

Report 08.838
Date 18 November 2008
File ENV/20/01/07

Committee Regulatory Committee
Author Juliet Milne – Team Leader, Environmental Science

State of the environment – 2007/08 annual summary

1. Purpose

To present the summary of our state of the environment monitoring results for 2007/08.

2. Reason for monitoring

The Resource Management Act 1991 requires us to monitor and report on the state of the environment in the region. Monitoring the state of the environment allows us to:

- observe and interpret trends or changes in environmental quality and determine the reasons for these;
- have good information for guiding resource consent decision making;
- evaluate the effectiveness of the Regional Policy Statement and regional plans, and identify where policy changes may be necessary for the sustainable management of the region's natural resources; and
- convey information about our natural resources to the wider community.

3. Annual environmental reporting

We have presented annual summaries of the state of the environment as a package of report cards since 2001. The 2007/08 cards (see **attachment 1**) cover air quality, rainfall and river flows, groundwater, recreational water quality, the health of rivers and coastal environments, and soil health and contamination for the period 1 July 2007 to 30 June 2008. The cards are based on our annual monitoring reports which present the results of the past year's environmental monitoring in more detail. There is also a report card about our work in natural hazards.

The report cards present key information about the state of the region's resources and, where relevant, compare results with national standards and

guidelines. This allows us to check the “pulse” of the environment in between the full analysis of trends done every six years for our major state of the environment report, *Measuring up*. *Measuring up* will next be prepared in 2011, and will be used to determine the effectiveness of our Regional Policy Statement and regional plans.

4. Selected highlights from the 2007/08 cards

As with previous years, we have summarised the key points on the front page of each report card. Some of the key points include:

- The limit for particulate matter (PM₁₀) set by the National Environmental Standard for air was exceeded on one occasion in Wainuiomata and in Tawa during winter 2007, and three times in Masterton during winter 2008. The elevated Masterton results mean that the Wairarapa airshed breached the National Environmental Standard for PM₁₀.
- La Nina conditions from late spring 2007 through until autumn 2008 led to one of the worst droughts on record in the Wairarapa and Hutt Valley, in terms of the number of days with a significant soil moisture deficit. Very low rainfall led to the Ruamahanga River having its lowest flow since 1985, with restrictions on water takes from rivers in place very early in the summer.
- The long dry summer led to greater demand for groundwater for irrigation and municipal water supply and this was reflected in record-low groundwater levels in many areas.
- Our beaches were suitable for swimming on most occasions over the summer bathing season. However, it was a different story in some of the rivers where hot, dry weather conditions led to extensive toxic blue-green algal growth. The Hutt River was heavily affected, with restrictions imposed on swimming from January through to March.
- Rivers and streams draining urban areas and agricultural catchments continue to have the poorest water quality and ecological health, with smaller lowland streams affected the most by intensive land use.
- Assessments of sediment quality and sediment-dwelling fauna in Wellington and Porirua harbours revealed that there is room for improvement in the health of both harbours. In Wellington Harbour, concentrations of some stormwater-derived contaminants exceed alert guideline values, while Porirua Harbour is moderately eutrophic (nutrient rich) and has a moderate risk of sedimentation accumulation.
- Soil quality testing on drystock/pastoral farming sites found the health of the soils to generally be in good condition. The primary concerns were compaction and suboptimal nutrient levels, both of which can be remedied with appropriate management.

- Despite the long dry summer, parts of the region were hit by a number of extreme rainfall events that led to localised flooding. A storm on 7-8 January led to significant flooding on the Kapiti Coast. A camping ground in Waikanae and residents from three homes adjacent to flooded streams were evacuated. The Kapiti Coast was also hit by three tornadoes in the first half of 2008.

5. Communication

A press release will be sent out when we distribute the report card package in late November. The package will be sent to over 500 users of environmental information in the region, including iwi, local and central government decision-makers, non-governmental organisations, environmental and community organisations, industry, interested individuals, schools and universities as well as all libraries and a selection of medical centres. The cards will also be available on our website, along with the more detailed annual monitoring reports.

6. Recommendations

That the Committee:

1. *Receives the report; and*
2. *Notes the contents.*

Report prepared by:

Report approved by:

Report approved by:

Juliet Milne
Team Leader, Environmental
Science

Ted Taylor
Manager, Environmental
Monitoring & investigations

Nicola Shorten
Manager, Environmental
Policy

Report approved by:

Nigel Corry
Divisional Manager,
Environment Management

Attachment 1: The state of our environment annual summary report cards 2007/08