IN THIS ISSUE:

Community, Resilience and **Recovery: Building or Burning Bridges?** By Suzanne Vallance

Marine Protection in the Ross Sea By Kelly Fisher

Community Collaboration at the Flax-roots as a Means to Progress By Shane Orchard

**Identification of Surf Breaks of National Significance** By Bailey Peryman

# Lincoln Planning Review





New Zealand's specialist land-based university

Lincoln Planning Review is prepared by Lincoln University students with staff assistance and the views expressed in this publication are those of the individual writers. While Lincoln University may or may not agree with the views expressed, the University is proud to support the work being done by LPR to raise, discuss and debate important planning issues.

# Lincoln Planning Review

Volume 3, Issue 1

September 2011

<b>Table of Contents</b>		Lincoln Planning
Editorial	3	Review ISSN 1175-0987
Editorial Bailey Peryman	3	Lincoln Planning Review is the journal of the Lincoln University Planning Association (LUPA) and is an online publication produced
Peer Reviewed Articles		twice each year and primarily edited by students. It is also a Land
Community, Resilience and Recovery: Building or Burning Bridges?	4	Environment and People Research Centre outreach publication and operates through the Environmental Management and Planning Research
Community collaboration at the flax-roots as a means to progress Shane Orchard	8	Theme.  The ambitious vision is "to be the
Articles		pre-eminent source of information on planning issues, research and education in and affecting the Cen- tral and upper South Island".
Marine Protection in the Ross SeaKelly Fisher	12	Contact LPR:
Identification of Surf Breaks of National Significance Bailey Peryman	15	Editor
What's at the end of the line for Akaroa wastewater – infertile fish?	21	LPR c/o NRE Building PO Box 84
Book Review - Cities on the shore: the urban littoral frontierNick Williams	24	Lincoln University Lincoln 7647 Canterbury New Zealand
Opinion Pieces		www.leap.ac.nz
Responsible Research	25	Email: LPR@lincoln.ac.nz
Case Affirms Test For UntenantabilityPaul Calder	26	Please put 'LPR' in the subject line
Christchurch – 2025	26	©LEaP, Lincoln University, New Zealand 2010.
		LUPA on Facebook
Outreach		Subscribe to LPR If you would like to be notified
PlacesHamish Rennie	28	when a new issue of LPR is available please email LPR@lincoln. ac.nz with 'subscribe' in the subject
Questions asked to Mahaanui Kurataiao Ltd Fiona Oliphant & Andrea Lobb	29	line.
Lincoln University News		This information may be copied or reproduced electronically and distributed to others without restric- tion, provided LEaP, Lincoln University is acknowledged as the
Staff Profiles	32	source of information. Under no circumstances may a charge be made
2011 NZPI Awards	33	for this information without the express permission of LEaP, Lincoln
Where are they now?	34	University, New Zealand.
LUPA (Lincoln University Planning Association) UpdateHolly Gardiner	35	Front cover: Ali Memon

#### **Other Matters**

2010 New Zealand Aquaculture Conference	36
Upcoming Events	37
Primary Supporters	39

#### **EDITORIAL BOARD**

Lincoln Planning Review Volume 3, Issue 1, September 2011

#### **EDITOR-IN-CHIEF:**

Hamish Rennie

#### **EDITORIAL TEAM:**

#### Co-convenors:

Bailey Peryman Kelly Fisher

#### **Content:**

Mark Burgess - Operational Editor Kevyn Miller David Birch

Michelle Ruske Michelle Marquet

Sarah Edwards Kelly Fisher

Alyce Melrose Bailey Peryman

Jess Bould Felicity Boyd Robert Love Theo Stewart Suzanne Vallance Shaun Coffey

#### **Production:**

Ike Kleynbos - Operational Editor, Graphics

#### Post production:

Ruth Markham-Short - operational editor

### PERMANENT EDITORIAL ADVISORY BOARD:

Ali Memon Clare Piper Hirini Matunga

**Disclaimer:** Due to the temporary nature of website locations, any hyperlinks can not be guaranteed to work beyond the release date of each issue.

# Matters of proportion, proximity, power and professionalism

The Canterbury Earthquakes have given cause to reflect on the concept of scale. The September Earthquake on the Greendale Fault was 7.1 on the Richter Scale. I was in the North Island and largely unaffected apart from disrupted return travel plans. Viewed from afar, with the fluorescently jacketed Mayor dominating our TV screen, the message was that this was a devastating tragedy. The reality on my return - no one dead and much of Christchurch unscathed - led me to write a slightly tongue-in-cheek opinion piece promoting urban commercial dairy farming in herd homes to replace the flattened parts of Christchurch.

That was to appear in this issue of LPR, but it would no longer be appropriate because the 22 February quake, only 6.3 on the Richter scale, did take lives and cause widespread damage. Again I was in the North Island and so feel a certain 'guilt' when talking with those who were here, but this time it was like returning to a third world city. There could be no doubt that Christchurch was wounded. But as we bemoaned the devastation and tragedy, the 'real thing' struck Japan. That was genuine devastation and tragedy with a death toll almost certainly beyond 20,000 and places transformed to memories.

I doubt whether New Zealanders outside Christchurch could as fully appreciate the Japanese situation as those here. New Zealand lacks the proximity to Japan and proximity is crucial. As Christchurch faces ongoing daily disruption and further damage, already there is talk of 'Earthquake fatigue'; that the rest of New Zealand wants to 'move on' and is bored with daily Christchurch quake-related stories. Japan's quake will also fade swiftly from New Zealand's collective consciousness. Who remembers Haiti's devastating quake of just last year? There is an assumption that developed countries have the technology and knowledge to plan ahead to build resiliently; that we have the power over nature to bend it to our wills, to make us invulnerable. We have had stark reminders of true power and of our own humanity; of how short-sighted is our anthropocentrism that tells us, as we speed around the corners of life, that we are in control. We have also seen how good planning can aid resilience and recovery. Pegasus, designed to withstand liquefaction demonstrates this. We have also seen the value of pulling together, of volunteerism and of building community spirit - of planning that develops social capital. Of a social heritage that stretches beyond buildings and of the value of professional, genuine communication and action.

This community spirit, at a much less significant scale, has been evident among the LPR team and I am proud of their efforts to once again put out a LPR that has only been delayed for a short period. That the current team has achieved this speaks well for the longevity of LPR. They continue to demonstrate their heritage; standards of dedication and professionalism that were honoured by the NZPI Award of Merit at its recent conference. That the profession has recognised the LPR in this way was a much appreciated surprise.

Two members of LPR's Permanent Editorial Advisory Board also received awards at the NZPI conference and I have great

pleasure in congratulating Prof Ali Memon (Gold Award) and alumnus Clare Piper (nee Sargeant) (Lance Leikis Award) for their achievements. These accolades from our professional planning colleagues affirm the standing of Lincoln University and its community of planners and attest to the skills that they bring to the recovery and planning for a future for this region. Well done! Now back to work...

Harrish G. Ronnie

Hamish G. Rennie, Editor-in-Chief (and a staff member of Lincoln University)

#### **Editorial**

Slightly late, although putting all seismic stresses aside, we are very proud to start on a positive note. The Award of Merit from the NZPI is a satisfying milestone and we have since enjoyed suitable celebrations. Congratulations are also due for Professor Ali Memon, adding to the suite of recognition for the excellent work coming out of Lincoln University – details are found within this issue.

This publication and the presence of Lincoln University in planning arenas will only continue growing, and with it, increasingly productive relationships between planning theory, education and practice. The energy amongst students and staff involved in producing LPR demonstrates this positively and admirably. Well done to you all.

Personally, the most rewarding aspect is to in part, see the vision of the Lincoln University Planning Association acted out through this publication. It is great experience being involved in bridging the gaps between students, staff and planning practitioners. We are forever learning.

Within this issue you will find peer-reviewed articles on Community Collaboration as a Means to Progress and Community Resilience in the Wake of the Earthquake. Very timely releases as we move into a recovery phase of unprecedented scale for this country.

We continue to use the first issue of each volume to feature content from the <u>SOCI 314 Professional Practice</u> course completed as part of the undergraduate <u>BEMP</u> degree. This volume we have a range of articles including Identification of Surf Breaks of National Significance, Akaroa Wastewater Issues, and the Ross Sea Marine Protection Area, as well as a book review from the same course and the usual newsy business.

Finally, the LPR team are continually looking for new ideas or ways to improve the publication. Your feedback is always welcome as it is an important part of our future development. We trust you will find this issue of Lincoln Planning Review an enjoyable read and on behalf of the Editorial Team we thank you very much for your support.

Bailey Peryman, Co-Convenor of Editorial Operations

#### **Peer Reviewed Articles**

# Community, Resilience and Recovery: Building or Burning Bridges? Suzanne Vallance\*

There is a critical strand of literature suggesting that there are no 'natural' disasters (Abramovitz, 2001; Anderson and Woodrow, 1998; Clarke, 2008; Hinchliffe, 2004). There are only those that leave us – the people - more or less shaken and disturbed. There may be some substance to this; for example, how many readers recall the 7.8 magnitude earthquake centred in Fiordland in July 2009? Because it was so far away from a major centre and very few people suffered any consequences, the number is likely to be far fewer than those who remember (all too vividly) the relatively smaller 7.1 magnitude Canterbury quake of September 4th 2010 and the more recent 6.3 magnitude February 22nd 2011 event.

One implication of this construction of disasters is that seismic events, like those in Canterbury, are as much socio-political as they are geological. Yet, as this paper shows, the temptation in recovery is to tick boxes and rebuild rather than recover, and to focus on hard infrastructure rather than civic expertise and community involvement. In this paper I draw upon different models of community engagement and use Putnam's (1995) notion of 'social capital' to frame the argument that 'building bridges' after a disaster is a complex blend of engineering, communication and collaboration. I then present the results of a qualitative research project undertaken after the September 4th earthquake. This research helps to illustrate the important connections between technical rebuilding, social capital, recovery processes and overall urban resilience.

#### Community engagement and recovery

It is now well-established in the literature that communities have an important role to play in recovery processes following a 'natural' disaster (Norman, 2004; Hauser, Sherry and Swartz, 2008; Coles and Buckle, 2004; Jilali, 2002; Murphy, 2007; Waugh and Streib, 2006; Aldrich, 2011). As the Canterbury Civil Defence and Emergency Management Group Plan (2005-2010, section 9, p. 8) states:

Community involvement is an important aspect of Recovery. It is the means whereby those directly affected by the event help rebuild their own facilities and services. Community involvement provides a framework for reestablishing the economic, social, emotional and physical well-being of the affected population. The benefit of using community resources is twofold. Firstly, local agencies know the community make-up and requirements better than any outside organisation. Secondly, affected people have an inherent need to rebuild. Using this resource wisely can lead to a stronger, more resilient and united community. (www.cdemcanterbury.govt.nz/cdem-group-plan-downloads.html)

Community involvement and engagement can take many forms, ranging from simple information provision at one extreme to co-management at the other. Different labels are given

to the various stages along this continuum (see, for example, the IAP2 spectrum of participation at www.iap2.org), however the names essentially reflect the extent to which a) communication can be seen as a two-way process and b) the way decision-making powers are shared between those with some official interest in recovery (such as the CCC, EQC (see Figure 1 which gives an overview of some methods I have seen used in the past in New Zealand and the Philippines) and community groups.

Community involvement after a disaster is complicated by the intensity, variety and scale of needs, and by the range of actors suddenly compelled to become involved in recovery processes. Local politics - usually a game for the 'usual suspects' - becomes a considerably more complex, heated and frustrating endeavour. This is exacerbated by lengthy timeframes, rumour and, of course, the trauma of the event itself. This raises questions about the nature of 'recovery' and what that might mean.

Figure 1. Participation and engagement.

# This is how it is: one way communication, no sharing of decision-making power

**A** 

**Inform:** Newsletters, media release, petitions, pickets, songs, marches, displays, posters, websites, lectures, 0800 numbers

**Consult:** Discussion documents, surveys, lobbying, voting, submissions, referenda

Involve: Charettes, postcard photos, ward meetings, public meetings, idea areas, Delphi, citizen juries, field officers, qualitative research (participant action)

**Engage:** Co-manage, kitchen table, workshops, field trips, hui, mutual projects, networks, alliances, role plays

Could we make this work?: Two way communication and shared decision-making power

#### Social capital, recovery and resilience

According to the CDEM Group Plan (2005-2010, section 9, p. 1):

(continued on next page)

...recovery is a developmental and remedial process with the main objective of efficiently organising available resources to restore communities to the point where normal social and economic activities resume....[It is the] coordinated efforts and processes to effect the immediate, medium and long-term holistic regeneration of a community following a disaster (<a href="www.cdemcanterbury.govt.nz/cdem-group-plan-downloads">www.cdemcanterbury.govt.nz/cdem-group-plan-downloads</a>).

Importantly, this definition does not privilege the repair and rebuilding of hard infrastructure over other community needs, some of which are amorphous and difficult to identify, much less address. Despite these difficulties, this recovery period can also be regarded as a time when a range of new opportunities are presented. Disasters throw open a new range of possibilities and it is often a time when civic consciousness is particularly strong (Shaw and Goda, 2004). There is a fine line between disasters and opportunity for, as Lorenz (2010, n.p.) has argued, sudden and dramatic change that 'only becomes a crisis when fundamental expectations addressed to the present or future are at stake, and a disaster ensues if and only if these expectations can no longer be fulfilled'. Conversely, change can be a positive force if it allows for developments that exceed our hopes and expectations. Napier's post-1931 earthquake Spanish mission or Art Deco style reconstruction (see John, 2006) is a good example of the way a strong recovery vision can turn disaster into success.

The extent to which these opportunities are developed depends on a range of factors, some of which are technical ability and expertise; however, there has recently been a resurgence of interest in Putnam's (1995) work on 'social capital' and the way it relates to recovery and resilience (Lorenz, 2010; Murphy, 2007; Walker and Salt, 2006; Newman, Beatley and Boyer, 2009; Pelling and High, 2005; Boettke et al, 2007). Putnam's work - where social capital is positively associated with civil society, networks, norms and trust - is based on the recognition of strong and weak social relationships. These relationships may be used to bond a group together; bridge groups with similar interests; link groups vertically in formal institutional arrangements; or brace between public and private sectors (see Murphy, 2007, Walker and Salt, 2006; Pelling and High, 2005; Rydin and Holman, 2004). Establishing and maintaining these different types of social capital is important in terms of recovery, particularly in terms of knowledge transfer and, building trust and developing a common language across laypeople and experts (Rydin, 2006). Olsson et al. (2006) use the terms 'leaders' and 'shadow networks' instead of social capital but they are similar concepts. They argue that leaders (linking capital) are needed to prepare a system for change by devising alternatives, developing strategies, seizing opportunities and assembling shadow networks (bridging, bonding and bracing) that work across different scales. These shadow networks can play an important role in both preserving traditional understanding of one's environment and in providing socio-ecological feedback loops; that is, identifying and communicating problems before thresholds are breached (Folke, Carpenter, Elmqvist, Gunderson, Holling, and Walker, 2002).

It is this complex network of social capital that makes a city resilient. Resilience has three related definitions. The first supposes an ideal 'steady-state' or equilibrium to which a system 'bounces back' following a disturbance. The second relates to

the extent to which a system is able to self-organise. The third recognises a system may have multiple stable states and that being able to bounce back to normal might be less important – and even less ideal - than the ability to adapt to new conditions (i.e., its 'adaptive capacity'). The adaptive capacity of a socioecological system thus refers to our ability to cope with change by observing, learning and then modifying the way we interact with the world around us, over different geographic scales. When applied to a city after a disaster, one might say resilience is the ability to restore essential functions and use the opportunities presented to avoid future disasters.

Despite a general literary consensus that social capital is somehow important to a robust recovery and a resilient society, unresolved questions still swirl around why that should be, and how we might foster 'social capital' under times of stress. This research has looked for answers to these questions based on approximately 50 in-depth interviews with Christchurch residents, City Councillors and Community Board Members, MPs, and representatives from community groups, Citycare, the Earthquake Commission, engineering firms, the District Health Board and several small businesses. The interviews with residents were conducted between October 2010 and February 2011 and usually began with the interviewee's recollection of the first earthquake and followed with their assessment of the recovery process.¹

#### **Results:**

In an age of globalisation, increased mobility, and technology that enables people to be 'closer' to their chat room buddies than their neighbours, it has become rather commonplace to question the relevance of geography and, in particular, the utility of place-based communities. While the notion of 'community' does remain problematic, the Canterbury earthquake has shown that when the power is out, the computer no longer works and your cell phone battery is running low, geography matters. In the immediate aftermath of the earthquake, in the dark and the cold, neighbours played a vital role in framing the event - that is, making sense of it - and developing an initial, grassroots response. Street level caring and sharing took many forms: cooking breakfast and making cups of tea for others on their barbeque, dismantling trembling chimneys, securing homes and digging exit paths through the slushy, smelly mud volcanoes caused by liquefaction. But perhaps the greatest comfort came through the face-to-face sharing of information about where to get water, how to boil it, which food outlets were open, and the thing no-one wants to talk about, 'where to poo'.

Along with the more salubrious services – water, food, housing – sewers are a vital component of a well-functioning city and unfortunately, the earthquakes left many homes in certain parts of Christchurch without this basic provision. Restoring this important function may seem at first a technical matter, but several incidents show the pitfalls of seeing infrastructure in this way. One of these concerns the way functional sewer connections became part of the 'sticker scheme', issued under the Civil Defence Emergency Management Act, that determined whether a house was unsafe (red), safe but uninhabitable due to a lack of

<sup>1</sup> This research had approval from the Lincoln University Human Ethics Committee.

water or sewer connection (yellow), or fully functional (green). These stickers, while intended as a guide to a dwelling's state of (dis)repair, were subsequently used to inform rates rebates and financial grants. The accuracy of the stickers therefore had consequences that extended well beyond their original technical purpose.

The state, location, and carrying capacity of the sewers in badly affected suburbs also caused much confusion. There was constant adjustment and readjustment of functionality as some sewers were repaired only to cause a blockage elsewhere. Again, this seemingly technical matter – whether a particular section of sewer had 'full', 'low' or 'no' flow- caused a range of anxieties. As one interviewee told me:

They [the Christchurch City Council (CCC)] keep telling me I've got 'low' flow but that's not right...I've got no flow really because when I flush it bubbles up in my neighbour's back yard...now I'm not about to... take a dump on my neighbour's lawn am I?

