.3	1.2
Q.Promedio	0.8	1.0	1.3	1.7	1.4	1.5	2.1	3.2	2.8	1.7	1.1	0.8
Q.Mín.68/69	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3

RIO MAPOCHO EN LOS ALMENDROS



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	2.4	2.1	2.4	12.3	5.7	6.7	9.4	12.2	12.2	9.4	5.6	3.3
Q.Promedio	2.3	2.8	3.9	5.0	5.4	7.9	12.0	14.0	13.0	8.4	4.8	3.3
Q.Mín.68/69	1.3	0.9	0.8	0.8	0.6	0.9	1.0	1.0	1.1	1.9	1.8	1.2

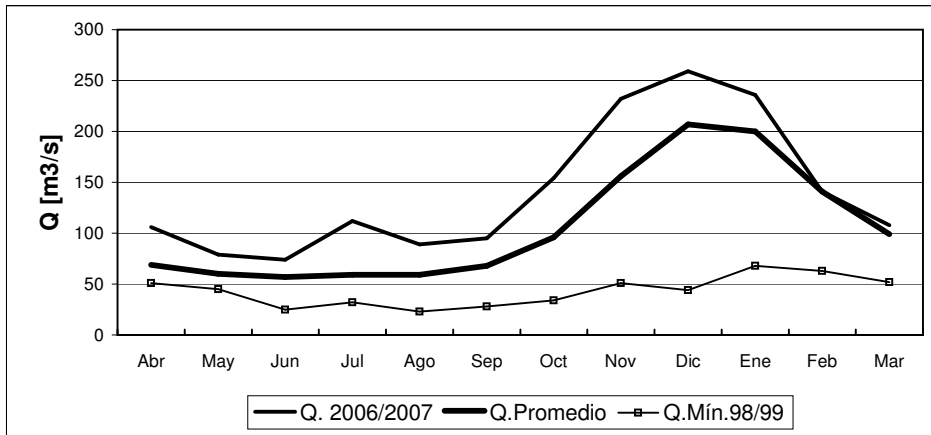
RIO MAPOCHO EN RINCONADA DE MAIPU



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	37.0	20.8	32.3	69.4	56.1	43.7	57.4	57.6	53.0	44.2	38.7	24.7 *
Q.Promedio	18.1	21.0	30.3	35.9	31.6	28.0	27.1	29.5	29.7	22.6	19.6	18.7
Q.Mín.68/69	11.8	10.4	8.1	6.0	4.6	3.4	3.2	3.1	2.2	2.9	5.3	6.5

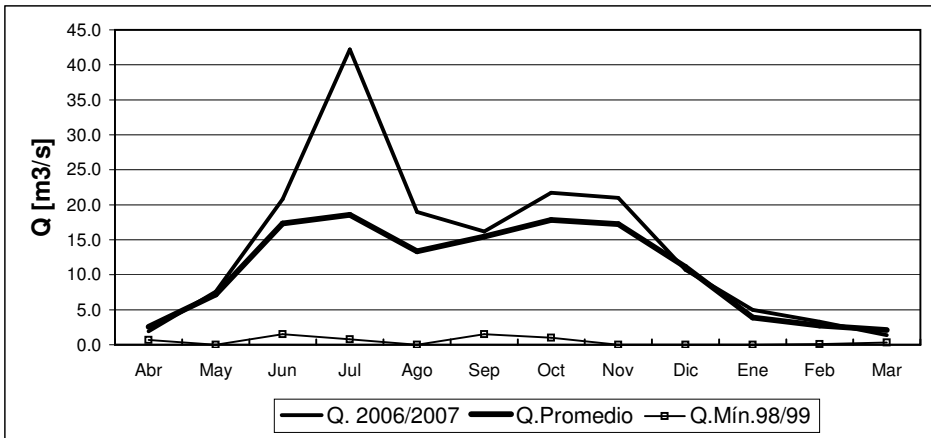
* valor de Aforo

RIO MAIPO EN EL MANZANO



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	106	79	73.8	112	89	95	154	232	259	236	141	108
Q. Promedio	69	60	57	59	59	68	96	156	207	200	141	99
Q. Mín. 98/99	51	45	25	32	23	28	34	51	44	68	63	52

