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EDITORIAL

Genevieve Hilliard and Bailey Peryman

Students preparing for employment is a very topical issue for those of us nearing graduation at Lincoln University and applying for planning jobs. Throughout our studies we have gained a breadth of knowledge concerning planning issues with the expectations these skills will prepare us for planning jobs. At Lincoln University both lecturers and students are involved in a large variety of research projects and through LUPR we wish to complement and contribute to relevant planning research and academic enterprise through knowledge exchange. Therefore, the theme for the second edition of LUPR is 'bridging the gap' in which the aim is to provide both academic and professional perspectives on planning issues. We wish to stimulate a wider understanding of current planning issues and outcomes of research taking place at Lincoln University and throughout the Central and upper South Island. To this end, in the LU news section of this issue, we have included the recently completed planning related theses and dissertations to enthuse students, professionals and the wider planning community about the research undertaken at Lincoln

There is a need on both sides for better communication. All too often, students do not pursue extensive research projects because they are uncertain what topics are relevant in the professional world and how progressive their research contribution could be to the planning profession. Those in the workforce understand the practicalities of planning and those in academia are able to provide research independent of the potential limitations faced by practitioners.

This issue begins with two articles on the city centre of Christchurch. Maurice Roers from the Christchurch City Council (CCC) sheds some light on the practical realities of bringing about positive change in our cities; and Lincoln Uni lecturer Christopher Kissling presents some of the pragmatic issues of the ongoing efforts of the CCC to revitalise the city centre of Christchurch, a summary of his recent studies on the matter. Visiting academic Chul Sohn provides insight on the issues of waste management from Seoul, Korea which makes a nice contrast with Canterbury waste issues; Ali Memon, Brett Painter and Ed Weber present a prelude to a larger study (yet to be published) on the strengths and challenges posed by the adoption of integrated catchment management as a pathway to the sustainable

management of natural resources. Jean-Paul Thull writes on some of the conflicting issues surrounding transport and urban planning in New Zealand; and last, but not least, of the feature articles is an overview of some of the great work being carried out by the Lincoln Envirotown Trust, written by chairperson of the trust, Sue Jarvis.

Thank you to all those keen beans who contributed to this issue. We are very excited to be a part of the second edition of LUPR and hope the support we have received thus far continues to grow with our aspirations for this journal. We believe that increased dialogue and open knowledge sharing will benefit both planning professionals and students and hope that LUPR is a means to better facilitate this process.

* Bailey Peryman is in his 3rd year of the Bachelor of Environmental Management and Planning at Lincoln University. Genevieve Hilliard is in her final year of the Masters of Environmental Policy, also at Lincoln. Both have been employed recently as student planners at the Christchurch City Council.

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LINCOLN UNIVERSITY PLANNING ASSOCIATION CHAIRPERSON'S REPORT



In the past eight months the Lincoln University Planning Association (LUPA) has made such progress that it can now be regarded as a legitimate member of the Canterbury

planning community. When Clare Sargeant's tenure as a student at Lincoln and sole LUPA advocate drew to a close, she initiated movements to generate renewed interest. As it turned out, a unanimous decision was made to appoint both an undergraduate and postgraduate Chairperson to share the role and ensure balanced representation.

Before anything could proceed with any sense of purpose, LUPA needed first to build identity and direction. During the final meeting of 2008, the current mission statement and objectives were drafted collectively. Although this was an important milestone, I perceive this as merely a foundation for the development of a full constitution. However, an enduring document requires due consideration and therefore remains a work in progress at this point in time. The next stage of LUPA's development was to pursue affiliated club status with the Lincoln University Students Association (LUSA). In addition, we were awarded essential funding needed to support the proposal to host a professional networking event. With the fundamentals in place, the schedule of events for Semester 1 kicked off with an excellent presentation from Ivan Thomson, Christchurch City Council, speaking on planning career paths and employment avenues. In Term 2 Paul O'Neill and Marisha Dorrance came along from Canterbury Community Law to re-establish the relationship with Lincoln planning students and offer them the opportunity to train as case workers and assist with the Resource Management service. The highlight of LUPA events in Semester 1 was the successful conduct of the inaugural professional networking evening. The event involved students and planners getting together over a few drinks at the MOA Club and taking the opportunity to discuss pertinent issues about planning careers. The early ground work paid off with 20 fabulous planners attending to share their knowledge, stories and enthusiasm with an eager crowd of Lincoln students.

LUPAs achievements could not have materialised without the support of a great many people. I wish to take the time to acknowledge those who have made a difference. Firstly thank-you to the LUPA executive, Terri Craig (Co-Chairperson, UG), John Raven (NZPI Rep), Bailey Peryman (NZPI Rep) and Sarah Hunt (Treasurer) for all your support and input to key events throughout the Semester. Thank-you to Nancy Latham and Sarah Hunt for your contribution to the planning and conduct of the professional networking evening. Thank-you to the hardworking team on the LUPR editorial led by Adrienne Lomax and Suzanne Blyth. Thankyou to Hamish Rennie, Ali Memon and Geoff Kerr for all your encouragement. Thank-you to the Canterbury Westland Branch of NZPI, especially Kim Seaton (Chairperson), Andrew Willis (Treasurer) and Clare Sargeant (YP Rep) for your outstanding support and financial assistance to student initiatives. Thank-you to the MOA Club and CCC for the use of your facilities and also Janine Sowerby for assisting with the logistical arrangements. Thank-you to all those invited guests who attended and contributed to the professional networking evening. Finally, thank-you to all those students who have been a part of LUPA meetings and events this year.

Although this semester has been full of considerable challenges for me, I was always sure it would be a success and I am proud for all those who have been a part of LUPA, now with over 60 members and growing. I look forward to returning in the second half of the year refreshed and ready for the opportunities that await. Onwards.

Abbie Bull Chairperson (Postgraduate)



Lincoln University is fortunate to have several fine sculptures and other features of interest on campus. The fountain featured on the cover of this issue is situated between Ivy Hall and Memorial Hall and is a refreshing water feature, enjoyed by students, staff and visitors.

Despite an extensive search LUPR has been unable to

ascertain the citation details for this fountain, which illustrates the fragility of our heritage. What we have discovered is that it is believed to have been constructed as part of the centenary celebrations of Lincoln College in 1978. If you have any further information about it please contact us. Hopefully we will be able to fill in the details in a later issue.

CHANGING THE CITY: PRACTISING THE ART OF THE POSSIBLE

A COMMENT FROM MAURICE ROERS*

I have a work colleague, an arborist, who has a cartoon that hangs above his desk entitled "The man who tried to plant a tree." In it, a well-intentioned, yet beleaguered man is stooping to plant a tree in sterile suburbia. On all sides he is beset by detractors who are berating him for such a foolish idea: "You'll block out my sunlight!" "It'll drop leaves in my yard!" "It'll clog up the drains!" "You're creating a traffic hazard!" "It'll grow into the overhead wires!" "The roots will pull up the footpath!" Woe to the man who tries to plant a tree.

On my desk, I have a framed letter from a member of the public. This particular resident had read about an aspect of one of my projects that had generating a bit of press. The concerned citizen concluded his letter, "This city was fine until you came here. YOU are the unaesthetic clutter that is ruining our city!" Woe to the man who tries to plant a tree.

I start with these couple of anecdotes because I think that they illustrate beautifully the challenges faced by so many of us who embark on the mission of trying to improve our cities. Ideas on how to improve the city are all around. Planting street trees are symbolic of this. "You know what the problem with the city is? Not enough green. The city would look so much better with more trees. Why don't they think to plant some trees?" I don't disagree. Surely doing such a simple thing, so obviously right can't be all that tough. Woe to the man who tries to plant a tree. I've been a city planner now for seven years; nine if you count the two that I spent in graduate school studying to be one. I like to think that I've been in the game long enough now to have a bit of perspective on the career, but still young enough to remember why I got into in the first place. And in that time, I've become a firm believer that great cities only come about by actually getting ones hands dirty and making them great. It is true, you get the city you deserve.

A common fallacy amongst young planners, and perhaps the public in general, is the belief that most problems in our cities exist because the solutions simply hasn't been thought of before or considered by the right people. "Why don't they think to plant some trees?" As I've come to find, so often it's not that the solution hasn't occurred to people before, it's that no one has had the courage of conviction or the commitment to see it through; to do it. And it is here that I think more planners and those involved in building our cities need to engage; in the doing. How do we do it? I believe by continually linking the possibility of our plans

to the practice of implementing those plans; by practicing the art of the possible.

It is all fine and well to say that our city would be a better place if more trees were planted. It is another to plant trees. Planners are in a unique and privileged position to bridge this gap. In fact, it is our daily job to ensure that tomorrow's city is better than today's. How do we do it? By having the courage and openness to get our hands dirty. Our hands are not dirty when they have only produced a nice looking map. Our hands are not dirty when they have only written some lofty words. Our hands are not dirty when they have only handled a slick rendering. Our hands are dirty when they have held those of the architect, the landscape architect, the engineer and the contractor in the implementation of a plan. Our hands are dirty when we have worked with the accountants, the property developers, and the lenders to get funds allocated for our plans. Our hands our dirty when we have walked elected officials, community boards, and the public through what we are trying to achieve, and then walked them through again.

Knowledge of city planning techniques and the ingredients that make a well-designed city are invaluable, but they are most valued when they are linked to the processes, people, and practices that make them happen, when the art of the possible is practiced. In my time working on Christchurch's Central City, I've found the greatest planning successes to have been in those projects where planning has taken a broad as well as deep perspective. Successful when a broad range of topics and perspectives have been embraced when formulating plans. And successful when plans have a depth that consider high level objectives all the way through to the details of implementation.

So, woe to the man who tries to plant a street tree. Woe to the man, because his good intentions are not enough. His intentions, coupled with a willingness and commitment to see them through, are needed. I commend city planning to anyone who has an interest in improving the places in which we live. There are few jobs where your main task is to think creatively about how to make tomorrow better than today. But to be effective, you need to be prepared to roll up your sleeves. We get the cities we deserve

*Maurice Roers is team leader for Urban Renewal & Transport at the Christchurch City Council. Prior to working in Christchurch, Maurice worked for the New York City Department of City Planning with primary responsibility for Lower Manhattan. He has a Masters in Public Policy & Urban Planning from Harvard's Kennedy School of Government and Graduate School of Design.

IN SEARCH OF A PROCESS FOR CENTRAL CITY

REVITALISATION — THE EXAMPLE OF CHRISTCHURCH

Christopher Kissling*

Introduction

The research programme reported here is the result of collaboration between Dr Christopher Kissling; Professor of Transport Studies, Lincoln University, Dr Ted Pryor, MBE, recently retired Deputy Director of Planning, Hong Kong; Tim Hogan, Architect and Chairman of the Christchurch Civic Trust; John McDonagh, Senior Lecturer in Property Studies, Lincoln University; Dr Crile Doscher, Senior Lecturer in Environmental Management, Lincoln University, specialising in Geographical Information Systems (GIS); Cao Pei, Masters graduate in Applied Science (Transport Studies) at Lincoln University; and various members of staff at the Christchurch City Council who oversaw contracted work undertaken for the Christchurch City Council (CCC).

The research arises because these multidisciplinary professionals have a strong desire to see Christchurch's inner-city core sustained as a vibrant and viable centre for the whole of the Canterbury region. The city centre is important. It is as important as the consideration of metropolitan growth under the Greater Christchurch Urban Development Strategy (UDS). The two are inextricably linked.

Degenerating central city functions are not associated with world class cities. Christchurch has a rich cultural heritage and garden city image that provides an environmental and historic foundation for liveability. However, much of the inner-city urban fabric is tired and functionally impaired. Now is the time for well-designed and co-ordinated redevelopment that will enhance the vision and help implement a world class image for Christchurch.

What is needed is a systematic approach to revitalisation that will lead to resurgence in inner-city residential living along with encouragement for businesses and cultural activities that serve the wider region.