The full-, low- and no-flow scheme was also used to determine whether or not a portaloo would be provided. As one interviewee told me in an email dated November 5, 2010:

Yesterday a truck turned up outside quite a number of properties to remove "un-needed" Portaloos ... We phoned the CCC yesterday and again gave the names and numbers of those that needed them because they had no sewerage at all and those that didn't need them because they had a tank. But today I got a phone call from the CCC to make sure I still needed a Portaloo today. I said yes nothing had changed overnight. She then told me that I would be the only one in the street with one as no one else needed one. There was an ongoing discussion that involved quite a bit of anger and abruptness on my part I must confess - the outcome was that I had no authority to seek a Portaloo for my neighbours and they weren't on "the list" - although they were on the a "list" yesterday etc... I told my neighbour she better call to advise that she still needed a Portaloo. After a long discussion in which she was advised she wasn't on the list and so didn't need one the dreaded Portaloo truck appeared. Fearing the worst my neighbour rushed outside to save our dignity only to be told it was alright he was bringing one not taking one away. In fact he also brought me another one to sit beside my existing one. ... One for each cheek maybe?

One more conflict that belies the purely technical appearance of sewers centred on an apparently 'ideal' solution to the numerous blockages in the lines. Essentially the earthquake lowered the ground level and left some streets without a gravity feed to the main sewers. Rectifying this would take a long time and prove costly, so the CCC proffered an alternative; individual pressurised septic tanks. These did not necessarily meet people's 'needs', however. There was much confusion over the capacity of the tanks, concern as to how often they would be emptied and, although they were fairly unobtrusive to look at, people were also concerned that their house values would be adversely affected by this unorthodox and perhaps unreliable system. Again, though the tanks appeared to offer a sound technical solution, because they were embedded in wider social configurations of capital gains, household size and aesthetics,

the individual tanks were not a workable solution. As a result, a small scale protest group convened, liaised with the CCC and the pressurised tanks are now considered a 'temporary' solution. This raises interesting questions about the way disasters affect social capital and vice versa and the ways recovery, resilience and reconstruction are linked.

# Community, Resilience and Recovery: Building Bridges Within and Between

These incidents all highlight the dangers of seeing recovery as a technical matter, and of confining the matter to one of rebuilding hard infrastructure. Hard infrastructure, as these examples show, is embedded in a social context; it is part of an intricate but vitally important web of social relations and expectations. Listening to the people living within that context is, therefore, a necessary part of understanding what will work in a social, if not technical, sense. So what have these events taught us about social capital, resilience and recovery?

#### Bonding capital:

'Disasters' rearrange, sometimes strengthen, but often undermine existing geography-based social networks. Although neighbours were often the first point of contact after the earthquake, many residents in badly-affected areas simply left. They could not or would not stay in their damaged homes and have not returned. Consequently, this has fractured once-strong communities and ruptured established social networks and routines. That said, some Christchurch citizens have done very well: as one example, after an initial 'scramble' the Canterbury Communities' Earthquake Recovery Network (CanCERN) was formed and it has started to gain traction with various organisations like EQC, CCC and the Canterbury Earthquake Recovery Commission (CERC). It has, however, been a difficult road and has taken an enormous amount of volunteer hours to become as organised as they have. Their path could have been easier had more funding been provided earlier on, with resources made available to facilitate their attempts to self-organise.

Figure 2: CanCERN's community engagement model (courtesy CanCERN)

# Community Network Engagement Model Street Coordinator Street Coordinator Coordinator Coordinator Coordinator Coordinator Coordinator RESIDENTS ASSOCIATION / COMMUNITY GROUP Canterbury Communities' EARTHOUAKE RECOVERY NETWORK EARTHOUAKE RECOVERY NETWORK COUNCILLORS GLOBAL COUNCILLORS Christchurch City Council MPS Christchurch City Council New Zealand Government New Zealand Government New Zealand Government

One idea that has worked well for CanCERN is a somewhat more elaborate version of the old 'phone tree' system (see Figure 2), but one that is based on 'street' geography. In this model, street coordinators communicate with both individual households and neighbourhood representatives, who then liaise with government and non-governmental organisations. This works well because some of the issues – like pockets of liquefaction or failed sewer laterals - connect neighbours, streets and neighbourhoods. Such issues are resolved more quickly and more effectively if they are addressed holistically rather than on an individual household basis. It also manages to 'capture' people who might otherwise be left out (such as those without telephone or internet), and it provides a forum whereby all those people who suddenly have issues - and who may not be familiar with existing processes - can be heard. In the wake of a disaster, local authorities should do what they can to instigate this process of community-based recovery so that, when it is time to discuss rebuilding options, there is actually a body to 'engage' with. The alternative, as one CCC representative put it, is to 'try and herd cats'.

#### Bridging capital:

CanCERN's efforts have been undermined, to some extent, by the lack of clear leadership roles that typified the September to February period. As a recent Press release (http://www.stuff. co.nz/the-press/lifestyle/mainlander/4621179/Whos-in-charge) pointed out, CERC, EQC, Environment Canterbury and CCC all have important roles to play, however, it appears that these responsibilities were still being negotiated 5 months on, and are in the process of being renegotiated post-February. Exacerbating this is a lack of an established track record - a working relationship – between the community and the organisation with which residents are most familiar: the Christchurch City Council. The situation is somewhat different in Waimakariri District where some Residents' Association representatives have very good things to say about their council. But, as one representative pointed out 'we already had a good relationship with council before the earthquake, we're used to working with each other'. This relationship, and pre-existing communication paths and strategies have worked to their benefit.

This shows that building bridges in a - communication sense - is an essential part of recovery processes and something that should be undertaken as soon as possible after a disaster, before goodwill erodes. On a practical level, the repairing of hard infrastructure can present a good opportunity to test small scale co-managed projects where the public is invited to participate actively in re-building. As one example, about a month after the earthquake quite in-depth community discussions took place over the design and location of a replacement for the Medway Street bridge which had been 'munted' to use the 'technical term' (as Mayor Bob Parker told TVNZ reporters on the 25th Feb). Now, school term one has begun, but children can no longer walk across the bridge to get to school, so parents drive them the considerably longer distance in their cars, along roads that are still dusty, past houses that are still cracking on tenuous piles. Residents – initially quite happy to engage in discussions around the bridge's future - had become increasingly disillusioned with the 'recovery' process. The lesson here seems to be to see opportunities in the rubble and seize them in order to, literally, build bridges with 'the community'.

#### Conclusion:

Though there is a clear consensus in the literature that social capital plays an important role in processes of recovery, there is a paucity of detailed analyses addressing 'why', 'how', and 'how to foster it', particularly under stressful conditions. This research shows social capital is an important part of recovery, and contributes to resilience, because it helps generate a holistic set of satisfactory outcomes, that not only meets infrastructural needs, but also builds all-round urban capacity. A resilient city is not only able to recover from disasters but is able to actually seize the opportunities disasters present (and reduce risk from future events). This is less about technical repair and infrastructure (though this plays an important role) and more about the relationships between its parts, its people and its leaders. The Christchurch earthquakes have highlighted that value of cultivating relationships within and between as soon as possible. This study has shown that if these relationships do not exist, small scale test projects are useful ways of building bridges that then serve the greater project.

\* Suzanne is a social scientist in the Faculty of Environment, Society and Design at Lincoln University. She has an interest in urban sustainability and resilience, and connecting sudden shocks - like earthquakes - with long emergencies including peak oil and aging population.

#### References

- Abramovitz, J. (2001). Unnatural Disasters. Worldwatch Paper 158. Worldwatch Institute, Danvers, MA.
- Aldrich, D. (2011). The power of people: social capital's role in recovery from the 1995 Kobe earthquake. *Natural Hazards*, 56(3), 595-611.
- Anderson, M. & Woodrow, P. (1998). *Rising from the ashes:*Development strategies in times of disaster. Lynne Rienner Publishers: Colorado.
- Boettke, P., Chamlee-Wright, E., Gordon, P., Ikeda, T., Leeson, P. & Sobel, R. (2007). The political, economic, and social aspects of Katrina. *Southern Economic Journal*, 74, 363–376.
- Clarke, L. (2008). Worst-case thinking and official failure in Katrina. In H. Richardson, P. Gordon, & J. Moore (Eds.), Natural disaster analysis after Hurricane Katrina: Risk assessment, economic impacts and social implications (pp. 84-92), Cheltenham, UK, Edward Elgar.
- Coles, E. & Buckle, P. (2004). Developing community resilience as a foundation for effective disaster recovery. In S. Norman (Ed.). *Proceedings of the New Zealand Recovery Symposium*, 12-13th July, 2004. Napier, New Zealand. Ministry of Civil Defence and Emergency Management. Pp 92 –105.

- Folke, C., Carpenter, C., Elmqvist, T., Gunderson, L., Holling, C. & Walker, B. (2002). Resilience and sustainable development: Building adaptive capacity in a world of transformations. AMBIO: A Journal of the Human Environment, 31, 437-440.
- Hauser, E., Sherry, E. & Swartz, N. (2008). Risk, preparation and rescue. In H. Richardson, P. Gordon, & J. Moore (Eds.), Natural disaster analysis after Hurricane Katrina: Risk assessment, economic impacts and social implications (pp. 93-120), Cheltenham, UK, Edward Elgar.
- Hinchliffe, S. (2004). Living with risk: The unnatural geography of environmental crises. In S. Hinchliffe and K. Woodward (Eds.). *The natural and the social; Uncertainty, risk, change* (pp. 116-126), London, Routledge
- John, A. (2006). Napier after the earthquake: Reconstruction and planning in the 1930s. *Planning Quarterly*, 162, online, n.p.
- Jalali, R. (2002). Civil society and the state: Turkey after the earthquake. *Disasters*, 26, 120–139.
- Lorenz, D. (2010). The diversity of resilience: contributions from a social science perspective. *Natural Hazards*, online first, n.p.
- Murphy, B. (2007). Locating social capital in resilient community-level emergency management. *Natural Hazards*, 41, 297–315.
- Newman, P., Beatley, T., & Boyer, H. (2009). *Resilient cities: Responding to peak oil and climate change.* Washington, Island Press.
- Norman, S. (2004). Focus on recovery: A holistic framework. In S. Norman (Ed.). *Proceedings of the New Zealand Recovery Symposium*, 12-13th July, 2004. Napier, New Zealand. Ministry of Civil Defence and Emergency Management. Pp. 31 46
- Olsson, P. Gunderson, S., Carpenter, P., Ryan, L., Lebel, C., Folke, C. & Holling, C. (2006). Shooting the rapids: navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society*, 11 (1), 18+.
- Pelling, M. & High, C. (2005). Understanding adaptation: What can social capital offer assessments of adaptive capacity? *Global Environmental Change*, 15, 308–319.
- Putnam, R. (1995). Bowling alone: the strange disappearance of civic America. *Journal of Democracy*, 6, 65–78.
- Rydin, Y. & Holman, N. (2004). Re-evaluating the contribution of social capital in achieving sustainable development. *Local Environment*, 9, 117-132.
- Shaw, R. & Goda, K. (2004). From disaster to sustainable civil society: The Kobe experience. *Disasters*, 28, 16–40.
- Walker, B. & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world.* Washington: Island Press.
- Waugh, W. and Streib, G. (2006). Collaboration and leadership for effective emergency management. *Public Administration Review*, 66, 131–140.

# Community Collaboration at the Flax-roots as a Means to Progress Shane Orchard\*

#### Introduction

Non-governmental groups play several important roles in society. Whilst some groups function mostly to advance discrete projects, other groups are effective players in the important task of holding the government to account amongst a range of 'watchdog' functions (Roberts & Jones, 2005). In New Zealand, single-issue community groups and projects have long been a part of society. Contributions on this level are both easier to conceptualise and perhaps have been advantaged by New Zealand's project-oriented funding landscape for work in the community sector. Ongoing community development roles are more difficult to fund. Multi-issue initiatives are fewer in number, perhaps reflecting these funding realities combined with the difficulty of managing multi-facetted programmes through reliance on volunteers over the longer timeframes often required. Multi-issue groups that have persisted are often organised around thematic areas of interest to significant segments of society. Amongst these are groups addressing cultural, religious and environmental values.

A recent development in this field has been the establishment of new multi-issue initiatives seeking to revitalise whole communities. A common theme is a renewed focus on aspects of societal progress and well-being. An increasingly prominent group of these initiatives is found in the so-called 'transition town' movement in addition to similar ventures under a range of different names. This article provides an overview of this phenomenon and reviews the key aspects of this movement based on recent literature and examples drawn from Canterbury and elsewhere in New Zealand. The possible relevance of the transition movement for community planning is then discussed.

#### The transition movement and re-localisation

Responses to future-focused concerns have been a part of the non-governmental organisation (NGO) landscape for some time, with sustainability concerns being of particular note (Capra, 2005). For the most part such initiatives have targeted particular aspects of becoming more sustainable, including the practices adopted by certain industries, calls for conservation of resources, or support for desirable behaviours such as organic food production and education for sustainability. Although the transition town movement is also concerned with some of these issues, its major defining factor is the mode of operation which focuses on well defined geographical units. Specifically, these units are existing communities. Communities are immensely important to the transition town model due to the perceived importance of a central organising principle; that of re-localisation (Hopkins, 2008; Brangwyn & Hopkins, 2010). Re-localisation refers to the local provision of goods or services where the capacity exists to do so. This might involve a return to the production of goods and services that were produced within a community in the past.

As a consequence, the application of 'transition thinking' involves heightened engagement, interconnections, and activities within communities. Although the exact geographical boundaries to which this refers are dependent on the context of 'community', enhancement of the social connectivity which might define and support the notion of a functioning community is a common element of on-the-ground activities (Goldsbury, 2006; Murphree, 1993). In this way, transition thinking works first on community processes before proceeding to any specific action on other issues. This relates to perspectives on social capital, a term referring to a wider range of social connections capable of facilitating individual or collective action, including networks of relationships (Portes, 1998). In transition thinking, reversing the perceived loss of social capital is regarded as one of the substantive issues to be addressed, especially at the local level, as many believe this to be a by-product of western economic imperatives (Jackson, 2009; Orr, 1992; Schumacher, 1973).

#### The evolution of transition thinking in civil society

In recent years the growth in community groups taking an interest in these concepts has been rapid, and for convenience the term 'transition' will be used here to refer to all such groups. However it is important to note that these ideas were not exclusive to the transition or 'transition town' model. Very similar ideas had occurred to many people working on sustainable development issues, who recognised the potential role of strong functional communities in determining appropriate responses to concerning trends and likely change. Some of these groups invented their own frameworks aimed at building social capital in their communities, and many had put these ideas into practice long before the first transition town was born. For example, the Cittaslow or 'Slow Cities' movement originated in Italy in 1999, performing similar work to the transition initiatives of today (David Currant, 2010; pers. comm.). The movement has also seen considerable growth since, and by mid 2009 had been adopted by at least 93 towns across 14 countries (Cittaslow UK, 2010).

Here in New Zealand there were also similar initiatives getting underway prior to the first transition town. Two such initiatives in Canterbury remain at the cutting edge of this field work today. The first of these began in the early 1990s as an historic restoration project. However, in 2002 the project was transformed around an idea to create a vision statement for revitalisation of the entire community and the result was 'Project Port Lyttelton'. The fact that the residents created their own vision for their community in a facilitated process has been a significant factor in the success of the project (Jefferies & Everingham, 2006). Under the new name of 'Project Lyttelton' the original inclusive philosophy towards all ideas linked to this vision remains a defining feature of the project in action.

A different set of circumstances led to the establishment of another group in the Lincoln community. The group started as a sub-committee of the Lincoln Community committee in 2005 before forming 'Lincoln Envirotown Trust' in 2006. Those involved developed their own model for creating change in the community based on perceived needs; in part guided by a survey revealing that many residents were concerned about the na-

ture of growth and development in their area. From the outset the concept was assisted by a high level of support for a community- led initiative from many individuals and organisations in the community (Sue Jarvis, 2010; pers. comm.). From these beginnings the group conceptualised the key objectives for a local initiative, as are now reflected in the 'Lincoln Envirotown' mission. A year's discussion and consultation resulted in a sustainability action plan with a focus on improving awareness of environmental sustainability issues in the Lincoln community, providing opportunities to address those, and being a role model for other communities (Jarvis, 2007). Many parts to the plan have now been completed or are being actively worked on.

At around the same time that Project Lyttelton and Lincoln Envirotown were developing new community initiatives in New Zealand, the 'transition town' concept was being developed in Ireland. The term arose from the work of Louise Rooney and Catherine Dunne, who were students studying under Rob Hopkins, a permaculture tutor. In working on the three main permaculture principles of earth care, fair share and people care, Hopkins engaged his students in future scenario planning in order to consider important questions about local resiliency in the face of change. In addressing the Peak Oil phenomenon, Hopkins became heavily interested in the concept of 'energy descent', a term first coined by the ecologist Howard Odum (Odum & Odum, 2001). Alongside their studies on other permaculture issues, Hopkins worked with his students to produce a plan to reduce their town's energy dependency. This led to the creation of the Kinsale Energy Descent Action Plan in 2005. In addition to a focus on energy, the plan helped raise the profile of sustainability in the town and began to influence subsequent planning decisions within the community. The 'Energy Descent Action Plan' concept was adapted and expanded throughout 2005 and 2006 through the work of Rooney, Dunne and others, who developed the transition town model as a means of putting ideas into practice.

To date the transition concept has been taken up by more than 300 official initiatives worldwide, with many more in the initial stages of consideration. Here in New Zealand there are now at least 75 active community groups identifying with or using the term, following the lead of the first official 'transition initiative' on Waiheke Island in 2007 (James Samuel, 2010; pers. comm.). In Canterbury, as elsewhere, the growth of the transition movement has been strong, and has been advanced by Sustainable Otautahi Christchurch, a local NGO that has facilitated an ongoing transition dialogue in the area since 2008. This led to the establishment of several new transition initiatives in Christchurch communities. In other parts of Canterbury additional groups have arisen, inspired by the Lincoln Envirotown lead in the Selwyn District (Sue Jarvis, 2010; pers. comm.). There are now at least 14 transition groups in the greater Christchurch area alone, in addition to many other Canterbury groups in localities including Rangiora, Timaru and Oamaru. Given that nearly all of these initiatives have arisen since 2008 these examples demonstrate that the rate of uptake of the transition concept has been surprisingly fast.

#### **Key concepts**

Transition thinking has certainly proved successful in terms of attracting the interest of communities worldwide in addition to facilitating real change on the ground. Many of the similar initiatives that pre-dated the transition movement also readily identify with 'transition concepts', as they have come to be known. A striking feature of many of these community organisations is the commonality of ideas arrived at by the initiators and leaders involved. What perhaps has changed with the advent of transition towns is increasing recognition for, and analysis of, the key ideas. This is attributable in no small way to the work of Rob Hopkins and others who have set about not only implementing the ideas, but also documenting and disseminating them via a range of media.

