A-PDF MERGER DEMAS PUBLICAS DIRECCION GENERAL DE AGUAS

Boletín N^2 : 340 Mes : Agosto Año : 2006

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 boletin
- -Caudales en tiempo real

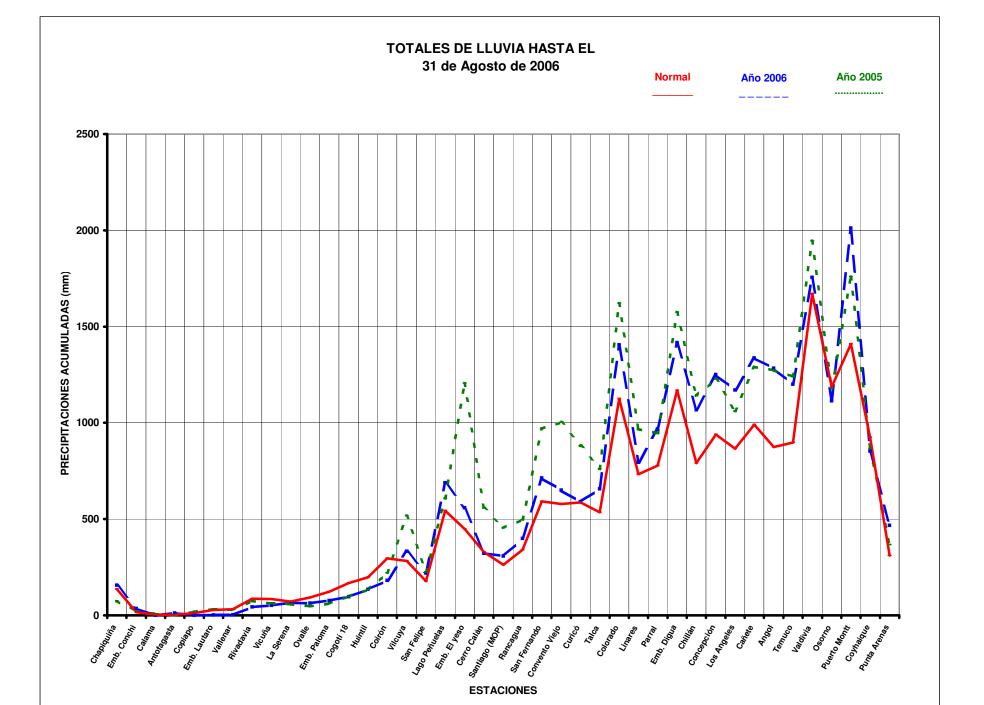
NOTA: Datos provisorios sujetos a modificaciones posteriores

INFORME PLUVIOMETRICO NACIONAL Nº08

		TOTALES	AL 31	DE AGOSTO_	
		2225	2225		EXCESO O
	3.000	2006	2005	PROMEDIO	DÉFICIT
ESTACIONES	AGOSTO	(mm) 	(mm)	(mm)	(ક)
CENTRAL CHAPIQUIÑA	0.0	155.5	75.0	135.6	15
EMBALSE CONCHI	1.0	34.2	21.5	17.3*	97
CALAMA	0.0	0.7	6.5	3.9	- 82
ANTOFAGASTA	11.5	11.5	0.5	3.1	>100
COPIAPÓ	0.0	0.0	18.7	12.4	-100
EMBALSE LAUTARO	0.0	1.0	31.5	28.2	- 96
VALLENAR	0.0	2.0	28.6	30.8	- 93
RIVADAVIA	1.5	42.5	75.0	85.7	- 50
VICUÑA	0.0	51.4	62.0	84.3	- 39
LA SERENA	1.1	64.4	57.5	72.1	- 11
OVALLE	0.0	62.4	46.3	93.3	- 33
EMBALSE PALOMA	0.0	75.7	62.1	122.3	- 38
COGOTÍ 18	0.0	96.0	98.0	167.1	- 43
HUINTIL	3.5	135.0	132.6	197.7	- 32
COIRÓN	2.5	182.0	220.3	295.1	- 38
VILCUYA	34.0	332.2	517.0	283.1	17
SAN FELIPE	20.1	219.7	224.4	178.6	23
LAGO PEÑUELAS	53.0	687.5	607.1	544.2	26
EMBALSE EL YESO	57.5	559.3	1205.6	449.5	24
CERRO CALÁN	66.5	322.8	556.1	328.6	- 2
SANTIAGO (MOP)	62.9	308.2	453.4	263.1	17
RANCAGUA	62.2	398.9	496.8	340.4	17
SAN FERNANDO	119.5	713.5	969.8	591.7	21
CONVENTO VIEJO	139.5	649.5	1002.2	578.4	12
CURICO	102.6	590.0	880.5	586.9	1
TALCA	134.6	656.6	762.0	535.1	23
COLORADO	322.0	1404.5	1620.9	1125.3	25
LINARES	146.2	794.4	967.9	732.4	8
PARRAL	146.0	966.6	945.7	778.4	24
EMBALSE DIGUA	252.8	1415.9	1574.5	1168.0	21
CHILLÁN	165.5	1067.3	1141.1	790.9	35
CONCEPCIÓN	239.9	1250.6	1226.0	939.2	33
LOS ÁNGELES	215.9	1170.7	1061.1	865.7	35
CAÑETE	219.6	1335.9	1289.6	990.0	35
ANGOL	234.9	1283.0	1273.3	873.7	47
TEMUCO	177.9	1200.5	1239.9	896.9	34
VALDIVIA	253.9	1754.6	1945.5	1670.2	5
OSORNO	162.9	1114.4	1178.4	1186.2	- 6
PUERTO MONTT	196.7	2011.4	1758.6	1410.1	43
COYHAIQUE	52.6		865.8	924.5*	- 8
PUNTA ARENAS	42.9	467.3	367.3	310.5	50

