

## EIANZ Environment Update: Apr 2011

## Issue 4

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Our special topic for this issue is [Urban planning for sustainable, resilient cities](#), which is particularly relevant after recent events in Christchurch. Note also the articles on natural hazards and disaster response in the Environmental Practice section.



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## Special topic: Urban planning for sustainable, resilient cities

**Towards a new science of cities.** Batty, Michael. *Building Research & Information*; Jan/Feb 2010, Vol. 38 (1), p.123-126

The article reviews the book "World Cities and Urban Form: Fragmented, Polycentric, Sustainable," edited by Mike Jenks, Daniel Kozak and Pattarannan Takkanon.

**Code: Env 04/01**

**Resilience and the city: The water sector.** W. A. H. Hamilton. *Urban Design and Planning*; Sept 2009, Vol. 162 (3), p.109-121

**Code: Env 04/02**

**Engineering the sustainable city: A social or technical problem?** Vallance, Suzanne et al. *Planning Quarterly (NZ Planning Institute)*; Dec 2009 (175), p.4-9

A report on ideas that have emerged from recent research into the ways New Zealand urban management professionals have conceptualised the idea of urban sustainability.

**Code: Env 04/03**

**Relocalising disaster risk reduction for urban resilience.** I. Kelman. *Urban Design and Planning*; Dec 2008, Vol. 161 (4), p.197-204

**Code: Env 04/04**

**The need for baseline data characteristics for GIS-based disaster management systems.** Laefer, Debra F. et al. *Journal of Urban Planning & Development*; Sep 2006, Vol. 132 (3), p.115-119

The article discusses the need for baseline data characteristics for geographic information system-based disaster management systems. By embracing the four key characteristics of comprehensiveness, accuracy, timeliness, and accessibility for baseline data collection, an infrastructure management information systems can completely accommodate the vast range of information necessary to address the multiphase nature of disaster management and to provide capabilities to store, analyze, query, and visualize critical disaster information throughout many organizations.

**Code: Env 04/05**

**A changing climate for urban design: An examination of the New Zealand regulatory approach.** Irvine, Jessica. *New Zealand Journal of Environmental Law*; 2008 (12), p.277-313

**Code: Env 04/06**

**Typologies and basic descriptors of New Zealand residential urban forms.** Ghosh, Sumita; Vale, Robert. *Journal of Urban Design*; Nov 2009, Vol. 14 (4), p.507-536  
**Code: Env 04/07**

**The social sustainability of medium density housing: A conceptual model and Christchurch case study.** Ancell, Sarah; Thompson-Fawcett, Michelle. *Housing Studies*; May 2008, Vol. 23 (3), p.423-442  
**Code: Env 04/08**

**Green zones in the future of urban planning.** Gómez, F. et al. *Journal of Urban Planning & Development*; Jun 2004, Vol. 130 (2), p.94-100  
This work analyzes certain influences of climatological variables on the city, as well as the main interactions between green spaces and the environmental parameters that form the urban environment. Several comfort indices were used in different parts of the eight districts most representative of the urban complex. The formulation of these indices was statistically correlated with the green zone areas, in order to find out the surface area of these areas that the city should have in order for this to be considered theoretically comfortable. The scenario for the study was in all cases the city of Valencia, Spain, taken as a prototype of the Mediterranean city.  
**Code: Env 04/09**

**Regional development and regional innovation policy in New Zealand: Issues and tensions in a small remote country.** Nischalke, Tobias; Schöllmann, Andrea. *European Planning Studies*; Jun 2005, Vol. 13 (4), p.559-579  
**Code: Env 04/10**

**Evaluating urban downtown one-way to two-way street conversion using multiple resolution simulation and assignment approach.** Chiu, Yi-Chang et al. *Journal of Urban Planning & Development*; Dec 2007, Vol. 133 (4), p.222-232  
**Code: Env 04/11**

**Towards liveable cities: Progress in the European Union urban environmental agenda.** Zuidema, Christian; De Roo, Gert. *European Planning Studies*; Sep 2009, Vol. 17 (9), p.1405-1419  
**Code: Env 04/12**

**Sustainable urban community development from the grassroots: Challenges and opportunities in a pedestrian street initiative.** Newman, Lenore et al. *Local Environment*; Mar 2008, Vol. 13 (2), p.129-139  
**Code: Env 04/13**

**Briefing: User-perspectives on walkable neighbourhoods.** Fahmida Khandokar et al. *Urban Design and Planning*; Dec 2009, Vol. 162 (4), p.155-158  
**Code: Env 04/14**

**ROTI method: Evaluation of the state of the built environment in Finland.** Saari, Arto J. et al. *Journal of Urban Planning & Development*; Jun 2009, Vol. 135 (2), p.86-89  
Long-term planning, efficient allocation of resources, and awareness of the future challenges of a society require comprehensive information about the state of the built environment. The objective of this study was to develop an evaluation process for assessing the state and development of the built environment in a country. The evaluation process was called "ROTI" and it was tested in 2006 by evaluation of the state of Finland's built environment. The evaluation work was done in four areas: Buildings, Traffic Networks, Water, Waste and Environment, and Future. The evaluation report model proved to be an effective tool to communicate with politicians and other decision makers as well as with the media. The results indicated that the ROTI expert panel working is an efficient method of assessing the state of the built environment.  
**Code: Env 04/15**