Although there are a great variety of actions promoted by transition initiatives, there are also many similarities and some philosophical commonalities that are becoming apparent. Amongst the most prevalent of these concern the vulnerability of communities and their resources, and resilience to foreseeable change (Hopkins, 2009). The transition town model clearly identifies practical responses to change associated with Peak Oil and climate change as key concepts (Hopkins, 2008). As a result, the practical measures promoted are often capable of addressing more than one problematic trend simultaneously, and the re-localisation concept is frequently portrayed as such. For example, it is suggested that a renewed local focus might improve the adaptability of communities to change through reducing the length, and thus vulnerability of supply chains (Porritt, 2009). The re-localisation premise also suggests that, although responses to climate change and Peak Oil are required in respect of many institutions at many different scales, there is a need for engagement at the level of communities to drive the process. In addition, re-localisation embraces the idea that increased collaboration within communities can lead to better decision making processes, which can improve other aspects of well-being (Allen et al, 2001; Ostrom, 1990; Winstanley et al., 2005).

Since a common focus is on coping with change, issues that create common concerns for all communities feature in most transition initiatives. These include planning for Peak Oil and climate change, but may also include questions relating to other aspects of well-being identified by communities as being important to a vibrant and sustainable way of life. A common perspective is that the bigger challenges involve how models such as 'Energy Descent Action Plans' can become the shared prerogative of many, rather than the preferences of a small number of influential practitioners or gatekeepers. This indicates that transition thinking is inherently collaborative and contextual, despite the fact that there are several 'How to' guides on setting up transition initiatives, which might be interpreted as top-down tendencies within the movement (Hopkins & Lipman, 2009). The set of principles and practices embraced by transition initiatives typically require building over time through observation and experimentation unique to each local community. In some respects the transition concept has produced a principled approach to community development whilst recognising and embracing the role of contextual interpretations of priorities by local communities as the essential catalyst for change.

#### The transition movement and community planning

It would appear that transition thinking has come at an opportune time and its popularity suggests that the issues embraced are meaningful for many people. Certainly the need to build adaptive capacity to change is becoming better known even in developed countries. For example, Government policy in the United States depicts previous assumptions of relatively low vulnerability and high adaptive capacity in respect to dealing with stresses such as climate change, assumptions that have recently been challenged (Moser, 2009a).

Studies in the United States now consider that investment is required in achieving better assessments of vulnerabilities, capacities, and governance barriers across all scales (Moser, 2009b). Governance and political aspects cannot be ignored since, as Hopkins (2009) suggests, the necessary responses may also include "... making unelectable policies electable, creating the groundswell for practical change at the local level".

In New Zealand, investigations into vulnerability and adaptability concepts have highlighted similar concerns (Ministry for the Environment, 2006 & 2007; New Zealand Government, 2009), and there are many plausible scenarios concerning the future we face, some of which are very challenging (SANZ, 2009).

All such assessments illustrate that a real call to action is due for all organisations with statutory roles in community planning and development. As the famous Einstein quote goes:

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them."

If so, then perhaps the thinking behind the transition movement might offer some of the 'new' thinking needed. Without a change in thinking there is considerable danger that mal-adaptations to contemporary drivers of change could create costly liabilities for future generations.

Transition initiatives are working with new approaches to community development to engineer a transition away from potentially undesirable trends that are becoming embedded in the status quo. There are several practical implications for policymakers, analysts and planners, and perhaps now rather than later is an appropriate time for statutory agencies to increase their interest in these concepts. An early step that can be taken is to ensure that momentum around transition initiatives and other community-based collaborative projects is not lost, such as by ensuring their facilitators are funded and that supporting resources can be accessed. At the very least, a commitment to collaboration with such groups to gain a better understanding of the plurality of perspectives on perceived problems may afford us a better chance of investing in the right courses of action.

\* Shane Orchard BSc, MSc(Hons) and PGDipMaoriRes&EvmtMmt is an ecologist and resource management consultant working with collaborative and community-based approaches to environmental policy. He specialises in the

sustainable management of natural resources, and on planning solutions for the maintenance and restoration of water resources and other receiving environments. Shane convenes the Catchment & Coastal issues group for the Environment & Conservation Organisations of NZ, as well as contributing to a number of community groups in Canterbury.

#### References

- Allen, W.J., Bosch, O.J.H., & Kilvington, M.J. (2001). ISKM (Integrated Systems for Knowledge Management): A participatory framework to help communities identify and adopt more sustainable resource management practices. In: Getting results through collaboration: networks and network structures for public policy and management. Ed. Myrna Mandell, Quorum Books.
- Brangwyn, B. & Hopkins, R. (2010). *Transition Initiatives Primer.* Version: 26. Totnes, UK: The Transition Network. Retrieved 2 July 2010 from: <a href="http://www.transitionnetwork.org/sites/default/files/TransitionInitiativesPrimer(3).pdf">http://www.transitionnetwork.org/sites/default/files/TransitionInitiativesPrimer(3).pdf</a>
- Capra, F. (2005). *Development and Sustainability*. Berkeley, California: Center for Ecoliteracy. Available at: <a href="https://www.ecoliteracy.org">www.ecoliteracy.org</a>
- Cittaslow UK. (2010). *The Cittaslow Philosophy*. Retrieved, 21 July 2010 from: <a href="http://www.cittaslow.org.uk/page.php?Pid1=5&Pid2=11&PLv=2">http://www.cittaslow.org.uk/page.php?Pid1=5&Pid2=11&PLv=2</a>
- Goldsbury, P. (2006). *New tools for growing living organisations* and communities. Paper presented at the World Congress for Total Quality Management, Wellington 4-6 Dec 2006. Available online at: <a href="https://www.tipuake.org.nz">www.tipuake.org.nz</a>
- Hopkins, R. (2008). *The Transition handbook: From oil dependency to local resilience*. Totnes: Green Books Ltd. 224pp.
- Hopkins, R. (2009). Resilience thinking. Resurgence 257: 12-15.
- Hopkins, R. & Lipman, P. (2009). *Who we are and what we do.* Totnes: The Transition Network Ltd. 24pp.
- Jackson, T. (2009). *Prosperity without Growth: Economics for a Finite Planet*. London: Earthscan. 286pp.
- Jarvis, S. (2007). *Lincoln Envirotown: model for community managed, sustainable development.* Final Report 2006 2007 to Ministry for the Environment Sustainable Management Fund.
- Jefferies, M. & Everingham, W. (2006). Lyttelton working towards sustainability. A Case Study - Project Port Lyttelton, a Community Group, Acting as Catalyst. Background paper as a contribution to the Parliamentary Commissioner for the Environment's review of progress with Sustainable Development in New Zealand.
- Ministry for the Environment (2006). *Helping New Zealand* prepare for and adapt to the impacts of climate change. Wellington: Ministry for the Environment.

- Ministry for the Environment (2007). *Preparing for and adapting to climate change. Look ahead to the future.* Wellington: Ministry for the Environment.
- Moser, S.C. (2009a). Whether our levers are long enough and the fulcrum strong? Exploring the soft underbelly of adaptation decisions and actions. In: *Adapting to Climate Change: Thresholds, Values, Governance*, eds. W. N. Adger, I. Lorenzoni and K. O'Brien, pp313-334, Cambridge, UK: Cambridge University Press.
- Moser, S.C. (2009b). *Good morning, America! The explosive U.S. awakening to the need for adaptation*. Report to the California Energy Commission and the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center.
- Murphree, M.W. (1993). *Communities as Resource Management Institutions*. International Institute for Environment and Development, Gatekeeper Series No. 36.
- New Zealand Government. (2009). *Helping New Zealand Prepare for and Adapt to Climate Change*. Cabinet Paper retrieved, 10 July 2010 from: <a href="http://www.mfe.govt.nz/issues/climate/resources/cabinet-papers/pol-06-269.html">http://www.mfe.govt.nz/issues/climate/resources/cabinet-papers/pol-06-269.html</a>
- Odum, H. & Odum, E. (2001). *A prosperous way down: principles and policies*. University of Colorado: University of Colorado Press.
- Orr, D. W. (1992). *Ecological literacy: Education and the transition to a postmodern world*. Albany, NY: State University of New York. 210pp.
- Ostrom, E. (1990). *Governing the Commons: The evolution of institutions for collective action*. New York: Cambridge University Press. 298pp.
- Porritt J. (2009). The three 'Rs'. In *Resurgence supplement: Resilience & Climate Change*, pp 12-13. Cornwall, U.K.: The Resurgence Trust.
- Portes, A. (1998). Social Capital: its origins and applications in modern sociology. *Annual Review of Sociology* 24: 1-24.
- Roberts, S. & Jones, J.P. (2005). NGOs and the globalization of managerialism: A research framework. *World Development 33*(11): 1845-1864.
- Schumacher, E.F. (1973). Small Is Beautiful: A Study of Economics as if People Mattered. London: Blond & Briggs. 272pp.
- Sustainable Aotearoa New Zealand (SANZ). (2009). Strong sustainability for New Zealand. Principles and scenarios. Auckland, New Zealand: Sustainable Aotearoa New Zealand Inc.
- Winstanley, A., Tipene-Matua, B., Kilvington, M., Du Plessis, R. & Allen, W. (2005). *From dialogue to engagement*. Final report of the MoRST Dialogue Fund Cross-Case Study Learning Group, Produced for the Ministry of Research, Science and Technology.

#### Articles

#### **Lincoln University Professional Practice Articles**

In the second semester of 2010 the third year Bachelor of Environmental Management and Planning students taking the Professional Practice course (SOCI 314) were set an assignment to write a short, topical article of local interest. This related directly to the content of the course SOCI 314, which provides a critical study of issues in the provision of professional services in environmental planning, design, social sciences, tourism, sport and recreation. As part of the assessment the articles were subject to the LPR review processes and those written by David Birch, Kelly Fisher and Bailey Peryman are included here.

some 90% of the world's top predatory fish. As a result industrial fisheries have endeavoured to travel further and further south in search of their catch. During 1996 and 1997 New Zealand commercial fishing vessels began investigating the feasibility of fishing the Ross Sea for Antarctic toothfish, Dissostichus mawsoni (Ainley et al., 2008). Toothfish is unusual and expensive and can be called by a variety of names including Chilean Sea Bass and Antarctic Cod. It is a high end luxury product, not one of necessity, and not one that can be guaranteed to be harvested sustainably. The initial exploration experiment has since ended; however each year since 1999 the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), has raised the catch limits, with catch sizes and the number of countries sending vessels to the southern most parts of the ocean continuing to increase (Ainley, 2004). This is clearly evident in CCAMLR's statistical bulletin (CCAMLR, 2009) which indicates that in 1999 751 tonnes of Dissostichus mawsoni was caught compared to 3,617 tonnes in 2009.

# Marine Protection in the Ross Sea Kelly Fisher

At the bottom reaches of the earth lies an ecosystem still largely untouched by humans. The Ross Sea continental shelf ecosystem is found 155 degrees west longitude lying adjacent to the Antarctic continent, with depths less than 3,000 metres, it stretches over almost a million kilometres (Hance, 2010). Its beautiful, rich and abundant nature somewhat protected from human exploitation by its extensive sea ice, brutal weather, and remote environment. Marine animals including killer whales, sea-birds, penguins, whales, giant fish and species not found elsewhere in the world continue to thrive and exist with limited manmade disturbance. Natural processes, species interaction, interconnections, food-webs, complexities not yet understood and other unknown mysteries abound. For this reason the establishment of a marine protected area (MPA) has recently been proposed by the Antarctic and Southern Ocean Coalition (ASOC). This follows suggestions by the World Summit for Sustainable Development, and the 5th World Parks Congress to establish a global and representative network of marine protected areas by 2012 (ASOC, 2010). This article will look at the Commission and the Convention currently governing fishing in the Ross Sea, as well as at the MPA proposal put forward.

#### Fish for science or profit

The Ross Sea has been described as the 'last ocean' and the 'last living laboratory' currently allowing scientists an opportunity to research the workings of an intact ocean ecosystem (The Last Ocean Charitable Trust, 2010). Mineral and oil extraction is prohibited in the Ross Sea under the Antarctic Treaty, fishing however is not (Hance, 2010). It has been suggested (Myers & Worm, 2003) that humans have already eaten their way through

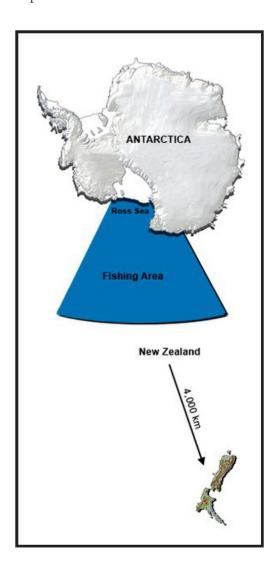
#### Ross Sea Governance

In 1980 the Convention on the Conservation of Antarctic Marine Living Resources, an instrument of the Antarctic Treaty System, was concluded in Canberra with New Zealand one of the original signatories (New Zealand Ministry of Foreign Affairs and Trade, 2010). In 1982 the Convention came into force and remains applicable to all marine living organisms between the Antarctic Convergence and south of 60 degrees south latitude. The Antarctic Marine Living Resources Act (1981) incorporates the Convention into New Zealand's legal system. It is through this Convention that a Commission known as CCAMLR (Commission for the Conservation of Antarctic Marine Living Resources) was initially established, of which New Zealand is a founding member (New Zealand Ministry of Foreign Affairs and Trade, 2010). The management and protection of marine living resources south of the Antarctic Convergence, including the Ross Sea, is the responsibility of the Commission. In New Zealand the Minister of Foreign Affairs is accountable for Antarctica and New Zealand's participation in the Antarctic Treaty system in which CCAMLR is a fundamental component (New Zealand Ministry of Foreign Affairs and Trade, 2010). [See map on following page]

#### **Precautionary Measures**

The CCAMLR Convention's objectives and conservation principles dictate harvesting in the Convention Area. Currently CCAMLR regulates crab, squid, lantern fish, mackerel icefish, Patagonian toothfish, Antarctic krill, and Antarctic toothfish fisheries in the Southern Ocean of which the Ross Sea is a part (Greenpeace, 2010). CCAMLR's precautionary and ecosystem based approach to fisheries management has earned them a well renowned reputation for international leadership. Their management practices require the whole ecosystem be taken into consideration, as opposed to just the species being

Map: With permission from The Last Ocean Charitable Trust



targeted. Decisions regarding fishing in the Southern Ocean should ensure any risk of long-term negative effects caused by the fisheries on the ecosystem are mitigated. CCAMLR requires fisheries operating in its waters to carry an independent observer to ensure the vessels are adhering to fishing regulations. It is under the Antarctic Marine Living Resources Act (AMLR) (1981) that New Zealand fisheries are granted permits to take marine organisms in the Convention Area, with allocation the responsibility of the New Zealand Minister of Fisheries.

#### Permits Required

To be able to operate in the CCAMLR area New Zealand flagged vessels must hold a high seas fishing permit issued under the Fisheries Act (1996), as well as obtain an AMLR permit from the Ministry of Fisheries. At the annual CCAMLR meeting the extent of New Zealand's participation in the CCAMLR fisheries is determined (New Zealand Ministry of Foreign Affairs and Trade, 2010). New Zealand is then able to authorise fishing to the level at which the Commission agrees.

In 2000 CCAMLR began operating a Toothfish Catch Documentation Scheme. All contracting parties are bound to the scheme designed to track landings and trade flows of toothfish

caught in the CCAMLR area. Catches and shipments of tooth-fish are required to carry valid catch documentation to indicate CCAMLR conservation measures of compliance (New Zealand Ministry of Foreign Affairs and Trade, 2010). In New Zealand all landings, imports and exports require toothfish to be accompanied by valid catch documentation. While such measures are in place to monitor catches, they have been insufficient in stopping illegal, unlicensed, and unregulated fisheries entering the Ross Sea. New Zealand is responsible for carrying out surveillance against such fisheries in the CCAMLR Convention Area while also monitoring licensed vessels' compliance with conservation measures.

#### **New Techniques**

What initially attracted the fishing industry to some of the most dangerous and distant waters on the planet can be linked to the introduction of new longlining fishing techniques (Greenpeace, 2010). These new techniques, allowing fishing vessels to operate in far deeper and rougher water than ever before, gave rise to the rapid expansion in the toothfish fisheries in the late 1990's. A typical longline is usually around 1,000-1,200 metres in length and has between 950-1,200 hooks. Longlines are baited by machine and typically each vessel sets and retrieves 10,000-40,000 hooks a day, equal to about 15-50 kilometres of longline (Greenpeace, 2010). In 2003-04 the legal quota for Patagonia toothfish may have been first realised, with an estimated three times this taken in illegal efforts (Ainley, 2004). The legal limit had been set at 3,625 mega tonnes equating to 75,000 voracious predatory fish, based on each fish weighing an average of 50 kilograms. These human sized predators slow to grow and mature, some as old as 50 years, are slow to be replenished. The repercussions of removing large numbers of these creatures from the Ross Sea continental shelf ecosystem are not yet completely understood.





Figure 1: The unique enviornment of the Ross Sea. Photo with permission from photographer, John Weller

The CCAMLR Antarctic toothfish total allowable catch limits are based on a precautionary catch limit approach. This approach has seen CCAMLR allow for the Ross Sea toothfish to be fished to within 50% of its pre-exploitation biomass over the next 35 years (NIWA, 2008); however a precautionary model has already predicted that up to 85% of the Patagonia toothfish pre-fished stock has already been reduced by fishing.



#### The Theory of Maximum Sustainable Yield

In her book The World is Blue (2009), Sylvia Earle, a respected Marine Scientist, discusses the theory of Maximum Sustainable Yield (MSY). MSY is a strategy developed in the 1930's to extract the largest possible catch from a stock of fish over an indefinite period of time. The theory is based on the idea that a population will reproduce at its maximum efficiency when reduced to half that which can be sustained in a given area. Computer models base calculations on fish numbers predicted to have been present before fishing began. Earle (2009) breaks down the concept of MSY into twelve assumptions, facts, and flaws. Within these the mysteries of population fluctuations and life histories and the difficulty of predicting fish numbers prior to when fishing began are alluded to. She criticises the theory's regard for fish foremost as a commodity rather than as integral parts of intact ocean ecosystems. She explains the realities of bycatch when using longlining methods to target a particular species and the problems which occur when the first of the target species caught are the oldest, largest and often most productive fish. Perhaps most striking is the claim that people who want to believe that maximum sustainable yield works, keep on believing that it works, even when experience repeatedly indicates that it does not.