Planning that embraces the concepts of mixed land uses, supported by excellence in transport access both within and beyond the central heart of Christchurch, is what is needed. That means a pedestrian friendly core, along with uncongested transport arteries that feed traffic into and out of the heart of the city. Those transport corridors should facilitate movement by private cars and

commercial vehicles, public transport (road and rail), and include provision for the soft modes of cycling and walking.

Policy Objectives for the Central City

The City Plan, Vol.2, Section 6.2.1, Policy: Urban Growth, says:

To promote the Central City as the principal focus for commercial, administration, employment, cultural and tourism activities. The Central City is an essential component of a City Council urban consolidation strategy. It is... a converging point of the city's radial road network... and is the most accessible part of the city for most people and also a logical focal point for public transport. Because reducing transport demand is an important long term aim of the City Plan, the continuing existence of the Central City as a socially, economically and environmentally attractive area is important.

A further reason for this policy is that the Central City is significant in terms of public and private buildings, infrastructure and amenities. The area provides for the social, economic and cultural well-being of the people of Christchurch (and surrounding districts) to a far greater extent than other business areas. This reflects the greater scale and variety of facilities and services available in the city centre... and is important... to the overall sustainability of Christchurch as an urban area

The policy... recognizes the close links between the Central City, the transport network and the demand that exists for a range of living environments in various parts of the city. The City Plan therefore provides... opportunities for medium to high density residential development around the Central City to enable convenient access for residents, thereby potentially reducing the demand for transport and supporting the Central city by providing it with its own "catchment".

It is stated in the UDS report that:

The success of the Strategy is tied directly to how well the City and town centres are revitalised.... Christchurch's Central City area is of special importance in ensuring that Christchurch and Canterbury continue to function and grow as dynamic places in which to live, work and play. As the centre of the region's economy and gateway to Canterbury, the success of the Central City is intrinsically linked to the success of the region.

Key Components of New Urbanisation & Central City Rejuvenation

UDS 2006 – 2041, growth projections anticipate an increase of about 75,000 households within the total UDS study area – including an additional 53,000 households within the City limits.

Within the Central City and parts of other inner suburbs (e.g. Sydenham) there are suitable,

conveniently accessible but ageing properties that can provide opportunities for sensitive upgrading or replacement. Site amalgamations of these properties would favour well-designed higher density multipurpose development likely to attract people to inner city living as well as the activities to serve them.

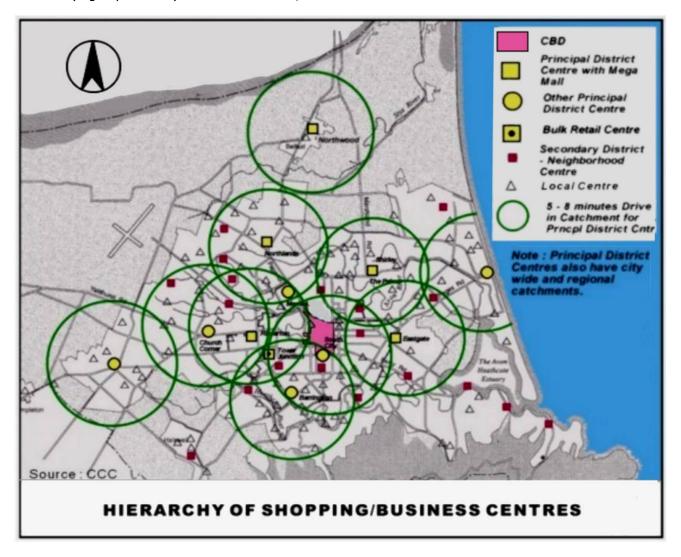


Figure 1: Distribution of suburban centres in Christchurch Plan drawn by E G Pryor using CCC sources on CCC base map

Competition

The distribution of shopping/business centres shown in Figure 1 indicates that suburban residents need not travel to the central city in order to satisfy the majority of their daily or even weekly needs. Retailing in the inner core of Christchurch is therefore placed under intense pressure with respect to ongoing viability. There are insufficient residents to sustain many retail outlets. Higher order retail establishments must pitch their marketing to the wider community if they are to survive.

Suburban malls have ample free parking. The inner-city charges for on-street and off-street parking with only the city controlled off-street parking facilities offering the first hour free. Public transport (PT) access to the inner city provides an inferior service when compared with private motoring as PT shares the same congested road space and buses do not yet have right-of-way when rejoining traffic streams after stopping for passengers.

Christchurch City Plan – relevant policy and institutional related aims

The approved City Plan became effective in November 2005. Some of the relevant policyand institutional-related aims for this analysis are:

- Implement the Christchurch Central City Revitalisation Strategy by providing information and incentives to promote the number of people living in the central city;
- Establish a dedicated City Urban Regeneration Agency to formulate and administer target-led programmes;
- · Assemble key redevelopment sites;
- Tender land for composite redevelopment proposals;
- Policy 12.2.2 addresses Consolidation To encourage the intensification of activities and land with significant redevelopment within the existing area of the Central City... (wherein)... there is a large amount of land with significant development potential.
- Policy 12.2.4 addresses Diversity To provide for a wide range of activities within the Central City... to accommodate... activities which are compatible with the unique environment found there i.e. business related, residential, recreational and cultural activities... tourist attractions and accommodation for transient visitors.

These policies and objectives are to be brought to fruition through the CCC Long Term Council Community Plan (LTCCP). CCC actions with respect to the purchase of the D. Henderson properties in 2008 can be seen in

the light of the CCC looking to ensure developments on those sites are in accordance with these general principles contained in the City Plan and in successive LTCCPs. The CCC has published its proposals for a Central City South Precinct as a composite development project involving Cityowned property in the main.

Our research outlined a methodology for identifying sites ripe for comprehensive redevelopment. The action taken by CCC with respect to the D. Henderson and other Council owned sites fits reasonably well with our analysis. Our approach was to expand upon the pioneering studies by the late Dr L. L. Pownall (1960). He looked at property values in terms of their unimproved and improved values to derive an indicative redevelopment potential index.

Redevelopment Potential (RP) = Assessed Value of Improvements ÷ Land Value x 100%

Assessed values take into account use, design, size, construction materials, age, and physical condition on the one hand, with zoning, location, title conditions, site dimensions, topography, climate and visual outlook on the other.

The mapped indices shown in Figure 2 provide a first cut to isolating sites with redevelopment potential. The following map shows the pattern inside the Four Avenues for inner Christchurch.

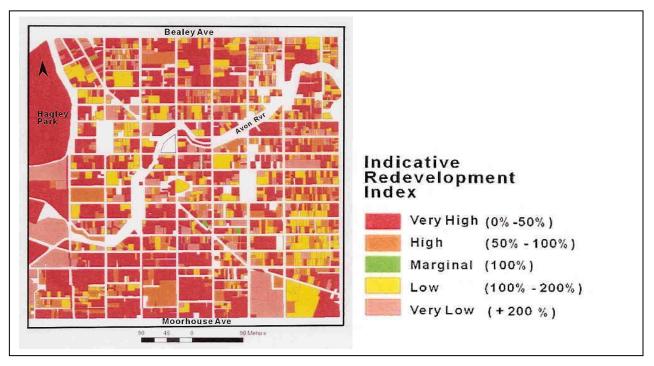


Figure 2: Redevelopment potential Source: Cao Pei

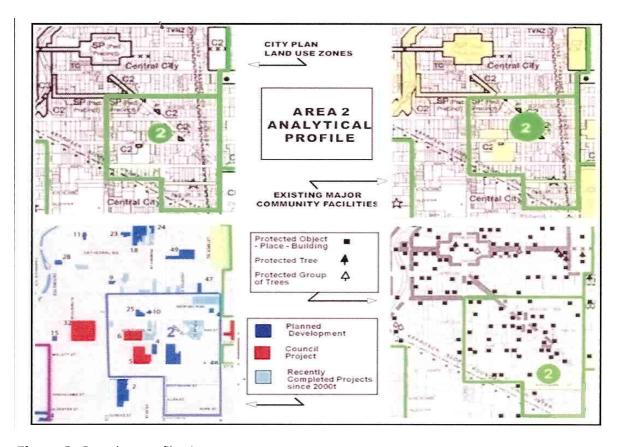


Figure 3: Sample area filtering

At first glance it would seem that there are many sites with very high RP indices, but it must be remembered that most sites have redevelopment potential. Subsequent steps take those parcels of land identified with very high RP indices and subject them to further analysis, screening out public spaces (e.g. Hagley Park), heritage sites, and those sites that would be difficult to merge with others. Adjacent sites with one owner are more suitable than small fragmented sites. Industrial sites are better candidates than existing residential sites as their current functions can often be relocated more readily

and they are usually bigger sites in the first place. Sites need to have excellent transport access to amenities, and connection to Greater Christchurch. Figure 4 shows a concept scheme for two hybrid inner-city shuttle-bus routes; a possible route for a train-tram that could link satellite settlements such as Rangiora, Kaiapoi, Rolleston and Burnham to the heart of the city in similar fashion to the train-trams in Karlsruhe, Germany.



Figure 4: Concept for inner-city shuttle bus and regional train-tram connections Source: C. C. Kissling

Once the potential sites are reduced to a smaller number, some areas stand out as good candidates for site amalgamation with a view to comprehensive redevelopment. These are further subjected to market analyses calling upon the expertise of real-estate analysts familiar with the Christchurch scene. We are then left with a small number of truly outstanding potential redevelopment areas.

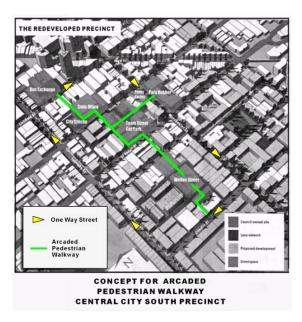


Figure 5a: Central City South Precinct Concept Source: CCC, Central City South Master Plan, May 2009.

Adjacent properties may be encouraged to become part of the design

Determining which of these high potential sites should be chosen for "flagship projects" that will galvanize similar redevelopments boils down to the politics of where in the inner-city the stimulus is most needed. Further, the question needs to be answered whether these sites should be promoted by the CCC itself, private developers, or jointly in public-private partnerships.



Figure 5b: Central City South Precinct Concept – walkways and ring road
Source: CCC, Central City South Master Plan, May 2009.

Christchurch City Council South Precinct Concept as published in local newspapers in June 2009

Central City South Precinct (CCSP)

Steps are now being taken by the CCC to revitalise the Central City South Precinct (CCSP) by means of new composite forms of inner-city housing, along with other appropriate land uses. Enhanced accessibility is also needed, for which new measures could be to:

- Create a clearly delineated one-way ring-road system around the CCSP (i.e.Lichfield-Manchester- Dundas- Colombo Streets), at the same time providing enhanced access to/from elsewhere in the city;
- Provide, where practical, an inter-connected, weather-protected walkway system within/between buildings (at ground and first floor levels) providing enhanced safety, convenience and amenity for pedestrians;



Figure 6: Pedestrian arcades and covered walkways at first floor level Source: E G Pryor

 Provide well located off-street parking buildings accessed from Tuam, St Asaph, and Welles Streets;

- Adapt streets for landscaped (open-air) pedestrian links - especially on east-west alignments;
- Provide escalators/lifts to access higher levels; and
- Roof-tops, landscaped where possible, allowing for open-air activities and communal residential gardens.

The CCC can also lead redevelopment in conjunction with the refurbishment of the former Post Office sorting centre in Hereford Street (see Figure 7) as its new civic headquarters. There is adjacent land beckoning for comprehensive improvement.

In spatial terms, the Central City has a substantial reservoir of under-utilized land potentially suitable for comprehensively planned development projects. There is scope for a combination of higher density residential and other compatible uses that could generate a range of economic, social and environmental benefits. Site amalgamations would be required to facilitate comprehensive development, possibly using powers of acquisition available for works relating to public projects.

Analysis is required of the open-market demand for accommodation arising from the formation of new households; the costs of development; and the degree to which households would be able to afford to purchase and/or rent either new accommodation or refurbished stock. The spectrum of households in need of housing can be expected to cover high, medium and low income households of varying sizes, ages and health.