**Neighbourhoods and health: A review of the New Zealand literature.** Stevenson, Anna et al. *New Zealand Geographer*; 01/12/2009, Vol. 65 (3), p.211-221  
**Code: Env 04/16**

**Urban planning and sustainable development.** Næss, Petter. *European Planning Studies*; Jun 2001, Vol. 9 (4), p.503-524  
Following the discourse about sustainable development based on the Brundtland Commission's report and the processes in the UN Committee on Environment and Development, a sustainable urban development would require considerably more ambitious policies than today in order to limit energy consumption, reduce pollution and protect natural areas and arable land. Re-use of urban areas and more effective utilization of building sites is a possible strategy to this end. However, continuous growth in the building stock will make it increasingly difficult to bring urban development in wealthy countries within the frames of what is ecologically sustainable and equitable in a global perspective. Planning for a sustainable urban development must be oriented towards long-term goals and utilize knowledge about the environmental consequences of different solutions, but should not be based solely on means-ends rationality. Rather than aiming at consensus including all stakeholder groups, planning for sustainability should facilitate alliance-building among those population groups who can support the basic equity and environmental values of a sustainable development.  
**Code: Env 04/17**

**What now for urban regeneration?** R. Granger. *Urban Design and Planning*; March 2010, Vol. 163 (1), p.9-16  
**Code: Env 04/18**

**Will the real smart city please stand up?** Hollands, Robert G. *City*; Dec 2008, Vol. 12 (3), p.303-320

Debates about the future of urban development in many Western countries have been increasingly influenced by discussions of smart cities. Yet despite numerous examples of this 'urban labelling' phenomenon, we know surprisingly little about so-called smart cities, particularly in terms of what the label ideologically reveals as well as hides. Due to its lack of definitional precision, not to mention an underlying self-congratulatory tendency, the main thrust of this article is to provide a preliminary critical polemic against some of the more rhetorical aspects of smart cities. The primary focus is on the labelling process adopted by some designated smart cities, with a view to problematizing a range of elements that supposedly characterize this new urban form, as well as question some of the underlying assumptions/contradictions hidden within the concept. To aid this critique, the article explores to what extent labelled smart cities can be understood as a high-tech variation of the 'entrepreneurial city', as well as speculates on some general principles which would make them more progressive and inclusive.

**Code: Env 04/19**

**Longer view: Planning for the rebuilding of New Orleans.** Olshansky, Robert B. et al. *Journal of the American Planning Association*; Summer 2008, Vol. 74 (3), p.273-287

**Code: Env 04/20**

**Collapse and reconstruction: Housing recovery policy in Kobe after the Hanshin Great Earthquake.** Hirayama, Yosuke. *Housing Studies*; Jan 2000, Vol. 15 (1), p.111-128

**Code: Env 04/21**

**The Kobe Earthquake, ten years later.** Robert Olchansky et al. *Planning*; Oct 2005, Vol. 71 (9), p.36 (1p.)

**Code: Env 04/22**

**Sustainability uptake on housing in metropolitan Australia: An institutional problem, not a technological one.** Crabtree, L.; Hes, D. *Housing Studies*; Mar 2009, Vol. 24 (2), p.203-224

**Code: Env 04/23**

**Potential direct effects on biosecurity from subdivision development activities.** Koshy, Liza. *Planning Quarterly (New Zealand Planning Institute)*; 01/03/2006 (160), p.18-21

**Code: Env 04/24**

**Connections between humans, cities and the environment.** Heslop, Viv. *Impact Assessment & Project Appraisal*; Sep 2010, Vol. 28 (3), p.254-255

A review of the book "Environment and the City," by Peter Roberts et al.

**Code: Env 04/25**

**A discussion for the profession.** Schofield, Robert. *Planning Quarterly (New Zealand Planning Institute)*; 01/09/2007 (166), p.12-16

An article on planning trends and challenges in New Zealand. Topics covered include: managing projects of national significance; sustainability in urban design; community engagement; the Resource Management Act (RMA).

**Code: Env 04/26**

## Conservation and restoration

**Modeling harvest intensity of Sooty Shearwater chicks by Rakiura Māori in New Zealand.** Mckechnie, Sam et al. *Journal of Wildlife Management*; May 2010, Vol. 74 (4), p.828-842

**Code: Env 04/27**

**Nature unbound. Conservation, capitalism and the future of protected areas – By D. Brockington, R. Duffy and J. Igoe.** Pawson, Eric. *New Zealand Geographer*; 01/12/2009, Vol. 65 (3), p.235-236

A review of the book "Nature Unbound. Conservation, Capitalism and the Future of Protected Areas," by D. Brockington, R. Duffy and J. Igoe.