#### Marine Protected Area Proposal

The Ross Sea continental shelf ecosystem is arguably one of the most pristine stretches of ocean left on the planet. Concerns have arisen for the ecosystem and its food-web as it comes under increasing pressure from commercial and illegal fishing interests. As the environment begins to experience irreversible alteration from climate change and anthropogenic activity, a proposal to establish a marine protected area (MPA) was submitted to CCAMLR in September 2009 by the Antarctic and Southern Ocean Coalition. This followed suggestions by the World Summit for Sustainable Development, and the 5th World Parks Congress to establish a global and representative network of marine protected areas by 2012 (ASOC, 2010). It is believed that if the Ross Sea was closed to fishing and protected as a marine reserve it would give the ecosystem a chance to recover from fishing impacts already beginning to emerge. The natural reserve created would set aside the Ross Sea as an area dedicated solely to science and peace (Greenpeace, 2010).

The benefits of marine protected areas are well documented and covered extensively throughout marine literature (World Commission on Protected Areas, 1999, Department of Conservation, 2005, & Earle, 2009). CCAMLR and the Antarctic Treaty Consultative Parties have both identified the Ross Sea as one of 11 priority areas to be included in the development of the global marine protected area network. However questions remain on whether a marine protected area would be sufficient to tackle the problem of illegal fisheries in the Convention Area and over who will be responsible for enforcement.

To bring the unique values of the Ross Sea to people's attention a dedicated group established The Last Ocean Charitable Trust (2010). The Trust is working closely with a variety of other projects intended to help raise general awareness, including the Last Ocean documentary currently in production by award winning kiwi filmmaker, Peter Young. Stunning imagery, combined with meaningful interviews, will make this documentary a powerful tool for introducing the Ross Sea and the MPA proposal. John Weller, Ross Sea conservation photographer, is also using images captured from the Ross Sea as he showcases his Last Ocean photography for free in public spaces around the world. The issue is beginning to gain momentum as presentations take place on different scales and publications begin to pick up on the story.

#### Conclusion

With a landscape as picturesque and abundant as the Ross Sea continental shelf eco-system it is no wonder that emotions run high. New techniques make fishing in the Ross Sea possible but clarification is needed on whether or not fishing in the Ross Sea is appropriate and able to be carried out sustainably. Moving forward CCAMLR is faced with the decision as to whether it is best to set aside the Ross Sea as a marine protected area designated solely to research, or whether to continue to allow and possibly expand a global fishery. The uncertainty of supply, combined with the unknown implications of removing the Antarctic toothfish from the Ross Sea food web, make this a decision that cannot be made lightly.

#### References

- Ainley, D. (2004). Acquiring a 'base datum of normality' for a marine ecosystem: the Ross Sea, Antarctica. *CCAMLR document WG-EMM* 04/20, Hobart.
- Antarctic and Southern Ocean Coalition. (2010). *Marine Protected Areas*. Retrieved from: <a href="http://www.asoc.org/issues-and-advocacy/antarctic-environmental-protection/marine-protected-areas">http://www.asoc.org/issues-and-advocacy/antarctic-environmental-protection/marine-protected-areas</a>
- Commission for the Conservation of Marine Living Resources. (2009). Statistical Bulletin, Volume 22, 2000-2009. Retrieved from: <a href="http://www.ccamlr.org/pu/E/e">http://www.ccamlr.org/pu/E/e</a> pubs/sb/CCAMLR 2010 Statistica Bulletin Volume 22 (2000-2009).pdf
- Department of Conservation. (2005). Protecting our seas, Tiakina a Tangaroa: An overview of New Zealand's marine biodiversity conservation and the role of Marine Protected Areas. Wellington, New Zealand: Marine Conservation Unit.
- Earle, S. (2009). *The world is blue: How our fate and the ocean's are one*. Washington DC, United States of America: National Geographic Society.
- Greenpeace. (2010). Defending the last ocean: How seafood markets can help save Antarctica's Ross Sea. Retrieved from Greenpeace's website: <a href="http://www.greenpeace.org/international/en/publications/reports/Defending-the-last-ocean/">http://www.greenpeace.org/international/en/publications/reports/Defending-the-last-ocean/</a>
- Hance, J. (2010). In the midst of marine collapse will we save our last ocean? An interview with David Ainley. Retrieved from: <a href="http://news.mongabay.com/2010/0705-hance\_ainley.html">http://news.mongabay.com/2010/0705-hance\_ainley.html</a>
- Myers, R. & Worm. B. (2003). Rapid worldwide decline of predatory fish communities. *Nature*, 423: 280-283.
- National Institute of Water & Atmospheric Research. (2008). Finding the role of Antarctic toothfish in the Ross Sea ecosystem. Retrieved from: <a href="http://www.niwa.co.nz/news-and-publications/publications/all/wa/15-1/role">http://www.niwa.co.nz/news-and-publications/publications/all/wa/15-1/role</a>
- New Zealand Ministry of Foreign Affairs and Trade. (2010)

  Commission for the Conservation of Antarctic Marine

  Living Resources. Retrieved from: <a href="http://www.mfat.govt.nz/Foreign-Relations/Antarctica/2-Antarctic-Treaty-System/0-conservation-of-resources.php">http://www.mfat.govt.nz/Foreign-Relations/Antarctica/2-Antarctic-Treaty-System/0-conservation-of-resources.php</a>
- The Last Ocean Charitable Trust. (2010). *The Last Ocean Charitable Trust*. Christchurch, New Zealand: author.
- World Commission on Protected Areas. (1999). *Guidelines for Marine Protected Areas*. Cambridge, United Kingdom: Black Bear Press Ltd.

#### **Identification of Surf Breaks of National Significance**

#### **Bailey Peryman**

#### Introduction

Surf break protection is experiencing a rapid rise in attention on an international scale. Researchers of coastal management issues and advocates for protection of the surfing environments are merging here in New Zealand too. The following is effectively an account of how this has led to the inclusion of a policy identifying surf breaks of national significance in the latest revision of the New Zealand Coastal Policy Statement (NZCPS) – the only mandatory National Policy Statement under the Resource Management Act (RMA) 1991.

#### A Brief Timeline

The 10-yearly revision of the NZCPS (1994) began in 2004 with an independent review<sup>1</sup> initiated by the Department of Conservation (DoC). Any specific recommendation for the protection of surf breaks and/or their associated environments is limited to:

...more specific policies that address the particular challenges of sustainable coastal hazard management (including the relationship between coastal hazards and the natural dynamic coastal processes that create and maintain coastline assets such as beaches ... (Rosier, 2004).

There was a significant response from surfers and surfing organisations to the review of the existing NZCPS in 2008. Much of this was led by the Surfbreak Protection Society (SPS), predominantly as a response to the DoC "Issues and Options" paper arising from the 2004 review; the situation unfolding around the Whangamata Bar at the time also served to galvanise the SPS² into action.

Subsequently, the Proposed NZCPS 2008 (DoC, 2008a) includes Policy 20: surf breaks of national significance:

The surf breaks at Ahipara, Northland; Raglan, Waikato; Stent Road, Taranaki; White Rock, Wairarapa; Mangamaunu, Kaikoura; and Papatowai, Southland, which are of national significance for surfing, shall be protected from inappropriate use and development, including by:

(a) ensuring that activities in the coastal marine area do not adversely affect the surf breaks; and

(b) avoiding, remedying or mitigating adverse effects of other activities on access to, and use and enjoyment of the surf

breaks.

<sup>1</sup> Rosier, J 2004. *An Independent Review of the New Zealand Coastal Policy Statement*. Report to the Minister of Conservation. May 2004. Massey University, Palmerston North, New Zealand.

A summary of this can be viewed via the Surfbreak Protection Society website at <a href="http://www.surfbreak.org.nz/campaigns/whangamata-.aspx">http://www.surfbreak.org.nz/campaigns/whangamata-.aspx</a>

A Board of Inquiry (BOI) was appointed to inquire into and report on the Proposed NZCPS. The BOI's recommended NZCPS 2009 (DoC, 2009a) contains a new Policy 18 (replacing former Policy 20):

All decision makers must recognise and protect surf breaks of national significance for surfing, including those listed in Schedule 2, by:

- (a) ensuring that activities in the coastal environment do not adversely affect the surf breaks; and
- (b) avoiding adverse effects of other activities on access to, and use and enjoyment of the surf breaks.

This revision also includes a number of important definitions. Schedule 2 lists 17 surf breaks from around the country. The glossary of terms also contains some important definitions pertaining to surf breaks. These are both addressed in more detail below. After considerable delay, public availability of the recommended version only came about after a disgruntled BOI member leaked the document<sup>1</sup>. Like a number of very public political debates surrounding our natural resources, the absence of this National-level policy statement creates issues of interpretation and coherence at the local government level.

#### Policy 20: Surf Breaks of National Significance

Justification for Policy 20 in the Section 32 report revolves around the national and international reputations of specific surf breaks in New Zealand, the significant benefits to people and communities provided by the natural features and process that create a surf break, and the potentially adverse effects of inappropriate use and development in the Coastal Marine Area (CMA) (DoC, 2008b). It references the case of the world-class river mouth break of Mundaka in Northern Spain which was destroyed in 2005 by dredging in the area (DoC, 2008b, footnote 5 p. 46). This is a well-known case in the world of surf break protection and has particular relevance to the New Zealand context where similar alteration of sediment flows is arguably having an adverse effect on the Whangamata Bar<sup>2</sup>.

The Section 32 report also recognises the economic significance of these surf breaks, as well as the importance of access, water quality and integrity of the natural processes that create a wave (DoC, 2008b). It is uncertain how the final list of surf breaks included in the original Policy 20 and the criteria for such was decided.

This is significant in itself when the SPS itself does not know for sure how a policy protecting surf breaks came to be.

Notably, the same Section 32 report recognises that protection of surf breaks "has not generally been provided for in planning documents, despite general directions in the Act and the 1994 NZCPS to protect natural features, processes, and amenity values" (DoC, 2008b, p. 46). Taranaki and Waikato Regional Councils are alone in creating provisions that directly identify surf breaks or recognise the importance of "surf zones" (SPS, 2006, p. 6); an example of what has to date been a predominantly voluntary and ad hoc process for protecting surf breaks within the context of the NZCPS 1994.



Stockroute, a Nationally Significant Surf Break at Wainui Beach, Gisborne . Photo taken by Bailey Peryman.

# The revised Policy 18: Surf Breaks of National Significance

Much of the reasoning behind the changes leading to BOI recommendations and the new Policy 18 centres on four key points supported in the evidence and submissions on Policy 20 made by the team of coastal environment experts and advocates compiled by SPS (Skellern et al, 2009):

- The need for a policy specific to surf breaks in the NZCPS;
- 2. The lack of specificity (in Policy 20) required when identifying a surf break as more than just a geographical area (e.g. Ahipara, Northland) and therefore the need to establish substantive criteria that best reflect the "quality" of New Zealand's surf breaks;
- 3. Establishing a working definition of the natural features and processes contributing to the presence of a surf break; and
- 4. The significance of surf breaks not initially recognised

<sup>1</sup> See the Scoop.co.nz press release titled: "Report of the Board of Inquiry into Coastal Policy" retrieved October 19, 2010 from <a href="http://www.scoop.co.nz/stories/PO1005/S00065">http://www.scoop.co.nz/stories/PO1005/S00065</a>. <a href="http://www.scoop.co.nz/stories/PO1005/S00065">httm</a>, or the SPS news release titled: "What happened to NZCPS Surfing Policy 20?" retrieved October 19, 2010 from <a href="http://www.surfbreak.org.nz/news/what-happened-to-nzcps-surfing-policy-20.aspx">http://www.surfbreak.org.nz/news/what-happened-to-nzcps-surfing-policy-20.aspx</a>

<sup>2</sup> See update posted on SPS website retrieved October 20, 2010 from <a href="http://www.surfbreak.org.nz/news/whangamata-bar-update.aspx">http://www.surfbreak.org.nz/news/whangamata-bar-update.aspx</a>

as 'world renowned' or of 'National Significance' (e.g. regionally significant surf breaks).

The BOI accepted the argument of a wide range of submitters, not just the SPS, which built on the findings if the initial Section 32 report mentioned above. Submissions to the BOI further established the importance of surf breaks as a finite natural resource and outstanding natural features in their own right. Surf breaks are of historical significance to Maori, as well as social, cultural and economic value to coastal communities in general. Pressures and activities in the coastal environment can and increasingly will lead to the damaging of surf breaks "scarce and vulnerable to development" (DoC, 2009b, p. 130).

The identification of breaks in the revised policy is based primarily on the "Wavetrack method": using breaks found in the Wavetrack New Zealand Surfing Guide (Morse & Brunskill 2004). This guide was accepted by the BOI as the most authoritative guide to New Zealand surf breaks (DoC, 2009b). The guide identifies 16 of the 470 listed breaks as having a 10 out of 10 "stoke", or surf quality rating. The stoke rating "offers an accurate appraisal of each break's potential when optimum conditions are present" (Morse & Brunskill 2004, p. 7). The surf break of Papatowai is included as an exception to the Wavetrack method that was protected under Policy 18. Although Papatowai has a rating of 8 on the stoke meter, it was protected for its growing international profile as a high performance big wave break. Thus, a total of 17 breaks are identified as being of national significance.

This method was addressed in detail in submissions made by the SPS and summarised well by evidence submitted by coastal planning expert Dr Hamish Rennie<sup>1</sup>. The fact that Policy 18 has been included in the recommended NZCPS underlines the merit of the submissions made to the BOI (M. Skellern, personal communication, August 23, 2010). The strength of these submissions also highlights the value of a more "bottomup" approach to policy and decision-making when a text as (relatively) simple as the Wavetrack guide can be accepted as a legitimate proxy in the absence of any other substantive criteria. The guide is the product of a pair of dedicated surfers working in conjunction with members of surfing communities from around the country. No small feat when dealing with the complex issue of interpreting "significance" within the context of the RMA. It is said "only a surfer knows the feeling..." and is therefore, arguably, the most qualified to define surf break quality.

The BOI also accepted the working definitions provided by SPS for:

"Surf break": A natural feature that is comprised of swell, currents, water levels, seabed morphology, and wind. The hydrodynamic character of the ocean (swell, currents and water levels) combines with seabed morphology and winds to give rise to a "surfable wave". A surf break includes the "swell corridor" through which the swell travels, and the morphology of the seabed of that wave corridor, through

to the point where waves created by the swell dissipate and become non-surfable.

"Swell corridor": means the region offshore of a surf break where ocean swell travels and transforms to a "surfable wave".

"Surfable wave": means a wave that can be caught and ridden by a surfer. Surfable waves have a wave breaking point that peels along the unbroken wave crest so that the surfer is propelled laterally along the wave crest (DoC, 2009b, p.134).

# The final Policy 16: Surf Breaks of National Significance

The NZCPS 2010 was finally gazetted on November 4, 2010. This retained a stand-alone policy for surf breaks of national significance, including the key definitions and an unchanged schedule of surf breaks (see Appendix 1). The final Policy 16 "surf breaks of national significance" in the NZCPS 2010 reads relatively the same as the BOI recommendation above:

Protect the surf breaks of national significance for surfing listed in Schedule 1, by:

- (a) ensuring that activities in the coastal environment do not adversely affect the surf breaks; and
- (b) avoiding adverse effects of other activities on access to, and use and enjoyment of the surf breaks.

The breaks scheduled in Policy 16 can now be protected by the relevant local authorities. There are some inconsistencies evident in the naming and identification of the breaks and a change in wording truncating the opening sentence effectively renders this more conclusive than initially desired by key submitters. BOI recommendations accepted submissions in support of a policy open to further addition of yet to be identified breaks. Despite this, the policy is something of a milestone for surf break protection in the country and has received plaudits on an international scale (M. Skellern, personal communication, February 11, 2011).

#### Surf Breaks in other NZCPS Policy

A number of surf breaks were unsuccessfully argued for (e.g. St. Clair, Dunedin; Main Beach, Mt. Maunganui) as significant, either as national or regional "nursery breaks" or for other reasons. However, the real teeth for surf break protection come through the inclusion of surf breaks as part of the natural character of the coastal environment (see Policy 13, DoC, 2010), and the recognition of seascapes as part of the natural features and natural landscapes of the coastal environment (see Policy 15, DoC, 2010,). I am conducting further studies in order to develop a robust methodology to guide local authorities in providing for surf breaks in response to the NZCPS 2010.

<sup>1</sup> See evidence of Hamish Rennie, retrieved October 20, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-7-7.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-7-7.pdf</a>

<sup>2</sup> See evidence of Matthew Skellern, retrieved October 20, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-6-7.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence-6-7.pdf</a>

# Arguments against Inclusion of a Stand-alone Surf Break Policy

Most of the Councils question why surf breaks – and not recreational diving spots, subsistence fisheries, etc. – should be classed as a specific natural feature of our coastal environment that is worthy of protection. Selecting one coastal activity above others is seen as inappropriate in the context of the NZCPS. Values associated with surf breaks can be protected by Regional Policy Statements (RPSs) using a less directly surf break-focused form of policy¹. Some Councils also expressed reservations about use of a national/regional/local hierarchy due to difficulty distinguishing cut off points for the appropriate or representative scale of surfing communities and their surf breaks (M. Langman, personal communication, September 28, 2010).

The BOI agrees with the SPS, however, that:

...the failure to identify [surf breaks] more specifically in the NZCPS will result in a less efficient, more ad hoc and arbitrary identification of nationally significant surf breaks through individual resource consent cases. We agree with Dr Rennie... that policy 20 should be retained because it...

marks a significant step towards improving policy guidance to decision-makers on the sustainable management of rare, finite and threatened geographical features (see DoC, 2009b, pp. 133-134).

This is based on the argument that the policy "specifically focuses on a component of the natural environment, as opposed to peoples' activities, and addresses the need to protect that component from the negative effects of other human activities on it... and therefore retains an effects-based approach"<sup>2</sup>. It also supports general arguments for increased national guidance made by Dr Rosier in the 2004 review of the NZCPS and recognised in the Section 32 report on the Proposed NZCPS (mentioned above).

#### **Implications for Planners**

The new NZCPS presents a number of challenges for planners providing for surf breaks given that it is a new area of resource management. Local authorities are required to identify outstanding areas of natural character and natural landscapes (including seascapes) in planning provisions. Therefore, mapping the spatial extent and establishing baseline data for environmental monitoring of dynamic natural phenomena poses a significant challenge.