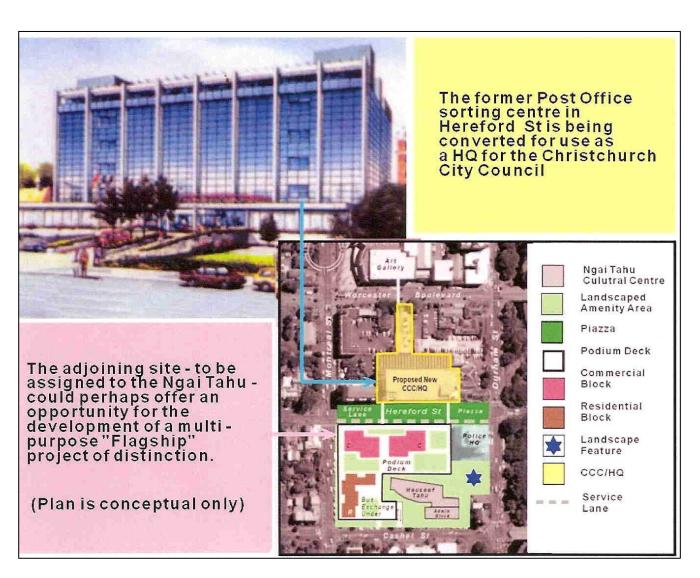


Figure 7: Scope for extending the impact of the New Civic Office Precinct Source E G Pryor

Substantial areas within the Four Avenues are currently devoted to light industrial uses. These areas have relatively low occupant intensities. Many industrial buildings in the Central City area are becoming functionally and economically obsolete, thereby lending themselves to redevelopment for housing and other compatible uses.

It must be noted that parts of existing residential areas display a chronic need for redevelopment. They contribute now to the diversity of the City in meeting basic housing needs, particularly at the low-cost end, for both rental and owner-occupiers. Costs and risks for developers need to be minimised if rents are to be affordable to a wide cross-section of the community (J. McDonagh, personal communication).

There is a framework under the current Urban Development Strategy for Greater Christchurch; the City Plan; the Central City Revitalisation Strategy; and the City Council's current LTCCP, for encouraging the phased implementation of "Flagship Projects" in the Central City involving areas identified for Comprehensive Housing Improvement. The primary aim is to boost population growth and associated socio-economic activities within the Central City as a viable alternative to peripheral green field expansion of the city.

URBAN REGENERATION AGENCY

An Urban Regeneration Agency (URA) as agreed in principle by CCC in 2008 should be established and funded as soon as possible. The URA would be the agency that could harness and combine the skills and resources from within and external to the CCC to initiate, design and implement phased 'flagship projects" that will accelerate the revitalisation of the Central City of Christchurch.

The primary roles of the Urban Regeneration Agency are to:

- (i) Act as a champion and partner for urban regeneration in Christchurch;
- (ii) Initiate, design and implement projects that lead to investment and redevelopment in Christchurch's intensification areas and activity centres as identified in the UDS;
- (iii) Eliminate and overcome development activities that run counter to the Council's regeneration objectives and policies such as detrimental land speculation and (incompatible) pre-existing uses;
- (iv) Foster public-private partnerships that maximise shared resources and generate a

balanced mix of economic, social and environmental benefits;

- (v) Be a positive force in the development of a community that does not duplicate current successful market activity and exits projects when the Council's regeneration objectives have been achieved;
- (vi) Ensure protection of the heritage buildings and sites listed in the City Plan;
- (vii) Ensure that the Urban Regeneration Agency works with a well constituted Urban Design Team and an Urban Design Advisory Group.

CONCLUSION

This article promotes a methodology for assessing, systematically, the redevelopment potential of sites in the inner-city area as part of a Central City revitalisation programme. This approach could be used as a planning tool to help evaluate alternative options for Christchurch and elsewhere.

There is a need to activate the proposed Urban Regeneration Agency (URA) and give it a mandate to explore the best options within the framework of a master plan. Properly resourced and led, an Urban Regeneration Agency could gather together a powerful team comprising the best available brains from a number of relevant disciplines to chart an exciting future for Central Christchurch. The URA may also need to act in the marketplace to facilitate joint venture schemes between public and private developers to ensure that the vision for a vibrant Central City is pursued with vigour.

The opportunity to make the proposed Central City South Precinct an exemplar project capable of stimulating further sympathetic rejuvenation is too good a challenge to ignore. It could be fruitful to use design competitions involving diverse talents to promote the transformation of the Central City of Christchurch.

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Pownall, L.L.,(1960). Low Value Housing in Two New Zealand Cities. *Annals of the Association of American Geographers.* 50(4), 439–460.

*Chris Kissling is Professor of Transport Studies at Lincoln University.

A BRIEF INTRODUCTION TO URBAN RESOURCE RECOVERY FACILITIES IN SEOUL, KOREA CHUL SOHN*

Introduction

Currently, landfills and incinerators are the two major ways of finally treating the household solid waste in Korea. In Korea, the incinerators are called "Resource Recovery Facilities". The objective of this short article is to briefly introduce how Korea deals with urban solid waste problems with the use of urban resource recovery facilities, using the example of the city of Seoul to aid in explaining the hot issues related to these resource recovery facilities. ¹

General Introduction to Urban Solid Waste Treatment in Korea

In Korea, all the urban household solid waste discharged from each household is classified into four: general waste, food waste, recycling material, and big size waste. General waste is collected in a fixed size garbage bag. If the area where the general waste is discharged has a resource recovery facility, the collected waste goes to the facility and is burned. Otherwise the waste collected goes to nearby landfills and is buried. Food waste collected is delivered to the companies which specialise in transforming them into animal feed or fertilizer. Recycling materials are classified and are sold to recycling companies after collection. In case of big size waste, wooden materials are crushed into pieces and metal materials are recycled after they are dismantled. To discharge the solid waste, each household should buy standard plastic garbage bags or stickers to be attached to the big size waste.

Urban Solid Waste Treatment History of Secul

Seoul is the capital city of Korea. It has approximately ten million population. Seoul is geographically surrounded by the city of Incheon and the province of Gyounggi as depicted in Figure 1. People call Seoul, Incheon, and Gyounggi altogether the Seoul Metropolitan Area.

Because Seoul is the largest and the most densely populated area in Korea, the need for more systematic solid waste treatment

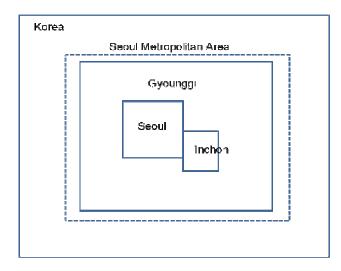


Figure 1 Seoul Metropolitan Area

emerged firstly in Seoul. In the early 1960s, the city of Seoul had no specialized landfills. Thus most of the solid waste was buried in swamps. From 1964, the Seoul city government designated several small landfills in suburban areas. Since the late 1970s Seoul's population increased rapidly, therefore, it was almost impossible to treat the solid waste generated from the huge population with a small number of landfills. In this vein, in the late 1970s, the Seoul city government designated the Nanji Island in Han River, which runs across Seoul, as a large scale city wide landfill. Since then and until 1993, all the solid waste discharged from the citizens of Seoul was buried in the Nanji Island landfill. The size of Nanji Island landfill is approximately 2,720,000m² and the height of waste laver reached approximately 100 meters above the surface when the Nanii Island landfill was officially closed in 1995. After the closure, the Nanii Island landfill was totally transformed to a big urban park as seen in Figure 2.



Figure 2 Transformed Nanji Island landfill Source: worldcuppark.seoul.go.kr

¹ This article is written to inform readers about resource recovery facilities in Korea. This article's descriptions about resource recovery facilities and Korea's urban solid waste treatment policy and history mainly are based on the contents of the official website of the Seoul's Resource Recovery Facility, rrf.seoul.go.kr. This article summarized and translated the relevant information provided in the web site. For more information, please refer to rrf.seoul.go.kr.

From 1985, the Seoul city government began to realize that the remaining capacity of the Nanii Island was not enough and to think about new landfills. As a result, the city government of Seoul, the city government of Incheon, and the Provincial government of Gyounggi agreed to build jointly a new metropolitan area wide landfill and actually opened a large scale landfill in the Gyounggi region in 1992. Also to cope with rapidly increasing amount of the urban solid waste, the city government of Seoul decided to build several incinerators in addition to the metropolitan area wide landfill. This is because the city government of Seoul considered the fact that if incinerators can take care of some amount of the solid waste, then the new landfill can be used for a longer period.

Resource Recovery Facility vs Incinerator

Currently, Seoul has four resource recovery facilities. Resource recovery facilities are basically incinerators which burn the solid urban waste to reduce the amount of the waste and to recover the heat in the process of trash burning. The heat recovered is provided to nearby households in the form of hot water and used for house heating. Even though the resource recovery facilities are theoretically incinerators, the term, incinerator, is not officially used. This is because this term has negative connotations associated with air pollution and, in fact, these facilities conversely actually conserve and reuse the heat produced.

A typical resource recovery facility consists of following several components.

- Waste Classification and Preprocessing Module: The collected household solid waste is classified and transported to an incinerator.
- Incinerator: The waste is completely burned and the hot gas generated from the burning is transported to a steam generator.
- · Steam Generator: The heat from the incinerator is used to generate hot steam.
- Hazardous Gas Treatment Facility: The hazardous gas from the incinerator is collected using electronic gas collector.
- Ash Treatment Facility: The ashes and variety of airborne particulates from the incinerator are collected and transported to landfills.
- Hot Water and Electricity Generation Facility: The hot steam gained from the incinerator is used to generate hot water and electricity in this facility.
- Waste Water Treatment Module: In this facility, all the waste water generated from the resource recovery facility is cleaned by chemical and biological methods and are discharged to nearby rivers.
- Recreation Centre and Park: The recreation centre includes the facilities for sports and child education. The park includes multipurpose open space and playground for

kids.2

Land Use Patterns of Resource Recovery Facilities' Neighbouring Areas in Seoul

As mentioned before, there are four resource recovery facilities in the Seoul area. Those are Nowon, Yangchon, Gangnam and Mapo resource recovery facilities as in Figure 3. All the resource recovery facilities in Seoul are located closely to residential areas as shown in Figure 4 because the major function of the facilities is to provide the hot water to the nearby houses. The hot water then is used for house heating system. If the distance between the facilities and houses is long, the loss of the heat is substantial in the course of delivery. This is the major reason why the facilities are usually surrounded by residential areas.

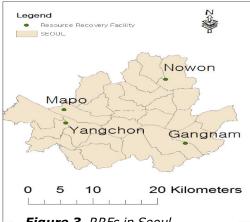
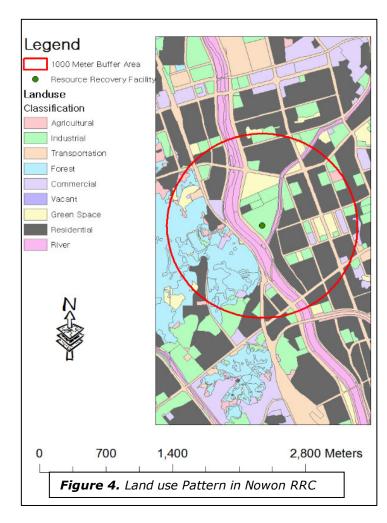


Figure 3. RRFs in Seoul

However, even though it is admitted that a need exists to establish facilities in residential areas, the fact that waste incinerators are located close to such areas causes severe opposition from the residents who own properties close to the facilities. What the residents are most concerned about is dioxin, a chemical discharged from the process of burning the solid waste. Dioxin is known to be linked to many cancer and skin diseases. Even though several scientific investigations conducted by environmental specialists clearly show that those facilities do not discharge dioxin beyond the level allowed by Korean environmental standard, the concerns of nearby residents has not decreased..

² It is interesting to see that the recreation centre is the typical component of a resource recovery facility in Korea. The residents who live close to the facility can use the recreation centre with substantially lowered user charge.

³ The city government of Seoul is conducting periodic environmental and health impact assessments on the operation of the facilities. The results from this assessment are open to the public through the web site, rrf.seoul.go.kr.