**Code: Env 04/28**

**Threatened and uncommon plants of New Zealand (2008 revision).** De Lange, P. J. et al. *New Zealand Journal of Botany*; Mar 2009, Vol. 47 (1), p.61-96

A reappraisal of the conservation status of the indigenous New Zealand vascular plant flora is presented using the 2008 version of the threat classification system developed for the New Zealand Department of Conservation. The list comprises 897 taxa (38% of New Zealand's total indigenous vascular flora) in the following categories: Extinct--6 taxa, Threatened--180 taxa (comprising 91 Nationally Critical taxa, 45 Nationally endangered, and 44 Nationally Vulnerable), At Risk--651 taxa (comprising 83 Declining, 6 Recovering, 20 Relict, and 542 Naturally Uncommon taxa), 25 taxa listed as either Vagrant (12) or Coloniser (13), and 35 as Data Deficient. a further 171 plants are listed as taxonomically indeterminate, being those which might warrant further conservation attention once their taxonomic status is clarified. Forty-four recognised taxa and 26 plants rated as taxonomically indeterminate, and previously considered to be threatened and/or uncommon, are removed from this updated listing. A brief analysis of the patterns of rarity exhibited by the listed taxa is presented. Overall, the conservation status of the New Zealand indigenous vascular plant flora is worsening, with 7.6% of this flora now regarded as threatened with extinction. A concordance of plants names from the 2004 listing is provided.

**Code: Env 04/29**

**Ecological restoration in New Zealand – current trends and future challenges.** Norton, David A. *Ecological Management & Restoration*; Aug 2009, Vol. 10 (2), p.76-77

**Code: Env 04/30**

**Managing cultural values in sustainable tourism: Conflicts in protected areas.** Zeppel, Heather. *Tourism & Hospitality Research*; Apr 2010, Vol. 10 (2), p.93-104

**Code: Env 04/31**

**Age- and sex-specific survival estimates incorporating tag loss for New Zealand sea lions, *Phocarctos hookeri*.** Chilvers, B. Louise; Mackenzie, Darryl I. *Journal of Mammalogy*; Jun 2010, Vol. 91 (3), p.758-767

**Code: Env 04/32**

## Biodiversity

**Bryozoan biodiversity in the New Zealand region and implications for marine conservation.** A. A. Rowden et al. *Biodiversity & Conservation*; Dec 2004, Vol. 13 (14), p.2695-2721

**Code: Env 04/33**

**Exchanging emissions for biodiversity: In pursuit of an integrated solution in New Zealand.** Carswell, Fiona et al. *Ecological Management & Restoration*; Aug 2003, Vol. 4 (2), p.85-93

**Code: Env 04/34**

**Patterns in the diversity and distribution of epiphytes and vines in a New Zealand forest.** Burns, K. C.; Dawson, John. *Austral Ecology*; Dec 2005, Vol. 30 (8), p.891-899

**Code: Env 04/35**

**A new mechanism for science-policy transfer and biodiversity governance?** Jorge M. Soberon; Jose K. Sarukhan. *Environmental Conservation*; Dec 2009, Vol. 36 (4), p.265-267

New initiatives are being proposed to create knowledge-transfer mechanisms between biodiversity science and so-called 'decision makers' that are apparently ignoring some of the significant differences to which biodiversity governance is subject at different scales. Shifting scales seriously change the rules of knowledge transfer; some implications of this are explored. Appropriate scope and focus are vital for international initiatives. There is no substitute for the full development of local capacities, and the multinational lending agencies interested in the conservation of biodiversity, the achievement of the Millennium Development Goals, and others should support such national efforts and establish regional training facilities to help generate the human and basic institutional capacities needed.

**Code: Env 04/36**

**Estimating and conserving patterns of invertebrate diversity: a test case of New Zealand land snails.** Overton, Jacob M. et al. *Diversity & Distributions*; Sep 2009, Vol. 15 (5), p.731-741

**Code: Env 04/37**

**Predicting the future of species diversity: Macroecological theory, climate change, and direct tests of alternative forecasting methods.** Algar, Adam C. et al. *Ecography*; Feb 2009, Vol. 32 (1), p.22-33  
**Code: Env 04/38**

## Public environmental reporting and sustainability reporting

**Making carbon reduction a strategic priority.** Metcalfe, David. *Environmental Finance*; Confronting climate risk: Business, investment and the Carbon Disclosure Project Oct 2010, p.S20-S21  
David Metcalfe considers the drivers behind the climate change issue.  
**Code: Env 04/39**

**From sustainable management to sustainable development: A longitudinal analysis of a leading New Zealand environmental reporter.** Tregidga, Helen; Milne, Markus J. *Business Strategy & the Environment*; Jul/Aug 2006, Vol. 15 (4), p.219-241  
The environmental reports of Auckland-based water utility Watercare Services Ltd are examined in detail.  
**Code: Env 04/40**

**Inter-linking issues and dimensions in sustainability reporting.** Rodrigo Lozano; Don Huisingh. *Journal of Cleaner Production*; Vol. 19, (2-3), Jan-Feb 2011, p.99-107  
**Code: Env 04/41**

**The achievability of sustainable reporting practices in agriculture.** Williams, Belinda R.; Wilmshurst, Trevor. *Corporate Social Responsibility & Environmental Management*; May/Jun 2009, Vol. 16 (3), p.155-166  
**Code: Env 04/42**

## Public participation in environmental decision making

**Is there anything like a citizen? A descriptive analysis of instituting a citizen's role to represent social values at the municipal level.** Soma, Katrine; Vatn, Arild. *Environmental Policy & Governance*; Jan/Feb 2010, Vol. 20 (1), p.30-43  
**Code: Env 04/43**

**Public participation in green urban policy: Two strategies compared.** Mabelis, A. A.; Maksymiuk, G. *International Journal of Biodiversity Science & Management*; Jun 2009, Vol. 5 (2), p.63-75  
**Code: Env 04/44**