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

 $[\]star$: Promedios calculados para períodos inferiores a 30 años Valores expresados en milímetros (1 mm = 1 lt x m2)



ESTADO DE EMBALSES

Ultimo día del mes (Volúmenes en mill-m³)

				TIOTIDDIO		
				HISTORICO	Agos	to
EMBALSE	REGION	CUENCA	CAPACIDAD	MENSUAL	2006	2005
Conchi	II	Loa	22	19	19	18
Lautaro	III	Copiapó	35	13	12	12
Santa Juana	III	Huasco	166	107	166	137
La Laguna	IV	Elqui	40	24	31	31
Puclaro	IV	Elqui	200	71	197	140
Recoleta	IV	Limarí	100	67	95	77
La Paloma	IV	Limarí	748	415	591	456
Cogotí	IV	Limarí	150	85	85	63
Culimo	IV	Quilimarí	10	5.4	1.3	1.3
Corrales	IV	Illapel	50	31	51	37
Peñuelas	V	Peñuelas	95	32	34	35
El Yeso	RM	Maipo	256	173	215	203
Rungue	RM	Maipo	2.2	1.5	2.0	2.0
Rapel	VI	Rapel	695	518	622	645
Colbún	VII	Maule	1544	1180	1491	1506
Lag. Maule	VII	Maule	1420	939	1234	829
Bullileo	VII	Maule	60	53	60	60
Digua	VII	Maule	220	200	219	219
Tutuvén	VII	Maule	15	10.8	12	15
Coihueco	VIII	Itata	29	22	27	28.3
Lago Laja (&) VIII	Bio-Bio	5582	3367	3083	2368