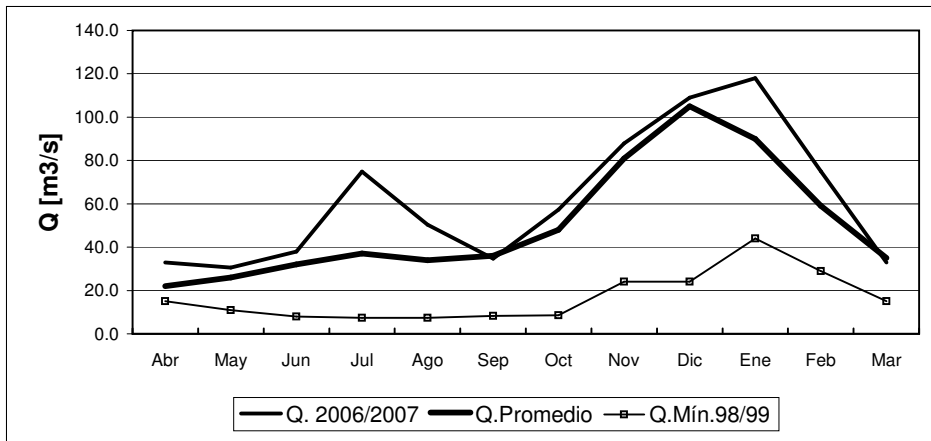
RIO CLARO EN EL VALLE 2



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	1.9	7.6	20.8	42.2	19.0	16.2	21.7	21.0	10.7	5.0	3.3	1.4 *
Q. Promedio	2.6	7.2	17.3	18.6	13.4	15.5	17.9	17.2	11.1	3.9	2.7	2.1
Q. Mín. 98/99	0.7	0.0	1.5	0.8	0.0	1.5	1.0	0.0	0.0	0.0	0.1	0.3

* valor de Aforo

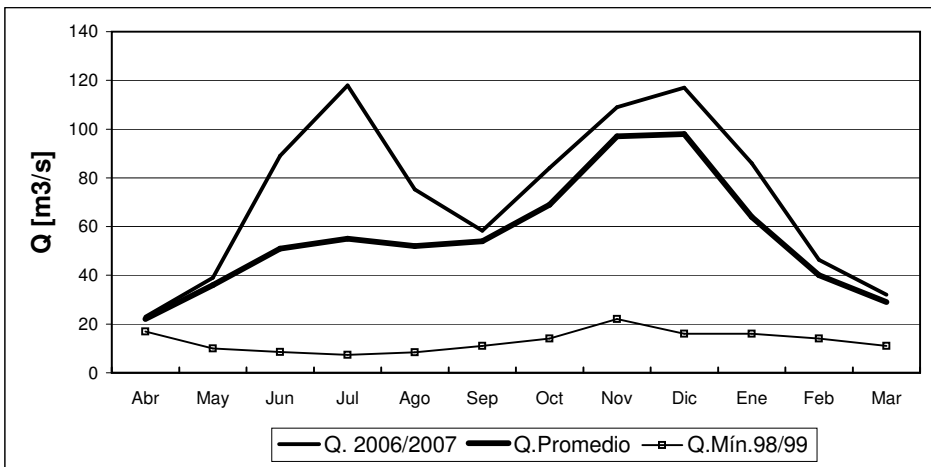
RIO TINGUIRIRICA BAJO BRIONES



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	32.9	30.5	38.0	74.9	50.3	34.7	57.3	87.9	109.0	118.0	75.0	33.0 *
Q.Promedio	22.0	26.0	32.0	37.0	34.0	36.0	48.0	81.0	105.0	90.0	59.0	35.0
Q.Mín.98/99	15.0	11.0	8.0	7.4	7.4	8.2	8.5	24.0	24.0	44.0	29.0	15.0