**Making place: Identity construction and community formation through “sense of place” in Westland, New Zealand.** Sampson, K. A.; Goodrich, C. G. *Society & Natural Resources*; Nov/Dec 2009, Vol. 22 (10), p.901-915

How do “community” and the attributes of landscape and setting shape personal identity and the way in which individuals develop an attachment to place? An exploration of the relationship between these ideas within two New Zealand West Coast rural communities revealed the need for a more inclusive conceptual understanding of “sense of place.” By drawing upon the seemingly mutually exclusive scholarly contributions of both social constructionists and environmental reductionists, we make a case for the inclusion of both approaches within the understanding of localized identity and its relationship with place. We argue that communities carry with them a specificity that binds them to particular locales, while locales provide a set of parameters, or boundaries, to the possibilities of what can be symbolically drawn upon. In this way identity is still culturally reproduced (constructed) but it draws upon particularized attributes within particularized landscapes.

**Code: Env 04/45**

**Public participation in local government review of development proposals in hazardous locations: Does it matter, and what do local government planners have to do with it?** Stevens, M. et al. *Environmental Management*; Feb 2010, Vol. 45 (2), p.320-335

**Code: Env 04/46**

**Modeling boundaries of concern among conflicting stakeholders.** Metcalf, Sara. *Leadership & Management in Engineering*; Oct 2008, Vol. 8 (4), p.255-262

When public and private stakeholders gather to address a shared concern, they implicitly or explicitly bound the problem in geographic space. Implicit bounding involves identifying the problem and then considering the spatial ramifications. Explicit bounding may be invoked by governing agencies of a metropolitan region. These implicit or explicit boundaries of concern are evident in recent discourse about the post-Katrina impact on communities in the New Orleans area. Analysis of such discourse reveals differences of understanding that result from individual experience as well as social influences. Individual affiliations with social institutions such as nonprofits, local governments, industry, and agriculture implicitly shape the boundaries of concern for shared land and water resources allocated in regional infrastructure decisions.

**Code: Env 04/47**

**Matauranga Maori.** Kamo, A. *Planning Quarterly (New Zealand Planning Institute)*; Jun 2010 (177), p.16-18

Planners need to engage with Maori to ensure their cultural heritage aspirations are taken into account. This statement is likely to elicit brow sweats and headaches, weary cynicism or indifference; it immediately conjures up images of long and contentious meetings, multiple and conflicting iwi perspectives, and litigation.

**Code: Env 04/48**

**Siting major public facilities: Facts, values, and accountability.** Trousdale, William; Nelms, Cheryl. *Journal of Urban Planning & Development*; Dec 2009, Vol. 135 (4), p.159-165

**Code: Env 04/49**

## Sustainability

**Modelling the dissipation kinetics of six commonly used pesticides in two contrasting soils of New Zealand.** Sarmah, A.; Close, M. *Journal of Environmental Science & Health, Part B -- Pesticides, Food Contaminants, & Agricultural Wastes*; Aug 2009, Vol. 44 (6), p.507-517  
**Code: Env 04/50**

**Adsorption of the herbicide terbuthylazine across a range of New Zealand forestry soils.** Watt, Michael S. et al. *Canadian Journal of Forest Research*; Jul 2010, Vol. 40 (7), p.1448-1457  
**Code: Env 04/51**

**Exploring the 'city-bush divide': What do urban people really think of farmers and rural land management?** Witt, G. B. et al. *Australasian Journal of Environmental Management\**; Sep 2009, Vol. 16 (3), p.168-180

Many developed economies have highly urbanised populations. As environmental concern in the general population has increased, farmers have found themselves at the centre of competing demands in relation to the resources and land they manage or own. Australian farmers are concerned that urban people are unsympathetic and see them as 'environmental vandals'. These perceived negative views of farmers are part of a wider division variously described as an 'urban - rural' or 'city - bush' divide. However, there is no empirical evidence to support, or define the nature of a divide, if it does exist in relation to urban people's views of farmers' environmental performance. This study found little evidence of a city - bush divide in relation to urban views of farmers and rural land management. Although diverse views are held of farmers and rural land management, there is a reasonable level of trust in, and empathy with, farmers. Nevertheless, rural land management is of high concern for urban people and they consider the environment to be in poor condition. We identified five groups of people, with only one group that could be considered sceptical of farmers' land management performance. The results highlight the difficulties in developing appropriate rural land management policies that balance legitimate societal concerns for environmental condition and public versus private benefits and costs, while not adversely affecting the many farmers whom the majority of urban people feel act responsibly. The data suggest uncertainty in the urban community as to whether government is effectively achieving this balance.

*\*This journal is published by EIANZ*

**Code: Env 04/52**

**The Middle Path: Avoiding Environmental Catastrophe.** Minato, W. *Australasian Journal of Environmental Management\**; Sep 2009, Vol. 16 (3), p.184-186

A review of the book "The Middle Path: Avoiding Environmental Catastrophe," by Eric Lambin.

