



WATER WATCH Issue No. 153

April 2005

for the attention of Water Supply Managers and Councillors

Water Supply

Demand for water eased back to winter levels during April, with the average supply for the month just 150 million litres per day (ML/d), eight ML/d less than for March. This level of demand is fairly typical for April in recent years.

Rainfall and Source Levels/Flows

April was drier than average, although the shortfalls recorded at Wainuiomata (13% below average) and the Orongorongo Valley (10% below average) were fairly modest. In the Hutt catchment, the level of rainfall was a third less than its long-term April average, while Karori had 46% less rain than average.

The average flow rate recorded for the Wainuiomata River in April was above the long-term average for the month while the Hutt River was lower relative to its long-term average flow (see table).

The average level of the Hutt aquifer (3.95 metres) was a little higher than the average April level (3.75 metres) since full-time production ceased at Gear Island (Oct. 1999).

Storage in the Stuart Macaskill Lakes was 90% of maximum at month-end.

Weather Outlook

NIWA's outlook (April to June) for the southwest of the North Island shows that normal levels of rainfall and river flows are the most likely outcomes for the period (probabilities of 50% and 45% respectively). The probability of low rainfall has fallen from 40 percent (March outlook) to 20%. Mean air temperature is expected to be normal (40%) or

above normal (40%). For more detail see www.niwa.co.nz/ncc/cu/2005-04/outlook.

Treatment Plants

Repairs are under way to the raw water pipeline between Orongorongo intake weir and the pipe tunnel to Wainuiomata treatment plant. Production from Wainuiomata treatment plant was entirely from the Wainuiomata catchment area during April.

We are assessing options in regard to a failed drive on one of the three Wellington pumps at Waterloo treatment plant. We do not anticipate this situation causing distribution problems at present levels of water use.

If you have any queries please contact me (Tel: 04 384 5708).

Andrew Samuel Marketing Analysis Manager Greater Wellington Water

Water source and catchment data									
Source: Hilltop, except 'A', supplied by GWW Operations	April 2005	March 2005	Average of long- term Apr. data						
Average flow rate (m³/sec) or level (metres)									
Hutt River at Kaitoke ^A	4.22 m ³ /s	7.25 m ³ /s	5.97 m ³ /s ¹						
Wainuiomata River at	0.57 m ³ /s	0.59 m ³ /s	0.48 m ³ /s						
Manuka Track									
Aquifer at McEwan Park	3.95 metres	3.66 metres	3.75 metres ²						
Total rainfall in water catchments									
Kaitoke Strainer House	102 mm	277 mm	150 mm						
Wainuiomata Reservoir	129 mm	242 mm	148 mm						
Orongorongo Swamp	138 mm	317 mm 153 mm							

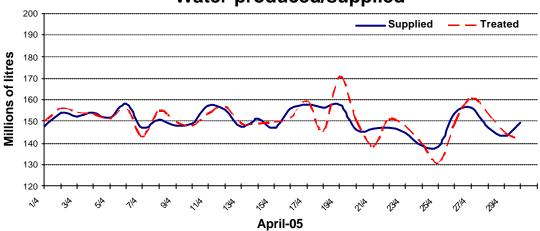
1: Record 1968-2003. 2: Dat a for 2000-2004 only, since Gear Island WTP ceased full-time production. Full-time use of Gear Island resulted in lower average level data from McEwan Park, due to its proximity to the abstraction point. All March 2005 data is raw.