Compensation for the Residents in the Area of Influence

The first resource recovery facility in Seoul opened in 1996. Since then concerns about the negative effects from the facility have grown including aesthetics of the plants themselves, possible health effects from dioxin, and resulting housing price reduction cause severe civil oppositions to the operation of the facilities (Sohn and Shin, 2007). To deal with this opposition, The Seoul City Government designated the area within 300 meters from the parcel boundary where the resource recovery facilities are located as the area of influence. Also the city government allows the residents in the area to build a Special Citizen Council of the Area of Influence. This council consists of the residents of the area, members of ward council, and specialists in environmental sciences. This council has the right to review the results from the environmental and health impact assessments regarding the operations of the facilities and oversee whether the facilities are operated in an environmentally healthy manner.

In addition to the right to build the council, the residents receive the following direct economic benefits from the city government of Seoul.

- The residents in the area of influence can get 70% discount of their payment for using heated water.
- The residents can use the recreation facility run by the resource recovery facility with substantially lowered costs.

Co-utilisation Issue

Seoul consists of 27 smaller administrative wards called "Gu". Because there are only four resource recovery facilities in Seoul, this means that only four wards have their own resource recovery facilities. In 2005, the Seoul city government decided to process the solid waste from the other wards where there is no resource recovery facility in the existing facilities. This decision is called "Co-Utilization of Resource Recovery Facilities" Consequently, this decision brought severe oppositions from the residents of the area of influence. However, in the early 2009, all of the Seoul's resource recovery facilities began to process the waste from other wards, after arrangements were made to increase the financial support of affected areas by the local government.

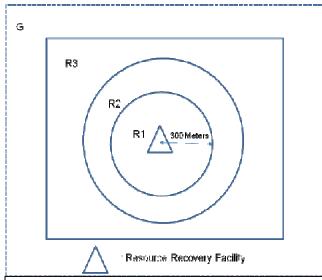
When the issue of Co-Utilization emerged by the city government of Seoul firstly, the stakeholders related with this issue show diverse attitudes according to their interests. We can identify the four major stakeholders related with Co-Utilization issues. Those are as shown in Figure 5.

It is quite useful to examine each stakeholder group's key attitude about the Co-Utilization issue in detail for the deep understanding of the conflicts related with resource recovery facilities in Seoul. Those can be summarised as follows.⁴

 City Government of Seoul: To deal with the rapidly increasing household solid waste in Seoul, the city government wants to build more resource recovery facility. However, this is not easy job because most of citizens don't want the facility in their backyard. Thus the city government wants to increase the amount of the waste processed in the existing facilities.

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⁴ The classification of stakeholder groups and the description about their attitudes are based on the author's personal readings on the Korean newspaper articles about this issue. Please refer to the reference section to see the list of the news paper articles.



G(Seoul City Government), R1(Residents of the Area of Influence), R2(Residents who live just outside of the Area of Influence), R3(Residents who live in the wards where there is no resource recovery facility)

Figure 5. Major Stakeholders in Co-Utilisation Issue

- Residents of the Area of Influence: The
 residents who live within 300 metre buffer
 area from the facilities receive some economic
 benefits such as reduced bill for the house
 heating and lowered user charge for the use
 of recreation facilities as rewards for living
 closer to the facilities. They are against the
 city government's policy which increases the
 amount of the waste processed in the existing
 facilities. However they are ready to accept
 the policy if the city government provides
 more economic benefits.
- Residents who live just outside of the Area of Influence: The residents who live beyond the 300 metre buffer area from the facilities receive no economic benefits from the city government. They are thinking that they should get some economic benefits because they suspect that some negative impacts from the facilities may reach beyond the 300 metres from the facilities. They are severely against the policy that increases the amount of the waste processed in the existing facilities because there will be no chance of receiving any economics benefits even though they are thinking that they become more exposed to potential negative impacts due to the more intensive use of the facilities.

Residents who live in the wards where there
is no resource recovery facility: The
residents who live in the wards where there
is no resource recovery facility are happy
with status quo. They are simply against the
new facilities in their backyards.

Conclusion

Thus far, I have briefly introduced how Korea deals with urban solid waste problems with the use of urban resource recovery facilities as an example of the city of Seoul. Because Seoul's resource recovery facilities are located in the residential area, they cause severe conflicts among the stakeholders involved. The Korean central and local governments have developed various strategies to cope with these conflicts as shortly explained above. Because New Zealand has a plenty of vacant lands to be used as landfills, it can be assumed that New Zealand can deal with the urban solid waste problems like Korea without relying on incinerators. However, I hope that the information I summarized here can be used by the environmental planners of New Zealand to design smart urban solid waste treatment policy in case they have to rely on incinerators to deal with urban solid waste treatment.

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Web Sites

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How to Harness the Full Potential of Integrated Catchment Management as a Pathway to Sustainability

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Introduction

Water resource management authorities globally are increasingly adopting regional ecosystem approaches and reflexive governance as pathways to sustainable development (Paton et al., 2004; Vos et al., 2006). An integrated collaborative approach to natural resource management at the catchment scale is a strong theme in the recent literature (e.g., Lovell et al. 2002; Painter & Memon, 2008). New Zealand's Resource Management Act (RMA), enacted in 1991, is a devolved planning mandate for integrated natural resource management exercised by elected regional councils. The territorial jurisdiction of regional councils established in 1988 was purposely defined on the basis of groups of large water catchments (including groundwater aquifers) to facilitate an integrated approach to natural resource management. Integrated management of water allocation, water quality and related land management are primary functions of regional councils. However, regional councils have shied away from exercising their devolved integrated water planning mandate at the subregional catchment scale. Instead, provisions of first generation regional water plans tend to be framed region-wide in scope. In some plans, water quality and quantity issues are addressed separately with limited linkages, a reflection of poor integration.

Growing cognisance of planning at the catchment scale is a recently re-emergent phenomenon under the RMA planning regime⁵. Regional councils, including the Canterbury Regional Council, are according a much higher priority to this as a means to avoid and resolve water conflicts. The community engagement and strategic planning provisions of the new Local Government Act 2002 (LGA)⁶ and the 2005 RMA amendments⁷, embedded in a wider cultural shift from *government* to *governance*, are improving the potential for integrated water resource management with community engagement.

A need for a greater catchment focus has become increasingly evident during the last decade for a number of reasons: to respond to potential adverse impacts on land and water connected with intensification and expansion in the farming sector; growing water demand and conflict between in-stream and out-of stream water users; dissatisfaction with predominantly top-down hierarchical approaches by regional councils to address these concerns; and demands by Māori, the indigenous inhabitants, to be actively involved in governance of water resources. These forces exemplify characteristics of a 'wicked' environmental problem (e.g., Weber & Khademian, 2008a) and have precipitated a gradually widening appreciation of integrated collaborative planning of land and water resources at a catchment scale.

One of the objectives of the Lincoln Ventures (LVL) led Foundation for Research Science and Technology funded research programme is to identify challenges for integrated catchment management (ICM) in New Zealand under the RMA regime and to suggest a way forward. The 'human dimension' of ICM research is not as well established or recognised in New Zealand as bio-physical research is. There is a need for improved social science understanding of catchment governance focused on context, perceptions and interrelationships amongst and between user groups, communities, regulators and other stakeholders from place based, multi-scalar perspectives. The LVL project is designed to contribute to that.

The detailed research findings from our study are reported in a forthcoming publication (Memon, Painter & Weber, forthcoming). In this article, we provide a brief summary and recommendations.

ICM challenges in NZ

Arguably, the RMA constitutes a logical planning framework for ICM, with the sole purpose of the Act defined in terms of sustainable management of natural and physical resources. Yet, notwithstanding this, and in spite of growing public concerns about issues of water quality and quantity in the face of land use intensification and climate change implications, and notwithstanding a recent proliferation of an array of ICM type initiatives, our considered assessment is that ICM has not featured strongly in the way regional councils have interpreted and implemented their devolved RMA mandate relating to water management. Regional councils have prepared plans for water allocation, water

⁵ A focus on catchment based planning by Catchment Boards, as special purpose *ad hoc* authorities, was more evident under the Water and Soil planning regime preceding the adoption of the RMA planning regime in 1991. The individual Catchment Boards were amalgamated into larger Regional Councils in 1988.

⁶ The LGA 2002 empowers local authorities to promote sustainable well-being of communities.

⁷ The amendments made to the RMA in 2005 re-affirm the role of regional councils to take a strategic planning approach to allocation and management of water resources.

quality and land use on a primarily 'whole-of-administrative-region' basis, but not many have prioritised water resource planning for water allocation and water quality at the catchment scale. Consequently, water resource planning tends to be more 'top-down' than 'bottom-up', with limited integration between allocation, quality and land use provisions on a specific catchment basis⁸.

Our research findings regarding recent ICM initiatives have highlighted the following constraints:

Strategic spatial planning

In the context of the RMA's devolved planning framework, a strategic spatial planning approach to water resource management at both regional and catchment scales is a key imperative to promote the sustainable management purpose of the Act via the integrated natural resource management function delegated to regional councils (Memon & Skelton, 2007). The strategic and integrated attributes of planning have been generally lacking in regional council plan making and implementation practices.

Silo-mentality

Prevailing poor professional integration ('silomentality') within regional councils, between statutory and non-statutory planning, and natural science and social science components of plan making and implementation are a significant constraint. Lack of integration of multi-disciplinary expertise, combined with the lack of opportunities to learn from other relevant processes are key constraints in linking voluntary ICM plans with statutory regional plans.

Lack of regional council support for ICM

ICM initiatives to date in New Zealand tend to be *ad hoc*, reliant on availability of funding and personal initiative. Our investigations highlighted the limited staff and other resources allocated to catchment initiatives by regional councils. Funding for planning at the catchment scale is a constraint for many regional councils, particularly those who don't have access to revenue from sources other than land taxes (e.g., shares in regional council owned port companies).

Lack of support and capacity building by central government

Even though central government has significantly devolved water resource management responsibilities to local government, it has provided limited policy guidance or direct support to build local capacity and political commitment. Catchment

level projects often do not continue long enough or with sufficient funding to ensure that successes in particular areas were able to be built on and integrated, either horizontally (between catchments) or vertically (from the individual through to the national level).

Clarification of Māori property rights

A related national context issue pertaining to ICM in New Zealand is the role of Māori as Treaty partners with the Crown in management of natural resources such as water. As with the recent settlement of fishery quotas, Māori claim ownership of water resources under the terms of the Treaty of Waitangi negotiated between the Crown and Māori in 1840. This claim has yet to be lodged and adjudicated, and uncertainty in the minds of regional council officials and farmers about future access to water by non- Māori is perceived as a barrier to collaboration by some respondents.

Institutional fragmentation

There are two aspects to concerns about institutional fragmentation: division of planning responsibilities between regional councils and territorial local authorities (district councils); and difficulties of collaboration with central government agencies on a 'whole-of-government' catchment basis.

Information

A constantly changing system with a wide range of time lags between inter-connected causes and effects introduces significant uncertainties into ICM, which can easily inhibit progress (e.g., Weible, 2008). Uncertainty is considered a key ICM challenge as it can affect whether stakeholders participate, the manner in which they participate, the ability of multiple institutions and disciplines to hold meaningful conversations, and the prioritisation of resourcing to reduce constraining uncertainties.

Participation

Inclusive community participation is important for reasons of democratic legitimacy and practical considerations related to problem solving and decision implementation (e.g., Stiftel & Scholz, 2005). Traditional consultative local authority processes are a back-to-front way of working with the community, in that the initiative was identified first, and the participation sought second.

An adversarial climate

A further challenge is the treatment of science and other expertise in an adversarial manner. This is considered to be a key hindrance to actualising the RMA intent of integrated management of air, water and land. A planning approach limited to managing environmental effects of individual consents in a first-in-first-served process has provided

⁸ A significant recent exception to the commonly practiced 'plan, notify and defend' approach is the catchment plan for Lake Taupo (see Budd et al. 2009).

incentives for water permit applicants to contest regional council decisions in courts of law on veracity of expert evidence (Memon & Skelton, 2007).