*\*This journal is published by EIANZ*

**Code: Env 04/53**

**Appropriate drainage systems for a changing climate.** M. G. Faram et al. *Institution of Civil Engineers: Proceedings: Engineering Sustainability*; Vol. 163 (2), June 2010, p.107-116

**Code: Env 04/54**

**Toward defining the concept of environmental crime on the basis of sustainability.** Ali Mohamed Al-Damkhi et al. *Environmental Practice*; Jun 2009, Vol. 11 (2), p.115-124  
**Code: Env 04/55**

**Towards a sustainability criteria and indicators framework for legacy mine land.** Rhys Worrall et al. *Journal of Cleaner Production*; Vol. 17 (16), Nov 2009, p.1426-1434  
**Code: Env 04/56**

**Ecology, distribution, and identity in the world politics of environmental skepticism.** Jacques, Peter. *Capitalism, Nature, Socialism*; Sep 2008, Vol. 19 (3), p.8-28  
The article discusses the ideological basis for environmental skepticism. The usage of anti-scientific environmental skepticism by conservative groups seeking to promote a capitalist agenda is discussed. The abandonment of distributive justice by such groups is described, mentioning that environmental skepticism maintains the status quo of manipulating the natural resources of the global South in such a way as to preserve the economic hegemony of the global North. The lack of recognition for the impact of environmental degradation upon the citizens of the global South is also discussed, noting a solipsistic tendency to see environmentally-unsound capitalism as the dominant way of life.  
**Code: Env 04/57**

The special topic in the Nov 2010 EIANZ Environment Update was Resource Management in New Zealand. If you missed it you can view it here:  
<http://www.energylibrary.org.nz/documents/EnvironmentUpdateThree2010.pdf>

## Water

**Using the WATYIELD water balance model to predict catchment water yields and low flows.** Fahey, B. et al. (2010) *Journal of Hydrology New Zealand*; 49 (1), p.35-58  
**Code: Env 04/58**

**Delineation of a landfill leachate plume and flow channels in coastal sands near Christchurch, New Zealand, using a shallow electromagnetic survey method.** David C. Nobes et al. *Hydrogeology Journal*; Jun 2000, Vol. 8 (3), p.328-336  
The landfill referred to here is the Burwood landfill, in Bottle Lake Forest, Christchurch. Note that the landfill closed in 2005 but after the destructive earthquake on February 22<sup>nd</sup> 2011 it was decided that it would form part of the new Burwood Resource Recovery Park. This facility is being used to sort, process and recycle the building rubble created by the earthquake.  
**Code: Env 04/59**

**A novel cellular automata based approach to storm sewer design.** Guo, Y. et al. *Engineering Optimization*; Apr 2007, Vol. 39 (3), p.345-364  
**Code: Env 04/60**

**Integrated storm-water management for watershed sustainability.** Pitt, Robert; Clark, Shirley E. *Journal of Irrigation & Drainage Engineering*; Sep 2008, Vol. 134 (5), p.548-555  
**Code: Env 04/61**

**Under the lawn: Engaging the water cycle.** Moran, Sharon. *Ethics, Place & Environment*; Jun 2008, Vol. 11 (2), p.129-145

This paper explores how several water technologies mediate people's relationship with nature in the domestic sphere. While septic systems are critical to the built environment in exurban North America, they remain largely unacknowledged. Their hidden participation in the backyards of private homes silently facilitates—yet outwardly denies—people's continued engagement in the water cycle. Now, a growing array of alternative practices (e.g. composting toilets and greywater systems) are being embraced by individuals choosing to intervene in their local ecology in an active manner. This study shows how the domestic realm can be a site of imaginative engagement and shifting consciousness, and moreover, serve as a catalyst in society's transition toward a meaningful sustainability.

**Code: Env 04/62**

**Using multi-criteria decision analysis to assess the vulnerability of drinking water utilities.** Florent Joerin et al. *Environmental Monitoring and Assessment*; Jul 2010, Vol. 166 (1-4), p.313-330

**Code: Env 04/63**

**Water Management in 2020 and Beyond.** Rao, Bhanoji. *International Journal of Water Resources Development*; Dec 2009, Vol. 25 (4), p.681-684

A review of the book "Water Management in 2020 and Beyond," edited by Asit K. Biswas, Cecilia Tortajada, and Rafael Izquierdo.

**Code: Env 04/64**

**Algal and invertebrate bioindicators detect sewage effluent along the coast of Titahi Bay, Wellington, New Zealand.** Dudley, Bruce D.; Shima, Jeffrey S. *New Zealand Journal of Marine & Freshwater Research*; 01/03/2010, Vol. 44 (1), p.39-51

**Code: Env 04/65**

**Briefing: Proactive risk management of urban water supply systems.** Maria da Conceição Cunha. *Urban Design and Planning*; Mar 2009, Vol. 162 (1), p.3-6

**Code: Env 04/66**

**Role of decentralised systems in the transition of urban water systems.** Ashok Sharma et al. *Water Science & Technology: Water Supply*; 2010, Vol. 10 (4), p.577-583

The authors explain why it may be time for conventional centralised water, wastewater and stormwater systems to be transitioned to fully or partially decentralised systems. They also discuss some of the challenges that may be encountered along the way.