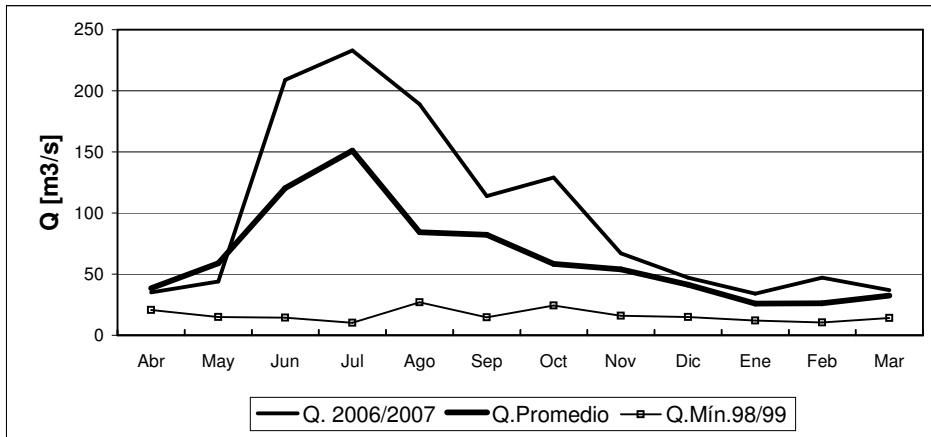
* valor de Aforo

RIO TENO DESPUES DE JUNTA



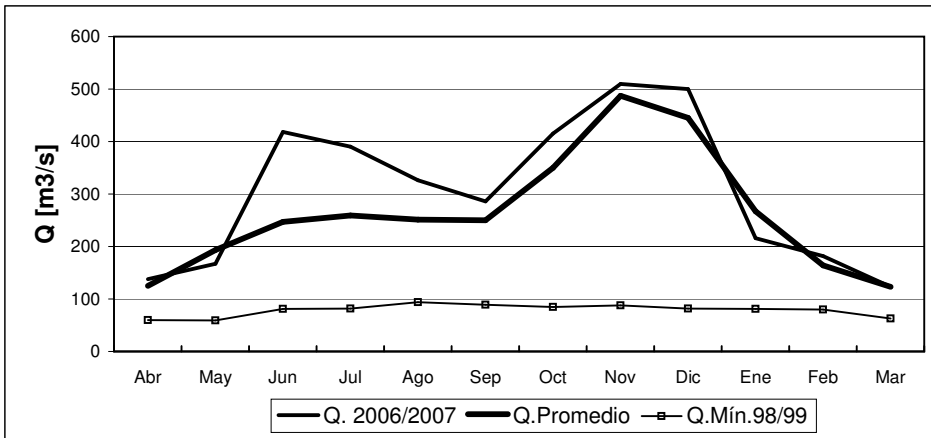
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	23	39	89	118	75	58	84	109	117	86	46	32
Q.Promedio	22	36	51	55	52	54	69	97	98	64	40	29
Q.Mín.98/99	17	10	8.6	7.4	8.4	11	14	22	16	16	14	11

RIO CLARO EN RAUQUEN



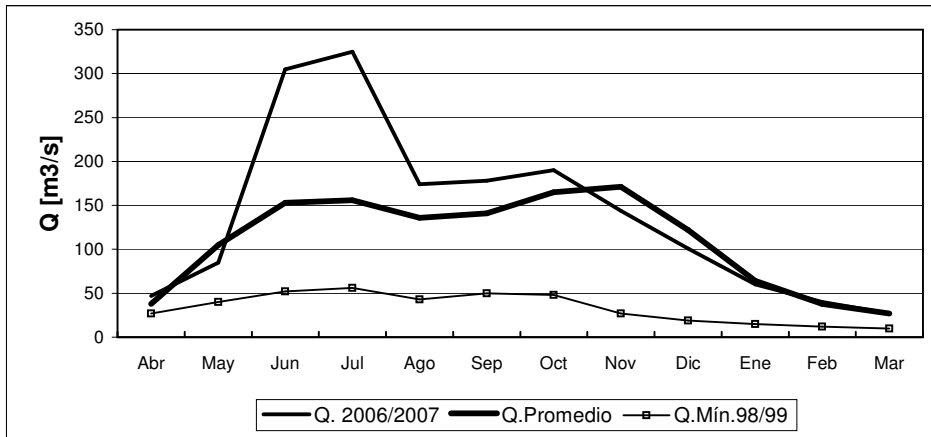
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	35	44	209	233	189	114	129	67	47	34	47	37
Q.Promedio	39	59	121	151	84	82	58	54	41	26	26	33
Q.Mín.98/99	21	15	15	10	27	15	24	16	15	12	10	14

RIO MAULE EN ARMERILLO (R. N.)



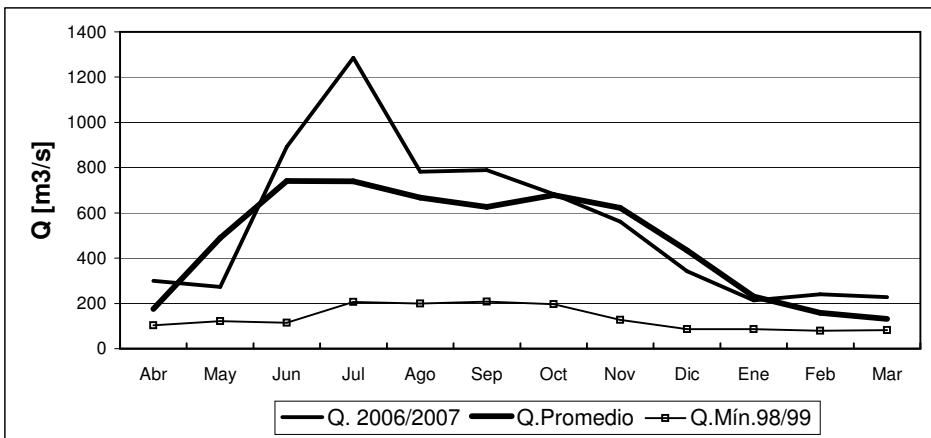
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	138	167	418	390	326	286	415	510	500	216	182	123
Q.Promedio	125	193	247	259	251	250	350	487	445	267	164	123
Q.Mín.98/99	60	59	81	82	94	89	85	88	82	81	80	63

