# A-PDF MERGER DEMAS PUBLICAS DIRECCION GENERAL DE AGUAS

 Boletín Nº
 :
 336

 Mes
 :
 Abril

 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: .

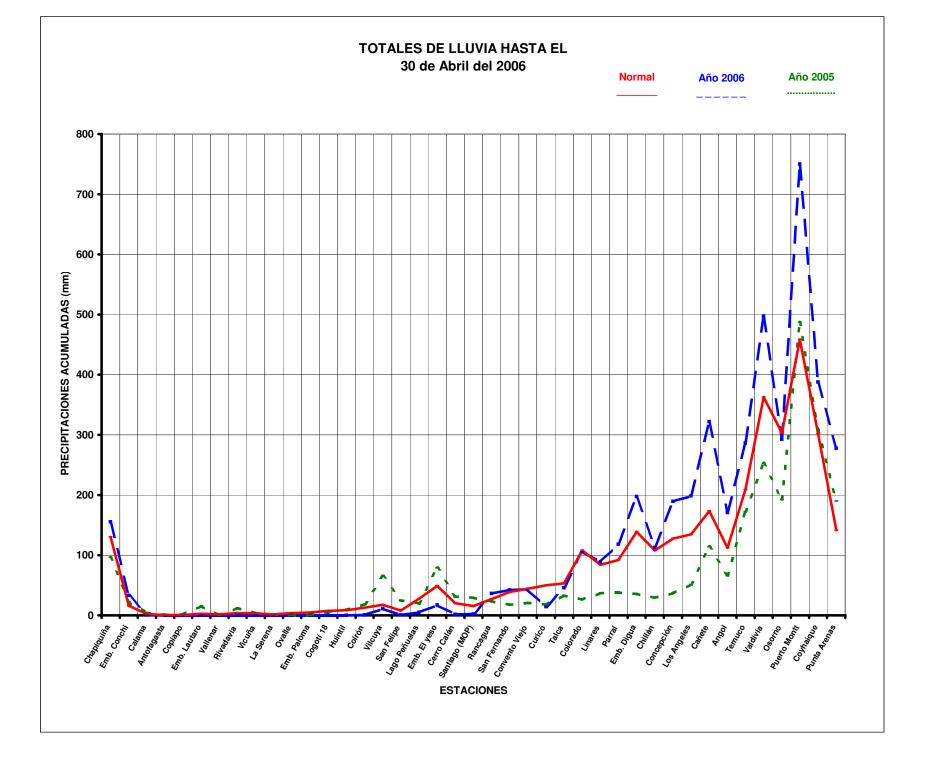
- -Los informes de este boletin
- -Caudales en tiempo real

NOTA: Datos provisorios sujetos a modificaciones posteriores

INFORME PLUVIOMETRICO NACIONAL Nº04

|                    |       | TOTALES      | AL 30        | DE ABRIL         |                     |
|--------------------|-------|--------------|--------------|------------------|---------------------|
|                    |       | 2006         | 2005         | PROMEDIO         | EXCESO C<br>DÉFICIT |
| ESTACIONES         | ABRIL | 2006<br>(mm) | 2005<br>(mm) | PROMEDIO<br>(mm) | (%)                 |
| ESTACIONES         |       | ·            | (Hull)       | (nun)            | (°)                 |
| CENTRAL CHAPIQUIÑA | 0.0   | 155.5        | 96.5         | 130.2            | 19                  |
| EMBALSE CONCHI     | 0.0   | 33.2         | 23.0         | 15.7*            | 111                 |
| CALAMA             | 0.0   | 0.7          | 4.0          | 2.0              | - 65                |
| ANTOFAGASTA        | 0.0   | 0.0          | 0.5          | 0.6              | -100                |
| COPIAPÓ            | 0.0   | 0.0          | 1.8          | 0.5              | -100                |
| EMBALSE LAUTARO    | 0.0   | 0.0          | 15.5         | 2.5              | -100                |
| VALLENAR           | 0.0   | 0.0          | 0.0          | 1.7              | -100                |
| RIVADAVIA          | 0.0   | 0.0          | 12.0         | 3.9              | -100                |
| VICUÑA             | 0.0   | 0.0          | 3.9          | 3.2              | -100                |
| LA SERENA          | 0.0   | 0.0          | 0.9          | 1.5              | -100                |
| OVALLE             | 0.0   | 0.0          | 0.0          | 3.7              | -100                |
| EMBALSE PALOMA     | 0.0   | 0.0          | 0.0          | 5.0              | -100                |
| COGOTÍ 18          | 0.0   | 0.0          | 6.0          | 7.2              | -100                |
| HUINTIL            | 0.0   | 0.0          | 9.0          | 8.3              | -100                |
| COIRÓN             | 0.5   | 0.5          | 18.5         | 12.9             | - 96                |
| VILCUYA            | 0.0   | 11.0         | 65.0         | 17.4             | - 37                |
| SAN FELIPE         | 0.3   | 0.3          | 24.9         | 7.8              | - 96                |
| LAGO PEÑUELAS      | 5.0   | 5.0          | 19.5         | 27.6             | - 82                |
| EMBALSE EL YESO    | 6.5   | 16.8         | 78.9         | 40.0             | - 66                |
| CERRO CALAN        | 1.5   | 1.5          | 31.5         | 20.1             | - 93                |
| SANTIAGO (MOP)     | 1.7   | 1.9          | 29.3         | 15.5             | - 88                |
| RANCAGUA           | 36.0  | 36.0         | 23.2         | 27.0             | 33                  |
| SAN FERNANDO       | 42.1  | 42.1         | 17.7         | 39.1             | 8                   |
| CONVENTO VIEJO     | 41.5  | 43.0         | 20.5         | 44.2             | - 3                 |
| CURICO             | 13.5  | 14.5         | 17.3         | 49.9             | - 71                |
| TALCA              | 34.5  | 45.8         | 32.8         | 53.2             | - 14                |
| COLORADO           | 65.5  | 106.0        | 26.2         | 107.9            | - 2                 |
| LINARES            | 68.3  | 89.0         | 36.9         | 84.2             | 6                   |
| PARRAL             | 85.5  | 118.1        | 37.8         | 92.1             | 28                  |
| EMBALSE DIGUA      | 130.7 | 197.2        | 35.4         | 138.6            | 42                  |
| CHILLÁN            | 72.0  | 113.0        | 29.0         | 107.9            | 5                   |
| CONCEPCIÓN         | 139.3 | 189.5        | 36.6         | 127.7            | 48                  |
| LOS ÁNGELES        | 132.4 | 198.6        | 51.2         | 134.5            | 48                  |
| CAÑETE             | 188.0 | 321.7        | 113.8        | 173.3            | 86                  |
| ANGOL              | 119.9 | 170.5        | 66.1         | 112.3            | 52                  |
| TEMUCO             | 142.5 | 286.1        | 172.5        | 209.0            | 37                  |
| VALDIVIA           | 268.1 | 497.3        | 252.7        | 362.8            | 37                  |
| OSORNO             | 111.4 | 292.6        | 192.5        | 303.0            | - 3                 |
| PUERTO MONTT       | 265.4 | 749.9        | 487.3        | 458.8            | 63                  |
| COYHAIQUE          | 138.0 | 387.6        | 308.6        | 302.4*           | 28                  |
| PUNTA ARENAS       | 111.1 | 277.9        | 189.7        | 141.4            | 96                  |