RESUMEN ANUAL

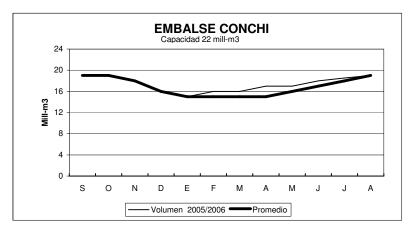
2005-2006

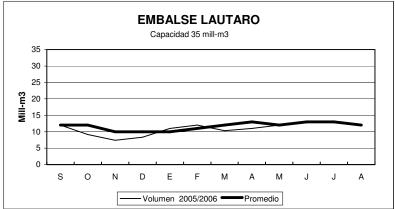
PROMEDIO

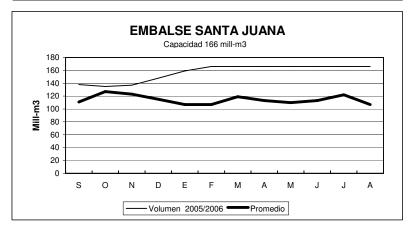
					2	005 200	, 0						
EMBALSE	S	0	N	D	E	F	M	A	M	J	J	A	
Conchi	19	19	18	16	15	16	16	17	17	18	19	19	
Lautaro	12	9	7	8	11	12	10	11	12	13	13	12	
Santa Juana	138	135	137	148	159	166	166	166	166	166	166	166	
La Laguna	32	36	37	38	36	31	28	32	34	33	32	31	
Puclaro	141	142	155	189	200	200	200	200	200	196	197	197	
Recoleta	80	81	86	91	91	100	92	94	95	97	97	95	
La Paloma	480	506	559	583	574	559	542	536	539	551	575	591	
Cogotí	73	80	100	104	98	92	86	82	79	79	83	85	
Culimo	3.1	3.7	2.9	2.4	1.9	1.2	0.4	0.1	0.4	0.4	0.7	1.3	
Corrales	42	43	44	46	49	49	49	48	48	48	50	51	
Peñuelas	35	34	32	29	27	24	22	21	20	21	30	34	
El Yeso	192	179	181	206	233	246	249	243	241	235	230	215	
Rungue	2.1	2.0	1.9	2.2	1.0	0.6	0.3	0.2	0.2	0.3	2.0	2.0	
Rapel	597	615	616	629	634	605	530	479	511	605	605	622	
Colbún	1480	1425	1542	1544	1519	1462	1148	902	654	1078	1522	1491	
Lag. Maule	843	863	914	1001	1088	1134	1144	1127	1115	1159	1202	1234	
Bullileo	60	60	60	60	49	24	0	0	7	30	60	60	
Digua	220	220	199	220	93	34	11	8.6	2.7	93	179	219	
Tutuvén	13	12	12	15	6.1	4	2.0	3.4	3.0	10	11	12	
Coihueco	29	29	29	28	22	14	6.6	3.9	6	10	16	27	
Lago Laja (&)	2482	2690	2974	3120	3104	2960	2709	2566	2365	2620	2989	3083	

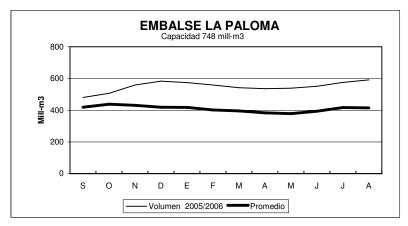
(&): Volumen sobre cota 1300 msnm

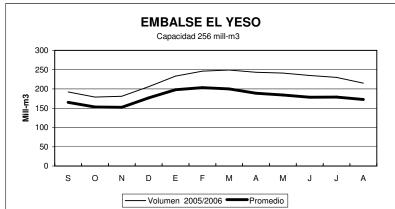
ESTADO DE EMBALSES

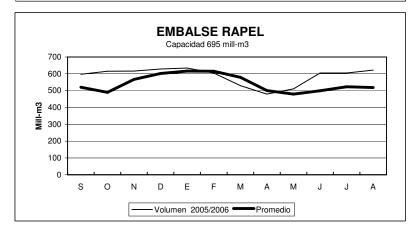


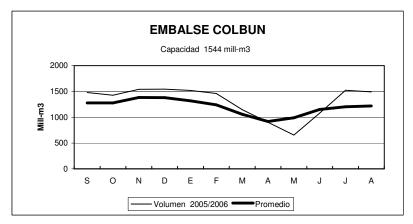


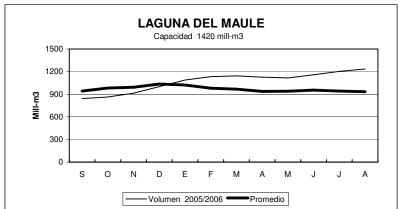


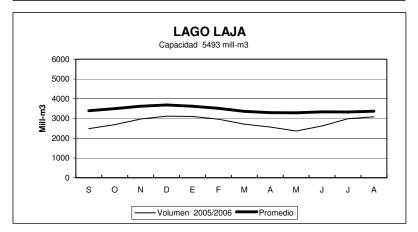








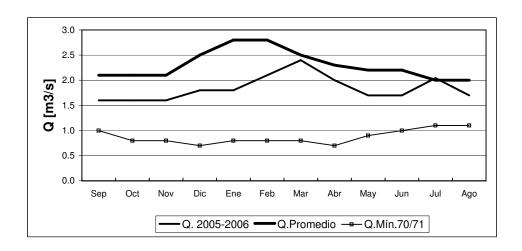




INFORME FLUVIOMETRICO

Caudales medios mensuales en m3/seg

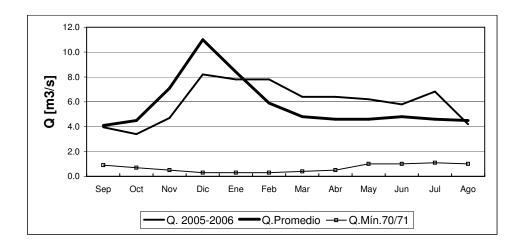
RIO COPIAPO EN LA PUERTA



Q. 2005-2006 Q.Promedio Q.Mín.70/71

Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
1.6	1.6	1.6	1.8	1.8	2.1	2.4	2.0	1.7	1.7	2.0	1.7
2.1	2.1	2.1	2.5	2.8	2.8	2.5	2.3	2.2	2.2	2.0	2.0
1.0	0.8	8.0	0.7	8.0	8.0	8.0	0.7	0.9	1.0	1.1	1.1