RIO ÑUBLE EN SAN FABIAN



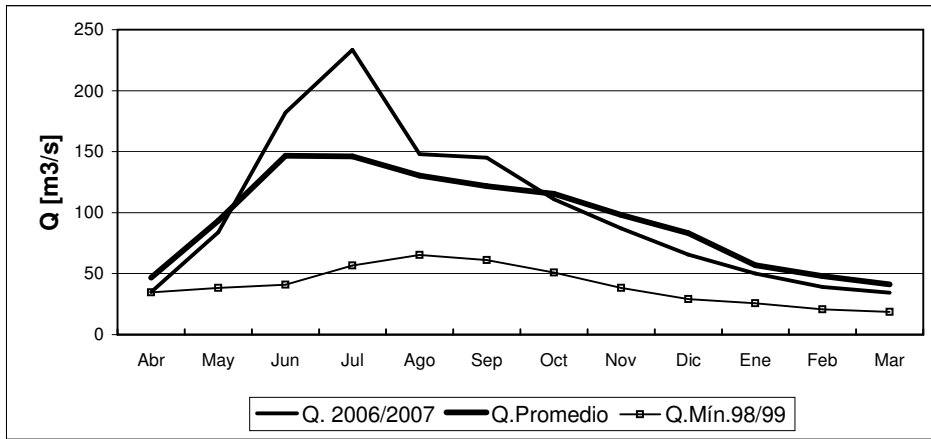
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	47	85	305	325	174	178	190	144	101	60	40	27
Q.Promedio	38	105	153	156	136	141	165	171	122	64	38	27
Q.Mín.98/99	27	40	52	56	43	50	48	27	19	15	12	10

RIO BIO-BIO EN RUCALHUE



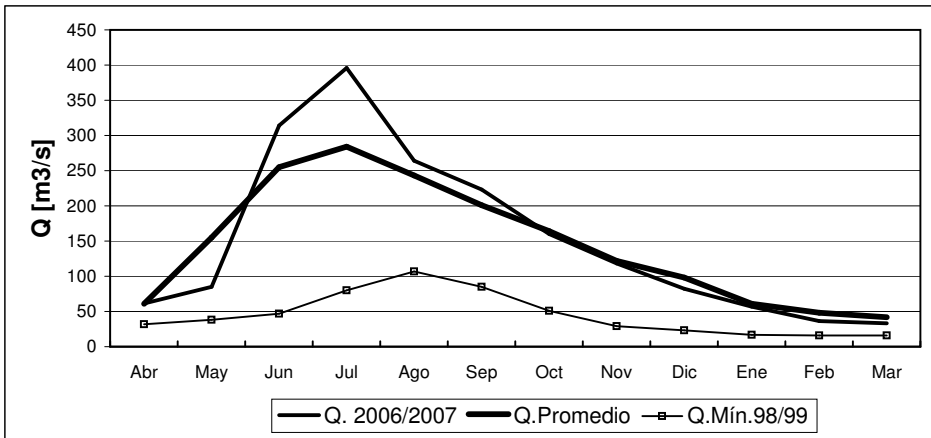
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	300	273	892	1285	782	789	683	561	342	214	240	227
Q.Promedio	176	489	741	740	668	627	679	622	434	231	158	132
Q.Mín.98/99	103	122	114	207	200	208	197	127	86	86	79	82

RIO CAUTIN EN RARI-RUCA



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	35	84	182	233	148	145	111	87	66	50	39	34
Q.Promedio	47	93	147	146	131	122	116	98	83	57	48	41
Q.Mín.98/99	35	38	41	57	65	61	51	38	29	26	21	19

RIO CAUTIN EN CAJON

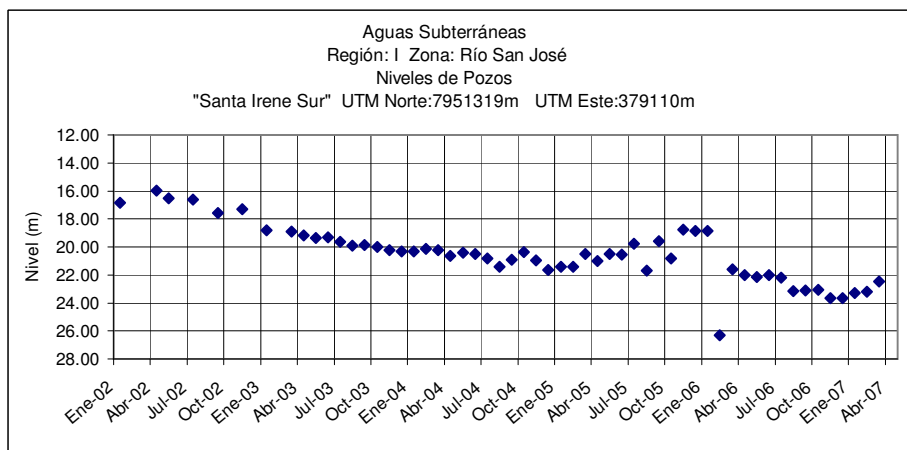


	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
Q. 2006/2007	61	85	314	396	264	223	160	118	82	57	36	33
Q.Promedio	61	155	255	284	243	201	164	122	98	61	48	42
Q.Mín.98/99	32	38	47	80	107	85	51	29	23	17	16	16