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)



#### **ESTADO DE EMBALSES**

Ultimo día del mes (Volúmenes en mill-m³)

|              |        |           |           | TROTIBLE  |      |      |
|--------------|--------|-----------|-----------|-----------|------|------|
|              |        |           |           | HISTORICO | Abr  | il   |
| EMBALSE      | REGION | CUENCA    | CAPACIDAD | MENSUAL   | 2006 | 2005 |
| Conchi       | II     | Loa       | 22        | 15        | 17   | 15   |
| Lautaro      | III    | Copiapó   | 35        | 13        | 11   | 9    |
| Santa Juana  | III    | Huasco    | 166       | 113       | 166  | 119  |
| La Laguna    | IV     | Elqui     | 40        | 21        | 32   | 26   |
| Puclaro      | IV     | Elqui     | 200       | 99        | 200  | 128  |
| Recoleta     | IV     | Limarí    | 100       | 58        | 94   | 65   |
| La Paloma    | IV     | Limarí    | 748       | 383       | 536  | 414  |
| Cogotí       | IV     | Limarí    | 150       | 71        | 82   | 53   |
| Culimo       | IV     | Quilimarí | 10        | 3.0       | 0.1  | 0.0  |
| Corrales     | IV     | Illapel   | 50        | 37        | 48   | 31   |
| Peñuelas     | V      | Peñuelas  | 95        | 21        | 21   | 27   |
| El Yeso      | RM     | Maipo     | 256       | 189       | 243  | 218  |
| Rungue       | RM     | Maipo     | 2.2       | 0.0       | 0.2  | 0.1  |
| Rapel        | VI     | Rapel     | 695       | 500       | 479  | 442  |
| Colbún       | VII    | Maule     | 1544      | 918       | 905  | 565  |
| Lag. Maule   | VII    | Maule     | 1420      | 937       | 1127 | 743  |
| Bullileo     | VII    | Maule     | 60        | 2         | 0    | 0    |
| Digua        | VII    | Maule     | 220       | 31        | 8.6  | 4.0  |
| Tutuvén      | VII    | Maule     | 15        | 2.0       | 3.4  | 0    |
| Coihueco     | VIII   | Itata     | 29        | 4         | 3.9  | 1.4  |
| Lago Laja (& | ) VIII | Bio-Bio   | 5582      | 3292      | 2566 | 1748 |