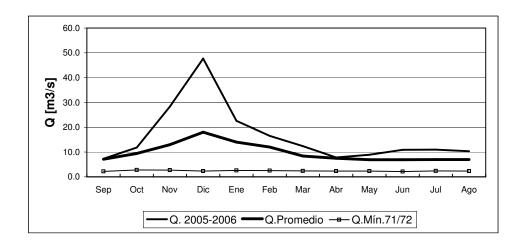
RIO HUASCO EN ALGODONES



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2005-2006	4.0	3.4	4.7	8.2	7.8	7.8	6.4	6.4	6.2	5.8	6.8	4.2
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

Ago-06

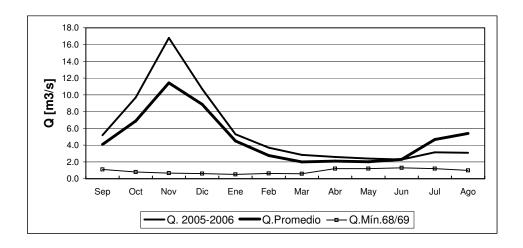
RIO ELQUI EN ALGARROBAL



Q. 2005-2006 Q.Promedio Q.Mín.71/72

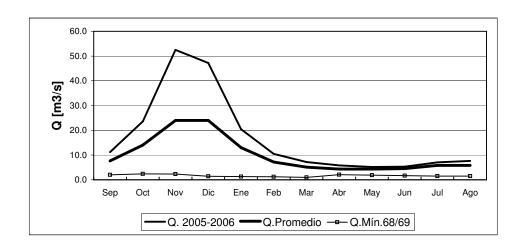
Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
7.3	11.8	28.3	47.7	22.6	16.5	12.4	7.8	8.9	10.9	11.0	10.3
7.1	9.4	13.0	18.0	14.0	12.0	8.4	7.5	6.9	6.9	7.0	7.0
2.2	2.8	2.7	2.3	2.6	2.5	2.4	2.3	2.3	2.1	2.4	2.3

RIO GRANDE EN LAS RAMADAS



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2005-2006	5.2	9.7	16.8	10.7	5.3	3.7	2.9	2.6	2.4	2.3	3.1	3.1
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	8.0	0.7	0.6	0.5	0.6	0.6	1.2	1.2	1.3	1.2	1.0

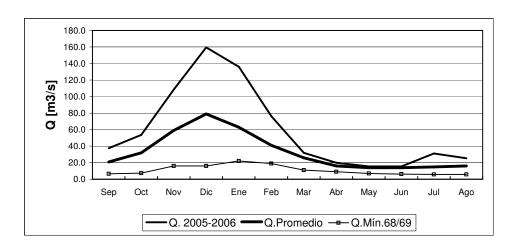
RIO CHOAPA EN CUNCUMEN



Q. 2005-2006 Q.Promedio Q.Mín.68/69

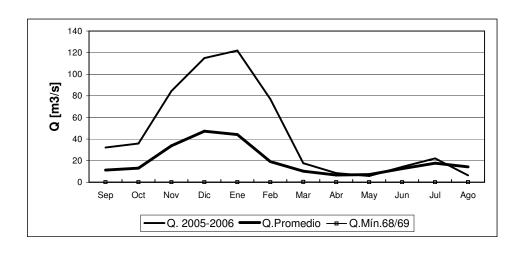
Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
11.2	23.6	52.5	47.2	20.4	10.5	7.2	5.8	5.2	5.3	7.1	7.6
7.6	14.0	24.0	24.0	13.0	7.2	5.1	4.3	4.3	4.5	5.8	5.8
2.0	2.4	2.3	1.4	1.3	1.2	1.0	2.1	1.9	1.7	1.5	1.5

RIO ACONCAGUA EN CHACABUQUITO



	Sep	Oct	NOV	DIC	⊨ne	reb	war	Abr	way	Jun	Jui	Ago
Q. 2005-2006	37.5	53.7	108.4	159.5	136.0	76.3	31.9	20.0	15.5	15.4	31.2	25.4
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