Leadership

One can draw a distinction between leadership and facilitation. It is deemed that leadership is required from all participants in an ICM process, as all are required to participate in a manner that considers the interests of the stakeholders they represent at the same time as the interests of the wider community. While leadership by senior regional council officials is considered highly significant to enable and support a culture conducive to ICM, long term ICM success relies principally on community leadership.

Facilitation requires a person or persons with sufficient trust and respect from participants to keep the process moving forward. The lack of trained and resourced facilitators is a significant barrier to effective stakeholder participation.

Enhancing the potential of integrated catchment management

The interrogation of ICM practices in New Zealand from an institutional perspective raises a number of policy implications.

The barriers to ICM identified in this paper can be addressed in a number of inter-related ways:

- International agencies such as the EU, New Zealand's major trading partner, could encourage the New Zealand government to take its environmental obligations more seriously because of possible risks of European consumer boycotts and the threat to New Zealand's 'clean-green' image. Likewise, the OECD, which periodically audits environmental performance of member countries, could pressure New Zealand government to take its international Treaty obligations pertaining to biodiversity and wetland protection more seriously.
- A national water policy should take full cognisance of the significance of ICM as a means to achieve the sustainable water management purpose of the Act and the pivotal role of regional councils in this respect. A joint funding formula with regional councils to support ICM practices should be part of the national policy.
- The issue of Māori water entitlements and their constitutional role in water governance needs clarification. The recently negotiated agreement between the Tainui tribe and the Crown for the

- joint governance of the Waikato River may provide a potential role model for future water governance arrangements.
- Regional council planning instruments (regional policy statements and plans) should embrace a sub-regional ICM dimension as a key attribute of region-wide water strategies to address interrelated issues of water allocation, water quality and land use. ICM initiatives and practices should be linked to regional water plan strategic objectives and policies. This will enable top-down and bottom-up approaches to more easily complement each other.
- At the catchment scale, to the extent that certain enabling, antecedent conditions are in place, collaborative participatory ICM practices will be more likely to succeed. Ideally, appropriate enabling conditions include strong social capital (Putnam, 2000), high cultural or belief homogeneity (Sabatier et al., 2005), an economy *not* dominated by extractive industries (Lubell, 2005), and good scientific knowledge about the resource problems at issue (Lubell, 2005; Sabatier et al., 2005; Weber, 1998). If such conditions are not present, however, a specific pragmatic, strategic approach to early problem solving, a series of initiatives that focus participants on shared values, common ground, and collective benefits, and a series of specific leadership practices can help to facilitate the transition to a successful collaborative institution (North, 2005; Weber & Khademian, 2008b; Weber, 2009).
- Once the enabling conditions are in place, it is important to craft a networkbased culture grounded in a credible, effective commitment to collaboration that increases the certainty that participants' stakes will be treated fairly and as legitimate claims within the broader context of sustainability goals. This requires facilitation from collaborative capacity builders (Weber & Khademian, 2008a) with a relevant set of skills, traits and reputation.
- Long term, measurable progress requires all stakeholder groups of place, interest and regulation to participate throughout ICM processes at a level that leads to mutual accountability for process outcomes. More progress is required in this area, in particular through finding participation incentives for those doing well out of the current system and offering participation opportunities for those struggling in the current system.

Monitoring of performance toward agreed catchment targets or within agreed tolerances requires regular reporting on a comprehensive, measurable, understandable and achievable set of performance indicators. Integrated indicators that hide subjective weightings should be avoided as these weightings change across a community and over time (e.g., Painter et al., 2007). The use of the internet with information designed to a reading age of 12 is recommended to encourage wide participation.

While the implementation time frame for some of the suggestions is long-term, others can be implemented sooner.

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TRANSPORT & URBAN PLANNING IN NEW ZEALAND

A CONSTANT BALANCE OF CONFLICT OF INTERESTS A COMMENT FROM JEAN-PAUL THULL*

Tim Cheesebrough's article – Two cars or not two cars? captured my interest in the previous edition of the Lincoln University Planning Journal, but I missed a clear answer to the question he posed.

The debate on the number of motor vehicles per household can be perceived as irrelevant as only one person can drive one vehicle at a time. Why not compare motor vehicles with shoes? Some women and men are known to have a tendency to like shoes and collect them. The same can be said about motor vehicles in New Zealand: some people collect them or just have one for each family member holding a driving licence as cars are cheap to buy, register and run. The availability of motor vehicles sitting in the garage or drive-way makes it easy for most people to just hop in, turn the key and drive off. Most people will not consider any other options unless the costs of running a car rises or they have to walk 500m to access their car or they cannot find easily a free car park at the end of each trip. This is not uncommon in many European cities and possibly the 500m induces people to choose different modes of transport in relation to the purpose and distance of their planned trip.

Well is it as simple as it looks? In principle yes, as the low density planning regime of quarteracre sections set the standard on everyone's property at the time to enable sufficient garden space including multiple parking/garaging. This has changed over the years through further subdividing such properties to make financial gains: however, the double garage concept (in some cases three garages plus off-road parking) and sealed drive-ways still seem to be the minimum standard for the modern architecturally designed residential housing box. The current planning regime is not well inter-connected with all the New Zealand strategies that involve urban and transport planning, as the basics of the urban design protocol or the Resource Management Act (RMA) are often ignored by private developers. In the example mentioned above, any adverse effects caused by rain water unable to infiltrate into the soil is exacerbated by diverting the rain water from the sealed driveway directly into the storm water system. Some have suggested that the algae in McCormack's Bay in Christchurch are largely related to nitrates from storm water discharges into the bay (e.g., as a result of car wash liquids). This could easily be mitigated if the Council required permeable drive-ways similar to designs of 50 years ago.

The RMA encourages authorities to consider the adverse affects of development and these should include the effects of sealed drive-ways. Best practice design has incorporated limits on impermeable surfaces in new subdivisions (e.g., the Bay of Plenty) and the Christchurch City Council's draft Surface Water Management Strategy (released 13 July 2009 for submissions (http://www.ccc.govt.nz/environment/healthyenvironmentstrategies/surfacewater/)) includes porous pavements as a preferred site management technique.

Sustainable development is also one of the five main objectives of the 2002 and 2008 New Zealand Transport Strategy (NZTS). Missing, however, is consideration of the interactions of local authorities and even super-authorities (e.g. Greater Christchurch) dealing comprehensively with sustainable development. In European countries, (e.g., Germany, an example I know well), new subdivisions will be granted permits within 500-1000m of public transport services, ideally along light rail systems. Naturally the geography of the terrain and existing structures play a role, but the main objective is to minimise peak private motor vehicle transport that leads to congestion and excessive pollution (air, noise) and energy demand. Subdivisions are not usually allowed in rural areas far from existing public transport routes. For example, it is doubtful a subdivision like Pegasus, north of the Waimakariri river would be allowed in Germany, unless they included the provision and costs of a light rail system in their development. Christchurch's practice of allowing existing urban properties to be subdivided to a point that the section is virtually fully covered with dwellings and sealed driveways that speeds runoff and ease of rolling out the rubbish bins is also impractical.

Looking at the south Christchurch Transport Strategy and the future developments the Urban Development Strategy (UDS) is foreshadowing, Rolleston township is going to double in size over the next few decades. It is therefore rather frustrating to see transport consultants backed by government authorities and politicians going ahead with such a proposal without a parallel consideration of a modern public light rail transport system. At the time of the study, in 2006-2007, the Peak Oil debate had not hit the headlines and the potential of high oil prices were not adequately taken into the equation. In mid-

2009 the fall in prices has meant the media no longer highlights these issues, but oil prices will rise again as major economies recover in 2010 and beyond. The European truck manufacturers Man, Mercedes, Volvo and Scania are readying themselves to respond to future logistics demands in India as they see the Indian peninsula as one of the first economies in the world to recover from the economic world crisis.

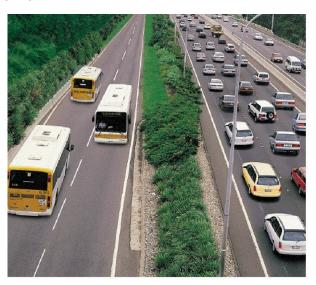
The whole energy supply should not be underestimated, despite the big oil companies investing heavily in growing and diversifying their energy sources. With an increased future worldwide demand for energy, it is most irresponsible to neglect the adverse affects of induced energy demand from large developments 20-40km outside main centres without planning and securing funding at the same time for appropriate public transport that can compete successfully with private motor vehicles. This public transport funding should be a cost attached to the development of these new centres to reflect the real costs to society. It is largely unfair that residents living currently within the urban area should suffer from increased commuting traffic and hence noise and air pollution exacerbated by dwellers who bought cheap land outside the cities. It would be different if they all used public transport when commuting to and from the city.

I am not saying that regional authorities who are in charge of public transport planning in their regions are not planning to extend bus services and frequencies to these growing centres however, in practical terms, the majority of people moving out to suburbia or the countryside, clearly have no love-affair with buses. There are many cost benefit analysis studies on light rail systems assessing the minimum patronage required to make such systems viable, but there is no study to my knowledge that indicates for how long or what distance New Zealanders are prepared to happily take the bus when they have alternatives. I strongly believe that a 30 minute rule may apply: bus transport is fine for trips under 30 minutes: if exceeding that time, commuters may opt to use their private motor vehicle. Light rail public transport can extend the 30 minute range.

Many politicians would like to see light rail being developed in their city. It requires capital funding from the Crown and/or rate payers' money. None of the public financing sources look very promising as the road transport industry is not keen to see their Road User Charges allocated to finance light rail. The running of the public transport system in New Zealand is funded by central government (25%), property rates (25%) and the remaining 50% is covered by fares. Depending on the type of bus contract, this is a challenge, with bus fares being increased at the same rate fuel prices go up. This does not encourage increased patronage. As a consequence, each new residential subdivision outside the main Christchurch area (> 10-15km) will face a double or triple zone bus fare. This fact, in addition to a bus trip that will take more

than 30 minutes, is not contributing positively to encourage the shift from private motor vehicles to public transport. One option would be to start introducing electronic road user charges directly related to the time of driving and specific road corridor used. Singapore has been operating this system for a few decades by introducing first class public transport.

Can the system be applied to New Zealand? It will be difficult, as the planning regime in Singapore is heavily regulated through intensification of 5-7 story buildings along public transport corridors to ensure sufficient public transport demand. The New Zealand quarteracre section culture cannot be changed overnight, possibly especially not in Canterbury. However, some changes could happen relatively easily through strict quality requirements in the bus tendering process. A regional council, like Environment Canterbury, could request high quality buses for routes that cater for more than one zone. These buses could be similar to the coaches used for Bus Rapid Transit (BRT) routes overseas, allowing far more seat spacing, folding tables and TV screens (as used in aircraft), WiFi connections, low noise interiors, air conditioning, leather seats, special bus lanes for by-passing congestion, and bus drivers with increased social skills.



Bus Rapid Transit, Brisbane

If New Zealand wishes to commit to a reduction of 10 - 40% CO $_2$ by 2020 - as the Minister for the Environment, Dr Nick Smith, is currently indicating - the private 'vehicle kilometre travelled' (VKT) will be need to be reduced. Public transport will be one measure to mitigate private VKT. However, a voluntary modal shift is the best option. This can only be achieved through a high quality service that is adequately funded. The current funding system is not appropriate as there is no real financial incentive to use public transport.

Funding a modern public transport system is probably one of the biggest challenges faced by governments around the world. A recent OECD report on PPPs (Public-private partnerships) judged the franchising PPPs in the UK and

Australia to be a failure due to a lack of skills in the design, implementation and monitoring of such franchising systems. It is crucial for public transport management to be backed up at all times by government: long-term political leadership is required. For instance, the German city of Luebeck experienced a PPP public transport failure recently and had to be rescued by government. Motorists just preferred taking 5 minutes longer did not pay the fee to use a tunnel. At the end of the day, private companies are not focusing on their customers, but have a legal responsibility to put the interests of their shareholders first. In terms of sustainability, the results are farcical.