#### RESUMEN ANUAL

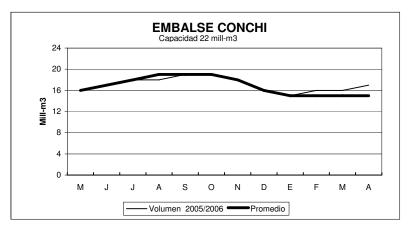
2005-2006

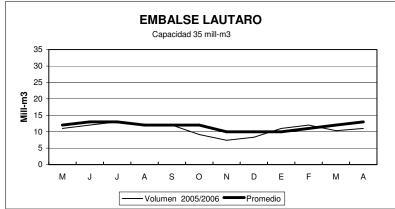
PROMEDIO

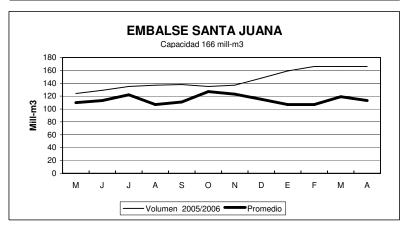
| EMBALSE       | M    | J    | J    | A    | S    | 0    | N    | D    | E    | F    | M    | A    |  |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Conchi        | 16   | 17   | 18   | 18   | 19   | 19   | 18   | 16   | 15   | 16   | 16   | 17   |  |
| Lautaro       | 11   | 12   | 13   | 12   | 12   | 9    | 7    | 8    | 11   | 12   | 10   | 11   |  |
| Santa Juana   | 124  | 129  | 135  | 137  | 138  | 135  | 137  | 148  | 159  | 166  | 166  | 166  |  |
| La Laguna     | 25   | 27   | 29   | 31   | 32   | 36   | 37   | 38   | 36   | 31   | 28   | 32   |  |
| Puclaro       | 133  | 137  | 140  | 140  | 141  | 142  | 155  | 189  | 200  | 200  | 200  | 200  |  |
| Recoleta      | 69   | 73   | 75   | 77   | 80   | 81   | 86   | 91   | 91   | 100  | 92   | 94   |  |
| La Paloma     | 423  | 437  | 449  | 456  | 480  | 506  | 559  | 583  | 574  | 559  | 542  | 536  |  |
| Cogotí        | 54   | 58   | 61   | 63   | 73   | 80   | 100  | 104  | 98   | 92   | 86   | 82   |  |
| Culimo        | 0.0  | 0.0  | 0.0  | 1.3  | 3.1  | 3.7  | 2.9  | 2.4  | 1.9  | 1.2  | 0.4  | 0.1  |  |
| Corrales      | 31   | 32   | 32   | 37   | 42   | 43   | 44   | 46   | 49   | 49   | 49   | 48   |  |
| Peñuelas      | 28   | 29   | 30   | 35   | 35   | 34   | 32   | 29   | 27   | 24   | 22   | 21   |  |
| El Yeso       | 215  | 221  | 215  | 203  | 192  | 179  | 181  | 206  | 233  | 246  | 249  | 243  |  |
| Rungue        | 0.1  | 0.6  | 1.2  | 2.0  | 2.1  | 2.0  | 1.9  | 2.2  | 1.0  | 0.6  | 0.3  | 0.2  |  |
| Rapel         | 537  | 432  | 514  | 645  | 597  | 615  | 616  | 629  | 634  | 605  | 530  | 479  |  |
| Colbún        | 714  | 1253 | 1488 | 1506 | 1480 | 1425 | 1542 | 1544 | 1519 | 1462 | 1148 | 905  |  |
| Lag. Maule    | 723  | 761  | 786  | 829  | 843  | 863  | 914  | 1001 | 1088 | 1134 | 1144 | 1127 |  |
| Bullileo      | 19   | 44   | 60   | 60   | 60   | 60   | 60   | 60   | 49   | 24   | 0    | 0    |  |
| Digua         | 28   | 105  | 160  | 219  | 220  | 220  | 199  | 220  | 93   | 34   | 11   | 8.6  |  |
| Tutuvén       | 3    | 15   | 13   | 15   | 13   | 12   | 12   | 15   | 6.1  | 4    | 2.0  | 3.4  |  |
| Coihueco      | 1.6  | 13.4 | 24   | 28.3 | 29   | 29   | 29   | 28   | 22   | 14   | 6.6  | 3.9  |  |
| Lago Laja (&) | 1716 | 1943 | 2110 | 2365 | 2480 | 2690 | 2970 | 3119 | 3104 | 2966 | 2709 | 2566 |  |

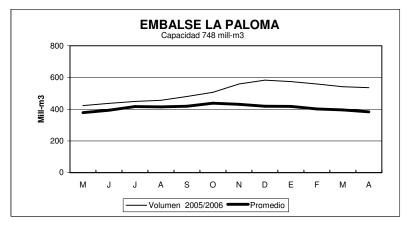
( & ): Volumen sobre cota 1300 msnm

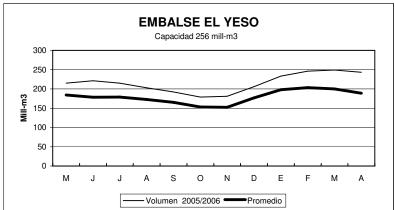
#### ESTADO DE EMBALSES

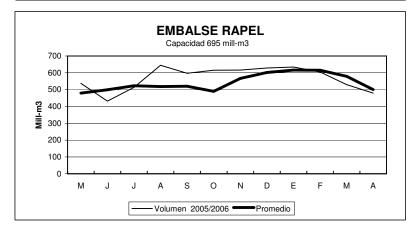


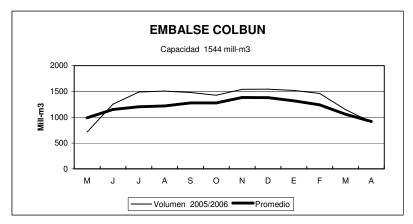


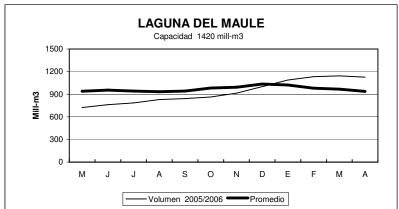


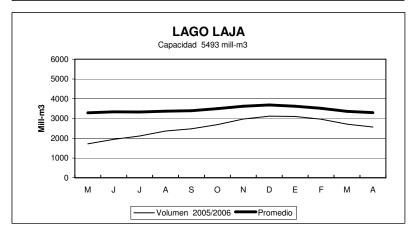








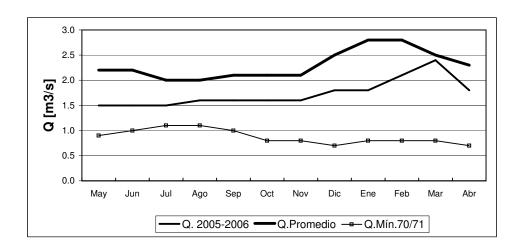




## INFORME FLUVIOMETRICO

Caudales medios mensuales en m3/seg

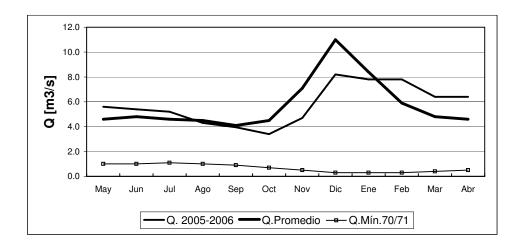
#### RIO COPIAPO EN LA PUERTA



Q. 2005-2006 Q.Promedio Q.Mín.70/71

| May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 | 1.8 | 1.8 | 2.1 | 2.4 | 1.8 |
| 2.2 | 2.2 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.5 | 2.8 | 2.8 | 2.5 | 2.3 |
| 0.9 | 1.0 | 1.1 | 1.1 | 1.0 | 8.0 | 8.0 | 0.7 | 0.8 | 8.0 | 8.0 | 0.7 |