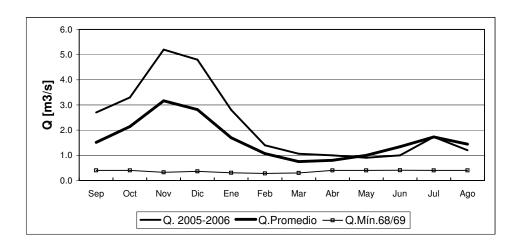
RIO ACONCAGUA EN SAN FELIPE



Q. 2005-2006 Q.Promedio Q.Mín.68/69

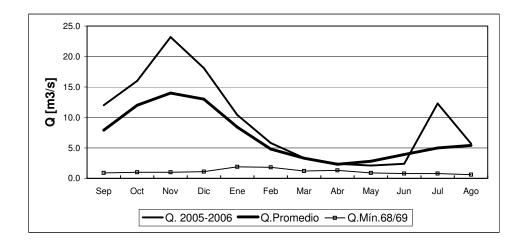
Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
32.2	35.8	84.4	115.0	122	77	17.6	8.5	5.8	14.2	22.1	6.3
11.3	13.0	33.8	47.3	44.1	19.1	10.2	6.7	7.1	12.7	17.6	14.2
0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

ESTERO ARRAYAN EN LA MONTOSA



Dic Sep Oct Nov Ene Feb Mar Abr May Jun Ago Jul Q. 2005-2006 2.7 3.3 5.2 4.8 2.8 0.9 1.2 1.4 1.1 1.0 1.0 1.7 Q.Promedio 1.5 2.1 3.2 2.8 1.7 1.1 8.0 8.0 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

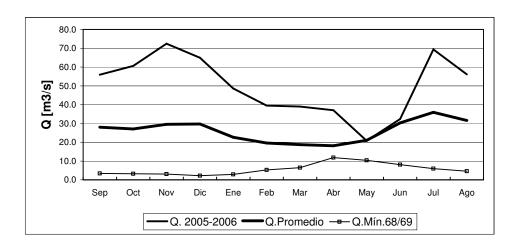
RIO MAPOCHO EN LOS ALMENDROS



Q. 2005-2006 Q.Promedio Q.Mín.68/69

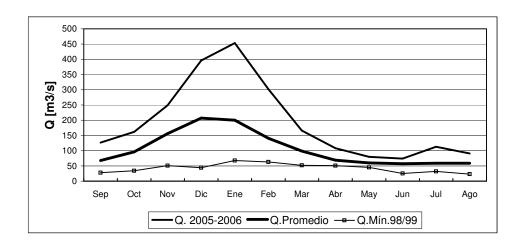
Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
12.0	16.0	23.2	18.1	10.4	5.8	3.3	2.4	2.1	2.4	12.3	5.7
7.9	12.0	14.0	13.0	8.4	4.8	3.3	2.3	2.8	3.9	5.0	5.4
0.9	1.0	1.0	1.1	1.9	1.8	1.2	1.3	0.9	0.8	0.8	0.6

RIO MAPOCHO EN RINCONADA DE MAIPU



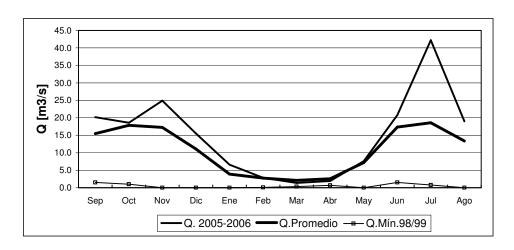
Dic Sep Oct Nov Ene Feb Mar Abr May Jun Jul Ago Q. 2005-2006 55.9 60.6 72.4 64.9 39.5 39.0 20.8 32.3 56.1 48.6 37.0 69.4 Q.Promedio 28.0 35.9 27.1 29.5 29.7 22.6 19.6 18.7 18.1 21.0 30.3 31.6 6.5 Q.Mín.68/69 3.4 3.2 3.1 2.2 2.9 5.3 11.8 10.4 8.1 6.0 4.6

RIO MAIPO EN EL MANZANO



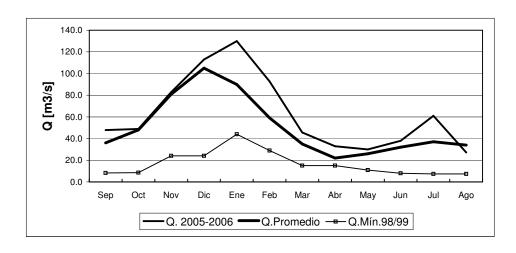
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
Q. 2005-2006	126	162	249	396	453	302	166	108	80	74	113	91
Q.Promedio	68	96	156	207	200	141	99	69	60	57	59	59
Q.Mín.98/99	28	34	51	44	68	63	52	51	45	25	32	23