The complexity of the situation can be highlighted by considering the motor vehicle fleet entering New Zealand. The import of Japanese second-hand cars drove the price down to a level such that dealers were hardly making a profit on their sales; instead they make money through the maintenance schemes that accompany these sales. By comparing the price of a similar second-hand VW Golf in Europe, the New Zealand price tag is about 50% under the European price tag. Hence it is pretty easy to buy your own car (\$1 is often enough to get started) and to increase your own mobility and advance your social status by owning a motor vehicle. The New Zealand government saw it as the best solution as Kiwis have a love affair with motor vehicles and there was no need to extract substantial funding from the budget for implementing modern public transport. The New Zealand government does not even require drivers of motor vehicles to hold third party insurance, unlike most of the developed world. But the objectives of the NZTS regarding increasing mobility and economic development are met.

So is it all good as Tim Cheesebrough seems to suggest? I am not sure whether Tim is fully convinced that the current situation deals with the real issues or if he just wishes to highlight the positive developments that have happened over the last decade. High crude oil prices in 2008 only shifted a few New Zealand commuters to public transport and encouraged some others to carpool. This was largely supported by Auckland investing in a modern bus-way from the Northshore and an upgrade of the Western commuter rail line to Britomart. The popularity of the Northshore bus-way is pertinent as it quickly demonstrated that planned Park & Ride facilities were too small and feeder bus frequency to the bus-way is too low. However, I am convinced that the North Shore Bus-way will be viewed internationally as a worthwhile system. Ideally, we would have seen a light rail system (the commuter numbers are there) adjacent to the motorway being constructed, similarly to the light rail system in Perth (WA). The integration of bus fares and smart cards was another positive move to reduce the image of public transport being 'just for losers', to put it bluntly. The CO₂ value of buses with low patronage is

certainly not ideal; car pooling may need more encouragement, or trialling more free buses in times of low frequency to increase patronage and to reduce the energy demand should be considered.



Bombardier Guided Bus System, Nancy, France

The 2008 NZTS supports Travel Demand Management (TDM) to decrease the demand for private motor vehicle use as a sustainability measure. TDM funding is currently used for promoting public transport, walking school buses, and parking strategies just to name a few initiatives. However, the energy demand is not monitored, nor has it any impact when it comes to urban planning principles. Generally speaking, the RMA deals with adverse affects relating to resources. Unfortunately, energy demand does not seem to be perceived as an adverse affect and is therefore not an issue when new subdivisions are being granted a resource consent (e.g. Rolleston, Pegasus Bay, rural properties north of the Waimakariri River).

Back to our beloved motor vehicles, keeping running costs low to the general public will ensure re-election of our politicians. Indeed, the registration fees of a petrol 3,000cc rating Mercedes Benz cost as little as a modern economic 1,400cc VW Polo or Peugeot 208. Just imagine if we had graduated registration fees and having to tell your mates at the pub that you could only afford a 1,400cc rating and not a 5,000cc Holden Commodore or Ford Falcon? Yes, the Kiwi culture is to blame for the way we act and we will not be able to shift behaviour quickly, unless we are forced to through having to pay for environmental externalities (as opposed to meeting profit targets in PPPs) or by mandated government legislation. Only strong leadership committed to sustainability will bring about change. The Local Government Act and RMA can both be seen as promoting sustainability, but only slowly. Hence the proposed changes by the current New Zealand government with modifications of the RMA and the introduction of a Supercity may see interesting times in the future.

*Jean-Paul Thull is a senior lecturer in the Department of Environmental Management and is featured in the LU staff profiles section on page 25

THE LINCOLN ENVIROTOWN TRUST

TAKING RESPONSIBILITY FOR A SUSTAINABLE FUTURE SUE JARVIS*



The Lincoln Envirotown Trust (LET) has come a long way since it started from a conversation between Ian Spellerberg and Sue Jarvis! A sub-committee of the

Lincoln Community Committee first met in June 2005, becoming a Charitable Trust in April 2006, with a grand launch in June 2006. We started with a township survey to find out what the issues were, what people wanted to know more about and how they liked to learn. The main issue was the rapid expansion of Lincoln. We provided a number of workshops and seminars on the topics they suggested. This was followed by many discussion groups, and feedback opportunities, culminating in a four hour marathon effort by about 45 people to come up with the Lincoln Community Sustainability Action Plan. The action plan was divided into achievable "chunks". These are shown visually as apples on a large wooden apple tree.



Various groups of locals took responsibility for different sections of the plan.
Progress has been made on all areas of the plan. The first action was to reduce the use of plastic shopping bags by distributing free reusable bags to every household in Lincoln with a message about reducing waste. For

more LET actions see the breakout box below.

The great progress made would not have happened without the support of the Lincoln community including Lincoln University, Landcare Research as well the Selwyn District Council, the Minister for the Environment's Sustainable Management Fund and many other funders.

The main objectives of the Trust are:

- To promote the long term environmental sustainability of Lincoln Township with the understanding that this is also the basis for social, cultural and economic sustainability in the future.
- To educate about and raise awareness of environmental sustainability issues and to provide information about how to achieve environmental sustainability.
- To provide appropriate opportunities for personal and community decision making to ensure that the environmental, social, cultural and economic sustainability of the Lincoln Township is promoted.
- To act as a model for other communities wanting to progress towards environmental sustainability.

The impact of LET has been influential on changing the attitudes of individuals and businesses towards the idea of environmental sustainability in a rapidly expanding township.

An area that has provided exceptional results has been the establishment of a very successful Community Garden. The garden has been well supported by the community and its success has been expanded upon recently by the introduction of an already oversubscribed cookery course that demonstrates recipes using the vegetables grown in the garden.



Lincoln Community Gardens

Local businesses have been invited to apply for "Responsible Business" awards to encourage environmentally sustainable business practices – three categories were established, bronze, silver and gold. Such has been the success of the awards that this year's award will include the new category of platinum, as some businesses have improved their work practices so much that gold is not a high enough award for them! The Responsible Business Awards are now being extended to Prebbleton.



Award ceremony 2008

Some businesses and groups based on the Lincoln University campus took part and gained awards: ASB bank, Lincoln University Students Association, Lincoln University Recreation Centre, Lincoln University Early Childhood Centre



Sian and Stuart from the Lincoln Township Library with their award

Lincoln BioBlitz - 3-4 April

BioBlitz was a 24-hour around-the-clock event where teams of biologists from Lincoln University and Landcare Research , with the

help of the public, found as many different species as possible, living in Lincoln's Liffey



Domain. It was fun and educational.

Native Restoration - Mahoe reserve:



Installation of a new information sign for the Mahoe reserve

Lincoln University provides an office for the Lincoln Envirotown Trust in the Department of Environmental Management.

For more information about the activities and events go to:

http://www.lincolnenvirotown.org.nz

You can also contact us if you would like to receive our monthly email newsletter

*Dr Sue Jarvis, who hoods a PhD in Plant Science, is a teacher at Lincoln High School and is a trustee and the chairperson of Lincoln Envirotown. Sue was the inaugural holder of the Sir Peter Blake Environmental Educators Award and was awarded the QSM in 2007.

LET Action: Lincoln Envirotown has provided information about the realistic achievability of sustainability via a wide range of methods:-

- School holiday programmes for 3-12 year olds
- Enviro kids club
- Story writing competitions on "sustainability" topics
- 3 books produced for the story competitions featuring the best stories
- Biodiversity talk and native garden tour
- Composting workshop
- · Sustainable households courses
- Zero Waste street challenges (3 so far)
- A website which provides information and resources:

http://www.lincolnenvirotown.org.nz

- A sustainability centre (at the moment in a caravan parked in Lincoln)
- Research into other sustainable communities, biodiversity in Lincoln etc
- Wide consultation
- Community garden in the Lincoln Township, where people and groups have their own beds, with communal beds and with a focus on education so that people can grow food at home, and on strengthened community.
- Organic community growing project, where people have their own "allotments"
- Producing a Lincoln calendar promoting local businesses and sustainability tips
- Embarking on a feasibility study for distributed energy production in Lincoln
- A booklet on which native species are suitable to plant in Lincoln
- "No Junk Mail" mail box stickers
- Delivered free reusable bags to all households in Lincoln to promote waste reduction
- Working with local developers to promote sustainable practices
- Encouraging links between various groups to communicate their ideas, such as Council, community members, developers, local CRI's, University, local educational establishments, local businesses
- Organising native planting for example at the Mahoe Reserve, Springs Road/Gerald street corner to improve the entrance to Lincoln
- A monthly newsletter that goes out to about 700 people
- Two "energy homes" bus tours, which toured local homes and demonstrated ways of saving or producing energy.
- Organising community "clean ups" of the local Liffey reserve
- Organising water quality testing of the Liffey stream for community groups, kids club and local school groups (with the help of Lincoln University Water Watch)
- Working with other communities to help them set up their own sustainability groups (Prebbleton, Springston and Rolleston so far, with interest from Leeston).
- The provision of speakers on sustainability to groups

LINCOLN UNIVERSITY NEWS

LINCOLN UNIVERSITY STAFF PROFILES



Chul Sohn

Dr Chul Sohn is currently a visiting scholar in the Department of Environmental Management at Lincoln University. Dr Sohn is the associate professor of Kangnung-Wonju

National University in Korea. He teaches Urban Planning, GIS, and Quantitative Research Methods and has served as a head of the National Education Center for GIS in Gangwon Providence, which is based at Kangnun-Wonju National University.

Dr Sohn earned a Masters degree in City Planning from the Seoul National University and PhD degree in Urban and Regional Science from Texas A&M University in the USA. After earning his masters he worked for several Korean public research institutes such as the Korea Research Institute for Local Administration and the Korea Research Institute for Human Settlement as a junior research associate. After finishing his PhD degree he worked for Texas Transportation Institute as a research associate for a short period and then for Samsung Data System as a GIS project manager.

His research interest is the use of GIS and real estate market data to evaluate the various impacts from the urban developments. The outcomes from his research have been published in the academic journals such as Transportation Research Record, Korean Spatial Planning Review, and Journal of Korean Planning Association. While Chul is at Lincoln University he will conduct research on neural network application in urban and regional planning areas.

Jean-Paul Thull



Jean-Paul Thull (Dipl.-Ing. TH Karlsruhe; PhD Lincoln) is a senior lecturer in the Department of Environmental Management, teaching transport, logistics, urban planning, energy and waste management. He graduated as

"Diplom Ingenieur" (eq. ME) in civil engineering from Karlsruhe University in Germany and completed a PhD in Environmental Management at Lincoln University 1996-99.

Prior to his academic career, from 1987-96, Jean-Paul worked in Karlsruhe as a civil engineer taking a comprehensive approach, from design to project completion, in environmental modelling (air quality), contaminated sites, waste treatment plants, waste transport, landfill gas and infrastructure planning.

Jean-Paul's teaching and research interests relate to multi-disciplinary problem-solving, balancing human, technical, economic and policy management. In NZ Jean-Paul has been involved in the management of stock effluent spillage from trucks and also has a strong interest in urban transport planning and city revitalisation. In conjunction with one of his students (Paul de Spa), Jean-Paul worked on the Little River Rail-trail project.

Despite being an enthusiast of German motor vehicles, his research emphasis over the last few years has focused on reducing the carbon footprint of land transport for private motor vehicles and freight transport.

Jean-Paul has been the chairman of the southern section of The Chartered Institute of Logistics and Transport (CILT) for the last two years and is also a member of CAN (cyclist advocate network), Living Streets Aotearoa (walking advocates), and the ECan Energy & Freight Transport advisory committee.