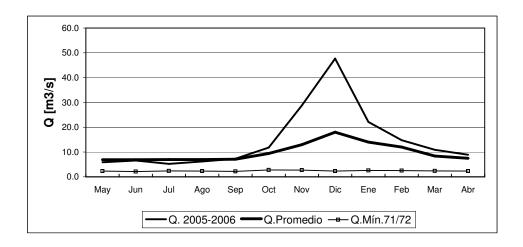
## RIO HUASCO EN ALGODONES



|              | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic  | Ene | Feb | Mar | Abr |
|--------------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|
| Q. 2005-2006 | 5.6 | 5.4 | 5.2 | 4.3 | 4.0 | 3.4 | 4.7 | 8.2  | 7.8 | 7.8 | 6.4 | 6.4 |
| Q.Promedio   | 4.6 | 4.8 | 4.6 | 4.5 | 4.1 | 4.5 | 7.1 | 11.0 | 8.4 | 5.9 | 4.8 | 4.6 |
| Q.Mín.70/71  | 1.0 | 1.0 | 1.1 | 1.0 | 0.9 | 0.7 | 0.5 | 0.3  | 0.3 | 0.3 | 0.4 | 0.5 |

Abr-06

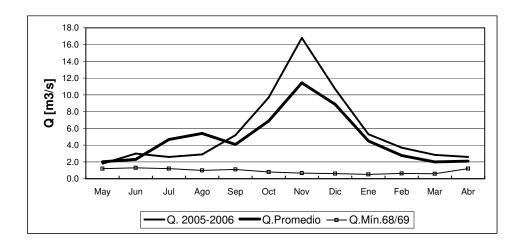
#### RIO ELQUI EN ALGARROBAL



Q. 2005-2006 Q.Promedio Q.Mín.71/72

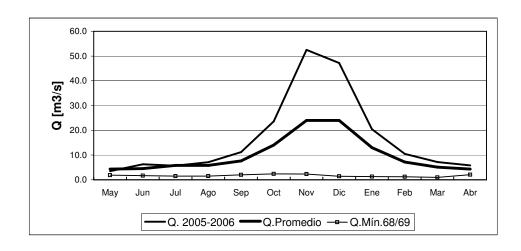
| May | Jun | Jul | Ago | Sep | Oct  | Nov  | Dic  | Ene  | Feb  | Mar  | Abr |
|-----|-----|-----|-----|-----|------|------|------|------|------|------|-----|
| 5.9 | 6.6 | 5.2 | 6.2 | 7.3 | 11.8 | 28.8 | 47.7 | 22.1 | 14.8 | 10.9 | 8.9 |
| 6.9 | 6.9 | 7.0 | 7.0 | 7.1 | 9.4  | 13.0 | 18.0 | 14.0 | 12.0 | 8.4  | 7.5 |
| 2.3 | 2.1 | 2.4 | 2.3 | 2.2 | 2.8  | 2.7  | 2.3  | 2.6  | 2.5  | 2.4  | 2.3 |

#### RIO GRANDE EN LAS RAMADAS



|              | May | Jun | Jul | Ago | Sep | Oct | Nov  | Dic  | Ene | Feb | Mar | Abr |
|--------------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|
| Q. 2005-2006 | 1.8 | 3.0 | 2.6 | 2.9 | 5.2 | 9.7 | 16.8 | 10.7 | 5.3 | 3.7 | 2.9 | 2.6 |
| Q.Promedio   | 2.0 | 2.3 | 4.7 | 5.4 | 4.1 | 6.9 | 11.4 | 8.9  | 4.5 | 2.8 | 2.0 | 2.1 |
| Q.Mín.68/69  | 1.2 | 1.3 | 1.2 | 1.0 | 1.1 | 8.0 | 0.7  | 0.6  | 0.5 | 0.6 | 0.6 | 1.2 |

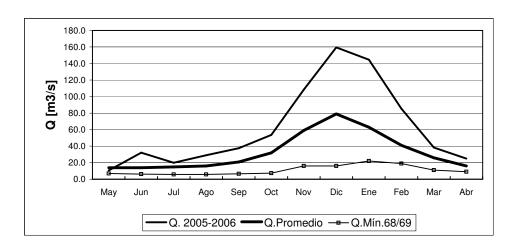
#### RIO CHOAPA EN CUNCUMEN



Q. 2005-2006 Q.Promedio Q.Mín.68/69

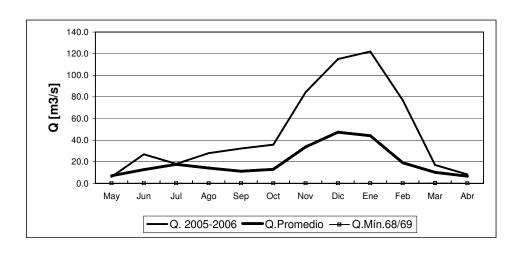
| May | Jun | Jul | Ago | Sep  | Oct  | Nov  | Dic  | Ene  | Feb  | Mar | Abr |
|-----|-----|-----|-----|------|------|------|------|------|------|-----|-----|
| 3.5 | 6.3 | 5.7 | 7.1 | 11.2 | 23.6 | 52.5 | 47.2 | 20.4 | 10.5 | 7.2 | 5.8 |
| 4.3 | 4.5 | 5.8 | 5.8 | 7.6  | 14.0 | 24.0 | 24.0 | 13.0 | 7.2  | 5.1 | 4.3 |
| 1.9 | 1.7 | 1.5 | 1.5 | 2.0  | 2.4  | 2.3  | 1.4  | 1.3  | 1.2  | 1.0 | 2.1 |

## RIO ACONCAGUA EN CHACABUQUITO



|              | iviay | Jun  | Jui  | Ago  | Sep  | OCI  | NOV   | DIC   | ⊏ne   | reb  | war  | ADI  |
|--------------|-------|------|------|------|------|------|-------|-------|-------|------|------|------|
| Q. 2005-2006 | 10.6  | 32.2 | 20.0 | 29.1 | 37.5 | 53.7 | 108.4 | 159.5 | 144.6 | 85.3 | 38.3 | 24.9 |
| Q.Promedio   | 14.0  | 14.0 | 15.0 | 16.0 | 21.0 | 32.0 | 59.0  | 79.0  | 63.0  | 41.0 | 26.0 | 16.0 |
| Q.Mín.68/69  | 6.9   | 6.2  | 5.9  | 5.9  | 6.6  | 7.4  | 16.0  | 16.0  | 22.0  | 19.0 | 11.0 | 9.1  |

