

Report	09.706
Date	18 November 2009
File	ENV/20/01/08
Committee	Regulatory Committee
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State of the environment – 2008/09 annual summary

1. Purpose

To present the summary of our state of the environment monitoring results for 2008/09.

2. Background

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 2008/09 cards (see **attachment 1**) cover air quality, coastal environments, groundwater, rainfall and river flows, recreational water quality, river and stream health, and soil health and contamination for the period 1 July 2008 to 30 June 2009. The cards are based on our annual monitoring reports which present the results of the past year's environmental monitoring in more detail. Key findings from recent targeted investigations are also included on some cards.

The report cards present core 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 environmental trends completed every six years for our major state of the environment report, *Measuring up*. *Measuring up* was last prepared in 2005 and was used to determine the effectiveness of our Regional Policy Statement (RPS) and regional plans. With the second generation RPS and regional plan(s) the primary focus for environmental policy and science staff at present, the next *Measuring up* report is unlikely to be prepared before 2012.

4. Selected highlights from the 2008/09 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 region generally had low air pollution levels during 2008, with only three days in Masterton and one day in central Wellington where the limit for particulate matter (PM_{10}) set by the National Environmental Standard for air was exceeded. Because there was more than one PM_{10} exceedance day in Masterton in 2008, the Wairarapa airshed breached the National Environmental Standard for PM_{10} . Pollution levels were lower in winter 2009, with only one day in Masterton where the PM_{10} limit was exceeded.
- Concentrations of some contaminants, particularly zinc and DDT, remain elevated in the surface sediments of some areas of Porirua Harbour. There is clear evidence that this contamination is stormwater-derived, with the highest contaminant concentrations recorded in sediments in the area between the Porirua Stream channel and several large stormwater outfalls.
- A relatively wet winter in 2008 resulted in a partial recovery of water levels in some of the region's aquifers. In terms of groundwater quality, elevated (i.e., above background) nitrate nitrogen levels continue to be recorded in some locations, particularly shallow aquifers associated with more intensive landuse. There were three occasions where groundwater samples exceeded the Ministry of Health drinking water standard.
- Although 2008/09 was a year with alternating periods of settled and stormy weather, there were no significant floods or droughts during the year. Eastern Wairarapa was particularly dry during much of autumn but rain in May eliminated concerns of an extensive drought.
- Our beaches were suitable for swimming most of the time over the summer bathing season, although several sites in Porirua exceeded the national recreational water quality guidelines on at least three sampling occasions. In our popular recreational rivers, the Hutt River and Wainuiomata River monitoring sites exceeded the national guidelines on the most occasions (up to four times at two sites). Sections of the Hutt River were also affected by widespread growth of toxic blue-green algae (cyanobacteria) during the summer. The Waipoua River in Masterton was affected the most by toxic algae, with restrictions imposed on swimming from early January through to the end of 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. However, investigations in our urban streams have revealed many contain large populations of banded kokopu, koaro, redfin bullies and eels. This highlights the need to protect these streams from further habitat degradation and contamination. Instream barriers such as weirs and pipes are a particularly significant threat to native fish as they limit migration between streams and the sea.
- Soil quality testing undertaken on 23 dairy farm sites found the health of the soils to generally be in good condition. However, most sites had at least one soil quality indicator outside the target range, with the primary concern being soil compaction. Excess nutrient levels were also reported at several sites.

5. Communication

A press release will be sent out when we distribute the report card package in early December. The package will be sent to over 500 users of environmental information in the region, including iwi, local and central government decisionmakers, 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.
- 2. Notes the content of the report.

Report prepared by:

Report approved by:

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Attachment 1: The state of our environment annual summary report cards 2008/09