**Code: Env 04/67**

**Adoption of stream fencing among dairy farmers in four New Zealand catchments.**

Bewsell, Denise et al. *Environmental Management*; Aug 2007, Vol. 40 (2), p.201-209

**Code: Env 04/68**

## Climate change

**The climate change regime: Efficiency, compliance and enforcement.** Ceri Warnock, Ailsa. *New Zealand Journal of Environmental Law*; 2004, Vol. 8, p.99-135

This article provides an overview of the efficacy of the climate change regime. In particular, the author considers whether states party to the United Nations Framework Convention on Climate Change and its Kyoto Protocol have, thus far, achieved the aim of addressing emissions of greenhouse gases. The compliance mechanisms contained within the Convention and the Protocol are examined and an assessment made as to whether such instruments are in fact likely to promote the efficacy of the scheme. Consideration is also given to some of the general barriers hindering substantive compliance with the goal of the Protocol. Finally, the successes of the regime as a whole, at this juncture, are acknowledged.

**Code: Env 04/69**

**Climate Change. The Science, Impacts and Solutions, 2nd edition.** Buckley, Ralf. *Austral Ecology*; Nov 2009, Vol. 34 (7), p.835-836

A review of the book "Climate Change. The Science, Impacts and Solutions," 2nd edition, by B. Pittock.

**Code: Env 04/70**

**Fair and effective multilateralism in the post-Copenhagen climate negotiations.**

Winkler, Harald; Beaumont, Judy. *Climate Policy*; 2010, Vol. 10 (6), p.638-654

**Code: Env 04/71**

**Climate, collective action and individual ethical obligations.** Hourdequin, Marion. *Environmental Values*; Nov 2010, Vol. 19 (4), p.443-464

**Code: Env 04/72**

**Emission intensity in New Zealand manufacturing and the short-run impacts of emissions pricing.** M. Bartleet et al. *Energy Policy*; Vol. 38 (12), Dec 2010, p.7756-7763

**Code: Env 04/73**

**Should agriculture be included in an emissions trading system? The evolving case study of the Australian Emissions Trading Scheme.** Maraseni, Tek Narayan. *International Journal of Environmental Studies*; Dec 2009, Vol. 66 (6), p.689-704  
**Code: Env 04/74**

## Energy

**The return to renewables: Will it help in global warming control?** T. Abbasi et al. *Renewable and Sustainable Energy Reviews*; Vol. 15 (1), Jan 2011, p.891-894  
**Code: Env 04/75**

**On developing a prospecting tool for wind industry and policy decision support.** Charles McKeown et al. *Energy Policy*; Vol. 39 (2), Feb 2011, p.905-915  
This paper presents the rudiments of a Wind Prospecting Tool designed to inform private and public decision makers involved in wind industry development in reducing transaction costs associated with identifying areas of mutual focus within a state. The multiple layer decision support framework has proven to be valuable to industry, state government and local decision makers. Information on wind resources, land availability, potential land costs, potential NIMBYism concerns and economic development potential were integrated to develop a framework for decision support. The paper also highlights implications for decision support research and the role of higher education in providing anticipatory science to enhance private and public choices in economic development.  
**Code: Env 04/76**

**Efficient energy management of a large-scale water supply system.** P. Bounds et al. *Civil Engineering & Environmental Systems*; Sep 2006, Vol. 23 (3), p.209-220  
**Code: Env 04/77**

**Beyond the Horizon: Making way for offshore resource management in New Zealand.** Knight, Peter. *New Zealand Surveyor*; 01/12/2010 (300), p.25-32  
**Code: Env 04/78**

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## Environmental management systems

**Implementing environmental with other standardized management systems: Scope, sequence, time and integration.** S. Karapetrovic; M. Casadesús. *Journal of Cleaner Production*; Vol. 17 (5), March 2009, p.533-540

The aim of this article is to analyze how the implementation of the environmental management system (EMS) in accordance with the ISO 14001: 2004 standard has been carried out in organizations having more than one standardized Management System (MSs). In particular, four implementation aspects will be discussed, namely the different management system standards (MSSs) used for registration, for example ISO 14001, ISO 9001, OHSAS 18001, ISO 27001 and SA 8000, the order in which they were implemented, the time required for each implementation, as well as the scope of integration of these MSSs into a single Integrated Management System (IMS). [Abstract shortened]

**Code: Env 04/79**

**Pollution prevention using the EMS toolbox: A bicultural training case study.** Kraus, J. L. et al. *Environmental Quality Management*; Autumn 2005, Vol. 15 (1), p.53-59

**Code: Env 04/80**

**SBC-MEDIU: A multi-expert system for environmental diagnosis.** Oprea, M.; Dunea, D. *Environmental Engineering & Management Journal (EEMJ)*; Feb 2010, Vol. 9 (2), p.205-213

**Code: Env 04/81**

**Integration of life cycle assessment in the environmental information system.** J. H. Eun et al. *The International Journal of Life Cycle Assessment*; Jun 2009, Vol. 14 (4), p.364-373

**Code: Env 04/82**

**Why do standardized ISO 14001 environmental management systems lead to heterogeneous environmental outcomes?** Yin, Haitao; Schmeidler, Peter J. *Business Strategy & the Environment*; Nov 2009, Vol. 18 (7), p.469-486

**Code: Env 04/83**

## Environmental practice

**Adaptive environmental management: A practitioner's guide.** Painter, Brett. *Australasian Journal of Environmental Management\**; Jun 2010, Vol. 17 (2), p.127-128

A review of the book, "Adaptive Environmental Management: A Practitioner's Guide," edited by Catherine Allan and George H. Stankey.