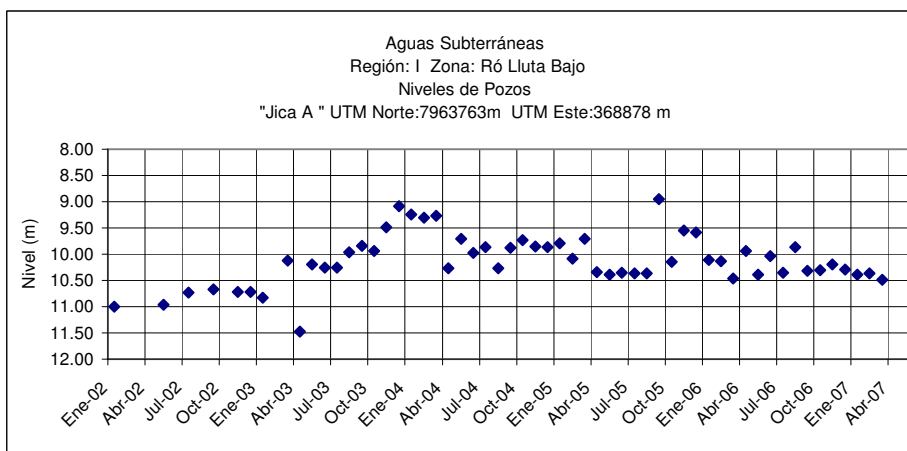
Informe de Aguas Subterráneas

Niveles de Pozos en metros

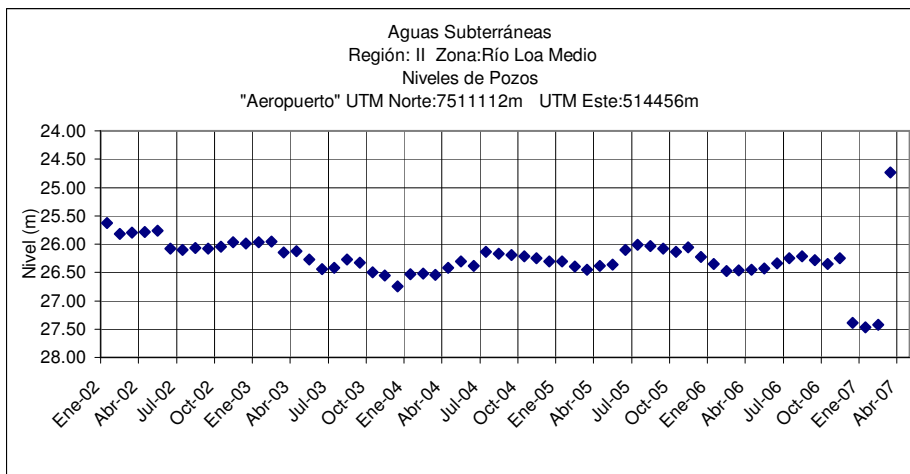
*Gráficos de últimos cinco años.



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	22.01	22.16	22.01	22.20	23.16	23.13	23.05	23.67	23.64	23.31	23.22	22.49



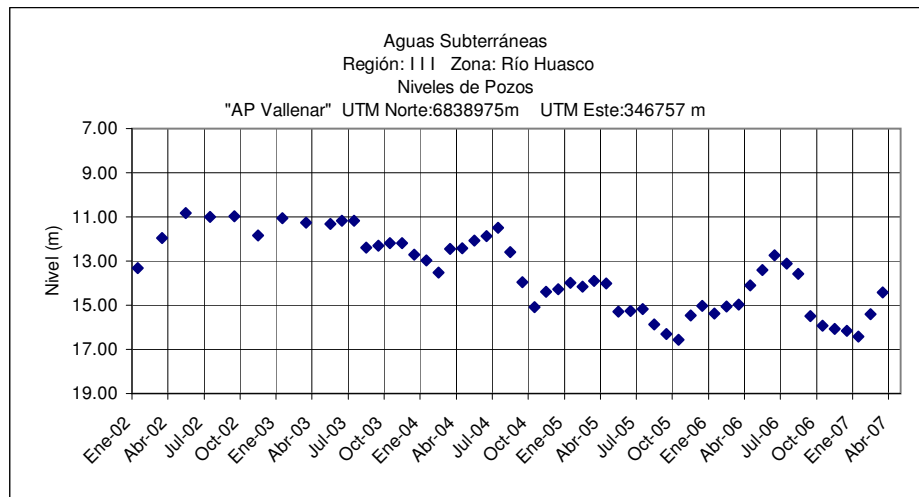
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	9.94	10.39	10.04	10.35	9.87	10.32	10.30	10.20	10.29	10.39	10.37	10.49