RIO CLARO EN EL VALLE 2



	Sep	Oct	NOV	DIC	⊨ne	reb	war	Abr	way	Jun	Jui	Ago
Q. 2005-2006	20.2	18.6	24.9	15.5	6.6	2.8	1.4	1.9	7.6	20.8	42.2	19.0
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

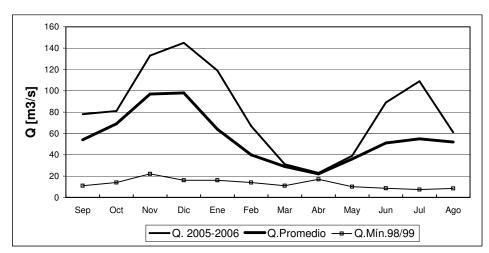
RIO TINGUIRIRICA BAJO BRIONES



Q. 2005-2006 Q.Promedio Q.Mín.98/99

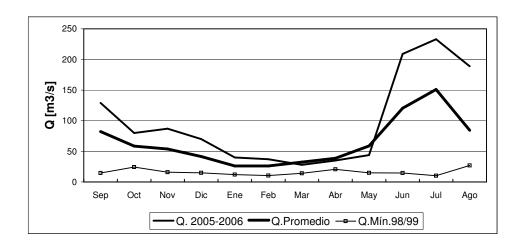
Sep	Oct	NOV	DIC	⊨ne	reb	war	Abr	мay	Jun	Jui	Ago
47.9	48.9	82.8	113.0	130.0	92.7	45.7	32.9	30.0	38.0	61.0	27.1
36.0	48.0	81.0	105.0	90.0	59.0	35.0	22.0	26.0	32.0	37.0	34.0
8.2	8.5	24.0	24.0	44.0	29.0	15.0	15.0	11.0	8.0	7.4	7.4

RIO TENO DESPUES DE JUNTA



	Sep	Oct	NOV	DIC	⊨ne	reb	war	Abr	way	Jun	Jui	Ago
Q. 2005-2006	78	81	133	145	119	67	31	23	39	89	109	61
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

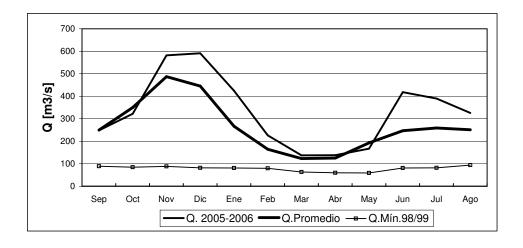
RIO CLARO EN RAUQUEN



Q. 2005-2006 Q.Promedio Q.Mín.98/99

Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
129	80	87	70	40	37	28	35	44	209	233	189
82	58	54	41	26	26	33	39	59	121	151	84
15	24	16	15	12	10	14	21	15	15	10	27

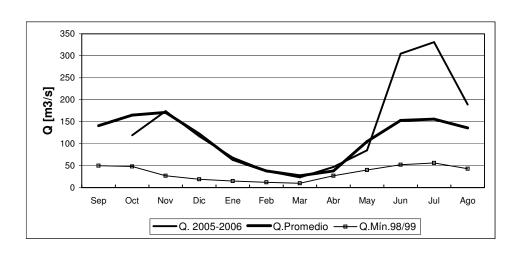
RIO MAULE EN ARMERILLO



	Sep	OCI	NOV	DIC	⊏ne	reb	war	ADr	way	Jun	Jui	Ago
Q. 2005-2006	248	322	582	591	425	226	137	138	167	418	390	326
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

nota: caudal julio 2006 corresponde a últimos 15 días

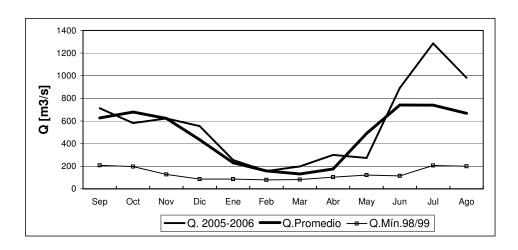
RIO ÑUBLE EN SAN FABIAN



Q. 2005-2006 Q.Promedio Q.Mín.98/99

Sep	Oct	Nov	Dic	⊨ne	Feb	Mar	Abr	мау	Jun	Jul	Ago
	119	174	117	68	38	23	47	85	305	331	189
141	165	171	122	64	38	27	38	105	153	156	136
50	48	27	19	15	12	10	27	40	52	56	43