NEW COURSE FOR SUMMER SCHOOL

The School of Landscape Architecture is offering a new course in 2009 which is highly relevant to planning. LASC 321 Structure Plans will be offered for the first time in this year's November Summer School and covers

"The investigation and design application of concepts of landscape sustainability, at a range of scales". For more information go to http://www.lincoln.ac.nz/story29831.html? or http://www.lincoln.ac.nz/story22.html

LINCOLN UNIVERSITY PROFESSIONAL PLANNING PROGRAMMES ACCREDITATION RENEWED! HAMISH RENNIE

LU is happy to announce that following consideration of the report of its accreditation review committee, the NZPI Council has reaccredited the Master of Environmental Policy (MEP) (with the required electives) for a further 5 years. The Bachelor of Environmental Management and Planning (BEMP) with the Professional Planning minor plus one year of specified post graduate study has also been accredited for two years. The difference between the accreditation period for the two reflects the intention of the NZPI to

review its education policy, and it would seem that for consistency the NPZI would be likely to do the same for all other undergraduate programmes coming up for review.

Out of more than 100 post graduate students in the Faculty of Environment, Society and Design, there are currently 15 post-graduate students at various stages of doing programmes that would make them eligible for NZPI membership.

MERGER PUT ON THE BACKBURNER

In March an amalgamation between Lincoln University and AgResearch was mooted.

During three months of investigation, the University strongly focused their attention on ensuring that existing undergraduate and postgraduate programmes were retained. Recently Lincoln University and AgResearch decided to propose a knowledge partnership model as opposed to a full merger, and keep the two organisations as separate entities.

This was decided to be the most cost effective outcome for both parties and ensures the stability of current and future programmes of study.

AWARDS FOR LINCOLN GRADUATES

In 2008 the John Hayward Memorial Prize went to **Clare Sargeant**. This prestigious prize is awarded to the most outstanding Master of Environmental Policy student who has completed the degree, based mainly on academic performance in all the core/compulsory subjects of the degree. It was created after the death of John Hayward (in 1993), who was the founder, and for a long time director, of the Centre for Resource Management and of the Master of Science (Resource Management) degree, the precursor of the Master of Environmental Policy degree. It must be noted that Clare completed the required electives for the NZPI planning accreditation and is the NZPI Young Planners Branch Representative for Canterbury/Westland. Congratulations Clare!

Millie Woods has won the Brooker Prize for Lincoln University for 2008. Thomson Brookers is the major law publishing firm in New Zealand and has close connections with Lincoln University. Its online and hard copy versions of the Resource Management Act and other legislation enables students to keep up to date with relevant changes in planning law. It offers awards to planning/planning law students at universities throughout the country and the criteria for gaining the award varies from university to university. At Lincoln University the Brookers Prize in Resource Management is awarded each year to the student enrolled in the first year of the MEP who gains the highest marks in the five core subjects: ERST 630, ERST 631, ERST 632, ERST 633 & MAST 603

THE WATER RESOURCE MANAGEMENT CENTRE BILL SWALLOW*

Background

The University of Canterbury and Lincoln University are establishing a Water Resource Management Centre. The Centre is the outcome of consultation with Environment Canterbury, the Canterbury Development Corporation, the Canterbury Water Cluster (i.e. the major bodies involved in water resource management and research in the region), and the Department of Labour. Water

resource management has been cited as a key area for regional initiatives in the "Regional Statement of Tertiary Education Needs, Gaps and Priorities in Canterbury 2008-2010" and was a principal economy-wide concern in the Food and Beverage Taskforce Report 2006 and the environmental sustainability goal of the Government's 2008 Economic Transformation Agenda. The project aligns with recent government initiatives, including the Proposed

National Policy Statement for Fresh Water Management, the National Environmental Standards, the Ministry of Research Science and Technology and Foundation for Research Science and Technology research strategies for resource management and sustainability, and the Ministry of Agriculture and Forestry and the Ministry for the Environment sustainable development 'Programme of Action' for water.

Our Vision

The two Universities see the Centre as being the focal point for improving knowledge-driven water resource management in New Zealand. The Centre will be the critical link in providing improved teaching and associated research in water resources. It will serve the unique and ever increasing demands in Canterbury for improved water resource management, and as a national centre of educational excellence. The Centre will facilitate the education sector's key role, alongside existing water organisations, in improving skills, knowledge, and awareness in the water sector. It will also encourage strong co-operation between the two universities to effect institutional change leading to better education outcomes for the country.

Key Outcomes

- Establish a Water Resource
 Management Centre between the two
 universities to serve as a catalyst for
 water action between teaching,
 research, regulatory, public interest,
 and water user organizations.
- Appoint a joint Chair of Water Resource Management between the two universities to provide integrated leadership and coordinate the disparate university resources existing in this area and identify current teaching and research gaps.

- Contribute to the Canterbury Water Cluster and the Department of Labour's Canterbury Regional Skills Strategy.
- Work within the sector to identify specific skills needed in developing capability
- Engage in community education
- Develop undergraduate career pathways, professional training and viable postgraduate education in water management studies
- Enhance and coordinate scholarships in this area.

Progress

Considerable progress has been made since planning for the new Centre began in late 2008. This includes forming an Advisory Board for the Centre with representation from local authorities, Crown Research Institutes, industry, farming and central government. An establishment committee has also been created, along with joint working groups in both Universities, to help ascertain current water resource teaching courses and identify gaps. The same audit process is also being carried out in the research area. External stakeholder liaison has been a key priority over the last few months as has the appointment of the new professorial chair to lead the Centre. More information on the Centre may be obtained from our website http://waterresource.ac.nz/index.shtml

*Bill Swallow PhD, has over 30 years of experience in science and science management particularly in the field of environmental health. He was a General Manager at the Crown Research Institute ESR from 1992 until 2004. Currently he is project manager of the joint Canterbury/Lincoln initiative to develop a Water Resource Management Centre. He is also an Adjunct Professor and Entrepreneur-in-Residence at Canterbury University.

RECENTLY COMPLETED PLANNING-RELATED LINCOLN UNIVERSITY STUDENTS THESES AND DISSERTATIONS. COMPILED BY HAMISH RENNIE

There are a wide range of degrees that can be taken at Lincoln University where students conduct research that has a fairly direct relevance to planning. Not all of these are professionally accredited qualifications. In compiling this list of theses and dissertations completed at Lincoln in 2008 the criteria used were that they be of direct relevance to one or more fields of planning and be held in Lincoln University's library. To some extent I have identified the field of specialised planning, have subdivided into the hierarchical order of research qualification, and have identified the particular qualification in parentheses that the student was studying for (there is a list of acronyms at the end of this section).

Note that not all successful dissertations are placed in the library or are online, and some have further restrictions on their use and accessibility.

General Planning PhD Theses

T-A. De Silva (2008) *Voluntary environmental reporting: the why, what and how* http://hdl.handle.net/10182/928

Masters Theses

M.J. Annear (2008) "They're not including us!" : neighbourhood deprivation and older adults'

leisure time physical activity participation (MAppSc) http://hdl.handle.net/10182/468

R.J. Batty (2008) Fantasia NZ?: the Disneyfication of the New Zealand shopping mall (MPRTM)

http://hdl.handle.net/10182/584

Brendan J. Doody (2008) *Riccarton Bush and the natural and social realities of native trees in Christchurch, New Zealand* (MAppSc) http://hdl.handle.net/10182/865

O. Dowsett (2008) 'Rural restructuring': a multi-scalar analysis of the Otago Central Rail Trail (MSocSc) http://hdl.handle.net/10182/669

V.A. Dowsing (2008) The provision of recreation opportunities for people with disabilities: a tale of two cities (MSocSc) http://hdl.handle.net/10182/672

M.S.T. Robertson (2008) Riparian management guides: are they meeting the needs of the interested public? (MNRMEE) http://hdl.handle.net/10182/601

Grant Thomson (2008) Community small scale wind farms for New Zealand: a comparative study of Austrian development, with consideration for New Zealand's future wind energy development (MNRMEE) http://hdl.handle.net/10182/961

J. Zeestraten (2008) Strolling to the beat of another drum: living the 'slow life' (MAppSc) http://hdl.handle.net/10182/833

Masters Dissertations

Paul Barrett (2008) Is there a role for environmental management systems in communities and if so can systems produce sustainable outcomes? (MProfSt) http://hdl.handle.net/10182/1016

S.E. Brown (2008) *Bikes, trains and problem frames: framing the Little River Rail Trail* (MAppSc (IRD)) http://hdl.handle.net/10182/835

D.G. Chittock (2008) Best practice in voluntary environmental approaches: a preliminary evaluation of five New Zealand local authority pollution prevention programmes (MProfSt) http://hdl.handle.net/10182/1073

Zhao Gao (2008) Fuel and carbon penalties from curfews at Christchurch International Airport (MAppSc)

D.G. Hayes (2008) An investigation of visitor behaviour in recreation and tourism settings: a case study of natural hazard management at the glaciers, Westland National Park, New Zealand (MAppSc)

- B.D. Jones 2008 Submarine cargo vessels: opportunities for future transport (MProfSt)
- T.H. Spittle (2008) Community recreation opportunity planning process: an alternative planning and management tool (MAppSc)
- S.E. Vesey (2008) Cost utility analysis of Department of Conservation and nongovernment organisation multiple-species conservation projects in New Zealand (MAppSc (Envt Mgt))

Māori Planning and Development PhD Theses

Simon J. Lambert (2008) The expansion of sustainability through new economic space: Māori potatoes and cultural resilience http://hdl.handle.net/10182/309

Masters Theses

Mark S. Feary (2008) Statistical frameworks and contemporary Māori development (MIPD) http://hdl.handle.net/10182/664

Landscape Planning PhD Theses

Nor Zarifah Maliki (2008) Kampung/landscape: rural-urban migrants' interpretations of their home landscape: the case of Alor Star and Kuala Lumpur http://hdl.handle.net/10182/791

Masters Dissertations

Lisa Rimmer (2008) Kete of continuance: managing values of the pastoral landscapes on the East Coast between Tatapouri and Tokomaru Bay (MLA) http://hdl.handle.net/10182/777

International PhD Theses

S.K. Sandhu (2008) What colours them green?: an enquiry into the drivers of corporate environmentalism in business organizations in developing and developed countries http://hdl.handle.net/10182/790

Masters Theses

Fredrick Dear Saeni (2008) Customary land ownership, recording and registration in the To'abaita region of the Solomon Islands: a case study of family tree approach (MAppSc) http://hdl.handle.net/10182/869

Rose Tungale (2008) Livelihoods and customary marine resource management under customary marine tenure: case studies in the Solomon Islands (MAppSc) http://hdl.handle.net/10182/861

Environmental Impact Assessment PhD Theses

Shuang Jiang (2008) Bacterial leaching from dairy shed effluent applied to a fine sandy loam under flood and spray irrigations http://hdl.handle.net/10182/668

Georgia-Rose Travis (2008) Boat preference and stress behaviour of Hector's dolphin in response to tour boat interactions http://hdl.handle.net/10182/303

Masters Theses

N.J. Day (2008) Two decades of vegetation change across tussock grasslands in New Zealand's South Island (MSc) http://hdl.handle.net/10182/338

Colleen D. Ford (2008) The fate of nitrogen in lactose-depleted dairy factory effluent irrigated onto land (MSc) http://hdl.handle.net/10182/837

Davidson A. Lloyd (2008) The effect of forest to pasture conversion on soil biological diversity and function (MAppSc) http://hdl.handle.net/10182/711

Masters Dissertations

S.C. Thompson (2008) 'The straw that broke the camel's back': an evaluation of the practice of cumulative effects assessment at six local authorities MAppSc (Envt Mgt) http://hdl.handle.net/10182/776

Kautoa Tonganibeia (2008) Strategic environmental assessment (SEA): a prescription for integrating environmental assessment and planning processes in Kiribati (MEP)

Pest Management Planning PhD Theses

Hazel A.W. Gatehouse (2008) *Ecology of the* naturalisation and geographic distribution of the non-indigenous seed plant species of New Zealand http://hdl.handle.net/10182/1009

Joel Peter William Pitt (2008) Modelling the spread of invasive species across heterogeneous landscapes http://hdl.handle.net/10182/912

Acronyms:

MLA

MAppSc Master of Applied Science **MAppSc (Envt Mgt)** Master of Applied Science in Environmental

Management

MAppSc (IRD) Master of Applied Science in

International Rural

Development

MEPMaster of Environmental PolicyMIPDMaster of Indigenous Planning

and Development Master of Landscape

Architecture

MNRMEE Master of Natural Resources

Management and Ecological

Engineering

MProf St Master of Professional StudiesMPRTM Master of Parks, Recreation and

Tourism Management

MSc Master of Science MSocSc Master of Social Science

OTHER MATTERS

TWO NEW PUBLICATIONS FOR PLANNERS

REVIEWED BY HAMISH RENNIE, LINCOLN UNIVERSITY

Land Use Capability Survey Handbook - 3rd Edition



Land use capability has been a keystone for rural planning in New Zealand since 1952, but the last edition of the Land Use Capability Survey Handbook was published in 1971 (reprinted in 1974)! Subsequently, the New Zealand Land Resource

Inventory, a nation covering database developed from 1975 to 1998, helped further develop the LUC standards. The Third Edition has just been published by AgResearch,

Landcare Research and GNS. This edition tells you how to prepare an LRI (Land Resource Inventory) and how to apply the LUC Classification. It includes great colour photographs and is updated to the present by experts who have worked extensively in the field. If your library hasn't got a copy of this edition, chase it up! It is very portable, easy to use and will be a valuable tool for planners working in rural areas. For the theoreticians, there are a number of potentially interesting ways this publication can be deconstructed, but this does not alter its practical value – enjoy!