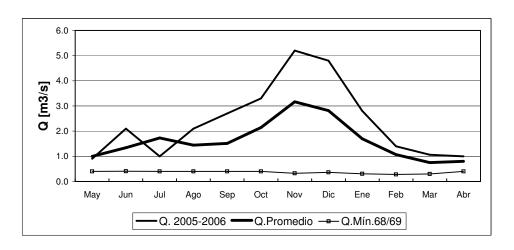
#### RIO ACONCAGUA EN SAN FELIPE



Q. 2005-2006 Q.Promedio Q.Mín.68/69

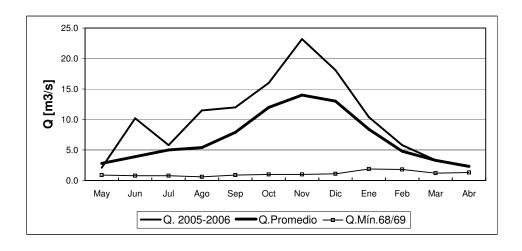
| May | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic   | Ene  | Feb  | Mar  | Abr |
|-----|------|------|------|------|------|------|-------|------|------|------|-----|
| 6.0 | 26.9 | 18.0 | 28   | 32.2 | 35.8 | 84.4 | 115.0 | 122  | 77   | 17   | 8.3 |
| 7.1 | 12.7 | 17.6 | 14.2 | 11.3 | 13.0 | 33.8 | 47.3  | 44.1 | 19.1 | 10.2 | 6.7 |
| 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0  | 0.3  | 0.0 |

## ESTERO ARRAYAN EN LA MONTOSA



|              | iviay | Jun | Jui | Ago | Sep | OCI | NOV | DIC | ⊏ne | reb | war | ADI |
|--------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2005-2006 | 0.9   | 2.1 | 1.0 | 2.1 | 2.7 | 3.3 | 5.2 | 4.8 | 2.8 | 1.4 | 1.1 | 1.0 |
| Q.Promedio   | 1.0   | 1.3 | 1.7 | 1.4 | 1.5 | 2.1 | 3.2 | 2.8 | 1.7 | 1.1 | 8.0 | 0.8 |
| Q.Mín.68/69  | 0.4   | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 |

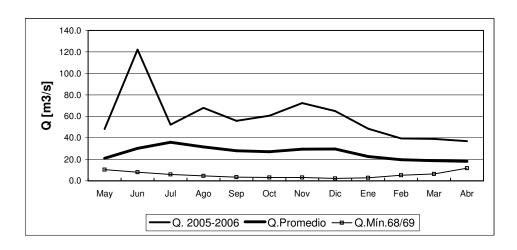
## RIO MAPOCHO EN LOS ALMENDROS



Q. 2005-2006 Q.Promedio Q.Mín.68/69

| May | Jun  | Jul | Ago  | Sep  | Oct  | Nov  | Dic  | Ene  | Feb | Mar | Abr |
|-----|------|-----|------|------|------|------|------|------|-----|-----|-----|
| 2.1 | 10.2 | 5.8 | 11.5 | 12.0 | 16.0 | 23.2 | 18.1 | 10.4 | 5.8 | 3.3 | 2.4 |
| 2.8 | 3.9  | 5.0 | 5.4  | 7.9  | 12.0 | 14.0 | 13.0 | 8.4  | 4.8 | 3.3 | 2.3 |
| 0.9 | 0.8  | 0.8 | 0.6  | 0.9  | 1.0  | 1.0  | 1.1  | 1.9  | 1.8 | 1.2 | 1.3 |

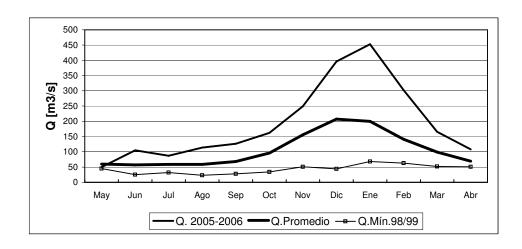
## RIO MAPOCHO EN RINCONADA DE MAIPU



Q. 2005-2006 Q.Promedio Q.Mín.68/69

| May  | Jun   | Jul  | Ago  | Sep  | Oct  | Nov  | Dic  | Ene  | Feb  | Mar  | Abr  |
|------|-------|------|------|------|------|------|------|------|------|------|------|
| 48.2 | 122.1 | 52.3 | 67.9 | 55.9 | 60.6 | 72.4 | 64.9 | 48.6 | 39.5 | 39.0 | 37.0 |
| 21.0 | 30.3  | 35.9 | 31.6 | 28.0 | 27.1 | 29.5 | 29.7 | 22.6 | 19.6 | 18.7 | 18.1 |
| 10.4 | 8.1   | 6.0  | 4.6  | 3.4  | 3.2  | 3.1  | 2.2  | 2.9  | 5.3  | 6.5  | 11.8 |

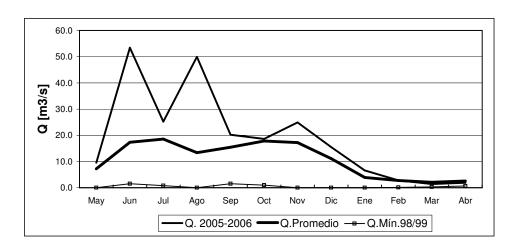
#### RIO MAIPO EN EL MANZANO



Q. 2005-2006 Q.Promedio Q.Mín.98/99

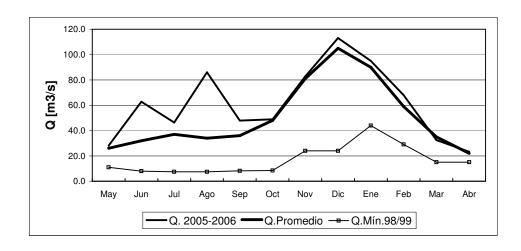
| May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50  | 105 | 87  | 114 | 126 | 162 | 249 | 396 | 453 | 302 | 166 | 108 |
| 60  | 57  | 59  | 59  | 68  | 96  | 156 | 207 | 200 | 141 | 99  | 69  |
| 45  | 25  | 32  | 23  | 28  | 34  | 51  | 44  | 68  | 63  | 52  | 51  |