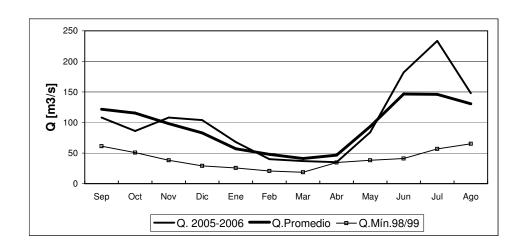
RIO BIO-BIO EN RUCALHUE



Q. 2005-2006 Q.Promedio Q.Mín.98/99

Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
713	581	622	554	255	157	198	300	273	892	1285	982
627	679	622	434	231	158	132	176	489	741	740	668
208	197	127	86	86	79	82	103	122	114	207	200

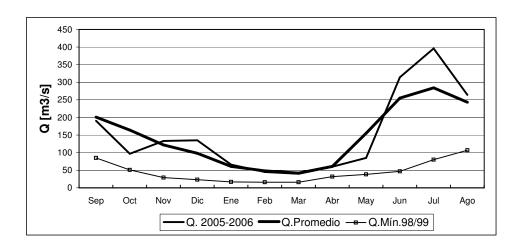
RIO CAUTIN EN RARI-RUCA



Q. 2005-2006 Q.Promedio Q.Mín.98/99

Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
108	86	108	104	68	40	37	35	84	182	233	148
122	116	98	83	57	48	41	47	93	147	146	131
61	51	38	29	26	21	19	35	38	41	57	65

RIO CAUTIN EN CAJON

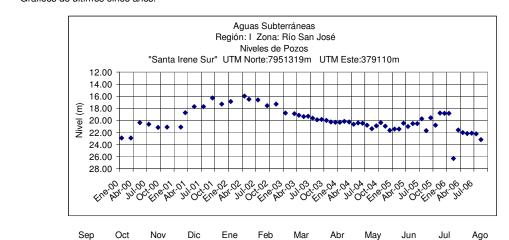


	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	Мау	Jun	Jul	Ago
Q. 2005-2006	190	97	133	135	66	45	40	60	85	314	396	264
Q.Promedio	201	164	122	98	61	48	42	61	155	255	284	243
Q.Mín.98/99	85	51	29	23	17	16	16	32	38	47	80	107

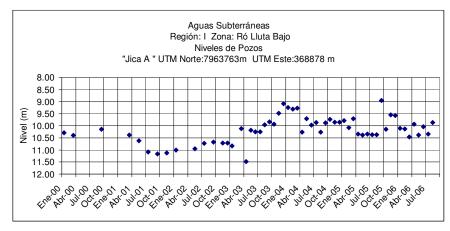
Informe de Aguas Subterráneas

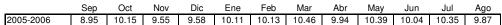
Niveles de Pozos en metros

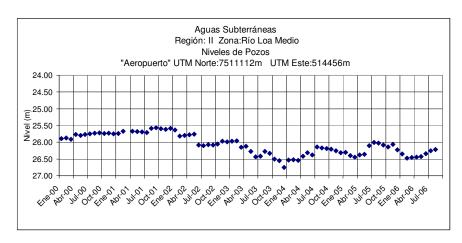
*Gráficos de últimos cinco años.



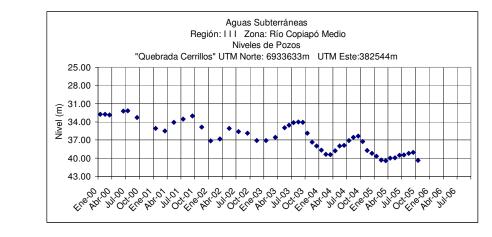
(Dinámico)



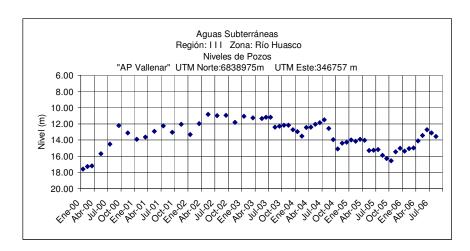




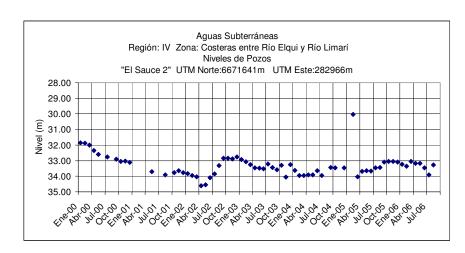
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	26.08	26.14	26.06	26.23	26.35	26.47	26.46	26.45	26.43	26.34	26.25	26.22



