



Report 05.219
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Committee Utility Services
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2005 Summer Water Conservation Campaign and supply analysis

1. Purpose

To provide the Committee with a summary of water supply totals and weather conditions for the summer period (1 December 2004 to 28 February 2005) relative to other recent summers and to give an indication of the outcomes of conducting the annual summer water conservation campaign.

2. Significance of the Decision

The matters in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

3. The 2005 Summer Water Conservation Campaign

A background to the campaign was presented to the Committee in November 2004 (Report 04.664).

The campaign was branded 'Be the Difference'. Print advertisements appeared in the main weekly community newspapers covering our supply area for four weeks from 25 January. Radio advertising was placed from Saturday to Monday inclusive for five weeks from 22 January. The key messages for our two advertisements were (1) check soil moisture before watering and (2) limit watering sessions with a sprinkler to 30 minutes. Subordinate messages in each advertisement promoted the use of mulch and watering at a rate soil could absorb.

A tap hanger covering the same conservation messages was mailed to all 'Be the Difference' members between 14 and 20 January.

We had planned to start our radio advertising on Saturday 15 January and press advertising from Tuesday 18 January. However, very wet conditions and low demand at the start of January led to our deciding - on 10 January - to postpone the start of both forms of advertising by a week. This flexibility to alter our advertising schedule at short notice without financial penalty was an underlying reason for the advertising channels chosen.

4. Weather summary

Total rainfall¹ for the three summer months was 242 millimetres (mm), making it the fourth driest summer of the last seven (the median). Average daily sunshine hours were 7.7, again ranking it fourth of the last seven summers. The longest period without rainfall lasted 14 days, jointly (with 1999/2000) the third longest dry spell over the last seven summers.

We experienced something of a summer of two halves. Above-average levels of rain were recorded in our water catchments and in Wellington during December. January was also wetter than normal, but almost all of the rain occurred in the first eight days of the month. Between 9 January and the end of the month there was only one rainfall event in Wellington, with five millimetres of rain. February was relatively dry, with only 43 mm of rain at Kelburn, 60% of the long-term February average. Our surface water catchments were also dry, with only half the normal rainfall at Kaitoke and well below half the normal level at Wainuiomata (38%) and Orongorongo valley (27%).

In terms of the combination of sunshine and rainfall, last summer (2004/05) most closely resembles 2002/03 (more harsh) and 1999/2000 (less harsh) and could be described as fairly average in relation to recent past summer periods (see Attachments 1, 2, 3 and 4). It is worth noting for comparative purposes that the period of low rainfall between 9 January and 11 February 2005 appears similar to the period between 15 January and 14 February 2003.

While soil moisture levels would have been healthy at the beginning of January, we experienced seven weeks of relatively low rainfall in mid-summer, which could reasonably have been expected to result in high water use across much of that period.

5. Water supply

The total volume of water supplied was 14,568 million litres (average 161.9 ML/day): the fifth highest total of the last seven summer periods. The maximum day supply was 203 million litres, the fourth highest (median) peak summer day of the last seven years, while the average day of the peak week was 192 ML, the second highest figure over the same period.

In terms of total water supply relative to the previous six years, it could be summarised as no more than an average year, albeit with a single high-demand week (see Attachments 1 and 5).

¹ Rainfall recorded at Kelburn

It has been well documented that the estimated usually-resident population for our supply area has increased markedly in recent years. If we view both total and peak day summer water supply relative to population served (Attachment 1), the summer of 2004/05 resulted in the second lowest per capita water use over the last seven years: only 2003/04 was lower. The average day of the peak week was the third lowest over the last seven years. All three parameters show a decreasing trend (Attachment 6).

6. What does this tells us?

The total and peak day per-capita water use figures were a little lower than we expected given the mid-summer weather pattern, which supports the view that gardeners are generally paying more attention to when and how they water.

There are many factors which almost certainly combine to contribute to the gradually decreasing trend in per capita water use during summer across our supply area. While it is not possible to quantify the contribution of these factors, including our water conservation communications, we know from research in past years that knowledge of appropriate water-wise gardening methods has generally improved. The delivery of a consistent water-wise gardening message over eight years is almost certainly helping to maintain public awareness of conservation-friendly watering behaviour.

7. Be the Difference

The Summer Water Conservation Campaign advertising was branded '*Be the Difference*'. Membership of the programme stood at 6883 on 10 December 2004 and 7043 on 2 March 2005: an increase of 160 households. The water campaign was not the only membership activity between these dates, but would have contributed to the increase in '*Be the Difference*' members during the summer.

8. Communication

An article about the level of water use relative to weather conditions during summer was published in the Greater Wellington newspaper Elements (May 2005 issue). Our customers have been advised of these results separately. No other activity is planned.

9. Recommendation

That the Committee receives the report and notes the contents

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Attachments

- 1 Water supply and weather summary (1998/99 to 2004/05)
- 2 Supply and weather pattern 2004/05 (graph)
- 3 Supply and weather pattern 2002/03 (graph)
- 4 Supply and weather pattern 1999/2000 (graph)
- 5 Summer daily water supply by frequency (graph 1998/99 to 2004/05)
- 6 Per-capita summer daily water supply (graph 1998/99 to 2004/05)