



# Environmental Indicators Quarterly



Welcome to the first issue of *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 [ENZ07@mfe.govt.nz](mailto:ENZ07@mfe.govt.nz).

## Environment New Zealand 2007 launch

New Zealand's second national state of the environment (SoE) report, *Environment New Zealand 2007*, was launched on 31 January. The launch was well attended by a range of stakeholders from local and central government, NGOs, industry, iwi, community and research institutes. *Environment New Zealand 2007* uses a set of national environmental indicators to present information on key aspects of the New Zealand environment and track how these have changed over time. The report has played an important role in establishing regular national-scale reporting on the state of New Zealand's environment, including five-yearly SoE reports. In part, its value is in setting a benchmark against which environmental outcomes can be monitored over time. You can read or

download *Environment New Zealand 2007* and its summary report at [www.mfe.govt.nz/state/reporting/enz-07.html](http://www.mfe.govt.nz/state/reporting/enz-07.html). This web page also has links to other related resources, including a set of 10 fact sheets – one for each environmental domain covered in *Environment New Zealand 2007* (see page 4).



## What's next?

The Ministry's Environmental Reporting Team has been busy working on a number of activities since the release of *Environment New Zealand 2007* including:

- developing an environmental reporting framework to guide national-level state of the environment (SoE) reporting
- planning for the regular (in many cases, annual) updates of the core set of national environmental indicators (see page 2)
- strengthening data-sharing arrangements with our reporting partners
- reviewing *Environment New Zealand 2007* to assess whether it meets end-user needs (see below)
- developing a blueprint for the production of the third national-level SoE report.

## End-user review

The Ministry for the Environment recently undertook a review of *Environment New Zealand 2007*. The review, conducted by an independent research company, sought stakeholder feedback on the readability, content and overall usefulness of the report. This feedback will contribute to the Ministry's ongoing environmental reporting work programme, in particular the regular updates of the core set of national environmental indicators and in the preparation of the third national-level state of the environment report scheduled for release in 2012. The review consisted of focus group discussions with representatives from CRIs, various NGOs, and central and local government agencies, together with an online survey through which other readers provided valuable feedback. The review will be made available on the Ministry's website shortly.

## A refresher! The core set of national environmental indicators

The table (right) lists the core set of national environmental indicators used in *Environment New Zealand 2007*. Around 65 different aspects of the environment will be measured regularly (in many cases, annually) to report against these indicators. In selecting its core indicators, the Ministry drew on OECD and European Environment Agency criteria for indicator selection. This included what national-level data and information was available in New Zealand, whether the indicator allowed for international comparison, whether the data set was statistically sound, how easy the indicator was to understand, and how relevant the indicator information is to New Zealand environmental managers and policy-makers.