1 The submission made by Northland Regional Council is an example of these two arguments. Retrieved October 20, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/northland-regional-council-nzcps-403.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/northland-regional-council-nzcps-403.pdf</a>

The jurisdiction of the RMA is limited to the 12 nautical mile limit of the CMA; this presents difficult questions for protecting the integrity of swell corridors stretching far beyond the seaward limit of the CMA. Notably, the BOI accepts the need to consider activities undertaken within the coastal environment, as opposed to just the CMA (DoC 2009b, p. 134), a subtle change in the wording of Policy 16 to cater for activities beyond the landward limit of the CMA. Another subtle change by the BOI is found in Policy 18(b), which states the adverse effects of activities shall be avoided, removing the "remedied or mitigated" as "there can be a major difference between avoiding and mitigating adverse effects" (DoC, 2009b, pp. 133-134).

Although a precedent has been set by the Taranaki Regional Council for including surf breaks in their RPS, there are also many questions around the form policy tools (e.g. RPS methods) might take for developing regional plans and regional coastal plans (M. Langman, personal communication, September 28, 2010), including complicated cross-over into the jurisdiction of local authorities for land-based activities. Perhaps this suggests a need to shift the focus of coastal planning towards integrated coastal management to meet the requirements of the comprehensive approach inherent in the NZCPS. Nevertheless, the complexity of coastal management issues is high when considering statutory management tools and provisions alone. This is illustrated by the figure in Appendix 2.

Personally, on a broader scale, I believe this entire process highlights the effectiveness of well-organised lobby groups in the RMA framework; à la the remarkable Fish & Game effort in securing the status of salmon and trout in the RMA. As SPS

President Paul Shanks outlined in his evidence to the BOI, the language of surfers is hardly conducive to acceptance within the appropriate legal and planning frameworks<sup>3</sup>. Once "translated", however, even some of the most colloquial of interpretations can be given legitimacy in the context of environmental law and science. This bodes well for a reorientation of the planning process to a more inclusive form of policy and decision-making; what is missing, arguably, is the methodology.

#### **Conclusions**

Surf break protection is justifiable in an international context, demonstrated as a multi-billion dollar industry (see again the evidence of Paul Shanks – see footnote 10 below). The first World Surfing Reserve was recently inaugurated in Malibu, California, USA by the Save the Waves Coalition. Endorsed by a wide range of statutory and non-profit organisations, "World Surfing Reserves proactively identifies, designates and preserves outstanding waves, surf zones and their surrounding environments, around the world". A quick search on Google Earth reveals a number of breaks in New Zealand ear-marked for similar recognition. Similar progress in Australia has seen 11

<sup>2</sup> Paragraphs 172-175 of evidence from Dr. Hamish Rennie, retrieved October 20, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-7-7.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-7-7.pdf</a>

<sup>3</sup> See evidence retrieved October 20, 2010 from http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-evidence-3-7.pdf

<sup>4</sup> See the article titled: "*Malibu becomes first World Surfing Reserve*" retrieved October 20, 2010 from <a href="http://www.surfersvillage.com/surfing/49045/news.htm">http://www.surfersvillage.com/surfing/49045/news.htm</a>

"National Surfing Reserves" established across the country in coalition with Save the Waves<sup>1</sup>.

The global community that is surfing is alive and well in New Zealand. A policy identifying surf breaks of national significance is testament to that fact. The complexity of issues surrounding the coastal environment and the interconnected nature of surfing and surfing culture as obviously both land and marine based lends weight to a more comprehensive and integrated approach to coastal zone management. The dynamism of the surfing industry and surfers alike are well-suited to accommodating such an approach.

#### References

Department of Conservation. (2008a). *Proposed New Zealand Coastal Policy Statement 2008*. Retrieved October 21, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/proposed-nzcps-2008-high-res.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/proposed-nzcps-2008-high-res.pdf</a>

Department of Conservation. (2008b). Proposed New Zealand Coastal Policy Statement 2008: evaluation under section 32 of the Resource Management Act 1991. Wellington, New Zealand. Retrieved October 21, 2010 from http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/proposed-nzcps-section-32-report.pdf

Department of Conservation. (2009a). Proposed New Zealand Coastal Policy Statement 2008: Board of Inquiry Report and Recommendations. Volume 1: Findings, Recommendations and Recommended New Zealand Coastal Policy Statement 2009. Retrieved October 21, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closed-consultations/nzcps/NZCPS-2008-board-of-inquiry-vol-1.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closed-consultations/nzcps/NZCPS-2008-board-of-inquiry-vol-1.pdf</a>

Department of Conservation. (2009b). Proposed New Zealand Coastal Policy Statement 2008: Board of Inquiry Report and Recommendations. Volume 2: Working Papers.

Retrieved October 21, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closed-consultations/nzcps/NZCPS-2008-board-of-inquiry-vol-2.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/closed-consultations/nzcps/NZCPS-2008-board-of-inquiry-vol-2.pdf</a>

Department of Conservation. (2010). New Zealand Coastal Policy Statement 2010. Retrieved November 21, 2010 from <a href="http://www.doc.govt.nz/upload/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf">http://www.doc.govt.nz/upload/documents/conservation/marine-and-coastal/coastal-management/nz-coastal-policy-statement-2010.pdf</a>

Morse, P. B. and Brunskill, P. (2004). *Wavetrack New Zealand Surfing Guide*. Greenroom Surf Media Limited: New Zealand.

Skellern, M. (2010). (October) Future-proofing waves. *KiwiSurf Magazine*, pp. 50-53.

Surfbreak Protection Society. (2006). Comments on the Dept of Conservation Issues and Options Paper – Review of the New Zealand Coastal Policy Statement. Retrieved October 20, 2010 from <a href="http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-exhibit-additional-2.pdf">http://www.doc.govt.nz/upload/documents/getting-involved/consultations/current-consultations/nzcps/evidence/133-nzcps-exhibit-additional-2.pdf</a>

Taranaki Regional Council. (2009). *Regional Policy Statement for Taranaki*. Retrieved October 21, 2010 from <a href="http://www.trc.govt.nz/assets/Publications/policies-plans-strategies/regional-policy-statement/rps-full.PDF">http://www.trc.govt.nz/assets/Publications/policies-plans-strategies/regional-policy-statement/rps-full.PDF</a>

# Appendix 1 Schedule 1: Surf breaks of national significance (DoC, 2010)

#### Northland

Peaks - Shipwreck Bay

Peaks – Super tubes – Mukie 2 – Mukie 1

#### Waikato

Manu Bay - Raglan

Whale Bay - Raglan

Indicators – Raglan

#### Taranaki

Waiwhakaiho

Stent Road - Backdoor Stent - Farmhouse Stent

#### Gisborne

Makorori Point – Centres

Wainui - Stock Route - Pines - Whales

The Island

#### Coromandel

Whangamata Bar

#### Kaikoura

Mangamaunu

Meatworks

#### Otago

The Spit

Karitane

Murdering Bay

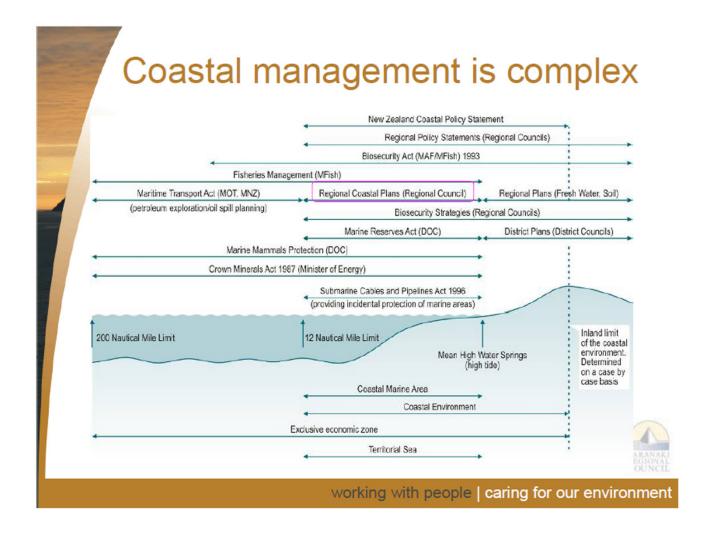
Papatowai

Rosier, J 2004. An Independent Review of the New Zealand Coastal Policy Statement. Report to the Minister of Conservation. May 2004. Massey University, Palmerston North, New Zealand. Retrieved October 21, 2010 from <a href="http://www.doc.govt.nz/upload/documents/conservation/marine-and-coastal/coastal-management/nzcps-review-2004.pdf">http://www.doc.govt.nz/upload/documents/conservation/marine-and-coastal/coastal-management/nzcps-review-2004.pdf</a>

<sup>1</sup> For more on National Surfing Reserves in Australia see the website retrieved October 20, 2010 from <a href="http://www.surfingreserves.org/what-is-nsr.php">http://www.surfingreserves.org/what-is-nsr.php</a>

#### Appendix 2 – Figure displaying applicable statutory provisions and instruments for Coastal Management

Taken from Taranaki Regional Council document: "Regional Coastal Plan Review" retrieved October 20, 2010 from <a href="http://www.trc.govt.nz/assets/Publications/policies-plans-strategies/regional-plans-and-guides/regional-coastal-plan/coastal-iwi09.pdf">http://www.trc.govt.nz/assets/Publications/policies-plans-strategies/regional-plans-and-guides/regional-coastal-plan/coastal-iwi09.pdf</a>



# What's at the end of the line for Akaroa wastewater – infertile fish?

#### **David Birch**

The small township of Akaroa on the eastern tip of Banks Peninsula is in a quandary over the future of its wastewater system. The factors that make this difficult community issue unique to such a quaint, adorable Canterbury backwater resort are its large transient population of bach-owners from Christchurch City, its remoteness from provincial governance, and the steep-sided topography of the terrain that limits the amount of available space to deploy an adequate land application system as an alternative to the current discharge of treated waste to harbour.

In the absence of constraints as powerful as the Resource Management Act (1991), in the 1960's there were few controls over the design of the original wastewater treatment system at Akaroa with respect to its environmental impacts and long-term sustainability, leading one to ask how a new system can be adequately designed to replace the ageing infrastructure and meet the growing needs of this popular summer haven. Now that administration of the Banks Peninsula district has been taken over by a council geographically distant and relatively isolated from the community, the provision of a solution that the township can live with is challenging.

In order to understand the dynamics at work here it is important to have some knowledge of the history behind the location of the existing treatment plant and the transition of political power away from the locality, and to listen intently to the diverse voices of the local community.

#### **Some History**

The southern corner of Takapuneke (Red House Bay) was bought by the (then) Akaroa County Council and in 1960 a wastewater treatment plant was constructed at Green Point on top of a sacred Maori site, where there was a massacre in the 1830s. In 1979 a county rubbish tip was opened uphill from the bay, just above the kainga, but was subsequently closed in 1998, with the council apologising to the Onuku runanga for placing the wastewater works and dump in such a culturally significant place. However, the council maintained that the treatment plant could not be removed, due to its size and vitality for the Akaroa township. In 2002 the area was registered as wahi tapu by the Historic Places Trust (Darling, 2005b; Keene, 1998).

Historically, the limited capital expenditure budget available to the old Banks Peninsula District Council (BPDC) has been insufficient to provide adequate wastewater infrastructure to cope with the demand of peak summer tourism, when the town population swells from a few hundred to several thousand; and sewage spills have occurred due to the age and condition of the piping infrastructure in significant wet weather events. In 2001 a Ngai Tahu Fisheries application for resource consent for the development of nine coastal marine mussel farms in the harbour was declined on the basis that such sewage releases could

contaminate the product (Hutching, 2001), although ironically there is already extensive marine farming across the harbour from Akaroa.

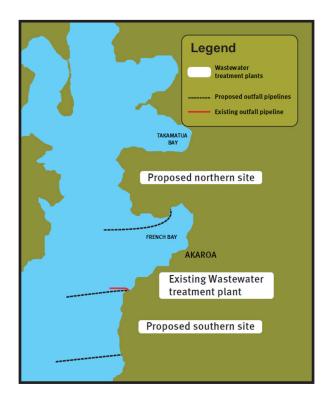
In 2005 the BPDC advised that they would ask the regional council, Environment Canterbury (ECan) to conduct tests south of the wastewater treatment plant after locals raised concerns about water quality in that area. The BPDC reported that the high ammonia nitrate levels in the early months of 2005 could trigger algal blooms. ECan advised that the capacity of the treatment plant had been reached during that period, and that extra storage may be required prior to release into the harbour. Although the BPDC had advised in 1996 that the plant could contribute up to 4% of the total nitrogen and phosphorous entering the harbour, the plant's 10-year resource consent that was due for renewal in 2007 did not specify a requirement to monitor water quality around the outfall. ECan pointed out that there was no correlation between the concentrations of nutrients in the sewage discharge and the actual volume of sewage discharged (Darling, 2005a).

The wastewater treatment primary stage comprises two sedimentation tanks, after which there is biological treatment in a trickling filter and secondary sedimentation subsequently disinfected by ultraviolet light. The treated wastewater is discharged into the harbour via a 100m long outfall pipe. Upgrades to the treatment plant have been carried out in 1984, 1998 and in 2009. The BPDC was disestablished in March 2006, and the region is now administered by the Christchurch City Council (CCC). According to the CCC website the current resource consent for discharge to the harbour (CRC 071865) was approved in 2008, and expires in 2013. The consent is conditional on CCC establishing a community working party to investigate alternative long-term wastewater treatment options, and on meeting a series of milestones and objectives, to demonstrate progress towards a management solution. A working party was indeed established in 2008, and public submissions on a range of options were received by CCC in mid-2010. According to CCC City Environment Group's Zefanja Potgieter, the amended date for the Council to select a long-term wastewater option is December 2011; therefore the working party's preference will be determined in the second part of 2011.

#### **Current Options**

The options currently on the table, according to the CCC website, are to improve the quality of the wastewater, discharge further out into the harbour (either at the current site or at a new location to the north or the south of the present site), or to discharge an improved standard of waste to land. A combination of these options might be considered, whereby waste is discharged to land only during dry weather conditions. An option to pipe the waste to sea beyond the mouth of the harbour may be considered, but is a high cost alternative.

[Please look at the following page for graphic]



Source: Christchurch City Council web pages, retrieved September 6, 2010, from ttp://resources.ccc.govt.nz/files/AkaroaWastewaterinfo27-

 $\frac{http://resources.ccc.govt.nz/files/AkaroaWastewaterinfo27-04.}{pdf}$ 

#### **Statistics**

According to the Statistics New Zealand 2006 census, Akaroa's population of permanent residents was 570 (declining since the 2001 census), and Akaroa Harbour was home to 735 people (increasing since the 2001 census). However, according to the CCC web pages, "the treatment plant services the whole of the Akaroa community of around 650 permanent residents, but does not extend over the hill to Takamatua, and ironically neither does it service the Onuku Marae community." CCC advised that they received 22 submissions which, based on Statistics New Zealand data of an average of 2 people per household in Akaroa Harbour, equates to a response rate of between 3-7%. One might speculate that this apparently low community participation may be due to their unfailing confidence in their representation through the working party (which comprises a cross-section of the community), or that it is a complex technical issue about which they do not feel confident expressing an opinion, or it could simply be due to apathy, or a combination of the above. However, it must be noted that a CCC representative regularly attends local public meetings, so the community can have their say here too, albeit to a lesser extent.

Of the submissions<sup>1</sup>, 52% prefer the status quo (an upgraded plant in the same location, discharging further out into the harbour), 24% prefer discharge of higher quality wastewater

onto land, 14% have no preference, and 10% would like an upgraded plant in a new location, discharging further out into the harbour. 19% oppose the status quo (particularly those who value the cultural and spiritual significance of the site), 19% oppose relocation to the north, 19% oppose discharge to land, 10% oppose relocation to the south, and 10% oppose discharge into the harbour of any description.

#### **Community-offered Solutions**

Some submitters offered imaginative alternative solutions, such as the recycling of grey water for non-potable use, installing septic tanks, low-flush toilets, and primary treatment systems in holiday parks. CCC were advised to choose their discharge outlet points carefully with respect to best dispersion, to take advantage of stronger outgoing tides, and to be located away from marine reserves. Some preferred to keep the cost to the ratepayer low by re-utilising existing infrastructure, while others would rather have a high-quality solution regardless of the expense, including piping out to sea beyond the heads.

Of interest, but not necessarily of any great significance, was that a few submitters were concerned about the release of oestrogens into the harbour. Sewage discharge is a major source of human oestrogens in marine ecosystems, and there has been growing concern over their effects on marine organisms (Saravanabhavan et al., 2009). Women excrete natural oestrogens, the primary female sex hormones secreted by all vertebrates, and also synthetic oestrogen used in the birth control pill; and neither source is completely broken down in the wastewater treatment process. When the process involves pumping treated sewage out to sea these oestrogen compounds have been found to 'feminise' marine organisms and disrupt their reproductive processes. In their research Jobling et al. (1998) recorded a high incidence of intersexuality in fish, whereby males were producing early stage eggs or egg proteins, or developing smaller gonads; thus impairing their ability to produce sperm and fertilise eggs, leading to a decline in population. This, in turn, can have a snow-balling impact on the entire predatory ecosystem.

Similarly, research on male birds that eat earthworms at sewage treatment plants has determined that although the oestrogen found in the human waste is causing the birds to be more virile and more attractive to female birds, the researchers are worried that the greater mating success by these birds will lead to weaker, less potent offspring (Schardt, 2008). So release of oestrogens on to land may also be an issue.

However, using inexpensive materials, abiotic transformation methods in wastewater systems have been developed for improving the removal of oestrogens from the environment (Marfil-Vega et al., 2010), and 80-90% of the oestrogens can

be taken out when the waste is treated with at least secondary treatment. These methods could be considered in the design of the Akaroa treatment plant.

<sup>1</sup> Andrews, V; Andrews, V & Davis, A; Arnold, P & Marshall, P; Beattie, R; Brocherie, T; Carter, L; De Hamal, M; Disse, W & M; Julian, A; McIvor, B; McIvor, J; Molloy, K; Moore, I & S; Naish, R & S; Parkes, V; Reid, B; Reid, K; Rolleston, H; Sheridan, G; Shirley, J; Slooten, L; Weir, C

#### Conclusion

According to Mr Potgieter, capacity can easily be built into the system to cope with future demand, the quality of the discharge can be improved to such an extent that it has a negligible affect on the environment, and the effluent plume can be safely dispersed outside the harbour if funds are available to risk building a 12 km long outfall in very active seabed conditions at the harbour mouth and beyond. Mr Potgieter confirms that there should be enough land available to cope with the soil hydraulic loading should a land-based option be wholly or partially adopted. It remains to be seen whether CCC can provide an imaginative long-term solution that the community can be proud of, against the current backdrop of competing priorities for Christchurch capital projects through the Long Term Council Community Plan.