## **RIO CLARO EN EL VALLE 2**



|              | May | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic  | Ene | Feb | Mar | Abr |
|--------------|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|
| Q. 2005-2006 | 9.5 | 53.4 | 25.2 | 49.9 | 20.2 | 18.6 | 24.9 | 15.5 | 6.6 | 2.8 | 1.4 | 1.9 |
| Q.Promedio   | 7.2 | 17.3 | 18.6 | 13.4 | 15.5 | 17.9 | 17.2 | 11.1 | 3.9 | 2.7 | 2.1 | 2.6 |
| Q.Mín.98/99  | 0.0 | 1.5  | 8.0  | 0.0  | 1.5  | 1.0  | 0.0  | 0.0  | 0.0 | 0.1 | 0.3 | 0.7 |

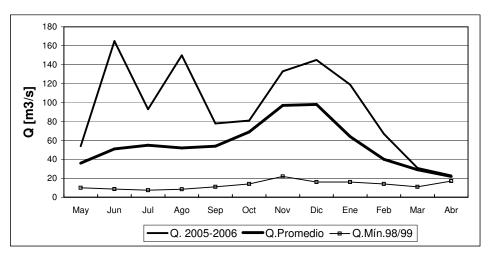
## **RIO TINGUIRIRICA BAJO BRIONES**



Q. 2005-2006 Q.Promedio Q.Mín.98/99

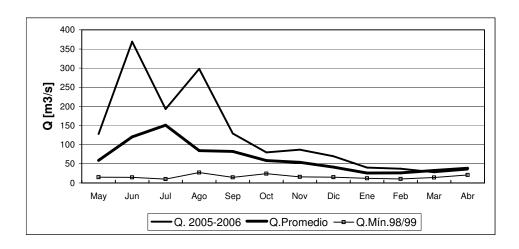
| May  | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic   | Ene  | Feb  | Mar  | Abr  |
|------|------|------|------|------|------|------|-------|------|------|------|------|
| 28.1 | 62.8 | 46.3 | 86.0 | 47.9 | 48.9 | 82.8 | 113.0 | 95.0 | 68.0 | 32.5 | 23.2 |
| 26.0 | 32.0 | 37.0 | 34.0 | 36.0 | 48.0 | 81.0 | 105.0 | 90.0 | 59.0 | 35.0 | 22.0 |
| 11.0 | 8.0  | 7.4  | 7.4  | 8.2  | 8.5  | 24.0 | 24.0  | 44.0 | 29.0 | 15.0 | 15.0 |

## RIO TENO DESPUES DE JUNTA



|              | мау | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2005-2006 | 54  | 165 | 93  | 150 | 78  | 81  | 133 | 145 | 119 | 67  | 31  | 23  |
| Q.Promedio   | 36  | 51  | 55  | 52  | 54  | 69  | 97  | 98  | 64  | 40  | 29  | 22  |
| Q.Mín.98/99  | 10  | 8.6 | 7.4 | 8.4 | 11  | 14  | 22  | 16  | 16  | 14  | 11  | 17  |

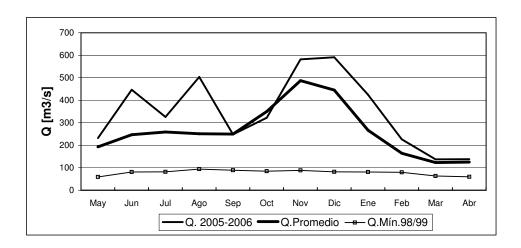
#### RIO CLARO EN RAUQUEN



Q. 2005-2006 Q.Promedio Q.Mín.98/99

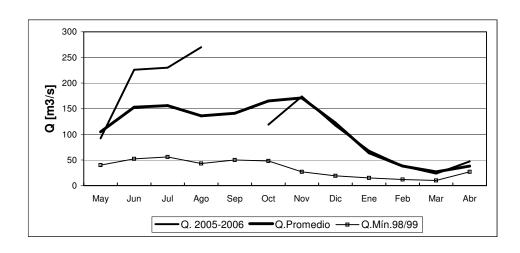
| May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 128 | 369 | 193 | 298 | 129 | 80  | 87  | 70  | 40  | 37  | 28  | 35  |
| 59  | 121 | 151 | 84  | 82  | 58  | 54  | 41  | 26  | 26  | 33  | 39  |
| 15  | 15  | 10  | 27  | 15  | 24  | 16  | 15  | 12  | 10  | 14  | 21  |

#### RIO MAULE EN ARMERILLO



|              | мау | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2005-2006 | 232 | 447 | 326 | 504 | 248 | 322 | 582 | 591 | 425 | 226 | 137 | 138 |
| Q.Promedio   | 193 | 247 | 259 | 251 | 250 | 350 | 487 | 445 | 267 | 164 | 123 | 125 |
| Q.Mín.98/99  | 59  | 81  | 82  | 94  | 89  | 85  | 88  | 82  | 81  | 80  | 63  | 60  |

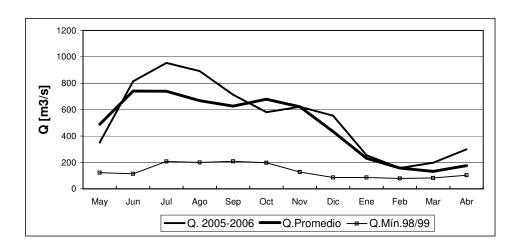
RIO ÑUBLE EN SAN FABIAN



Q. 2005-2006 Q.Promedio Q.Mín.98/99

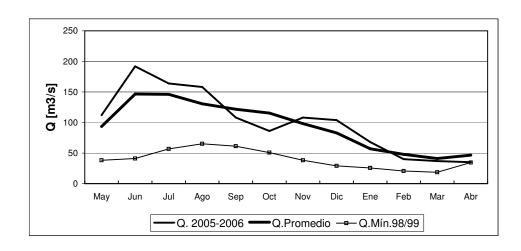
| мау | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 92  | 226 | 230 | 270 |     | 119 | 174 | 117 | 68  | 38  | 23  | 47  |
| 105 | 153 | 156 | 136 | 141 | 165 | 171 | 122 | 64  | 38  | 27  | 38  |
| 40  | 52  | 56  | 43  | 50  | 48  | 27  | 19  | 15  | 12  | 10  | 27  |