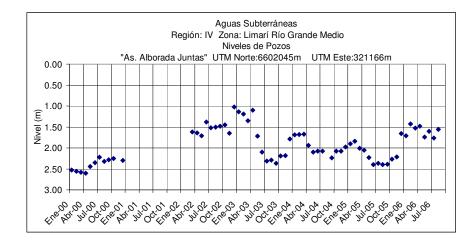
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	39.06	40.36	Seco									



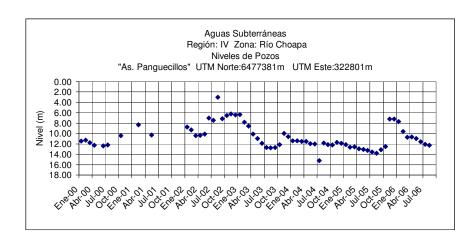
_	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	
2005-2006	16.29	16.56	15.45	15.03	15.37	15.07	14.97	14.09	13.42	12.73	13.11	13.57	l



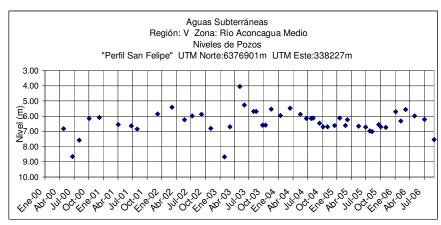
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	33.10	33.06	33.05	33.10	33.23	33.36	33.04	33.18	33.17	33.47	33.92	33.27



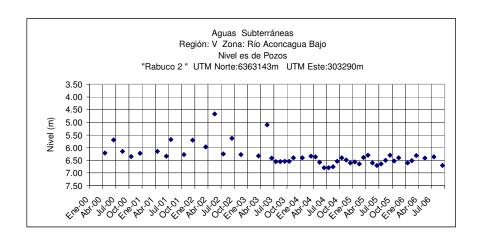
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	2 39	2 27	2 21	1 66	1 71	1 43	1.53	1 48	1 74	1 60	1 76	1.56



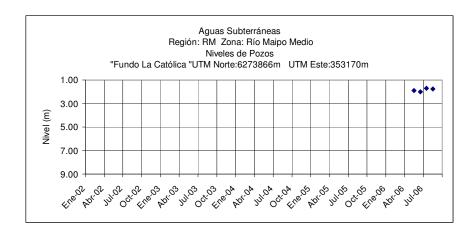
	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	13.16	12.49	7.24	7.21	7.68	9.61	10.72	10.68	10.96	11.58	12.08	12.26



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	6.55	6.70	6.75		5.71	6.33	5.57		5.99		6.22	

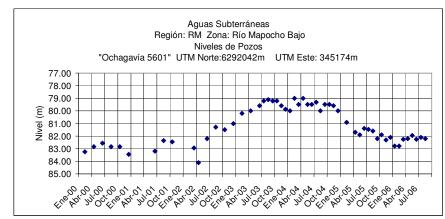


	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago	
2005-2006	6.30	6.53	6.40		6.61	6.52	6.32		6.42		6.37		1

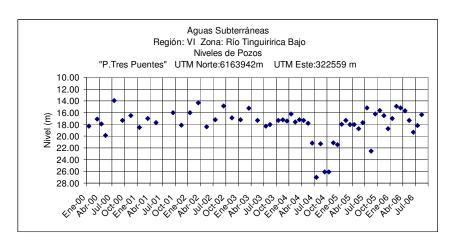


	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006									1.90	2.00	1.70	1.75

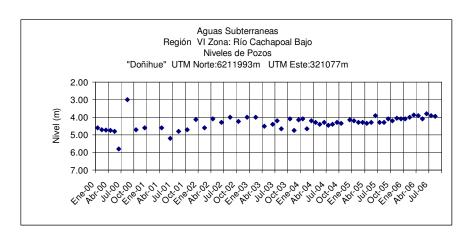
Nuevo pozo, reemplaza a pozo "El Cruceral" embancado.



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	82.20	81.90	82.30	82.10	82.80	82.80	82.25	82.20	81.95	82.25	82.10	82.20



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	16.20	15.60	16.50	18.75	17.00	14.90	15.20	15.70	17.30	19.30	18.20	16.30



	Sep	Oct	Nov	Dic	Ene	Feb	Mar	Abr	May	Jun	Jul	Ago
2005-2006	4.10	4.20	4.05	4.10	4.10	4.00	3.88	3.90	4.10	3.80	3.90	3.95