

# Fresh water in New Zealand

## *Reforms, accounting & sustainability*



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### Overview

*New Zealand is approaching some water resource limits, which can be seen in areas with deteriorating water quality, water demand outstripping supply, and constrained economic opportunities. We are in a period of opportunity to develop a better system and outcomes; we risk squandering New Zealand's natural advantages if the situation does not change<sup>i</sup>.*

A range of reforms are underway to establish a fairer and more efficient freshwater management system in New Zealand. Similarly, various initiatives are underway globally, nationally, regionally and locally to address water challenges for sustainability, including some that draw upon accounting practice and impact upon clients. We will present an overview of reforms underway in New Zealand, and give examples of some water initiatives leading to a discussion of the challenges and opportunities for accounting and the accounting profession in relation to sustainability of water.

### Further information

- **Freshwater reforms**

#### Resource Management Act

Information on the Resource Management Act and current reforms can be found at the Ministry for the Environment website<sup>ii</sup> or the Quality Planning website<sup>iii</sup> that gives an overview of the amendments.

#### Local Government Act

Details of the proposed amendments can be found at the websites of the NZ Parliament<sup>iv</sup> and Making Auckland Greater<sup>v</sup>.

#### New Start for Fresh Water

On 8 June 2009, the Government announced a new direction for freshwater management in New Zealand. For details of the New Start for Fresh Water Cabinet Paper and Work Programme see the Ministry for the Environment's Freshwater webpages<sup>vi</sup> and the website of the Land and Water Forum<sup>vii</sup> for background information on the collaborative process that is due to report to Ministers at the end of July 2010.

## Canterbury Water Management Strategy

The Canterbury Water Management Strategic Framework was published in November 2009 after years of work involving regional and local government, stakeholders and communities to address Canterbury's water challenges. Information about the development of the strategy and its implementation can be found at Canterbury Water ([www.canterburywater.org.nz](http://www.canterburywater.org.nz))

- **Accounting & Water**

### Water footprint

The water footprint<sup>viii</sup> is an indicator of water use (direct and indirect) of a consumer or producer. The water footprint of an individual, community or business is defined as the total volume of fresh water that is used to produce the goods and services consumed by the individual or community or produced by the business. The Water Footprint Network<sup>ix</sup> is a non-profit foundation with partners from the University of Twente, UNESCO-IHE, World Business Council for Sustainable Development, World Wildlife Foundation International, and Delft University of Technology.

Water footprinting is similar to work on virtual water (the total amount of water used in the production of products) that was discussed by the Royal Society of New Zealand in an emerging issues paper<sup>x</sup> published in 2009 that outlined some of the difficulties in measuring virtual water and implications for New Zealand.

The ACCA held an event in London in March 2009 'Water: The Next Carbon?'<sup>xi</sup>, which discussed the water footprint, why water is a business issue, and the range of actions available for business including engaging with government on water policy.

### Disclosure

The Carbon Disclosure Project<sup>xii</sup> is an independent not-for-profit organisation that holds the largest database on corporate climate change information in the world, gathered on behalf of institutional investors, purchasing organisations and government bodies. CDP aims to collect and distribute high quality information that motivates investors, corporates and governments to take action to prevent dangerous climate change.

The methodologies and practices developed in the CDP will be applied to water in 2010 with the launch of the Water Disclosure Project<sup>xiii</sup> to inform decision-making for sustainable water management. This year around 300 of the world's largest companies who are exposed to water-related risks or undertake water-intensive activities will be sent an information request for details on water management and governance, analysis of commercial risks and opportunities, and water accounting (withdrawals, discharges, and water intensity).

### Risk management

In 2007, the Water & Finance Workstream<sup>xiv</sup> of the UNEP FI<sup>xv</sup> network produced generic guidelines<sup>xvi</sup> for the management of water-related risks and opportunities. This has been followed by the first of *Water Materiality Briefings*<sup>xvii</sup> which aim to

- Give an overview of water sustainability issues specifically linked to corporate agricultural operations with reference to geographies of Australia, Brazil, India, South Africa and the Mediterranean Basin
- Provide a framework for water-related indicators to assess strategic and operational aspects of water performance in the agribusiness industry
- Raise awareness on the complex topic including issues of water availability, efficiency, water quality and social and environment implications of corporate water use

#### The Australian National Water Initiative: Water Accounting

The National Water Initiative (NWI) is Australia's blueprint for water reform. The NWI represents a shared commitment to increase efficiency of water use for greater certainty for investment and productivity for rural and urban communities, and for the environment. Under the NWI there is a commitment to introduce registers of water rights and standards for water accounting<sup>xviii</sup>, which meets the information needs of different water systems in respect to monitoring, trading, environmental management and on-farm management.

