



# Environmental Indicators Quarterly



Welcome to *Environmental Indicators Quarterly*, the Ministry for the Environment's e-newsletter linking you to information on what's happening in the realm of environmental reporting. We hope you find this newsletter useful and informative. We welcome your ideas, feedback and suggestions – please contact us at [environmental.reporting@mfe.govt.nz](mailto:environmental.reporting@mfe.govt.nz).

## National Environmental Reporting Forum

The Ministry for the Environment piloted a National Environmental Reporting Forum on 15 August 2008. The aim of the forum was to build a 'community of interest' in environmental reporting around the country. The forum brought together, for the first time, a variety of agencies involved in national, local and iwi-based environmental monitoring and reporting. The key objective of the forum was to share information on emerging trends in environmental reporting, and identify opportunities for potential collaboration between participating groups. Presentations were given on several reporting initiatives and emerging topics. Topics included the Ministry's [Land-use and Carbon Analysis System \(LUCAS\)](#), Te Rūnanga o Ngāi Tahu's [State of the Takiwā](#) project, the Hauraki Gulf Forum's 2008 [State of the Environment](#) report, Statistics New Zealand's [Sustainable Development](#)

[Project](#), and Waikato's [Indicators for Monitoring and Reporting Community Outcomes](#). Feedback from the forum was very positive. Participants expressed interest in continuing to meet in this way. In response, the Ministry intends to hold a reporting forum every six months, with the next one scheduled for March 2009. For more information contact Rapunzel Mulawin at either [rapunzel.mulawin@mfe.govt.nz](mailto:rapunzel.mulawin@mfe.govt.nz) or on (04) 439 7776.

## Independent review of *Environment New Zealand 2007*

There has been a high level of public interest in the *Environment New Zealand 2007* report, with nearly 10,000 copies of the report or its summary in distribution, and 278,000 hits on the report webpages. The Ministry for the Environment recently commissioned a review to ensure our

### PARTICIPANTS AT THE MINISTRY FOR THE ENVIRONMENT'S RECENT NATIONAL ENVIRONMENTAL REPORTING FORUM



readers' needs have been met by the report. This is particularly important as the Ministry will be producing similar national-scale state of the environment reports every five years. An independent research company conducted the review from May to July 2008, seeking stakeholder feedback on the readability, content and overall usefulness of *Environment New Zealand 2007*. The review consisted of an online survey and two focus group discussions with key stakeholders. Respondents to the online survey comprised a mix of sectors, with the general public representing the biggest group. The focus group discussions consisted of representatives of key stakeholders from central and local government agencies, non-governmental organisations, Crown research institutes and other agencies with an interest in environmental reporting.

The findings of the review are available in a report on the Ministry's website at [http://www.mfe.govt.nz/publications/ser/review-enviroz07\\_report/index.html](http://www.mfe.govt.nz/publications/ser/review-enviroz07_report/index.html). The Ministry's Environmental Reporting team will consider the review's findings as it continues to develop the national environmental reporting programme. In particular, the review will:

- inform the Ministry's work to finalise an environmental reporting framework
- help the Ministry develop a 'blueprint' for the 2012 state of the environment report
- help shape regular updates of the national environmental indicators used in *Environment New Zealand 2007*.

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## Land Use and Carbon Analysis System

The Land Use and Carbon Analysis System – known as the LUCAS programme – is a programme of work to measure and monitor the carbon stocks of New Zealand's forests and soils. This information is required for New Zealand's reporting requirements under the Kyoto Protocol and the United Nations Framework Convention on Climate Change. LUCAS is an important part of the Government's climate change policy package and will help inform our future international climate change negotiations. More specifically, the LUCAS programme will:

- determine any changes in carbon stocks in New Zealand's natural forests and planted forests
- determine changes in soil carbon
- identify changes in land use since 1990 by providing New Zealand-wide satellite maps as at 1990, 2008 and 2012
- determine the extent and location of deforestation by providing satellite maps of New Zealand forests in 2008 and 2012.

The data collected by LUCAS will also deliver a number of wider benefits to central, regional and local government, including improved information on land use, land cover and soils (see right). In addition, LUCAS will undertake New Zealand's first national forest inventory since the 1940s, which will provide important data on biodiversity within indigenous forest

## Sustainable Management Fund open

The Sustainable Management Fund (SMF), administered by the Ministry for the Environment, supports community groups, iwi, businesses and local government to take practical actions that produce long-term environmental benefits. The fund's objectives are to make a positive difference to the environment by supporting projects that:

- support the Ministry's priorities
- encourage proactive partnerships
- promote community action.