#### References

- Darling, S. (2005a, Jun 10). Call for algal-bloom testing at Akaroa. *The Press*, p. 6
- Darling, S. (2005b, Jun 18). Land of horror to be saved. *The Press*, p. 5
- Christchurch City Council web pages. *Akaroa Harbour water and wastewater strategy*. Retrieved September 6, 2010, from <a href="http://www.ccc.govt.nz/thecouncil/policiesre-portsstrategies/strategies/akaroaharbourwaterstrategy.aspx">http://www.ccc.govt.nz/thecouncil/policiesre-portsstrategies/strategies/akaroaharbourwaterstrategy.aspx</a>
- Christchurch City Council web pages. *Akaroa Treatment Plant*. Retrieved September 6, 2010, from <a href="http://www.ccc.govt.nz/">http://www.ccc.govt.nz/</a>
  <a href="http://www.ccc.govt.nz/">homeliving/wastewater/treatmentplant/akaroa.aspx</a>
- Environment Canterbury (2008). Decision of the Hearing Committee in terms of the Resource Management Act 1991. Christchurch City Council application for resource consent CRC071865: Akaroa wastewater treatment plant
- Hutching, C. (2001, July 13). Ocean property rights are set back. *The National Business Review*, pp. 40-43
- Jobling S., Nolan M., Tyler C.R., Brighty G., Sumpter J.P. (1998). Widespread sexual disruption in wild fish. *Environmental Science and Technology*, 32, 2498-2506
- Keene, H. (1998, Sep 26). Apology over site desecration. *The Press*, p. 3
- Marfil-Vega, R., Suidan, M.T., & Mills, M.A. (2010). Abiotic transformation of estrogens in synthetic municipal wastewater: An alternative for treatment? *Environmental Pollution*. In press, corrected proof. Retrieved September 6, 2010, from ISI Web of Knowledge [v.4.10] Web of Science
- Saravanabhavan G., Helleur R., Hellou J. (2009). GC-MS/MS measurement of natural and synthetic oestrogens in receiving waters and mussels close to a raw sewage ocean outfall. *Chemosphere*, 76, 1156-1162

- Schardt, H. (2008). Tainted love songs: starlings' odd attractions. *National Wildlife*, 46, 10
- Statistics NZ web pages. Retrieved September 6, 2010, from <a href="http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3596800&type=au&ParentID=1000013&expand=2000060&scrollLeft=0&scrollTop=1007&ss=y">http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/AboutAPlace/SnapShot.aspx?id=3596800&type=au&ParentID=1000013&expand=2000060&scrollLeft=0&scrollTop=1007&ss=y</a>

# Book Review - Cities on the shore: the urban littoral frontier Nick Williams\*

Attracting new flows of capital and people as a catalyst for economic and social renewal is becoming the focus of attention for many large cities around the world. As they strive to out-compete each other their burgeoning size is causing many to turn to the commissioning of mega-projects to achieve their status and goals. With this new focus, mega-projects are unfolding into greater and more ambitious waterfront projects and reclamations from once uninhabitable real estate - the water. The reclamation of land from rivers, estuaries, wetlands, and the sea has been occurring since the earliest of times, vastly predating the ostentatious islands of Dubai or the land-deprived Hong Kongs of the world.

Cities on the Shore is a result of research undertaken in many different parts of the world over a period of more than 30 years and is written in the belief that the reclamation of land for urban development is much more common than is generally realised. The author's theory is that far from being a phenomenon that occurs only in special circumstances, reclamation of land for urban development is a normal process of city expansion.

Hudson has studied land reclamation since 1959 when as a final year undergraduate at the University of Liverpool he made a study of Teesside, the industrial development and reclamation of the Tees estuary. Over the years, while working in Britain, West Africa, Hong Kong, the West Indies and Australia he maintained his interest in land reclamation and urban development. Having written and published papers in various journals his aim was to produce a book to attempt to treat the topic from a global perspective as a normal process of urban development. His starting point is that reclamation researchers focused too much on the special circumstances of a particular location, especially in places where development pressures are great and there are severe topographical restraints.

The book itself opens with an engaging introduction which zeros in on the examples of less obvious, but certainly not insignificant, waterfront reclamations in Auckland and Wellington, and then Sydney. These examples are sure to offer an interesting segue for New Zealand readers, and bring both some familiarity and relativity to the topic. Introductions aside, the book is much more global and the author's deep understanding of the topic is expressed through various case studies. Among the places most frequently used are Hong Kong, San Francisco Bay and Teesside.

The author strives to comprehensively cover the subject from the earliest years, pre industrial right up until the mid 1990's, showing that the planning issues and tradeoffs of yesteryear and the innovative solutions designed to enhance and mitigate our impacts on the surrounding environments are reflected in the similar tradeoffs and predicaments faced by planners of today. Albeit slightly less evolved, the economic, logistic, political, and social issues are all played out in very similar fashion. For the avid theorist on this topic this book is a must read, and given that the New Zealand Coastal Policy Statement 2010 has particularly strong policies on coastal reclamation, it is perhaps timely to revisit this classic.

What may seem at first to be a limitation, the emphasis on only case studies with which he is most personally familiar may be a blessing in disguise, as too many more may well have detracted from the ability of the author to set the scene and frame his story as effectively. For this reason I cannot fault his approach.

The book lacks in contemporary theory on 'green', low impact and transit-orientated design for waterfront development. However, this literature and research is relatively recent and with respect to the time period from which the book is set, it does not detract from its cause.

The author covers much, but does so in a chronological manner which helps the reader to understand why a particular situation has been played out, what may have influenced it and how we as a society may have learned in the process. The structure enables the reader to track the trials and tribulations of urban littoral reclamation from water side camp, through industrial growth, health concerns, market speculation/development pressure, to logistical dilemmas/engineering feats, and environmental opposition leading to greater public awareness and input in decision-making. The make-up of this book is such that it entices the reader to follow on, and learn while it references back and forth through the various case-studies as they relate to the narrative.

Cities on the shore is informative as much as it is accessible. Whether or not the reader is an expert on the topic, it is sure to be an enjoyable read. The book offers a valuable insight and overview on the history of land reclamation up until the mid to late 1990's. It should be an essential read for those who are interested in this global phenomenon in an age where real estate pressures, city expansion and littoral zone protection is an ever-increasing domain of importance for planners of today.

Hudson, B. J. (1996). *Cities on the shore: the urban littoral frontier*. New York: Pinter. 180 pages

\*Nick Williams is a Lincoln University student who completed his BEMP in 2010 and is returning in 2012 for postgraduate studies.

## **Opinion Pieces**

#### Responsible Research Raviv Crarsuk\*

Arguably there is a moral imperative to practice what one preaches. So, when one is conducting research in a field where environmental responsibility is a key component one should conduct the research in an environmentally responsible manner. With this in mind I sought to reduce the environmental impact of my Masters as much as practicable. Thus, while researching the Responsible Tourism Qualmark (RTQ) scheme, which is part of the New Zealand Ministry of Tourism's effort to improve the sustainability of tourism industry practices, I included the following initiatives:

#### Reducing the ink and page usage

Rather than unnecessary printing or photocopying of articles and sheets of analysis I conducted an online literature review (using PDF files), and an online digital analysis (using the NVivo 8 and the SPSS software). These practices have saved hundreds if not thousands of printed pages. Careful consideration has also been given to how best to lower the environmental impact of any printing required (i.e. survey forms and the thesis itself). I have found that printing using one and a half line spacing with Times New Roman 12 point font is one of the most environmentally friendly options (and is permitted within the Lincoln University, 2010 House Rules for Masters Theses). This choice reduces the ink and page numbers used when compared to the other options (Agarwal, 2010).

#### Commuting and fieldwork travel

I have endeavoured to use my bicycle as often as possible and during the year long research I have commuted over 4,000km by bicycle. I cycled to Lincoln University from my Christchurch home about three times a week and I cycled when surveying tourists or conducting interviews in Christchurch. I also cycled around Auckland in the week I stayed there for fieldwork.

For my research, 17 businesses were randomly selected to be interviewed from outside of Christchurch. To help reduce my carbon footprint I was able to schedule two of the interviews to be held in Christchurch while the business owners were visiting the city. The other 15 interviews were scheduled to be carried out during three road trips. On two of the road trips, interviews were conducted as I was driving through the interviewee's region while on my annual vacations (these included a journey to Fiordland and one to North-East Nelson). The third trip covered the North Island, from Wellington to Auckland via Napier and Taupo. I chose to relocate a rental car back to Auckland with the knowledge that this car would have completed the trip anyway by the rental company. I later completed my return Auckland - Christchurch journey by train. By choosing to travel by train rather than aeroplane there was a reduction of 240kg of CO2. An additional 100kg of CO2 was also saved by choosing the rental car option instead of flying (Landcare

Research, 2010). Unfortunately, to conduct this trip solely by public transport an extra three nights' accommodation would have been required. Although this option would have been more environmentally friendly it would have cost an extra NZ\$300 which my budget would not allow.

For my time outside Christchurch, I compared different environmental outcomes when choosing the accommodation style for the 10 night stay. Staying in backpacker style accommodation was not only a cheap option from a budget point of view, but it was also the most environmentally sustainable one (Becken, 2002).

Finally, to offset my carbon emissions I was involved in two restoration projects where I have planted over 400 native trees. I have also set \$200 of my budget for carbon offsetting. This money was donated to the Maurice White Native Forest Trust who supports the Hinewai Reserve on the Banks Peninsula that has 1230 ha of regenerating native bush.

#### Conclusion

I acknowledge that many people choose environmentally friendly commuting options, but I encourage other researchers to think about environmental impacts when planning and conducting their fieldwork, analysis and research write up. Plan ahead and make sure you are using your study time not only to develop your academic life, but also to develop environmental habits and demonstrate environmental sustainability through the way in which you conduct your research.

\* Raviv's experience in the tourism industry stretches over twenty years. He has worked for over a decade guiding domestic tourists in Israel before becoming a chef. As a chef he worked for catering companies, restaurants and distinctive hotels such as the King David Jerusalem. Raviv immigrated to New Zealand six years ago and worked for the Christchurch Heritage Hotel for two and half years before starting his studies at Lincoln University. In late 2010, Raviv submitted his Tourism Management Master under Associate Professor Susanne Becken and Professor Ken Hughey. His research seeks to understand why businesses incorporate sustainable practices through RTQ, and how tourists respond to the concept of responsible tourism.

#### References

Agarwal, A. (2010). Which Fonts Should You Use for Saving Ink. Retrieved 20 July from: <a href="http://www.labnol.org/internet/fonts-for-saving-printer-ink/12603/">http://www.labnol.org/internet/fonts-for-saving-printer-ink/12603/</a>

Becken, S. (2002). Analysing international tourist flows to estimate energy use associated with air travel. *Journal of Sustainable Tourism*, 10(2), 114-131.

Landcare Research. (2010). CarboNZero calculators. Retrieved 20 July from: <a href="http://www.carbonzero.co.nz/calculators/index.asp">http://www.carbonzero.co.nz/calculators/index.asp</a>

Lincoln University. (2010). Requirements and Guidelines for the Presentation and Deposit of Theses and Dissertations Retrieved 20 July from: <a href="http://library.lincoln.ac.nz/Documents/Library/thesis-requirements.pdf">http://library.lincoln.ac.nz/Documents/Library/thesis-requirements.pdf</a>

#### Case Affirms Test For Untenantability Paul Calder\*

A recent High Court decision sheds light on the question of untenantability. Paul Calder, of Duncan Cotterill, discusses what it means for landlords and tenants in Christchurch.

A High Court judgment has clarified the issue around untenantability of damaged premises and will no doubt be of interest to landlords and tenants of Christchurch buildings.

The case, Russell v Robinson, involved an appeal from an earlier District Court finding that a lease of commercial premises in Auckland had been validly terminated by the landlord because of damage caused by fire. The lease was on the standard ADLS form (4th edition 2002). The High Court upheld the earlier decision, affirming the meaning of the word "untenantable". The tenant in this case had entered into a four year lease of first floor premises in a three storey commercial building. On the first day of the lease there was a serious fire as a result of work being undertaken by the tenant in preparation for taking over the premises. It extensively damaged the building. The roof and ceiling of the premises needed to be demolished, the debris taken away and these structures then rebuilt. The electrical and air conditioning systems were destroyed and needed to be replaced; as did the flooring; and water and electricity had to be reconnected. The remedial work, which included design, consents, and building work, took 10 months during which the premises were unable to be occupied.

The landlord purported to terminate the lease on the grounds that the premises were untenantable and that, in its opinion, the damage was such that the premises would need to be demolished or rebuilt. The landlord effectively invoked both limbs of the total destruction clause in the lease. But the tenant disputed termination and argued that if a tenant wanted to continue leasing damaged premises, then how could they properly be described as untenantable.

This argument was rejected in both the District and High Courts. While there are no fundamentally new concepts identified in the High Court judgment, it does confirm the general principles to be applied when considering tenantability issues. In particular:

- The question of whether premises are untenantable is a factual matter that will need to be objectively determined in each case.
- While the focus of the enquiry must be whether the premises are capable of being used by the tenant who went into the premises for a specific purpose and term, this does not permit the objective assessment being watered down by the landlord or the tenant's subjective preferences. The question is, has there been a substantial interference to the tenant's ability to enjoy, use and operate the premises? If the premises are not fit for such occupation, they are untenantable.
- Importantly, some degree of permanence is required to render the premises untenantable. In this case the fact that the premises could not be occupied or used for the tenant's purposes for 10 months out of a four year lease term was central to the finding of untenantability.

Each case will be different. Landlords and tenants should seek legal advice early, and before taking action.

\* Paul Calder is a partner specialising in commercial property at national and trans-Tasman law firm Duncan Cotterill. P.calder@ DuncanCotterill.com

#### Christchurch - 2025

#### Rob Greenaway\*

The 2025 biannual International Symposium on the Rebuilding of Canterbury was drawing to a close. Keynote speaker, Ernie Bedford, the local private developer behind the successful Turners and Growers Centre, was offering his perspective on the past 20 years of post-quake growth in Christchurch and the region.

Bedford had presented various papers at the conference, and his latest on the long-term benefits of converting unstable residential land in the suburbs to public open space, had summed up the gains that could be made from what were controversial decisions immediately following the 2011 quake. The Council had decided to negotiate with insurance companies to buy destroyed homes, avoiding the need for owners to rebuild where they no longer wished to live, and massively expensive remedial land works. The new areas of parkland and pathways were acclaimed for enabling the high-quality low-rise apartments scattered throughout the suburbs. The earthquake had put many people off home ownership, and under-insurance forced others to accept an alternative lifestyle. Bedford's personal wealth was founded on some wise, but possibly risky investments made at the time.

The audience was in a jovial mood, having just returned from a field trip to Canterbury University, always a highlight of the Symposium. The University's International Centre for Earthquake Recovery and Construction had timed the engineering students' design tests to coincide. The structural integrity competition was won by three Korean students whose fourstorey model building had, as planned, withstood the equivalent

of a 7.3 earthquake with the students standing on it, but had collapsed with a shake of 7.8. The objective had been to have it crumple at 7.7.

Bedford called the gathering to attention, starting with a review of Lyttelton. Bedford had grown up there and still missed the Timeball Station, although the earthquake memorial on the site was a stunning piece of work. Older residents had taken time to adjust to the new Lyttelton, but it was the show-case for the region. In 2012 it was decided to rebuild the port town quickly as a model for Christchurch, and particularly for the CBD, which had languished while the City argued over its future. Promises of substantial national funding had not materialised and time was wasted in expectation and dispute.

In Lyttelton, the opportunity to encourage private owners to design and build within a set of themes was tested, and new rules in the City Plan were put through their paces. It was not easy, but there was no arguing that the town had led the resurgence in regional tourism. Guests at boutique hotels enjoyed the market atmosphere of the town centre, and the very quirky and unique local architecture. No one was comparing it to a mini-Melbourne or a tiny Nice, it was Lyttelton, and well-known internationally. The redeveloped Harbour Lights building centred the village and led the design theme, giving the main street a Bohemian air, perhaps something dreamt of by a child of Hundertwasser and Colin McCahon. Real estate agents joked that the only way to move into the town was to inherit a house.

Bedford turned the audience's attention to the city centre. This had been a challenge, but it was now the most modern CBD in New Zealand. Energy-efficient architecture was agreed as an early requisite for reconstruction, as well as – naturally – high construction standards for earthquake and fire risk. That part had been easy.

Design was another game altogether. The City Plan allowed the opportunity for several monstrosities to be built in the first few years as businesses struggled urgently to get back to work. These were the largely despised, 'warehouses without tutus'.

Over a five-year period, the CBD got back to work. Five precincts were carved out of the rubble and a consortium of private and public landholders was convened for each. Building codes and the hastily-revised City Plan defined the core principles of energy efficiency, construction standards, a pedestrian, cycle and parking framework, and 'future proofing' (although everyone agreed that they didn't know what this meant). Otherwise, each consortium was left to get on with it, with the oversight of a rather dictatorial steering group ensuring that network infrastructure functioned.

The word of the decade was 'charrette', and a successful local cafe bore the name. On its walls were framed sketches from the early brainstorming sessions (charrrettes) of the nation's leading architects, engineers and planners. Some designs were plainly mad, but had led to the creation of a city centre which took visitors and residents on a voyage of discovery. It was also a pleasure to work again in a central-city office. Professional businesses and their staff had shifted to Rolleston and Rangiora, and as far as Ashburton and Timaru, to keep functioning. It had taken years for the drift to reverse, although Addington was still in hot competition. Property owners had taken risks in

redeveloping in the CBD, and, for some, the gamble paid off.

Not everyone liked every precinct, but each had a charm suited to particular people, which was the intent. Students clearly owned the lower High Street precinct, and it was thriving. Suits had moved into the precinct around the Square. Viewing the Cathedral was still an emotional experience for many, even though you couldn't tell that only a few years ago it was still missing the final stonework on the spire.

Each consortium had identified a local design theme, had shared engineering and architectural input, saving landowners and the City millions of dollars in planning and design costs. Only one precinct had failed. A consortium was unable to reach agreement and there was an unwillingness to invest in an area which lacked a clear future. It still featured many of the popular inner-city pocket-parks where buildings had not yet been replaced.

Bedford's presentation concluded with a varied response. United Council staff had mixed feelings. The developer's drive and connections with several politicians had over-ridden some good long-term planning, and the merger of the Canterbury Councils in 2015 had created a short-term power vacuum which Ernie and his ilk had taken advantage of. Those from the private sector had seen opportunities come and go, some had won, some had lost.