Production and supply figures for April 2005

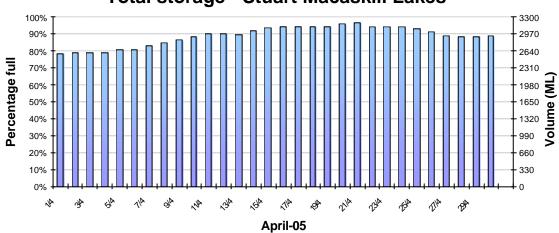
Day/date	Supplied	Storage	Treated	Te Marua	Wainui	Waterloo	Gear Island
Fri, 01/04/05	147.7	1.7	149.3	67.4	12.1	69.8	0.0
Sat, 02/04/05	153.8	2.2	156.0	73.1	23.4	59.5	0.0
Sun, 03/04/05	152.3	1.7	154.0	69.4	23.0	61.6	0.0
Mon, 04/04/05	153.9	-0.3	153.6	66.1	22.0	65.5	0.0
Tue, 05/04/05	151.4	-0.3	151.1	64.2	22.1	64.8	0.0
Wed, 06/04/05	158.3	-2.9	155.4	68.0	22.3	65.1	0.0
Thu, 07/04/05	146.7	-4.1	142.6	73.8	22.1	35.0	11.7
Fri, 08/04/05	151.0	3.9	154.9	75.9	19.9	59.1	0.0
Sat, 09/04/05	147.8	1.8	149.6	73.3	19.2	57.1	0.0
Sun, 10/04/05	149.1	-1.2	147.9	74.1	24.5	49.3	0.0
Mon, 11/04/05	157.3	-4.0	153.3	71.8	23.1	58.4	0.0
Tue, 12/04/05	155.1	1.6	156.7	78.0	21.6	57.1	0.0
Wed, 13/04/05	147.7	1.3	149.0	72.2	22.1	54.7	0.0
Thu, 14/04/05	151.3	-2.3	149.0	73.7	18.7	56.6	0.0
Fri, 15/04/05	146.7	2.9	149.6	74.2	17.6	57.8	0.0
Sat, 16/04/05	155.5	-3.9	151.6	76.5	12.1	63.0	0.0
Sun, 17/04/05	158.2	1.2	159.4	78.5	0.3	63.3	17.3
Mon, 18/04/05	156.3	-11.2	145.0	66.1	11.3	54.7	12.9
Tue, 19/04/05	157.9	12.9	170.8	80.4	13.9	54.5	22.0
Wed, 20/04/05	146.2	4.1	150.3	72.9	10.2	50.8	16.4
Thu, 21/04/05	146.5	-8.1	138.3	67.3	20.1	49.0	1.9
Fri, 22/04/05	147.1	3.7	150.8	77.6	14.6	58.6	0.0
Sat, 23/04/05	144.7	2.9	147.6	75.6	12.3	59.7	0.0
Sun, 24/04/05	138.6	0.9	139.5	68.9	20.3	50.3	0.0
Mon, 25/04/05	138.3	-7.5	130.8	68.3	21.7	40.8	0.0
Tue, 26/04/05	153.4	-4.8	148.6	73.0	4.2	71.4	0.0
Wed, 27/04/05	156.4	4.2	160.6	80.2	25.0	55.4	0.0
Thu, 28/04/05	147.1	6.4	153.5	76.2	26.0	51.3	0.0
Fri, 29/04/05	143.1	1.6	144.8	72.3	27.3	45.2	0.0
Sat, 30/04/05	149.4	-7.5	141.9	61.6	25.8	71.3	0.0
Total	4508.5	-3.0	4505.5	2154.1	558.5	1710.7	82.2
Average	150.3	-0.1	150.2	71.8	18.6	57.0	2.7

Supply on 30 April has been adjusted to allow for 6 ML used in flushing a section of the Kaitoke main

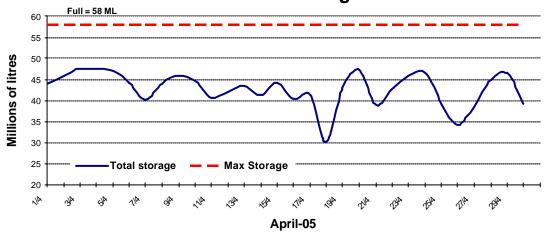
Water produced/supplied



Total storage - Stuart Macaskill Lakes



Water stored in balancing reservoirs



Note: Daily reservoir balances are a snapshot at approximately 8.00 am. Balancing reservoirs are Ngauranga (20ML) and Haywards (18ML) and the WCC reservoir Macalister (20ML)