\*This journal is published by EIANZ

**Code: Env 04/84**

**Ethics, science and environment: The need for a new environmental worldview.**

Tsekos, Christos A.; Matthopoulos, Demetrios P. *International Journal of Environmental Studies*; Dec 2009, Vol. 66 (6), p.679-687

On the question whether Science and Technology are under the surveillance of ethics, the answer is that scientists are responsible for the use of scientific achievements. Science, as a section of Culture, has been developed to assist human beings and has the moral obligation of improving the quality of life. As far as Environment is concerned, the initial harmonic relationship between man and Environment has been seriously disturbed during recent decades. The uncontrolled advancement of Technology and mankind's dominant behaviour over Nature, have created serious ecological problems. Unless these problems will be controlled, they may produce irreversible adverse trends which may even jeopardise earth's capacity. In order to achieve viable development and harmonious coexistence between humanity and Nature, mankind has to form a new relationship with the environment. The Christian Orthodox tradition provides the foundations of an Orthodox Environmental Ethic, which will provide sufficient teleological and religious reasons for environmental protection.

**Code: Env 04/85**

**Monitoring: A means to better ends.** Richard Dunbar. *Planning Quarterly (NZ Planning Institute)*; 01/12/2010 (179), p.9-13

A well designed monitoring programme for integrated land use transport projects could greatly enhance outcomes.

**Code: Env 04/86**

**Benefitting from differences in knowledge, practice and belief: Māori oral traditions and natural hazards science.** D. N. King; J. R. Goff. *Natural Hazards & Earth System Sciences*; 2010, Vol. 10 (9), p.1927-1940

**Code: Env 04/87**

**Quantifying the geomorphic impacts of a lake-breakout lahar, Mount Ruapehu, New Zealand.** Procter, Jonathan et al. *Geology*; Jan 2010, Vol. 38 (1), p.67-70

**Code: Env 04/88**

**Building assessment during disaster response and recovery.** F. Peña-Mora et al. *Urban Design and Planning*; Dec 2008, Vol. 161 (4), p.183-195

**Code: Env 04/89**

**Motivating online publication of data.** Costello, Mark J. *Bioscience*; May 2009, Vol. 59 (5), p.418-427

The author explains the importance of encouraging scientists to make environmental and biodiversity-related data available online. He outlines ways of improving online data publication systems.

**Code: Env 04/90**

**Guiding ideas: Key skills to lead environmental professionals.** Ron Deverman. *Environmental Practice*; Sep 2006, Vol. 8 (3), p.156-158

Are young professionals prepared to lead us in solving the environmental challenges of the twenty-first century, such as disaster recovery or global deforestation? Have they learned the basic skills it takes to communicate and work together with different people and cultures? Do they have the inner passion and mindset to be of service to the earth and their community rather than acting in self interest? The nation's universities have responded well in the last decade to become the young professional's preparatory launch pad for lifelong learning. Yet, after they leave school and enter the variety of environmental fields, are their jobs vital?

**Code: Env 04/91**

**Informal knowledge processes: The underpinning for sustainability outcomes in EIA?**

Alan J. Bond et al. *Journal of Cleaner Production*, Vol. 18 (1), Jan 2010, p.6-13

Environmental Impact Assessment (EIA) was originally tailored for restructuring rules and values regarding environmental protection, through interdisciplinary work. EIA has developed as a tool for decision-making for the implementation of projects which potentially pose significant environmental impacts. This paper reviews the sustainability and interdisciplinarity assumptions inherent in EIA. It illustrates through a case study of a proposed landfill extension in Rio Grande do Sul, Brazil, that these principles can arise more from informal knowledge processes than from legal ones. It can be shown that interdisciplinarity is often misunderstood as multidisciplinarity or simple knowledge clustering, and sustainability has no common definition amongst EIA practitioners, but that there predominates an understanding which delivers weak sustainability, driven primarily by social and economic goals. The conclusion is that EIA cannot achieve the original vision set out in the world's first legislation adopted in 1970 unless a learning-organization approach is taken whereby: the critical role of informal knowledge is recognized; informal knowledge is properly managed by EIA teams to engender a common understanding of sustainable development goals; interdisciplinary and transdisciplinary working practices are adopted.

**Code: Env 04/92**

## Environmental education and communication

**Baudrillard and our destiny with the natural world: Fatal strategies for environmental communication.** Cramer, Janet M.; Foss, Karen A. *Environmental Communication*; Nov 2009, Vol. 3 (3), p.298-316

Drawing on the writings of Jean Baudrillard, the purpose of this essay is to suggest a set of communication practices that promote a different way of thinking about the earth-human relationship. Baudrillard's "fatal strategies" are developed into concepts of intersubjectivity, seduction, and sorcery, which when used in conjunction with more traditional, logical rhetorical appeals, can produce powerful appeals for environmental change. To illustrate, we explore how these strategies are used in two exemplars of environmental discourse: Rachel Carson's *Silent Spring* and Al Gore's documentary, *An Inconvenient Truth*.