## RIO BIO-BIO EN RUCALHUE



|              | way | Jun | Jui | Ago | Sep | Oct | NOV | DIC | ⊨ne | reb | war | Abr |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2005-2006 | 350 | 815 | 954 | 892 | 713 | 581 | 622 | 554 | 255 | 157 | 198 | 300 |
| Q.Promedio   | 489 | 741 | 740 | 668 | 627 | 679 | 622 | 434 | 231 | 158 | 132 | 176 |
| Q.Mín.98/99  | 122 | 114 | 207 | 200 | 208 | 197 | 127 | 86  | 86  | 79  | 82  | 103 |

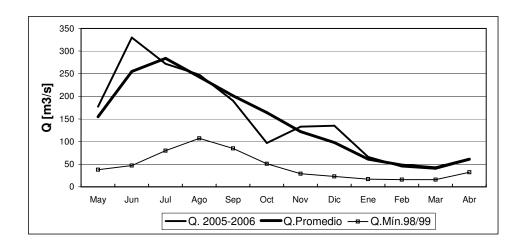
RIO CAUTIN EN RARI-RUCA



Q. 2005-2006 Q.Promedio Q.Mín.98/99

| May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 112 | 192 | 164 | 158 | 108 | 86  | 108 | 104 | 68  | 40  | 37  | 35  |
| 93  | 147 | 146 | 131 | 122 | 116 | 98  | 83  | 57  | 48  | 41  | 47  |
| 38  | 41  | 57  | 65  | 61  | 51  | 38  | 29  | 26  | 21  | 19  | 35  |

## **RIO CAUTIN EN CAJON**

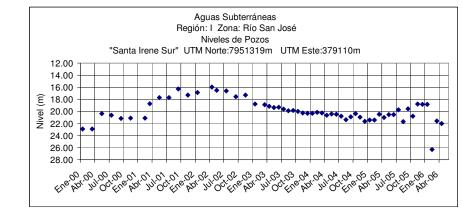


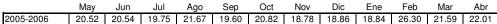
|              | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q. 2005-2006 | 177 | 330 | 272 | 248 | 190 | 97  | 133 | 135 | 66  | 45  | 40  | 60  |
| Q.Promedio   | 155 | 255 | 284 | 243 | 201 | 164 | 122 | 98  | 61  | 48  | 42  | 61  |
| Q.Mín.98/99  | 38  | 47  | 80  | 107 | 85  | 51  | 29  | 23  | 17  | 16  | 16  | 32  |

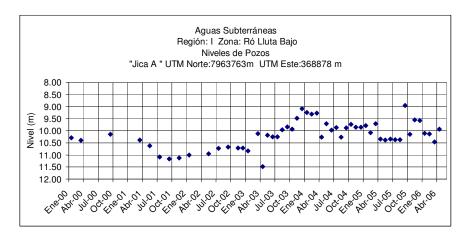
#### Informe de Aguas Subterráneas

Niveles de Pozos en metros

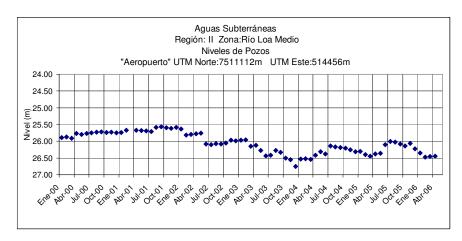
\*Gráficos de últimos cinco años.



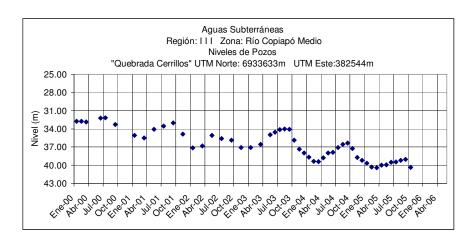




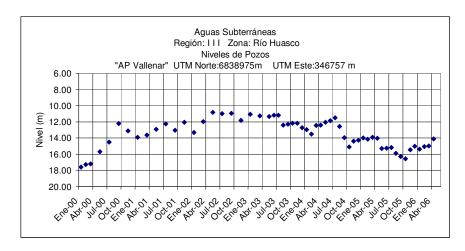
|           | May   | Jun   | Jul   | Ago   | Sep  | Oct   | Nov  | Dic  | Ene   | Feb   | Mar   | Abr  |   |
|-----------|-------|-------|-------|-------|------|-------|------|------|-------|-------|-------|------|---|
| 2005-2006 | 10.39 | 10.35 | 10.37 | 10.37 | 8.95 | 10.15 | 9.55 | 9.58 | 10.11 | 10.13 | 10.46 | 9.94 | 1 |



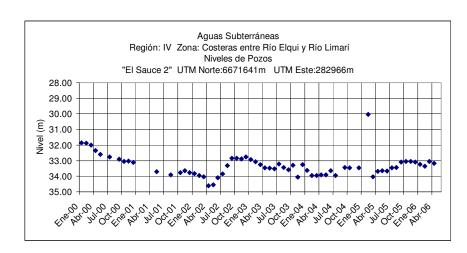
|           | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov   | Dic   | Ene   | Feb   | Mar   | Abr   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2005-2006 | 26.36 | 26.10 | 26.01 | 26.03 | 26.08 | 26.14 | 26.06 | 26.23 | 26.35 | 26.47 | 26.46 | 26.45 |