The National Water Accounting Model is under development and is based on an approach similar to that of financial accounting. The National Water Account<sup>xix</sup> will be published by the Bureau of Meteorology from December 2010 to provide information on water rights, water availability and water use. Production of the National Water Account is accompanied by creation of a Water Accounting Standards Board<sup>xx</sup> and the development of standards and reporting practice.

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<sup>i</sup> Office of the Minister for the Environment, Office of the Minister of Agriculture (2009) Cabinet Paper: New Start for Fresh Water. Page 1

<sup>ii</sup> Ministry for the Environment RMA reviews and amendments

<http://www.mfe.govt.nz/rma/central/amendments/>

<sup>iii</sup> Quality Planning Guidance notes updated for the Resource Management Amendment Act 2009

<http://www.qualityplanning.org.nz/rmaa-updated-notes.php>

<sup>iv</sup> NZ Parliament [http://www.parliament.nz/en-NZ/PB/Legislation/Bills/f/8/3/00DBHOH\\_BILL9872\\_1-Local-Government-Act-2002-Amendment-Bill.htm](http://www.parliament.nz/en-NZ/PB/Legislation/Bills/f/8/3/00DBHOH_BILL9872_1-Local-Government-Act-2002-Amendment-Bill.htm)

<sup>v</sup> Making Auckland Greater [http://www.auckland.govt.nz/web/cms\\_rcauckland.nsf](http://www.auckland.govt.nz/web/cms_rcauckland.nsf)

<sup>vi</sup> Ministry for the Environment <http://www.mfe.govt.nz/issues/water/freshwater/new-start-fresh-water.html>

<sup>vii</sup> Land and Water Forum <http://www.landandwater.org.nz>

<sup>viii</sup> For details of the methodology of the Water Footprint see Hoekstra et al. (2009) Water Footprint Manual: State of the Art 2009 <http://www.waterfootprint.org/downloads/WaterFootprintManual2009.pdf>

<sup>ix</sup> Details of the Water Footprint Network can be found at <http://www.waterfootprint.org>

<sup>x</sup> Royal Society of New Zealand (2009) Virtual Water: Emerging Issues

[http://www.royalsociety.org.nz/Site/news/virtual\\_water\\_paper.aspx](http://www.royalsociety.org.nz/Site/news/virtual_water_paper.aspx)

<sup>xi</sup> ACCA (2009) Discussion Paper: Water – The Next Carbon

<http://www.accaglobal.com/documents/WaterFootprinting.pdf>

<sup>xii</sup> Carbon Disclosure Project <https://www.cdproject.net/en-US/Pages/HomePage.aspx>

<sup>xiii</sup> See CDP Water Disclosure Project <https://www.cdproject.net/en-US/Programmes/Pages/cdp-water-disclosure.aspx> and CDP (2009) CDP Water Disclosure: The Case for Water Disclosure

[https://www.cdproject.net/en-US/Programmes/Documents/CDP\\_Water\\_Disclosure\\_PDF.pdf](https://www.cdproject.net/en-US/Programmes/Documents/CDP_Water_Disclosure_PDF.pdf)

<sup>xiv</sup> UNEP FI Water & Finance Workstream [http://www.unepfi.org/work\\_streams/water/index.html](http://www.unepfi.org/work_streams/water/index.html)

<sup>xv</sup> UNEP FI is a partnership between the United Nations Environment Programme and financial institutions.

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<sup>xvi</sup> UNEP FI (2007) Half full or half empty? A set of indicative guidelines for water-related risks and overview of emerging opportunities for financial institutions

[http://www.unepfi.org/fileadmin/documents/half\\_full\\_half\\_empty.pdf](http://www.unepfi.org/fileadmin/documents/half_full_half_empty.pdf)

<sup>xvii</sup> UNEP FI (2009) Chief Liquidity Series: Water-related materiality briefings for financial institutions:

Agribusiness. Issue 1. October 2009. [http://www.unepfi.org/fileadmin/documents/chief\\_liquidity1\\_01.pdf](http://www.unepfi.org/fileadmin/documents/chief_liquidity1_01.pdf)

<sup>xviii</sup> For further information on Water Accounting see the webpages of the National Water Commission

<http://www.nwc.gov.au/www/html/243-water-accounting.asp?intSiteID=1>

<sup>xix</sup> Bureau of Meteorology (2009) Accounting for Australia's Water Information Sheet 8

[http://www.bom.gov.au/water/about/publications/document/InfoSheet\\_8.pdf](http://www.bom.gov.au/water/about/publications/document/InfoSheet_8.pdf)

<sup>xx</sup> Bureau of Meteorology Water Accounting Standards Board

<http://www.bom.gov.au/water/standards/aboutWASB.shtml>