The 2009/10 funding round opens in October 2008 (for projects commencing 1 July 2009). The priorities for 2009/10 are:

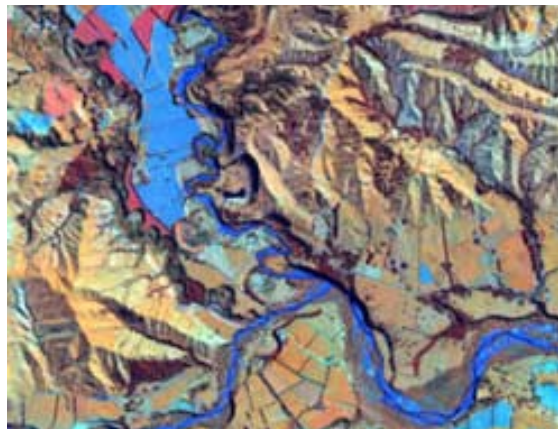
- sustainable land and water management
- meeting the challenges of climate change
- supporting sustainable business practices
- encouraging sustainable households.

Applications from communities who want to develop and implement localised environmental monitoring programmes to assess the health of their land, rivers and streams, or coastal marine areas will be eligible for funding under the 'sustainable land and water management' category. The SMF website [www.smf.govt.nz](http://www.smf.govt.nz) provides information about the fund, including how to apply. If you have questions, please email [funds@mfe.govt.nz](mailto:funds@mfe.govt.nz) or phone (04) 439 7400.

and shrub-lands. The information provided by LUCAS will also contribute significantly to the Ministry's environmental reporting work programme.

LUCAS is a cross-government programme led by the Ministry for the Environment in partnership with the Ministry of Agriculture and Forestry. Several other agencies including the Treasury and the Department of Conservation also provide input. For more information go to <http://www.mfe.govt.nz/issues/climate/lucas/index.html> or contact the LUCAS programme team at [lucas@mfe.govt.nz](mailto:lucas@mfe.govt.nz).

**EXAMPLE OF SPATIAL DATA AVAILABLE UNDER THE LUCAS ALL-OF-GOVERNMENT PURCHASE AGREEMENT. COPYRIGHT: SPOT IMAGE, CNES 2004.**



## Updates of the National Environmental Indicators

*Environment New Zealand 2007* reported on around 115 national data sets. Its primary focus was to report on the 66 national data sets which constitute New Zealand's environmental indicators. The last *Environmental Indicators Quarterly* newsletter reported that the Ministry for the Environment had updated the air quality national environmental indicator for PM<sub>10</sub>. Work has now begun on updates of the following environmental indicators:

- river water quality
- air quality pollutants (other than PM<sub>10</sub>)
- household consumption expenditure
- waste composition
- transport (vehicle kilometres travelled)
- marine protection.

As with earlier indicator work, the indicator updates will analyse and report new data, provide a 'snapshot' of the current state of the resource or pressure, and identify any trends over time. In response to feedback provided

through the independent review of *Environment New Zealand 2007*, the indicator updates will now also include an international comparison and a 'meter' (evaluative grading) where possible. As other national-scale data becomes available, the Ministry's

Environmental Reporting team will start updates of other national environmental indicators. For more information on the indicator updates, please contact Justine Daw on [justine.daw@mfe.govt.nz](mailto:justine.daw@mfe.govt.nz).



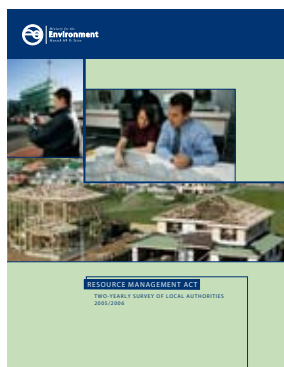
## RMA survey of local authorities

Every two years, local authorities participate in a survey which examines key aspects of the Resource Management Act (RMA). The survey supplies core information about:

- timeframes and costs of resource consent processing
- monitoring and enforcement
- Māori participation in RMA processes
- good practice
- plan changes and variations.

The survey also provides a measure of comparative performance between local authorities.

The Ministry for the Environment has been surveying all New Zealand councils (regional, territorial and unitary) about their RMA processes since 1996. Eight surveys have been conducted in that period. These surveys can be viewed at <http://www.mfe.govt.nz/publications/rma/annual-survey>. The Environmental Reporting team is currently coordinating the ninth (2007/08) survey, and results will be available in 2009. For more information contact Josh Fyfe at either [josh.fyfe@mfe.govt.nz](mailto:josh.fyfe@mfe.govt.nz) or (04) 439 7529.



## Waste composition survey

In 1992, the Ministry for the Environment developed the waste analysis protocol to collect consistent and reliable waste composition data throughout New Zealand. The Ministry updated and renamed the protocol as the **solid waste analysis protocol (SWAP)** in 2002. A SWAP programme then began at four sites across the country – Matamata Transfer Station, and Silverstream, Kaikoura, and Green Island Landfills.