Delegates handed in their conference ID badges and wandered slowly in small groups from the Conference Centre to enjoy the sunshine in Victoria Square. Locals were picking up their bikes and cycling home, a few keen to avoid Bedford, several shaking his hand enthusiastically. A tui was feeding on a flax bush by the Avon River. It must have flown from the predator-proof wildlife sanctuary on the Port Hills. Bedford's Real Estate had a stall set up nearby. Ernie always got a couple of new buyers after each conference.

#### www.greenaway.co.nz

\*Rob Greenaway is a recreation, tourism and open space planner currently based in Nelson, but who has lived in Christchurch and in Lyttelton. In this article he presents a vision of a potential future for Christchurch following the recent earthquakes. He writes about the future of the City as a retrospective of the experience of the fictional property developer Ernie Bedford.

#### Outreach

#### **Places**

Place branding is an important aspect of planning. One only needs to look at the many expensive attempts of Auckland and Hamilton to find a 'brand', the success of the "Absolutely, Positively Wellington" and Christchurch's Garden City brands and at smaller scale the iconic Rakaia salmon to see the significance that a good brand can have for a place. Some brands are cleverer than others and in this issue we launch a series looking at place brands with one of the cleverest, which coincidentally has a Lincoln University connection!

The Canterbury Earthquakes have significantly impacted on the psyche of its residents, so viewers of the new mural at the entrance to the small Lyttelton Harbour community of Charteris Bay might be forgiven for thinking that its claim to be "Home of the Optimist" is an attempt to lift spirits! Only those familiar with yachting might recognise that this commemorates a significant moment in New Zealand yachting history - Charteris Bay was the New Zealand launching place of one of the world's most popular dinghy yachting classes, the Optimist class. In 1975 the first New Zealand Optimist was launched in Charteris

Bay by its builder Paul Pritchett and Optimists went nation-wide the following year. Within five years there were more than 2,500 optimists spread throughout the country. It is now nearing 5,000. The Optimist yacht is the class with the greatest number of boats in the world and holds the record for the greatest number of participants in junior classes. It is sailed in more nations than there are in the Olympic movement. New Zealand America's Cup skipper, Dean Barker is one of the many well-known yachties who started their career in Optimists and the current New Zealand champion is Charteris Bay's 15 yr old Jayvee Buchanan.

And there is a link to Lincoln University. On the day that the first Optimist was launched, the daughters of the builder were the first to sail it, Tanya and Sarah Pritchett both went on to complete degrees at Lincoln University – see "Where are they now?" page 34.

Hamish Rennie



Charteris Bay, Home of the Optimist.

#### Q & A:

#### Questions asked to Mahaanui Kurataiao Ltd (MKT)

Prepared by Fiona Oliphant, Planning Advisor and Andrea Lobb, Kaiārahi – General Manager, Mahaanui Kurataiao Ltd

17 February 2011

What is MKT's background? How, when and why did you form? Are you a trust, a private company or something else?

Mahaanui Kurataiao Ltd (MKT) is a 'Manawhenua Environmental Services' company owned by the six Papatipu Rūnanga of Christchurch and Banks Peninsula: Te Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki) Rūnanga, Ōnuku Rūnanga, Koukourārata Rūnanga, Wairewa Rūnanga and Te Taumutu Rūnanga. MKT is a limited liability company with business objectives that align with the charitable objectives of the Rūnanga, all of which are incorporated societies.

The establishment of MKT resulted from by the needs shared by each Runanga to find a better way to manage the consultation demands from councils and other agencies arising from Treaty of Waitangi-related legislative responsibilities under the Resource Management Act (1991) and Local Government Act (2002). Previously, Rūnanga had been responding individually to numerous unsolicited requests for resource consent and planning matters via resource management committees and/or committed individuals on a voluntary basis. However, the large consultation loads and expectations of free advice, on-call availability and meeting attendance were not fair or sustainable for these individuals or Rūnanga. Alternatives were investigated for over a year by a joint working party, with representatives from each Rūnanga and support from Te Rūnanga o Ngāi Tahu. MKT was formed in August 2007 as a result of these investigations. Similar Ngāi Tahu pan-Rūnanga resource management organisations were already established in Otago (KTKO Ltd Consultancy) and Southland (Te Ao Mārama Incorporated). MKT was established on the basis of what had been learned from these organisations, their structures, relationships and resourcing, and has similarities to these Ngāi Tahu agencies, while also having some different attributes.

MKT was established on the basis of an agreement for service provision with resourcing from Christchurch City Council, and subsequently entered similar agreements with Selwyn District and Waimakariri District Councils. The agreements enable MKT to provide tangata whenua information, assessment and advisory services across the full range of Councils' statutory and non-statutory planning , resource consent, operations and other administrative and management processes. The company is largely funded by these councils, as they are the key recipients of MKT services. However, each Rūnanga also contribute based on their use of MKT's services for public consultation and notified planning matters.

MKT can be described as a mechanism that aims to facilitate the response of each Rūnanga for consultation that arises from

various statutes, primarily the RMA and LGA. When relevant, collective consultative processes with all Rūnanga are undertaken, and when necessary individual Rūnanga responses are facilitated. The jointly owned entity reflects the desire of Rūnanga for cost-effective, efficient and consistent ways to participate in environmental management within their collective takiwā – from Ashburton/Rakaia to the Hurunui River – andwhere appropriate, to enable them to alleviate the cost burden of this participation.

# What do you see as the role of MKT? Why is what you do important to iwi and the wider community? In what ways do you support tangata whenua?

MKT's role is to provide tangata whenua focussed environmental planning and advisory services on behalf of the six Rūnanga in a manner that better reflects the processes that local authorities, developers, consent applicants and other agencies work to. MKT's role is to do this in a way that reflects the status of these Rūnanga as Treaty partners and the statutory provisions that recognise and provide for the relationship of tangata whenua with their culture and traditions with their ancestral land, water, sites, wāhi tapu, valued flora and fauna, and other taonga. In doing this, MKT aims to remove or reduce the consultation burden on Rūnanga members by engaging in planning processes on their behalf, and to ensure costs fall to the recipients and beneficiaries of this information and advice. MKT also facilitates consultation with Rūnanga on an individual or collective basis and assists with commissioning of relevant cultural advisory reports, where the nature and scale of activities, or the significance of the area indicates direct engagement between the Rūnanga and the parties is needed.

MKT is focussed on delivery for the Papatipu Rūnanga that own the company. However, MKT directly and indirectly benefits the wider community through seeking to implement the values and objectives of the Rūnanga for their takiwā and their taonga (treasured resources), . For example, Rūnanga goals for water that is safe for mahinga kai, will ensure that the community can also enjoy water that is safe for recreational and commercial users, as well as waterways that are restored with appropriate buffers and indigenous plantings.

A key benefit for Rūnanga working through a professional planning agency across several takiwā is the ability to be more active and consistent in upholding their kaitaiakitanga responsibilities and ensuring that their interests and values are better represented in environmental decision-making. For councils MKT provides a 'one stop shop' to assist in meeting their statutory obligations to tangata whenua – to co-ordinate and facilitate consultation, to ensure appropriate input to council strategies and plans, and to ensure sound information is provided to decision-makers.

# What is the vision of your organisation? What do you hope to achieve in the long-term?

The ultimate objective of MKT is to uphold the mana of the Rūnanga as kaitiaki and manawhenua for their takiwā, achieving this through the articulation of their aspirations, goals and objectives for natural resources and taonga in their takiwā into Council planning, consenting, administration and management processes. The vision of MKT is held on behalf of the Rūnanga - that through effective engagement in planning and resource management processes, direct environmental gains will be achieved to protect and restore their taonga.

As a new advisory agency, the short term objective of MKT has been to establish a credible and useful service to Councils in a way that reflects the processes Councils work to, and that recognises the significance of matters to the Rūnanga. A further objective is to establish and maintain effective working relationships with officers to progress the functions of MKT and enable greater understanding and learning for Council officers. The challenge has been to do this in a way that is not simply working as a go-between. Longer term, MKT aims to be able to offer advisory services more widely in the community, particularly targeting advice to developers and their technical and planning consultancies at early stages of development planning. It is at this stage that responses to tangata whenua interests can be best incorporated into development proposals.

Long term, MKT hopes to achieve a shift in attitudes toward achievement of matters of interest to tangata whenua, and to build a body of practice and working examples that demonstrate that such responsiveness can generate positive outcomes for any development and any community. The aim is to have tangata whenua included as a "business as usual" approach for Councils and developers, not something to be avoided whenever possible.

How do you work with local councils and under which drivers (RMA, LGA, IMPs, statutory, non-statutory?) How close is this relationship with the local councils and does MKT assist in promoting more effective planning in this country?

MKT is available to work closely with council staff as they review and develop Council strategies and plans, and to evaluate resource consent applications. This advisory service occurs well before the public consultation phase, to ensure that Council decision-makers have the appropriate information and advice on matters of significance to tangata whenua. In practice this is unbundling consultation into the planning process. MKT aims to work with council planners at the outset of any planning process, to identify issues, matters and areas of significance for tangata whenua and develop draft objectives, policy and/ or terms and conditions to address these. MKT also advises on engagement and consultation processes that best suit the nature of the work, the timeframes available and the significance to Rūnanga. MKT then co-ordinates consultation with Rūnanga. By providing early input into the planning process, MKT is often able to avoid significant objections by Rūnanga at the submission stage. How well this approach works is largely dependant on the willingness of council planners and their ability to understand and respond to tangata whenua concerns.

In the past three years MKT has ensured that Rūnanga interests are reflected through the development of robust objectives and policies in a raft of council plans prepared under the RMA, LGA and Reserves Act 1977, including Christchurch City-wide strategies, urban development area plans, integrated reserve and park master plans, and reserve management plans. Some examples are: Christchurch City Council's - Biodiversity Strategy 2008-2035; Surface Water Strategy 2009-2039; Public Open Space Strategy 2010-2040; Belfast Area Plan 2010; Mid-Heathcote River/Ōpawaho Linear Park Masterplan 2009; Brooklands Lagoon/Te Riu O Te Aika Kawa Area Parks Master Plan 2010; South New Brighton Reserves Management Plan 2010; and numerous one-off pieces of advice on the impacts and significance of activities proposed for waterway margins, coastal and urban areas, for resource consent applications and the Council's own operational activities.

Can you give us an example of some of the important issues/outcomes that you've been involved in? What was it about these issues that made them so important to iwi?

Matters of importance to Ngāi Tahu include the protection of significant ancestral sites, the restoration of water resources and quality that provides for current and future generations to access safe and abundant mahinga kai; and access to contemporary mahinga kai sites. Ngāi Tahu also strive for Councils to appropriately recognise them and their culture and traditions, as Treaty Partner, Manawhenua and Kaitiaki. Methods and expressions of this vary depending on the nature of any particular development or management proposal.

A good example of how MKT has worked to assist with matters of signifance to tangata whenua is where proposals were made to plan for township growth in the Selwyn District. In this case early consultation had been done prior to the establishment of MKT through first stage non-statutory planning processes. MKT became involved when a plan change was underway, and when assessments were being prepared for consent applications for the stormwater scheme. The area was highly significant for waterways flowing into Te Waihora (Lake Ellesmere) and for the occurrence of many springs - which are a taonga to Ngāi Tahu in this area. Recognition and the potential impacts of the development areas and the stormwater scheme had not been reflected in the original plans for the area. MKT established and facilitated a consultation hui with Rūnanga representatives, that generated an agreed method to recognise and provide for the significant taonga. MKT lodged a submission to this effect on behalf of the Rūnanga. MKT also prepared a cultural impact assessment, and through hui, site visits and an outcomes hui with Council officers, facilitated design changes that provided for the separation of the spring flow from the stormwater flow. Specific provision was made for a reserve to give acknowledgement to springs of the area and to Ngāi Tahu as the tangata whenua. While this development planning still has a way to run in terms of the statutory decision processes, it was a combination of the capacity, knowledge and ability of MKT to understand Council process, identify methods and bring a process together for Rūnanga; and MKT's ability to work proactively and effectively with Council, that generated constructive and pragmatic solutions that could be accommodated into the Council's planning and design. MKT will continue to progress the Rūnanga goals for this through the hearing stages of the plan change, and through the resource consent processes for the stormwater scheme.

#### What sort of staff do you have- do you employ non-Maori? Do you employ professional planners? Is there an element of volunteerism in what you do?

MKT is a small organisation and currently has six staff and contractors (four part time), which include a general manager, an administrator, three planners/advisors and a tangata whenua advisor. These people are paid, not volunteers, and at present there is a mix of Maori and non-Maori staff and contractors. It is MKT's policy to employ the best person for the job, and places particular emphasis on planning and policy skills and experience, to enable efficient and effective articulation of Rūnanga objectives into the resource management process.

MKT has enabled the elimination of a large portion of the burden workload and costs to the Rūnanga for responding to requests. However, there remain elements of volunteerism at the Rūnanga for this work - to the extent that MKT needs to maintain communication and liaison processes with Rūnanga and their individual representatives, and when consultation hui are required. These are still provided in a non-paid capacity by the Rūnanga and their people.

## Lincoln University News

#### **Staff Profiles**

This issue we welcome the following new staff members who are involved in the Environmental Management and Planning fields to the Faculty of Environment, Society and Design.

#### Dr Shannon Page



Dr Shannon Page is a new lecturer in the Department of Environmental Management. This will be his first year as the examiner for ERST 368 – Energy, Transport and Environment. Dr Page obtained a B.Sc.(Hons) in Physics, and a Ph.D. in Mechanical Engineering from the University of Canterbury. His PhD topic was on hydrogen fuel cells for backup power systems, and he spent most of his time in industry, as well as a 9

month research period at the University of California at Irvine. After completing his PhD, Dr Page worked at the University of Canterbury on various energy related research projects, such as: analysis of carbon dioxide capture and storage for reducing greenhouse gas emissions, the promise of the hydrogen economy, renewable electricity systems, transport fuel consumption, and urban resilience to fuel constraints.

Broadly speaking, Dr Page's research has been focused around energy services demanded by society, and how these demands can fit within renewable energy supplies. He has a particular interest in the energy consumption of different transportation systems, renewable electricity generation, and demand side management of electricity consumption. Currently Dr Page is researching issues with New Zealand's electricity system as renewable generation is increased, in particular, how electricity demands can be changed to fit within an increasingly variable supply. Two weeks into his new job at Lincoln University Dr Page shares that he is thoroughly enjoying it so far. Born and raised in Christchurch, Dr Page is currently living in Addington which he finds very handy to the hills for road biking and the park for running. He enjoys competing in the occasional biking and/or running race, and has already signed on to the Lincoln University team for the city to surf.

#### **Dr Simon Lambert**



Dr Lambert is a lecturer in Maori Environmental Planning and Development. This year he will be teaching three courses: MAST 206, 319, and 603. Dr Lambert has a Canterbury University Bachelor degree in Geography, where he also achieved a First Class Honours Masters with his thesis titled 'The Assessment of Pacific Island Environmental Vulnerability'. In 2007 he attended Manaaki Whenua/Otago University for a Te Tipu Pūtaiao Fellowship before attending Lincoln University in 2008. At Lincoln he completed his PhD in Economic Geography, with his thesis 'The Expansion of Sustainability through New Economic Space: Māori Potatoes and Cultural Resilience'. Dr Lambert's main research interests are focused around indigenous economies, Maori agribusiness, water governance, technological innovation; customary fisheries and well-being, cultural diplomacy. He has just registered the domain name <a href="https://www.reindigenisinghumanity.org">www.reindigenisinghumanity.org</a> as an e-space for some ideas that several of us here at Lincoln and in Canada (Trent and Guelph) and the US (UC Davis) have been musing over. Currently the link is only a name and not fully operational as yet, but something worth keeping an eye on. Essentially these ideas are:

- seeking the re-establishment of a holistic interpretation of life processes;
- re-focusing of our relationships with each other and our surrounding lifeworlds to bring about this change;
- supporting like-minded individuals and communities to the practical implementation of what we learn.

Dr Lambert is married with 3 children and has recently moved to Leeston. He enjoys a Pale Ale, believes in family values and that everyone needs a big project to keep themselves occupied.

#### Dr. Ronlyn Duncan



Dr. Ronlyn Duncan is a lecturer in Water Management and is the new examiner for ERST 203 Environmental Monitoring and Resource Assessment and ERST 311 Monitoring and Management of River Systems. She completed her PhD in Environmental Studies from the University of Tasmania after receiving a Bachelor of Science majoring in Geographical Ecology as well as a Bachelor of Arts

majoring in Science & Technology Studies with a First Class Honours in Science & Technology Studies from the University of New South Wales.

Formerly an Associate Lecturer at the University of Tasmania in the School of Geography and Environmental Studies Dr. Duncan spent five years teaching environmental management and human geography. Her main research interests include the role of science in socio-ecological decision-making, collaborative water management and the development of knowledge governance models for water policy and management.

Before moving from Tasmania to Christchurch to take up her new role at Lincoln University, Dr. Ronlyn Duncan was working on a research collaboration funded by the Australian Government's Sustainable Tourism Co-operative Research Centre. The project involved a number of universities from across Australia and brought together the disciplines of economics, public policy, human geography and ecology as well as a range of water management, tourism and recreation stakeholders. They developed a research agenda for Australia's tourism and recreation sectors in the context of a water-constrained economy. This project has culminated in a book to be published by Resources for the Future Press in May this year- Water Policy, Tourism and Recreation: Lessons from Australia, edited by Lin Crase and Sue O'Keefe.

Ronlyn is currently working on settling into Lincoln University after arriving in New Zealand in February. She enjoys taking the time to grow her own food, then cooking it and eating it with New Zealand's wonderful white wines.

#### 2011 NZPI Awards

# Lincoln University wins for the Lincoln Planning Review

Lincoln University received an Award of Merit at the New Zealand planning Institute's Annual Conference in Wellington this week for the Lincoln Planning Review. This is a competitive award process recognising: A meritorious contribution to the theory or practice of planning; or Meritorious service to the profession

The full citation reads:

"The Lincoln Planning Review is a Lincoln University studentorganised, edited and managed initiative undertaken by volunteers on an extra-curricular basis. The first issue was published in 2009 and it is now the official journal of the Lincoln University Planning Association. It provides a forum for discussion and for disseminating research findings by students, academics and working professionals on New Zealand planning issues and is available free online at Lincoln University's Land Environment and People Research Centre.

Topics during 2010 ranged from applying habitat theory in Christchurch to Defence Force planning and bylaws for suburban owner operated brothels. A forum for the planning debates has addressed transition towns and the ECan Act.

NZPI recognises the Lincoln Planning Review as a medium for experiential learning that links undergraduates at Lincoln to the wider planning profession, and constitutes a very innovative and meritorious contribution to improving the teaching and practice of planning".