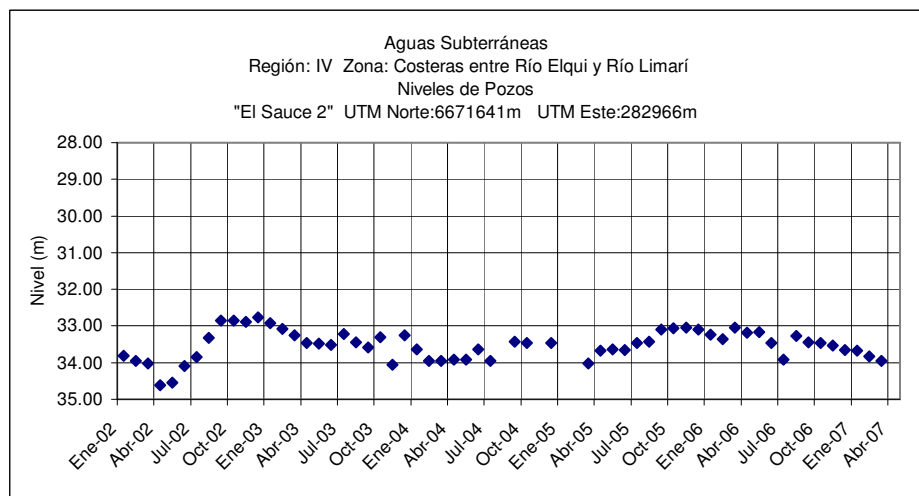
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	26.45	26.43	26.34	26.25	26.22	26.28	26.35	26.25	27.39	27.47	27.42	24.73



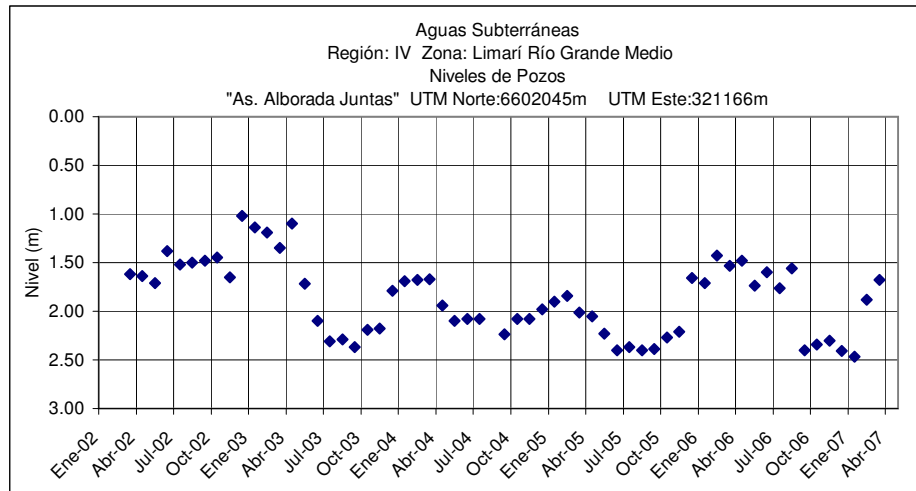
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	49.85	50.08	50.06	50.36	49.30	48.47	48.77	50.09	51.21	52.58	51.50	51.59



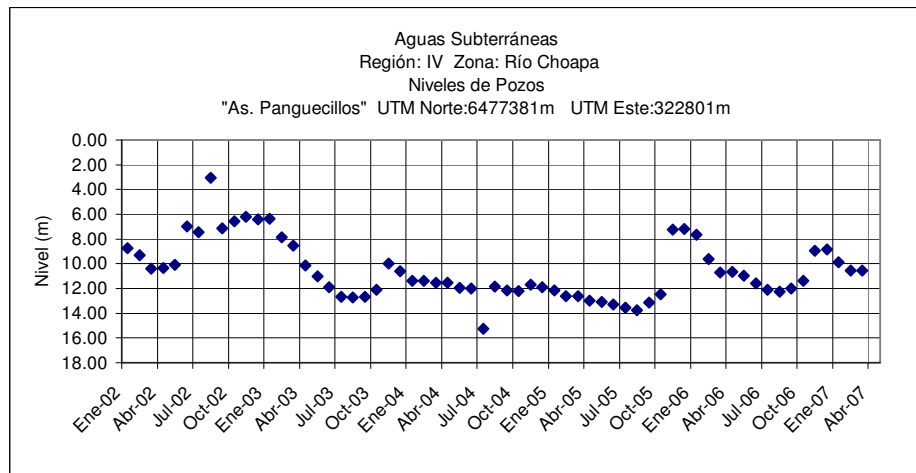
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	14.09	13.42	12.73	13.11	13.57	15.50	15.92	16.07	16.17	16.41	15.41	14.42