## OECD and regional SoE reporting

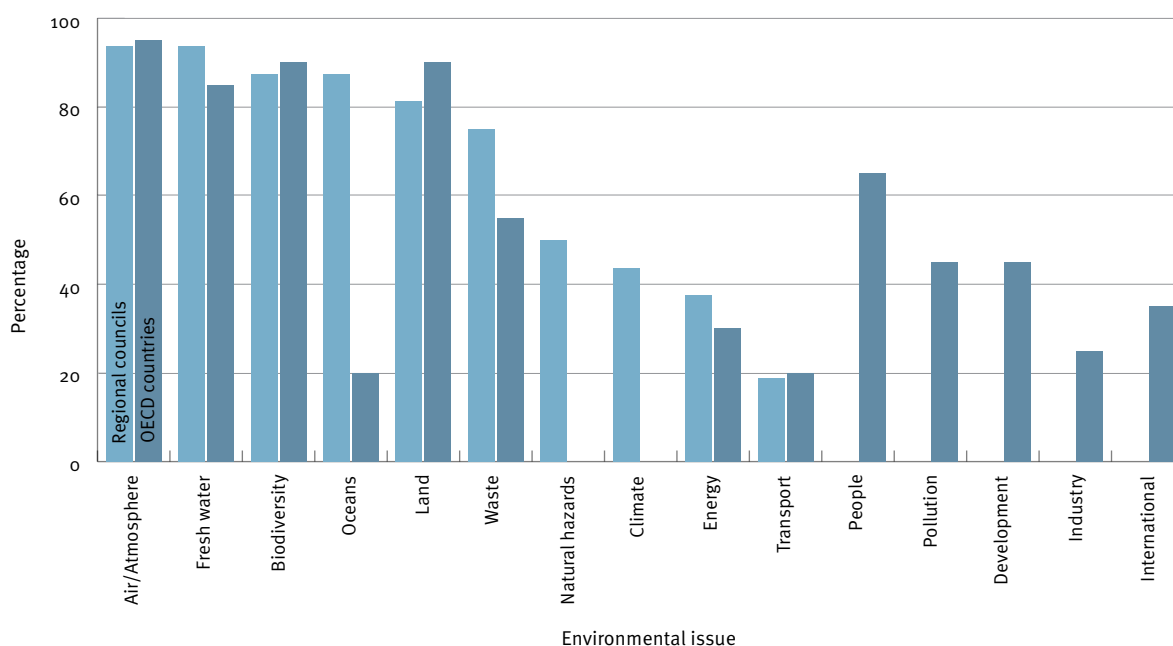
The Environmental Reporting Team recently completed desktop reviews of state of the environment (SoE) reporting by OECD member countries and by regional councils and unitary authorities across New Zealand. The two reviews will help guide the Ministry's environmental reporting programme in future, including the third national-scale SoE report scheduled for publication in 2012. Like New Zealand, most OECD countries use the 'pressure-state-response' framework or some modification of it for their SoE reporting. Overall, the environmental domains used by OECD countries (such as atmosphere and fresh water) align well with those used in *Environment New Zealand 2007*. In some instances, the domains reported reflect issues of particular relevance to individual OECD countries (for example, New Zealand reports on oceans, reflecting our maritime geography, while land-locked European countries do not). In the same way as New Zealand does, the majority of OECD countries report against a

**CORE SET OF NATIONAL ENVIRONMENTAL INDICATORS AND THE RELEVANT ENVIRONMENT NEW ZEALAND 2007 CHAPTER**

NATIONAL ENVIRONMENTAL INDICATOR	RELEVANT CHAPTER
Household consumption	Household consumption
Vehicle kilometres travelled (VKT) by road	Transport
Energy supply and consumption	Energy
Solid waste disposed of to landfill	Waste
Air quality in managed airsheds	Air
Emissions and removals of greenhouse gases	Atmosphere
Stratospheric ozone levels	Atmosphere
Land cover	Land
Land use	Land
Soil health	Land
Soil intactness of erosion-prone hill country	Land
Water quality in rivers, lakes and groundwater aquifers	Freshwater
Freshwater demand	Freshwater
Fish stocks under the quota management system	Oceans
Seabed trawling in deep waters	Oceans
Water quality at coastal swimming spots	Oceans
Marine areas with legal protection	Oceans
Land area with native vegetation, including area under legal protection	Biodiversity
Distribution of selected native plants and animals	Biodiversity

specific set of environmental indicators. The regional review showed that over two-thirds of councils use some form of the 'pressure-state-response' framework in their reporting. Reflecting a trend toward electronic publishing, a quarter of regional councils now use web-based environmental reporting as their primary means of reporting. The graph below shows OECD and regional council SoE reporting by environmental issue.