**Code: Env 04/93**

**Overcoming silos: The role of an interdisciplinary course in shaping a sustainability network.** Kurland, Nancy B. et al. *Academy of Management Learning & Education*; Sep 2010, Vol. 9 (3), p.457-476  
**Code: Env 04/94**

**Community ecology and capacity: Keys to progressing the environmental communication of wicked problems.** Caron, Rosemary M.; Serrell, Nancy. *Applied Environmental Education & Communication*; Jul 2009, p.195-203  
Wicked problems are multifactorial in nature and possess no clear resolution due to numerous community stakeholder involvement. We demonstrate childhood lead poisoning as a wicked problem and illustrate how understanding a community's ecology can build community capacity to affect local environmental management by (1) forming an academic-community partnership and (2) developing a place-specific strategy grounded in the cultural-experiential model of risk. We propose that practitioners need to consider a community's ecology and social context of risk as it pertains to wicked problems. These factors will determine how a diverse community interprets and responds to environmental communication and capacity-building efforts.  
**Code: Env 04/95**

**A review of "The Handbook of Sustainability Literacy: Skills for a Changing World".** Prall, Holly. *Journal of Environmental Education*; 2010, Vol. 41 (4), p.250-251  
A review of the book "The Handbook of Sustainability Literacy: Skills for a Changing World," edited by Arran Stibbe.  
**Code: Env 04/96**

**"Save the crabs, then eat 'em": A culinary approach to saving the Chesapeake Bay.** Landers, Judy et al. *Social Marketing Quarterly*; Spring 2006, Vol. 12 (1), p.15-28  
The Academy for Educational Development, a non-profit organization specializing in social change communications, implemented a campaign to reduce nutrient pollution flowing into the Chesapeake Bay from the greater Washington D.C. area. Funded by the Chesapeake Bay Program, the primary campaign goal was to convince area residents not to fertilize their lawns in the spring, when fertilizer runoff is most damaging to the Bay, but to do so in the fall, if at all. For the 16% of residents who hire a lawn service, the goal was to convince them to hire a Bay-friendly partner lawn service. To overcome message fatigue from previous Bay-oriented campaigns and motivate this urban audience with a meaningful connection to the Bay, the campaign message was framed not as an environmental appeal, but as a way to ensure the continued availability of Chesapeake Bay seafood. Television, newspaper, and out-of home ads ran for a seven-week period during March and April 2005. In spite of a small budget, a post-intervention survey showed increased awareness of lawn care behaviors that contribute to Bay pollution, and decreased intent to fertilize in the spring.  
**Code: Env 04/97**

**Misperceptions of global climate change: Information policies.** Erling Moxnes; Ali Kerem SAYSSEL. *Climatic Change*; Mar 2009, Vol. 93 (1-2), p.15-37  
**Code: Env 04/98**

**Ethical decision making in environmental communication.** Valenti, JoAnn Myer. *Journal of Mass Media Ethics*; 1998, Vol. 13 (4), p.219-231  
**Code: Env 04/99**

**Recapturing the corporate environmental management research agenda.** Ulhøi, J. P.; Madsen, H. *Business Strategy & the Environment*; Feb 2009, Vol. 18 (2), p.79-82  
**Code: Env 04/100**

## Business / Management

**The collaborative organization: How to make employee networks really work.** Cross, Rob et al. *MIT Sloan Management Review*; Fall 2010, Vol. 52 (1), p.83-90  
The traditional methods for driving operational excellence in global organizations are not enough. The most effective organizations make smart use of employee networks to reduce costs, improve efficiency and spur innovation.  
**Code: Env 04/101**

**An Executive's Primer on the Strategy of Social Networks.** Zell, Deone; Kurland, Nancy. *Academy of Management Learning & Education*; Sep 2010, Vol. 9 (3), p.563-565  
A review of the book "An Executive's Primer on the Strategy of Social Networks," by Mason Carpenter.  
**Code: Env 04/102**

**Proactive coaching for employee development and improved business results.** Bourg, J. et al. *Total Quality Management & Business Excellence*; Oct 2010, Vol. 21 (10), p.1005-1016  
**Code: Env 04/103**

**How to keep your best people.** MacGregor, Teresa; Wood, Paul. *Employment Today*; Sep/Oct 2009 (141), p.28-30  
**Code: Env 04/104**

**Environmental services industry profile: Global.** Mar 2010.  
A 38-page report by business information company Datamonitor. Sections include: Market overview; Market value; Market segmentation; Competitive landscape; Leading companies in the industry; Market forecasts; Demographics; Further reading  
**Code: Env 04/105**

**Mitigating climate change – how do corporate strategies differ?** Weinhofer, Georg; Hoffmann, Volker H. *Business Strategy & the Environment*; Feb 2010, Vol. 19 (2), p.77-89  
**Code: Env 04/106**

**Just leadership: Creating a values-driven community.** Zigarmi, Drea. *Leader to Leader*; Winter 2008, Vol. 2008 (47), p.33-38

**Code: Env 04/107**

**The implementation of socially responsible purchasing.** Leire, C.; Mont, O. *Corporate Social Responsibility & Environmental Management*; Jan/Feb 2010, Vol. 17 (1), p.27-39

**Code: Env 04/108**

**The role of environmental management in consumers' preferences for corporate social responsibility.** Araña, J. E.; León, C. J. *Environmental & Resource Economics*; Dec 2009, Vol. 44 (4), p.495-506

**Code: Env 04/109**

**The importance of regular ethical exercise.** Garrett, Michael. *Leadership & Management in Engineering*; Jan 2010, Vol. 10 (1), p.49-51

**Code: Env 04/110**

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