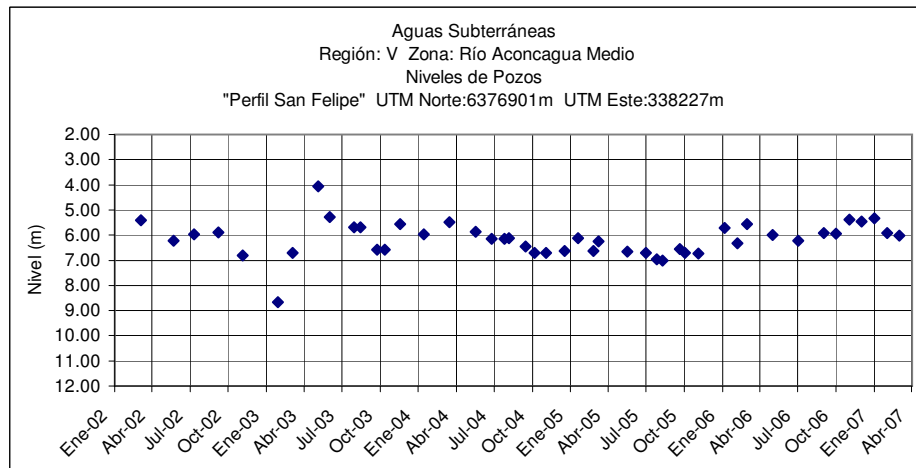
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	33.18	33.17	.	33.92	33.27	33.45	33.47	33.54	33.65	33.68	33.83	33.95



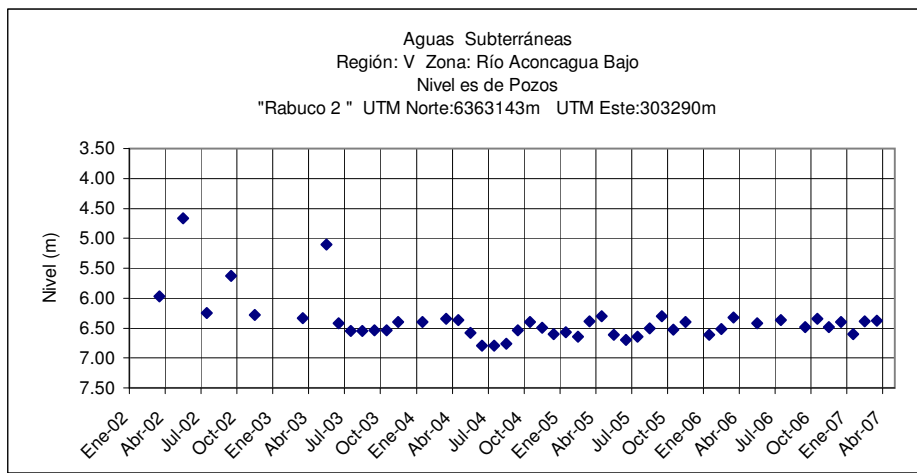
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	1.48	1.54	1.60	.	1.56	2.40	2.34	2.30	2.41	2.47	1.88	1.68



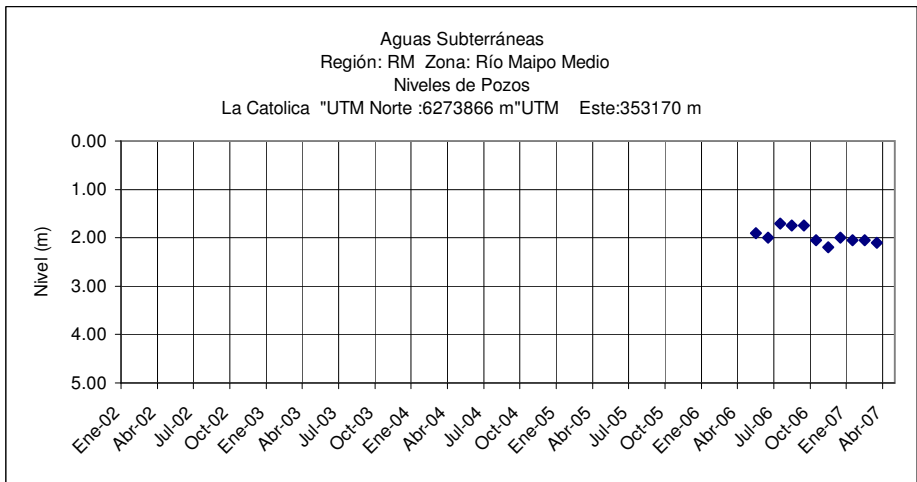
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	10.68	10.96	11.58	12.08	12.26	12.00	11.40	8.93	8.85	9.90	10.55	10.56