**HIGH LEVEL ENVIRONMENTAL ISSUES REPORTED ON BY OECD COUNTRIES AND REGIONAL COUNCILS**



## Website mania

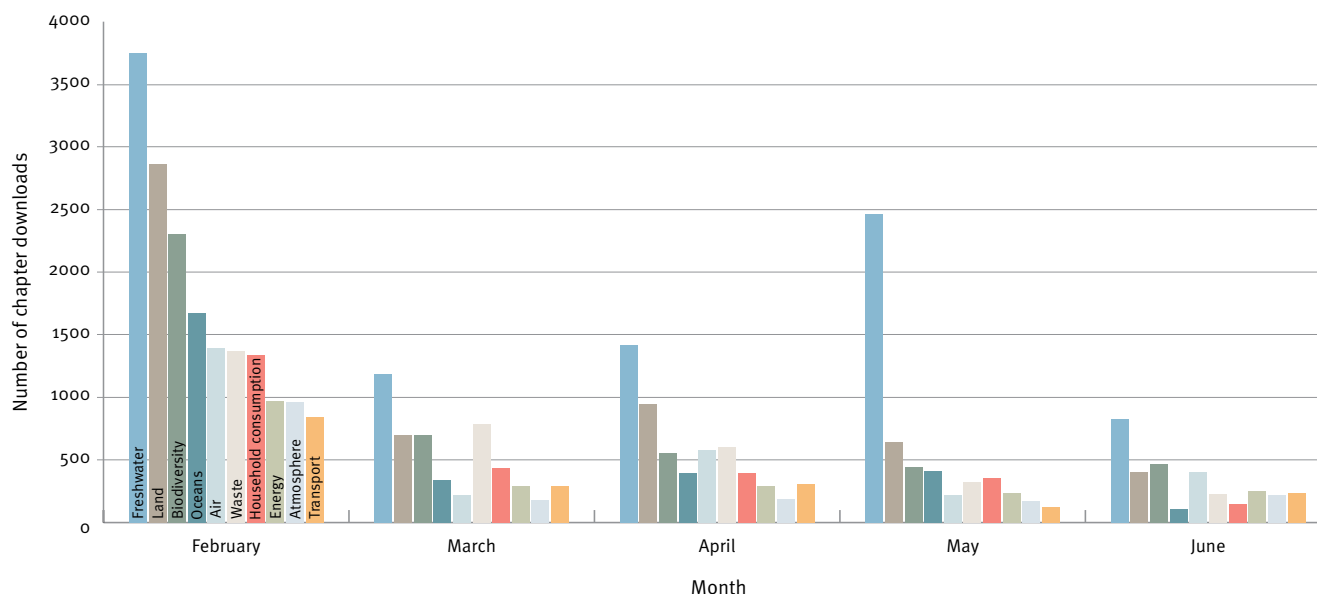
Interest in *Environment New Zealand 2007* has been huge – so much so that the report was reprinted within a month of its release. The Ministry’s website has been swamped with a whopping 212,004 hits on the report web pages between February and June! The report was the top download from the website over this period.

Overall, the Freshwater chapter has been the most popular chapter to be downloaded, with Land and Biodiversity taking the number 2 and number 3 slots respectively. In fact, the Freshwater chapter has consistently been the most popular chapter to be downloaded every month (see the graph below). The table (right) reveals the ‘top ten’ countdown by chapter and is a fascinating insight into the environmental reporting topics that Kiwis are most interested in.

**THE TOP 10 ENVIRONMENT NEW ZEALAND 2007 CHAPTERS DOWNLOADED, FEBRUARY–JUNE 2008**

	CHAPTER
1	Freshwater (26%)
2	Land (15%)
3	Biodiversity (12%)
4	Waste (9%)
5	Oceans (8%)
6	Air (8%)
7	Household consumption (7%)
8	Energy (5%)
9	Transport (5%)
10	Atmosphere (5%)

**DOWNLOADS OF ENVIRONMENT NEW ZEALAND 2007 CHAPTERS, FEBRUARY–JUNE 2008**



## Going green gets gold – Pride in Print award for *Environment New Zealand 2007*

*Environment New Zealand 2007* has won a second national award (also see page 4) for using best practice environmental printing processes. Wellington print company Printlink entered the report into the environmental section of the annual Pride in Print awards held in May. The awards recognise and promote the achievement of excellence within the New Zealand printing industry.