An objective of the SWAP programme is to establish generic waste composition data for New Zealand. The data is also used to support the Ministry's environmental reporting programme – the national environmental indicator for waste reports on both the quantity and composition of solid waste disposed of to landfill.

Quarterly SWAP surveys were carried out over a two-year period at the four sites in 2003/04. The results can be viewed at <http://www.mfe.govt.nz/issues/waste/waste-data/swap-baseline.html>.

In 2007/08, the Ministry's Environmental Reporting team commissioned four more quarterly SWAP surveys at each of these sites. The results of the latest survey will be posted on the Ministry's website in November. For more information contact Brent King at either [brent.king@mfe.govt.nz](mailto:brent.king@mfe.govt.nz) or (04) 439 7549.

## In brief

### National guideline for managing freshwater cyanobacteria

Cyanobacteria – commonly known as blue-green algae – are widespread in New Zealand streams, rivers and lakes. At times, these algae proliferate and grow into toxic blooms that can be harmful to people and animals who come into contact with, or swallow, affected water. Working with local government, the Ministry's Environmental Reporting team recently commissioned the development of a national guideline to help councils and health authorities manage cyanobacteria blooms.

The guideline will provide best practice advice about monitoring cyanobacteria and communicating monitoring results to the general public (for example, it will identify when a public health warning should be triggered). Benefits of the guideline include increased standardisation of monitoring and reporting around the country, more consistent practices in respect of public health warnings, and an increase in information on cyanobacteria. A pilot version of the guideline will be ready for use in early 2009.

### Environmental health indicators

The Ministry of Health is currently preparing the fifth annual report on environmental health indicators for New Zealand. Environmental health indicators summarise the relationship between the environment and human health. The 2008 report will cover three key issues: water quality, air quality and biosecurity, and is due at the end of the year.

This work follows on from the Environmental Health Indicators project which ran from 2001 to 2007. The Ministry of Health commissioned the project to develop and report on a core set of environmental health indicators for New Zealand. The four previous reports were prepared by the Crown research institute Environmental Science & Research (ESR). For more information contact Dr Paul White at [paul\\_white@moh.govt.nz](mailto:paul_white@moh.govt.nz).

### Scion's forestry soil indicators

Crown research institute Scion recently hosted a forest soil monitoring workshop in Rotorua. The workshop was attended by representatives from forestry companies, regional councils, the Ministry of Agriculture and Forestry and the Ministry for the Environment. The workshop aimed to generate wider discussion around the key indicators of soil productivity previously identified by Scion. Workshop participants also discussed stakeholders' soil monitoring requirements. Group discussions identified a need for indicators to be applicable across a range of land uses and scales to enable their widespread use by key stakeholders. Those who attended the workshop also agreed that any future monitoring programme

must have a well defined purpose, and be statistically robust, easily applicable and affordable. Scion plans to host additional workshops in the future. The workshops will help to maintain the dialogue between research providers and stakeholders around forestry soil indicators, and explore the potential of establishing a national soil quality monitoring network. For more information contact Peter Clinton at [peter.clinton@scionresearch.com](mailto:peter.clinton@scionresearch.com).

### The role of research, science and technology in national state of the environment reporting

The Ministry's Environmental Reporting team recently carried out an assessment of how the research, science and technology sector can contribute to strengthened national state of the environment (SoE) reporting. The report identifies several impediments to high-quality, national SoE reporting including:

- a lack of national coverage in some key data sets
- a lack of national comparability among some key data sets
- barriers to national data storage
- issues relating to ownership and ongoing maintenance of national environmental tools, data sets and databases.

The report recommends ways the research, science and technology sector could help address these impediments. It also explores links between national SoE reporting and research, science and technology policy and funding. For more information contact Brent King at either [brent.king@mfe.govt.nz](mailto:brent.king@mfe.govt.nz) or (04) 439 7549.

### Cultural indicators for New Zealand

Work is underway on a second national report on cultural indicators. The Ministry of Culture and Heritage is producing the report under the Cultural Statistics Programme. The programme was established in 1993 to improve the range and quality of statistical information about the cultural sector. The first national report, [Cultural Indicators for New Zealand](#) was published in 2006, and covered five themes: engagement, cultural identity, diversity, social cohesion and economic development. The upcoming report is due for release in June 2009. In addition to updating existing indicators, it will provide data for several indicators which were previously not able to be reported, including:

- heritage protection
- access to arts, culture and heritage activities and events
- perceptions of the role of arts, culture and heritage
- cultural participation by ethnic minorities.

For more information contact Ed Siddle at [edward.siddle@mch.govt.nz](mailto:edward.siddle@mch.govt.nz).