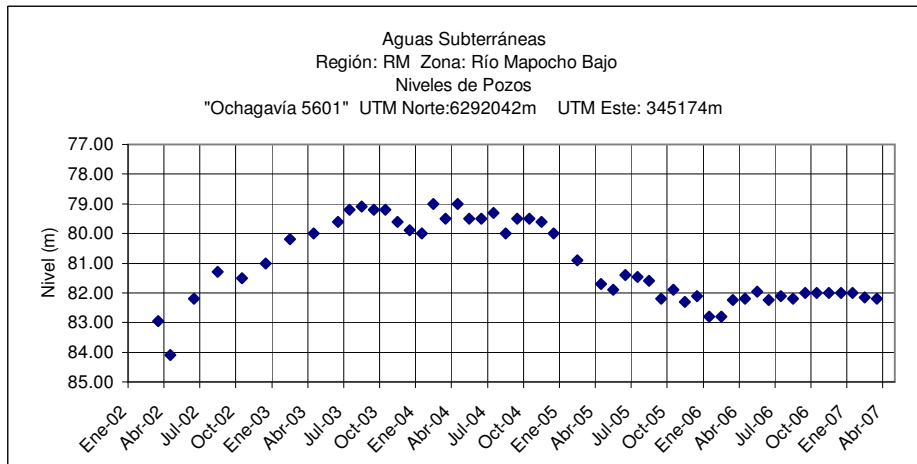
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	.	5.89	.	6.22	.	5.91	5.95	5.39	5.45	5.34	5.93	6.03



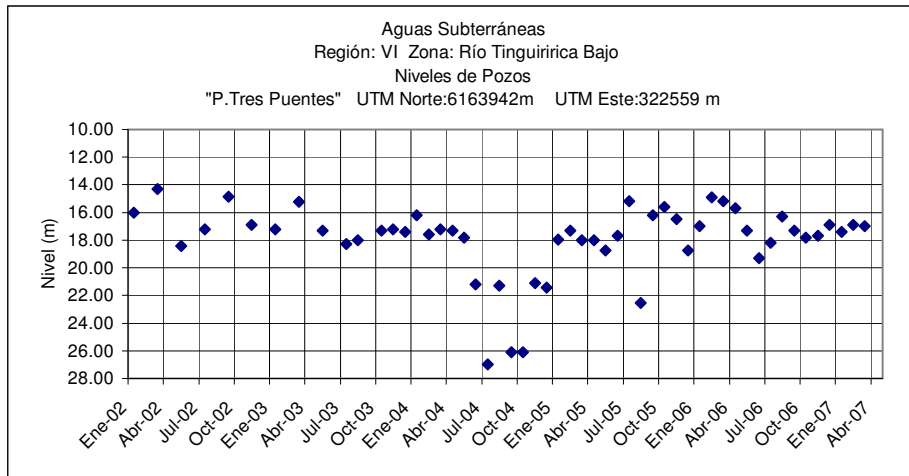
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	.	6.42	.	6.37	.	6.48	6.35	6.48	6.40	6.60	6.39	6.38



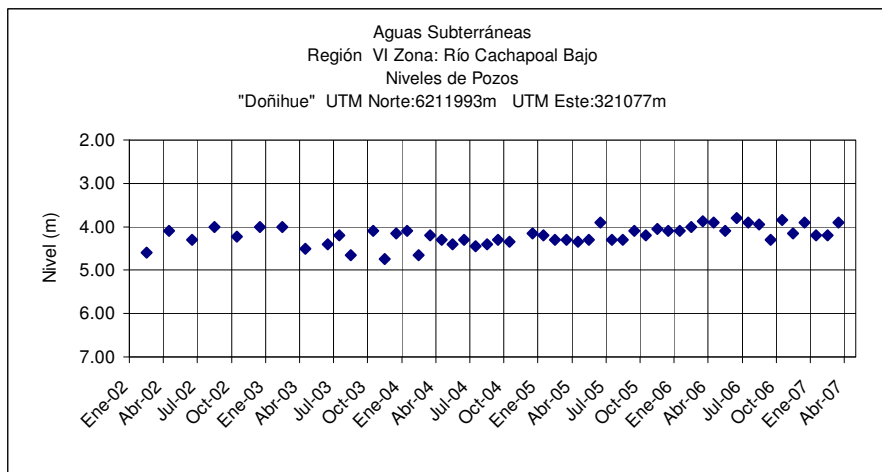
	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	.	1.90	2.00	1.70	1.75	1.75	2.05	2.20	2.00	2.05	2.05	2.10



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	82.20	81.95	82.25	82.10	82.20	82.00	82.00	82.00	82.00	82.00	82.15	82.20



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	15.70	17.30	19.30	18.20	16.30	17.30	17.80	17.70	16.90	17.40	16.90	17.00



	Abr	May	Jun	Jul	Ago	Sep	Oct	Nov	Dic	Ene	Feb	Mar
2006-2007	3.90	4.10	3.80	3.90	3.95	4.30	3.85	4.15	3.90	4.20	4.20	3.90