#### Lincoln Professor wins Gold

Prof Ali Memon has been awarded the New Zealand Planning Institute premier award at its conference in Wellington last week. This is only the third time in twenty years the Gold medal has been awarded.

The Institute Gold Medal Award recognises:

- Outstanding service to the profession, or
- Exceptionally meritorious contribution to the theory or practice of planning,
- The status of the award as the premier award of the New Zealand Planning Institute(r).

As the citation says:

"The Gold Medal Award acknowledges his exceptional sustained outstanding contribution to the profession through service, theory and practice."

# Lincoln Alumni Clare Piper (nee Sargeant) also Recognised

Clare was awarded the Lance Leikis Graduate Award which recognises "A significant contribution by a Graduate Member of the profession to planning in practice, research, or Institute affairs". She is only the fifth recipient since it was first awarded in 1999.

Clare, an MEP(Hons) graduate of Lincoln University and currently a planner at Christchurch City Council started the Lincoln Planning Association and is on the Permanent Editorial Advisory Board of the Lincoln Planning Review. She has been a major force for promoting the interests of young planners and connecting the profession to the University. She delivers a lecture each year to the 3rd year professional planning class on planning practice which is one of the most valued parts of the course.

As the citation states:

"Clare's tireless efforts coordinating events and providing support and encouragement to Young Planners throughout New Zealand makes for a truly deserving Lance Leikis Graduate Award recipient".



#### Where are they now?

#### **Katie Collins**

Katie submitted her Master of Resource Studies thesis in January 2011 and is now working for the new Auckland Council based in the Takapuna office. She is a Water Specialist in the Environmental Strategy and Policy Department. The Water Unit sets the policy direction for the management of all types of water across the Auckland Region. Katie's initial project is closely related to her thesis topic, looking at stream restoration and what makes a successful project.

#### Sarah Pritchett

Sarah completed a Masters in Resource Studies in 1998 and has worked for the Sustainability Trust and as an independent waste consultant in Wellington. She has just returned to live on the Banks Peninsula after visiting the UK on a Winston Churchill Memorial Fellowship to see how organisations over there successfully engage the public in waste minimisation.

#### **Matt Robinson**

After completing his Bachelor of Environmental Management and Planning, Matt has been employed at the Waimakariri District Council based in Rangiora, North Canterbury. Matt deals with the processing of resource consent applications and private plan change requests, along with general public enquires, and initiating Councils own District Plan changes.

#### **Matthew Watkins**

Matthew completed his Masters of Environmental Policy in 2010 and is now working for the United Nations Economic and Social Commission for Asia and the Pacific as a project associate in Bangkok Thailand. He is currently supporting the implementation of a payment for ecosystem services project in Aceh Indonesia and the development of regional knowledge network on the use of market-based instruments in environmental policy for Asian and the Pacific.

#### Mike Vincent

Mike graduated from Lincoln with a BRS in 2005. Following this, he worked as a Policy Planner for the Thames Coromandel District Council. Mike then accepted a heritage planning position with the Tauranga office of N.Z. Historic Places Trust (NZHPT) dealing in Regional and District policy planning. Mike is currently working as a planner for the NZHPT Christchurch office with a focus on earthquake resource consents. The recent spate of earthquakes in the region has seen an increase in demand for planners with heritage expertise.

#### **Awards**

#### Master of Environmental Policy Awards:

#### 2010 John Hayward Memorial Prize

Congratulations to Adrienne Lomax who is the recipient of the 2010 John Hayward Memorial Prize. The John Hayward Memorial Prize is a distinguished prize awarded to the student who completed their Master of Environmental Policy (MEP) with the best academic results in the core papers of the degree. It should be noted that Adrienne is a very deserving winner of this prize and a consistent high achiever, being the recipient of the Thomson Reuters Prize in 2009. This prize also holds special meaning given that it was created after John Hayward's death in 1991 who was not only a long-serving director but the founder of the Centre for Resource Management and of the Masters of Science (Resource Management) degree, the forerunner of the MEP. A valued member of the LPR team, we wish Adrienne a hearty congratulations.

# 2010 Thomson Reuters Prize in Resource Management

Congratulations to Shaun Coffey who is the recipient of the 2010 Thomson Reuters Prize in Resource Management. Shaun was a clear winner of the award which recognises the student who completed the set core of first year Master of Environmental Policy papers to the highest academic standard. It must be noted that in previous years the courses have included ERST 630, ERST 631, ERST 632, ERST 633 & MAST 603, however in 2010, MAST 603 was not offered and hence alternative MEP courses were considered. Shaun is no stranger to being mentioned in LPR and in Volume 2, Issue 2 an article titled "Collaborative Environmental Governance Down Under, in Theory and in Practice" summarised the summer research project he was working on with Bailey Peryman and Ann Brower.

#### Ian Spellerberg EIANZ fellow

Congratulations must go to Professor Ian Spellerberg who has been made a fellow of the EIANZ (Environment Institute of Australia and New Zealand). This is a fantastic achievement, especially given that Ian is now one of only three honorary fellows of the institute. A fellow membership recognises extensive service and highly valued contributions to the profession, as well as a highly respected professional nature, just to name a few. The president of the EIANZ must offer his invitation to a member of the institute for them to be made a fellow. The citation included comments about Spellerberg's "extensive CV" and outstanding contribution to the institute as well as his proven leadership "on matters of national and international significance relating to ecology, nature conservation, environmental education and environmental best practice."

#### Suzanne Becken - Emerging Scholar of Distinction

Congratulations to Suzanne Becken, Associate Professor of the Faculty of Environment, Society and Design who is a recipient of the 2011 Emerging Scholars of Distinction Award for the Conference of the International Academy for the Study of Tourism. Suzanne will receive her award this June in Taiwan when the Academy's conference is held. Suzanne will deliver a research presentation at the 2011 conference. We wish her all the best.

#### **Bob Batty NZPI Fellow**

Congratulations must go to Robert William Batty (known to many as Bob Batty), who in April 2010 was awarded the New Zealand Planning Institute Fellow Award. Bob, who began his career as a planning assistant in 1958 has accomplished a great deal since then. Joining the New Zealand Planning Institute in 1979, Bob has gone on to be a well respected and deserving individual to be made a fellow. On a more local note, Bob is a member of the Lincoln University Planning Advisory Board (LUPAB) which works to advise and give support to the university on its programmes, ensuring that they meet the educational needs and professional needs of planners. The final paragraph of Bob's citation sums up why he has been made a fellow of the institute. "This Fellow Award recognises over 50 years of a disciplined and focused contribution to the practice and image of planning under a variety of legislative and administrative regimes. *It acknowledges the respect and reflects the gratitude of members* of the Institute as well as the many individuals in public authorities, private businesses, colleagues, and students. Many of us have appreciated the advice, wisdom and understanding demonstrated by Bob in both his professional capacity and also his personal attributes of service with excellence. His elevation to Fellow of the New Zealand Planning Institute is well deserved." Congratulations Bob on this wonderful achievement.

#### **LUPA (Lincoln University Planning Association) Update**



The Planning Association has been relatively busy in recent months. Jess Bould has taken over from Theo and myself, as Lincoln University's rep on the Canterbury branch of NZPI; it is great to have her representing Lincoln, bringing her passion and dedication to the role. Theo and I will remain in the role as chairpersons of LUPA for this year. So far we had a walking tour of Lincoln discussing the draft structure plan for Lincoln with the Selwyn District Council, which was a great success.

There have also been several workshops on discussing the future of Christchurch that have been generating ideas for the City Plan. Our main cause for celebration though, in amongst the discussions and chaos, has been the Lincoln Planning Review winning an Award of Merit at the NZPI conference in March. This was an enormous achievement for the Review, a lot of work goes into each issue, and it is something we really can be proud of.

Next semester should be another exciting one for us, with the release of the draft City Plan for consultation, and the Young Planners Showcase, so look out for these. All in all, we are ticking along well. A big thank you goes out with this update too, to everyone for your support and contributions to the review and LUPA.

Holly Gardiner

#### **Other Matters**

# 2010 New Zealand Aquaculture Conference By Justine Brennan, senior Planner at the Bay of Plenty Regional Council

The 2010 New Zealand Aquaculture Conference was held on the 17th and 18th of November at the Rutherford Hotel in Nelson. The conference was attended by over 250 delegates from industry, science, regional council and iwi sectors and provided an opportunity to deliver the key messages of the recent aquaculture reform.

During the course of the two-day conference delegates were left with little doubt that the National led Government is committed to unlocking the potential of New Zealand aquaculture as part of its Economic Growth Agenda, and is actively supporting the industry to triple current annual sales and reach its target of \$1 billion exports by 2025.

Mike Burrell, CEO of Aquaculture New Zealand opened the conference by introducing the theme 'futures now', which was expanded upon over the two days to cover the future of aquaculture in New Zealand in terms of:

- Future law and planning
- Future science
- Future markets
- Future Māori participation

#### Future law and planning

The conference provided a timely opportunity for industry and local government to come to grips with the details of the Aquaculture Legislation Amendment Bill (No 3), which had its first reading in the House the day before the conference. The reforms were introduced by the Minister of Fisheries, Phil Heatley, who under the new regime becomes the Minister of Fisheries and Aquaculture.

Wayne McNee, departing CEO of the Ministry of Fisheries, assisted by Dan Lees, director of the Government's new Aquaculture Unit, led us through the details of the Aquaculture Bill. The Bill reforms four substantial pieces of legislation (the Resource Management Act 1991, Fisheries Act 1986, Māori Commercial Aquaculture Claims Settlement Act 2004, and the Aquaculture Reform (Repeals and Transitional Provisions) Act 2004), with the intention being to stimulate growth and promote investment certainty. These intentions are to be achieved through streamlining planning and consenting processes, and removing impediments to gaining water space.

The main legislative changes proposed by the Bill include;

- Removing the requirement that aquaculture activities can only take place within Aquaculture Management Areas (AMAs)
- Streamlining the Undue Adverse Effects (UAE) test on fisheries
- Introducing a minimum 20 year consent term for aquaculture

- Limiting the information requirements for re-consenting an existing marine farm
- Introducing tools to enable councils to better manage situations of high demand for water space

Lincoln University's Hamish Rennie invited delegates to think outside the square in terms of future opportunities for aquaculture planning. The removal of AMAs, the advent of openocean farming and associated infrastructure requirements, demand for space within the coastal marine area, and the enormous potential of ocean ranching will require 'blue ocean' thinking from coastal planners in order to provide opportunities for aquaculture in appropriate locations.

#### **Future science**

Kevin Heasman of the Cawthron Institute spoke on the future of open-ocean farming around the world. Kevin's presentation highlighted that farming offshore is considerably more expensive than sheltered coastal water, due to higher servicing and equipment costs and greater loss of product. However the benefits are also higher in terms of greater phytoplankton levels, cleaner water, faster growth rates and superior product. The take-home message regarding the future of offshore marine farms was their enormous potential to satisfy increasing global demand for protein, tempered by the reality that success will ultimately depend on a number of external factors such as technological advances and a supportive economic environment for exports.

Chris Cornelisen, marine scientist from the Cawthron Institute, delivered a high impact presentation on meeting the future environmental challenges of a growing aquaculture industry. The importance of integrated management across the invisible jurisdictional boundary of land / ocean was highlighted using the infamous 'dead zones' of the Gulf of Mexico as an alarming case study. The take-home message was the importance of industry participation in the land management planning process to ensure the preservation of pristine water quality, which is a keystone in terms of marketing New Zealand seafood.

#### **Future markets**

Jason Shoebridge, Managing Director of marketing company TNS Conversa, delivered some good news for aquaculture in terms of consumer trends. Future demand for protein is increasing exponentially with global population growth and it is unlikely that wild-caught seafood will be able to meet that demand sustainably. Aquaculture is projected to make up 58% of worldwide seafood production by 2020.

Future consumer trends reflect a shift away from the 'indul-

gence' customer towards 'ethical' consumption (consumption with a conscience). This trend provides an opportunity for the New Zealand seafood industry to leverage off the benefits of product grown in New Zealand waters, including environmental sustainability, social responsibility, authenticity and traceability.

A. J. Hu, Partner and co-founder of The JLJ Group, a consultancy firm specialising in assisting New Zealand companies to enter the thriving but challenging Chinese market, presented some mind boggling stats on the world's fastest growing economy. Last year China consumed over 21 million tonnes of seafood and overtook Japan as the second largest economy in the world. Most seafood consumption (and foreign investment) is targeted in coastal cities which are predicted to grow by 20% per year over the next 20 years.

New Zealand is well placed to leverage off this growth, as China's domestic seafood production is low-value and the country relies on imports to satisfy demand for high-value products. In addition, New Zealand seafood has established a good reputation in China and the potential for export growth is unlimited, particularly if we can tap into western-type hotels and restaurants which play a key role in changing consumer perception and consumption trends.

#### Future Iwi participation

While the aquaculture reforms do not alter the core components of the 2004 Māori commercial aquaculture settlement (in terms of 20% of new aquaculture space created after 1 January 2005 being provided to iwi aquaculture organisations), a new delivery mechanism will be needed as space will no longer be created through AMAs. There are a number of challenges in allocating a percentage of new space in the absence of large AMAs, particularly when much of the new space likely to be consented will take the form of small extensions to existing farms.

During the breakout sessions on Māori in aquaculture, the high profile panel of Matiu Rei, Justine Inns, Keir Volkering and Laws Lawson led robust discussion centred around the Bill's provision for settlement to be reached by providing either space or an agreed equivalent. Ministry of Fisheries officials indicated that a lack of consensus among iwi will not impede the progress of the reforms as Government have indicated a willingness to return to these negotiations once the primary reforms have progressed.

The 2010 New Zealand Aquaculture Conference provided a valuable opportunity to network and gain up-to-the minute insights on the changing landscape that is aquaculture legislation in New Zealand. My personal highlight was the cocktail function held at the World of Wearable Art and Classic Cars Museum, where delegates got a taste of the Logan Brown experience with head chef and Regal Salmon ambassador Shaun Clouston dishing up his signature smoked salmon. I can still taste it! For me that evening served as a reminder to everyone involved in aquaculture planning in New Zealand that we have something very special to offer the world, so let's hope the Aquaculture Legislation Amendment Bill (No 3) finally gets it right.

#### **Upcoming Events:**

#### New Zealand Recreation Association (NZRA) National Conference

16-18 November 2011

Forsyth Barr Stadium, DUNEDIN

http://www.nzrecreation.org.nz/Default.aspx?section=organisation&page=National%20Conference

# Cultural and Historic Heritage Landscapes presentation from Di Lucas

September the 20th (Tuesday)

MWH Offices, Level 4, 6 Hazeldeen Business

Park.

RSVP by September 16th to canterbury.westland@planning.org.nz

# New Zealand Association for Imapet Assessment (NZAIA)

Natural disasters: impact assessment for

sustainable recovery

Annual Conference: 24th-25th Nov 2011,

Lincoln University, Christchurch

The registration form and information on accommodation options will be posted on the

NZAIA web site: www.nzaia.org.nz

For further information: rkm@geography.otago.ac.nz

# Surveying and Spatial Science Conference 2011 (SSSC2011)

21-25 November 2011

Wellington Convention Centre, Wellington,

New Zealand

Web site: <a href="http://www.sssc2011.org/">http://www.sssc2011.org/</a> Email: convenor@sssc2011.org

Phone: +64 21 2599 816

#### Living Lake, Changing Catchment: 2011 Te Waihora/Lake Ellesmere integrated catchment symposium

November 15th and 16th, field trip on

19 November

Lincoln University, Canterbury, New Zealand

Web site: <a href="www.wet.org.nz">www.wet.org.nz</a> Email: manager@wet.org.nz

Phone: 365 3828 (Environment Canterbury re-

ception –ask to be put through)

SEE NEXT PAGE



Register now for the third Living Lake (and Catchment) Symposium to be held on November 15th and 16th at Lincoln University and field trip on 19 November

# Day 1 **Tuesday 15 November**

Updates on biophysical, cultural, social and economic aspects of the Te Waihora/Lake Ellesmere catchment. The day will include presentations on recent science and research related to the catchment, and a look at lessons from elsewhere.

\* Keynote Speaker opening the second day is Professor David Hamilton, Waikato University, Environment Bay of Plenty Regional Council Chair in Lakes Management & Restoration.

#### Day 2 **Wednesday 16 November**

Governance and management of the catchment, new initiatives, and a presentation about Selwyn-Waihora Zone Implementation Programme.

> Fees have been kept to a minimum thanks to our sponsors. For a registration form and further details please visit: www.wet.org.nz

# Field Trip **Saturday 19 November**

A bus tour to some key sites of interest around the lake and catchment.

#### Or contact:

Adrienne Lomax, Waihora Ellesmere Trust ph: 365 3828 (Environment Canterbury reception – ask to be put through) cell: 021 052 9720

email: manager@wet.org.nz

Living Lake 2011 is hosted by Waihora Ellesmere Trust with support from:



















# Presentation from the General Manager of the Chatham Islands Council on 'Council Life on the Chatham's'

October 2011 at 6pm Venue to be confirmed

The Canterbury/Westland Young Planners Group Email: canterbury.westland@planning.org.nz

New Zealand Coastal Society Annual Conference Nelson, 7-9 November 2011

# 'Life's a beach: enjoying coastal resources today and into the future'

6 – 9 November 2011, Tahuna Beach Holiday Park, Nelson, New Zealand

http://www.coastalsociety.org.nz/index.

php?option=com content&view=article&id=74&Ite mid=71

#### CERA - Feedback on draft Recovery Strategy

The Strategy is now being developed and you will be able to give your feedback on the draft in September/ October 2011.

http://cera.govt.nz/recovery-strategy

# 2012 NZPI Annual Conference - Incorporating Young Planners Congress

Marlbourough Convention Centre, Blenhiem, New Zealand

Tuesday 1 May – Friday 4 May

Web site: <a href="http://www.planning.org.nz/">http://www.planning.org.nz/</a> Category? Action=View&Category id=211

Email: barry.williams@planning.org.nz

Phone: 09 520 6277

# Oops! National Disasters: Impact Assessment for Sustainable Recovery - NZAIA annual conference

24-25 November 2011, Lincoln University www.nzaia.org.nz

#### **Primary Supporters:**

LPR would like to thank Lincoln University Planning Association, the Department of Environmental Management, the Centre for Land Environment and People, and Lincoln University as primary supporters of the Lincoln Planning Review.

- Department of Environmental Management
- Centre for Land, Environment and People
- Lincoln University





New Zealand's specialist land-based university

#### **NEXT ISSUE**

The next issue of the LPR is planned for December 2011. Articles for publication should be submitted no later than September 30, 2011 to Hamish Rennie, LPR@lincoln.ac.nz