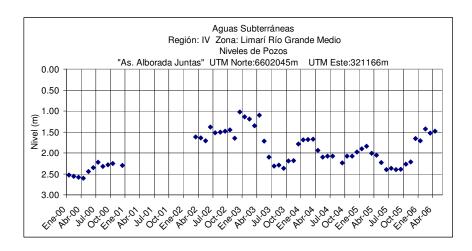
|           | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov  | Dic  | Ene  | Feb  | Mar  | Abr  |  |
|-----------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|--|
| 2005-2006 | 39.92 | 39.51 | 39.46 | 39.19 | 39.06 | 40.36 | Seco | Seco | Seco | Seco | Seco | Seco |  |

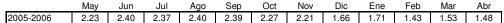


| _         | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov   | Dic   | Ene   | Feb   | Mar   | Abr   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2005-2006 | 15.28 | 15.26 | 15.17 | 15.87 | 16.29 | 16.56 | 15.45 | 15.03 | 15.37 | 15.07 | 14.97 | 14.09 |



|           | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov   | Dic   | Ene   | Feb   | Mar   | Abr   |   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| 2005-2006 | 33.64 | 33.66 | 33.46 | 32.56 | 33.10 | 33.06 | 33.05 | 33.10 | 33.23 | 33.36 | 33.04 | 33.18 | İ |





May

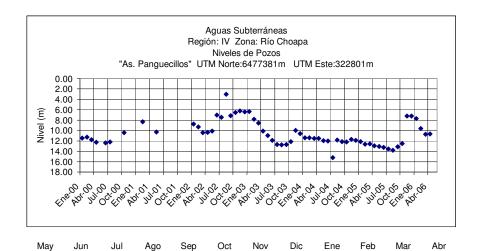
2005-2006

Jun

Jul

Ago

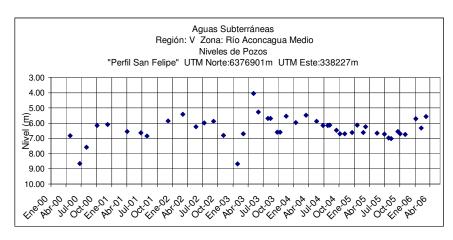
13.08 | 13.27 | 13.55 | 13.78 | 13.16 | 12.49 | 7.24



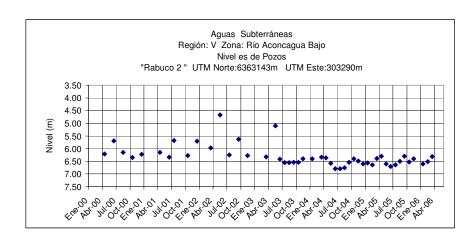
Mar

9.61 10.72 10.68

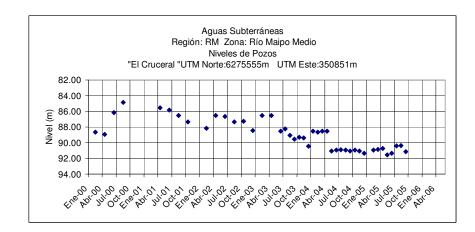
7.21 7.68



|           | May  | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic | Ene  | Feb  | Mar  | Abr |
|-----------|------|------|------|------|------|------|------|-----|------|------|------|-----|
| 2005-2006 | 6.65 | 6.72 | 6.97 | 7.02 | 6.55 | 6.70 | 6.75 |     | 5.71 | 6.33 | 5.57 |     |

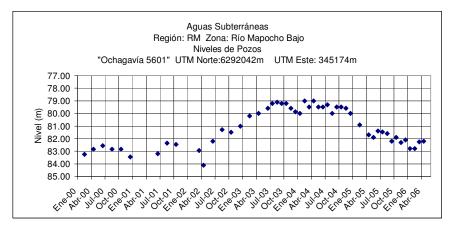


|           | May  | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic | Ene  | Feb  | Mar  | Abr |
|-----------|------|------|------|------|------|------|------|-----|------|------|------|-----|
| 2005-2006 | 6.61 | 6.70 | 6.64 | 6.50 | 6.30 | 6.53 | 6.40 |     | 6.61 | 6.52 | 6.32 |     |

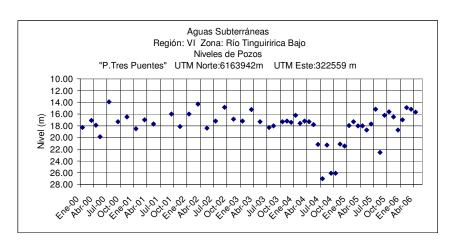


|           | May   | Jun   | Jul   | Ago   | Sep   | Oct | Nov | Dic | Ene | Feb | Mar | Abr |
|-----------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|
| 2005-2006 | 91.55 | 91.35 | 90.40 | 90.35 | 91.15 |     |     |     |     |     |     |     |

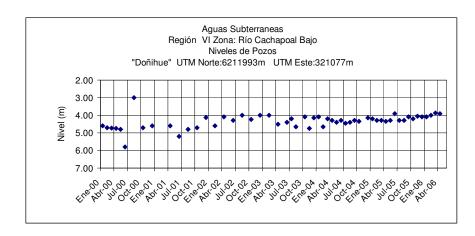
#### (.) Embancado



|           | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov   | Dic   | Ene   | Feb   | Mar   | Abr   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2005-2006 | 81.90 | 81.40 | 81.47 | 81.60 | 82.20 | 81.90 | 82.30 | 82.10 | 82.80 | 82.80 | 82.25 | 82.20 |



|           | May   | Jun   | Jul   | Ago   | Sep   | Oct   | Nov   | Dic   | Ene   | Feb   | Mar   | Abr   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2005-2006 | 18.75 | 17.70 | 15.20 | 22.55 | 16.20 | 15.60 | 16.50 | 18.75 | 17.00 | 14.90 | 15.20 | 15.70 |



|           | May  | Jun  | Jul  | Ago  | Sep  | Oct  | Nov  | Dic  | Ene  | Feb  | Mar  | Abr  |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2005-2006 | 4.30 | 3.90 | 4.30 | 4.30 | 4.10 | 4.20 | 4.05 | 4.10 | 4.10 | 4.00 | 3.88 | 3.90 |