Full reference: Lynn I.H., Manderson A.K., Page M.J., Harmsworth G.R., Eyles G.O., Douglas G.B., Mackay A.D., Newsome P.J.F., (2009). Land Use Capability Survey Handbook – a New Zealand handbook for the classification of land 3rd Edition. Hamilton: AgResearch. Lincoln: Landcare Research. Lower Hutt: GNS Science. 163p. http://www.landcareresearch.co.nz/research/soil/luc/luc handbook.pdf

What if?

Future Seas Scenario Planning and the Establishment of a Marine Reserve Network



One of the most difficult tasks for planners is to get beyond the issues of the day and really plan for the future. A number of tools are around, but rarely do we find readily accessible well-explained examples of thinking 50 years ahead. On June 6th the

WWF published "What if?" which uses a scenario planning method to try to understand how the biological, social, economic, and cultural aspects of the marine environment in New Zealand will change over the next 50 years, how it will be protected and used, and the role that a marine reserve network should play in that process. This is a timely publication in light of the recent announcement of proposals for marine reserves on the West Coast and the message

from the Minister for the Environment that the long delayed marine protection legislation will progress in this term of government. The publication is readable and accessible and hard wearing, and contains very useful wellreferenced information on a range of marine planning matters. It is a good source book. The effectiveness of the approach, facilitated by URS New Zealand, will depend in part on what one's expectations are. As a participant in some of the scenario building processes, I have found the presentation guite interesting and the process helped to stimulate my thinking through the knowledge gained from experts in areas of the marine environment with which I was less familiar. It is also pertinent to note that the work was largely done in 2006/07. One scenario successfully conjectures the economic collapse that apparently blind-sided politicians, business and planners alike. Coastal and marine planners, especially those in environmental planning, should get hold of this for its direct relevance. Other planners may find the scenarios very useful to read in a more generic sense hopefully it will get the creative juices flowing.

Full reference: WWF-New Zealand (2009). What if? Future Seas: Scenario Planning and the Establishment of a Marine Reserve Network Wellington: WWF-New Zealand. 63p. http://wwf.org.nz/media_centre/publications/?1460/Future-Seas-Scenario-Planning-and-the-Establishment-of-a-Marine-Reserve-Network

NZPI EDUCATION POLICY REVIEW HAMISH RENNIE

The NZPI has decided to review its Education Policy, and a draft of a proposed new policy was circulated to planning programme heads on 3rd July 2009. As always, it will be a difficult issue. The educational needs of the profession are always hard to define because of the varied skills and knowledge that is required of a planner, and the many fields of professional planning. There is also the question of how much should be taught on the job and how much at University and the distinct differences between form of delivery of research-led education required by the government and the expectations of those not involved in tertiary education.

The Tertiary Education Commission, for instance, is heading toward adopting the international standard (the Bologna Agreement) which is based around a 3 year bachelors degree with options of plus 1year, and plus 2 years for post graduate qualifications. This is the model that Lincoln has established and has recently been reaccredited by the NZPI. It means that if a

student has not met the standard to advance from undergraduate to postgraduate study they will not be able to complete a professional planning qualification at Lincoln. The traditional planning programmes at Auckland and Massey, however, have four year undergraduate planning degrees. This means that their students do not need to meet the post graduate academic entry standards that the Lincoln students do. On the other hand, students at Lincoln can complete a BEMP with a professional planning minor after three years, but not be eligible for membership of the NZPI. Such issues are bound to form part of the discussion of the draft policy, as will the proposed content of the education programmes.

Planning education has not featured on the NZPI annual conference programme for some time. Consequently, Lincoln's Prof Ali Memon has initiated a meeting of New Zealand planning programme representatives at the Australia and New Zealand Planning Schools' annual conference which is being held at

Griffith University in Australia in August 2009. Fortuitously, the Australian planning schools are reviewing their equivalent accreditation procedures at the same conference. It is expected that this will enable useful comparisons of content and delivery.

NZPI MEMBERSHIP A general reminder to folk to keep up their NZPI membership! Recent issues of Planning Quarterly have focused on Coastal Planning and Transport Planning. The upcoming issue will focus on the RMA reforms and the following issue will feature structure planning.

LIVING LAKE SYMPOSIUM 2, 4 - 5TH NOVEMBER 2009

A follow up to Living Lake Symposium 2007, Living Lake Symposium 2 will focus on the planning issues around the management of Te Waihora/ Lake Ellesmere. Updates will cover the current state of the lake and its values, along with potential future plans and management activities since 2007.

For further information go to the Waihora Ellesmere Trust website www.wet.org.nz or contact the trust at admin@wet.org.nz , Phone: (+ 64) 03 353 9712 , Cell phone: (+ 64) 027 294 2132, PO Box 198, Tai Tapu 7645, New Zealand.

PLANNING PAINS? DON'T PANIC!

This a new section for LUPR - an opportunity to ask all those burning questions about planning issues. To get started we have a question about LU qualifications but we are keen to include a range of topical and tricky planning queries in future issues. Please contact LUPR if you have a question you would like answered in the next issue.

Question - Why do some Master of Environmental Planning (MEP) graduates from Lincoln University get honours and others get distinction or merit - what's the difference? Response - An Honours degree generally indicates that the degree has included a significant individual, independent research component (hence the difference between a Bachelors degree with Honours and a Post Graduate Diploma). Under current regulations, at Lincoln University those students eligible to graduate with an MEP (Hons) are those who have replaced two of their courses with a dissertation. Those students who do not do a dissertation are eligible for being awarded Distinction or Merit.

The grading system for a Masters is the same as the Bachelors degree. 80% (A-) or more is '1't class Honours' or Distinction, 70-79% (B+, B) is '2'd class Honours, Division I' or Merit, 60-69% (B-, C+) is '2'd class Honours, Division II'. The award of an MEP with Honours or Merit/Distinction is automatic and only available to those students who have achieved that average. A candidate can only get Honours or Distinction/Merit if they

complete within 3 years of first enrolment date for full time students and four years for part-time students. Some Universities and degrees have a 3rd Class Honours category, but the MEP does not. Under older Lincoln University regulations the difference between Honours and Distinction/Merit was not as clearly specified as it is now.

It is important to note that if a student is seriously impaired for an examination and applies for an aegrotat they may not be awarded honours. Instead of applying for an aegrotat, they may elect to sit a subsequent examination (see general regulation 3 of the Master Degree regulations). Those students intending to do a PhD are recommended to do an honours programme as the preliminary qualification for admission to a PhD at a New Zealand university is a Bachelors or Masters degree with first or second class honours. This means that you have completed a research degree as opposed to a taught degree. Without honours you would need to apply for special admission and produce relevant information to progress to further assessment of your application.

(From 2009 Lincoln University has changed its grading scale to be more in line with the scale used at other NZ universities. The percentages noted above apply from semester 1 2009. Marks awarded before 2009 were on the old grading scheme.)

TRAVELLING TO THE UK? HERE'S A WEBSITE TO CHECK OUT

www.planningscholars.co.uk is a recently created online, interactive community for students with an interest in urban and environmental planning. Students in Town Planning at London South Bank University are inviting planning students everywhere to share

their ideas and make contacts and learn from each other wherever they maybe. At this stage the forum's posts are mainly UK and EU related, which may be of help for some of our assignments here in New Zealand.

SUZANNE BLYTH

CONFERENCE REPORT HAMISH RENNIE*

REPORT ON THE ENVIRONMENTAL DEFENCE SOCIETY'S REFORM IN PARADISE CONFERENCE, AUCKLAND, 8-9 JUNE 2009



The EDS conference is one where the theme is set and speakers are invited by the EDS. This provides a cohesiveness and certainty of standard that ensures an interesting conference. That it is influential was demonstrated by the presence of reporters, including the Christchurch Press' environmental reporter, a large number of public servants known for their performance at the action end of the RMA, lobbyists, elected politicians and the present or past chief executives of regional councils and their staff.

The Minister for the Environment, Nick Smith, used the Conference to announce a new initiative, the establishment of a collaborative process spearheaded by the new Land and Water Forum which is tasked to reach a national consensus on outcomes and goals for water in twelve months. This Forum is an expansion of the Sustainable Land Use Forum originally established by the EDS at its 2008 conference.

Environment Canterbury was a major conference sponsor and it was not surprising that ECan's CEO Bryan Jenkins played a prominent role. Daniel Fiorino, a Director in the USA EPA was beamed in by satellite. Local 'stars' included Hugh Logan, formerly Secretary for the Environment and Director General of Conservation, and now a Lincoln University PhD student. The break-out sessions into three streams were not effective as no mechanism was used to summarise discussions for the main plenary.

The reform themes of the conference were dominated by discussion of the proposed Environmental Protection Agency, with an undercurrent of concern over the future of local government in the face of the restructuring of Auckland City. The debate was superbly set up by EDS's analysis of various EPA structures and the presence of current and former Australian state EPA CEOs and Ecologic's Guy Salmon. Gary Taylor's

(EDS) proposal for a Coastal Commission received short shrift from Minister Smith.

On the EPA, I was left with the impression that in one corner stood Guy Salmon, former environmentalist-cum-Blue Green National Party advisor, brusquely demonising farmers and their henchmen (regional councils), and advocating his Scandinavian solution - an EPA. Alongside him stood those seeking to curb the powers of local governments and those saying brands are important and an EPA is a recognisable 'brand' (although its shape and form varies considerably from EPA to EPA). In the middle were those, like the EDS, accepting the inevitability of an EPA, but trying to influence the scope of its activities, generally wishing to make it considerably more expansive and expensive than it appears the Government had intended. The third group, largely active, experienced RMA practitioners rather than theoreticians or lobbyists, appeared bemused and cynical. Their attitude was perhaps summed up by Adrienne Young Cooper's statement that the EPA was 'an answer looking for a question', and Jan Crawford arguing the RMA was fine as it is when the lag period for its implementation was considered. She considers the second generation plans are likely to be far more effective than the first. In the margins, an ex-DoC officer pondered the difference between 'conservation' and 'protection', and if the EPA was effective would it be rewarded with severe budget cuts.

I thoroughly enjoyed this conference and strongly urge people, especially planners, politicians and students, to read the conference papers posted on the EDS website: http://www.edsconference.com/speakers.cfm

*Hamish Rennie is a Senior Lecturer in Environmental Management and Planning at Lincoln University and presented a paper "Will the NZCPS adequately protect the coast?" at the recent EDS conference.

NEXT ISSUE

The next issue of LUPR is planned for January/February 2010. Articles for publication should be submitted by December 31st, 2009 to Hamish Rennie, lupr@lincoln.ac.nz (Please put 'LUPR' in the subject line).

If you have something to say about a current planning issue or a response to any of the articles in this issue we'd love to hear from you.