Todd Kriebel, Ministry General Manager Reporting and Communications, says the award is an achievement that sets the standard for green publishing. “The Ministry produces a considerable number of reports and informational material every year. We make deliberate choices whether to print hard copies or upload reports onto the web, what paper and ink to use, which print company to contract, and how to encourage smart design and lay out.”

Peter Ward, General Manager of Printlink, says the company is delighted that the Ministry’s publication has received such recognition. “The Ministry insisted that we showed a clear and precise plan to produce this job with minimal impact on the environment.”

Key elements of the plan included the use of 100 per cent chlorine-free recycled paper and vegetable-based inks. All printing plates, chemicals and waste paper were recycled.

“We believe the end result reflects the commitment of both Printlink and the Ministry to achieve an excellent ‘sustainable printing’ outcome without diminishing the quality of the final product,” Mr Ward says.

## Briefs

### OECD visit

Kevin Parris of the OECD's Trade and Agriculture Directorate was recently in New Zealand to talk about agri-environmental indicators. He also presented some findings from the OECD's new report *Environmental Performance of Agriculture in OECD Countries since 1990*. The report, released on 16 June, looks at the environmental performance of agriculture across the 30 OECD countries in terms of themes (eg, soil, water, air, biodiversity) and trends. You can download the New Zealand chapter at [www.oecd.org/dataoecd/13/23/40804999.pdf](http://www.oecd.org/dataoecd/13/23/40804999.pdf).

### Conflict in Paradise: The transformation of rural New Zealand

The Environmental Defence Society (EDS) recently held its annual conference *Conflict in Paradise: The Transformation of Rural New Zealand* in Auckland on 11–12 June. The purpose of the conference was to identify changes likely to occur in New Zealand's rural sector over the next 25 years, based on current trends, and to discuss how these changes can be managed to achieve positive environmental, social and economic outcomes.

Todd Kriebel, the Ministry's General Manager of Reporting and Communications delivered a presentation on the state of the rural environment and national reporting, drawing on the findings from *Environment New Zealand 2007*. Conference papers are available at [www.edsconference.com/conference\\_papers.cfm](http://www.edsconference.com/conference_papers.cfm).

### National GIS award

The Ministry for the Environment won a national award for *Environment New Zealand 2007*. The geospatial maps in the report won the 'Benefits of GIS' competition at New Zealand's main national conference for GIS professionals in November 2007. Entries were judged on how organisations have harnessed GIS technology to advantage.



## What's new

### Want to know more?

The Ministry has recently released a set of 10 fact sheets – one for each environmental domain covered in *Environment New Zealand 2007*. Each fact sheet provides a summary of findings from the report and also offers simple steps for living more sustainably. The fact sheets are available at [www.mfe.govt.nz/publications/ser/enz07-info-sheets-juno8/index.html](http://www.mfe.govt.nz/publications/ser/enz07-info-sheets-juno8/index.html). Alternatively, if you would like a hard copy, please email us at [publications@mfe.govt.nz](mailto:publications@mfe.govt.nz).

**LAND**

**Did you know?**

- New Zealand's land is valued for its scenic, recreational, historical, and cultural significance.
- Land cover in New Zealand has changed over recent years. Between 1987 and 2002, the total area in pasture has decreased slightly and exotic forest cover increased by about 20 per cent.
- Urban sprawl, while beneficial in some ways, has increased the amount of land used for agriculture. Urban expansion can often result in highly productive, fertile soils being covered by artificial surfaces.
- About 12 per cent of New Zealand's pasture is severely eroded. In recent years, there was a reduction in erosion on erodible pasture hill country with over 20,000 hectares conserved to exotic forests or left to revert to scrub.
- Agricultural land use has intensified. The area of land in pasture has increased, leading to increased fertiliser and water use, and greenhouse gas emissions. This report finds that the growth by 24 per cent since 1990.
- Soils under intensive and agricultural land are generally in poorer condition than soils under other land uses, with higher levels of compaction, nitrogen and phosphate, and lower levels of organic matter.

**What can you do?**

- Visit [www.landcare.org.nz](http://www.landcare.org.nz) to understand local environmental issues.
- Planting trees improves carbon atmosphere. There are an estimated 100 million trees in New Zealand. Planting more trees can help improve the soil and atmosphere.
- Use the use of pesticides to improve pasture health. Pesticides, use fertiliser or spray to improve pasture health in your local garden centre for no more than \$10.
- Plant off-season and use the soil moisture. Planting native trees and shrubs can improve soil moisture, reduce erosion, and improve water quality.

**BIODIVERSITY**

**Did you know?**

- New Zealand's native biodiversity is unique. We have a high percentage of endemic species (those found nowhere else in the world).
- With an estimated 80,000 species of native animals, plants, and fungi, New Zealand makes an important contribution to global biodiversity.
- About 40 per cent of New Zealand's land area is covered by native vegetation, most of which is in hill country and alpine areas. Between 1997 and 2002, an estimated 18,000 hectares of native forest cover has been lost or changed as a result of natural processes.
- Internationally, a high proportion (22 per cent) of New Zealand is protected for conservation purposes. Both the area of conservation land and the area under pest management have increased over the last decade.
- Some introduced native species (the lesser short-tailed bat, kaka, kākā, mōiua, whio, and black-billed gull) have all decreased in range since the 1970s, probably due to past activity rather than habitat loss.

**What can you do?**

- Attract native birds to your community – visit [www.doc.govt.nz](http://www.doc.govt.nz) for tips on what trees and shrubs to plant in your garden to attract native birds and other native species.
- Plant and weed problems? Visit [www.landcare.org.nz](http://www.landcare.org.nz) to help identify a control-oriented pest on your land and help protect our precious native biodiversity.
- Many native birds are killed each year by cats and dogs. Help protect native wildlife by putting a ball on your cat's collar and walking your dog on a leash.
- Pollution can be harmful to wildlife – leave out your footprints behind!
- Best owner? Before entering a new lake or to remove all weeds, fish or be careful, and use your best effort to avoid introducing any weeds, fish or be careful into the waterway. Visit [www.landcare.org.nz](http://www.landcare.org.nz) for more information on stopping the spread of pest species.

### National air quality data updated

The Ministry's annual reporting on national air quality data is now available at [www.mfe.govt.nz/state/reporting/air/nes/index.html](http://www.mfe.govt.nz/state/reporting/air/nes/index.html). Providing information on national air quality in 2007, this reporting represents the first of many updates on the indicator information presented in *Environment New Zealand 2007*. The link provides the location of airsheds around New Zealand and reports an annual summary of air quality information for PM<sub>10</sub> particulates, drawing on data provided by regional councils and unitary authorities. In future years, the Ministry expects to also report on other air pollutants (eg, carbon monoxide, nitrogen dioxide, ozone and sulphur dioxide). For more information, contact Rapunzel Mulawin at either [rapunzel.mulawin@mfe.govt.nz](mailto:rapunzel.mulawin@mfe.govt.nz) or on (04) 439 7776.

### Environmental Reporting Forum

The Ministry will soon be hosting a pilot Environmental Reporting Forum. The aim of the forum is to bring together for the first time a range of groups that undertake state of the environment (SoE) monitoring and reporting. These groups can update each other on the many different strands of SoE reporting underway at national, regional and local levels, and share best-practice. The pilot forum will be held in mid-August. For more information on the forum, contact Rapunzel Mulawin at either [rapunzel.mulawin@mfe.govt.nz](mailto:rapunzel.mulawin@mfe.govt.nz) or on (04) 439 7776.