

Issue 49, July 1999

Convenor's Report

Welcome to the second edition of the new newsletter. This edition has been assembled by Nick Taylor and focuses on risk assessment - in particular its potential as a tool in impact assessment. Thanks to all those who contributed.

Work on the Auckland conference in October is proceeding. While things have been a bit slow to get going at the Auckland end, we are confident of having a stimulating gathering - the first of the new Association. The programme will be focused on integrating the various aspects of impact assessment and there will be plenty of opportunity for people to discuss their own work and to examine a range of cases.

Those visiting the website (www.nzaia.org.nz) will be able to see the beautiful logos and proposed letterhead designs.

A small group of New Zealand members made the trek to the 1999 IAIA Annual Meeting in Glasgow. Core group member Martin Ward reported that the programme was very good,

but the venue proved difficult compared with last year's conference in Christchurch. Closer to home, Nick Taylor, Gerard Fitzgerald, Ali Memon and Roger Wilkinson, among others, attended the International Symposium on Society and Resource Management at the University of Brisbane in early July and presented papers. This was preceded by a meeting of Kiwi and Aussie impact assessment practitioners - hosted by the CSIRO. This meeting covered the joint Australia-New Zealand work on and forthcoming book on the institutionalisation of social assessment, and also options for the formation of an association for social/impact assessment in Australia.

Reports on the IAIA and Australian meetings will be provided in the next edition - and hopefully on the website. In the meantime, Nick and Gerard's paper can be accessed on www.tba.co.nz if you are interested.

Gerard Fitzgerald

IANZ is compiled and published by members of the New Zealand Association for Impact Assessment (Inc.) and distributed **free** to NZAIA members.

Its aim is to **encourage contact** and **sharing of information** between all those interested in impact assessment in New Zealand. The views expressed are those of the authors and do not necessarily represent those of their various employers or of the Association.

Editor: Nick Taylor

Layout: Anne Duncan

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Administration Report from James Newell

The project to replace the ASA logo and letterhead finally bears fruit with this issue of IANZ. The earlier logo used by ASA was developed in the early 1980's for SIAN in the days when it was produced by the Social Impact Unit in Town and Country Planning Directorate of the Ministry of Works and Development. To develop the new NZAIA graphics I approached the Design School at the Wellington Polytechnic and ran a little design competition with third year design students. We received two promising entries, finally selecting the design ideas offered by Brent Thomas. We used the web site as a communications medium to involve core group members in selecting the design and getting feedback on design variations. The logo design that you see on the cover page of IANZ evokes the idea of linkage and interweaving of impacts and issues which is one feature of impact assessment. Thanks very much to Brent for his work which you will also see in the letterhead and on the web site etc.

My next systems development task is to upgrade our web site. I set up a simple functional web site design to get something started late last year. I try and keep this up to date with current NZAIA material. The wish list includes :

- * developing a web site structure which makes it easier to access resources and information;
- * adding lots more links;
- * increasing content (for example, add past issues of SIAN and IANZ, past conference proceedings etc.);

- * adding new services (for example, some sort of online bibliographic database of impact assessment projects in New Zealand); and
- * developing ways in which the site can become more interactive by adding forms etc.

Ideas or offers of help would be appreciated. If anyone has good web design / development skills and is prepared to donate time in this project, then please send me an email (to "sec@nzaia.org.nz"). The upgrade of the web site is a major project. I hope to find time and resources to make progress with this by the time the next issue of IANZ comes out.

There is also a need to bring use of the NZAIA mail list group more into the main stream. If you haven't done so already, please subscribe to this mail list based discussion group. To join, send an email to "listproc@stonebow.otago.ac.nz" the message "subscribe NZAIA <your name>", no subject. Feel free to use the mail list group as a forum to discuss issues of relevance to impact assessment in New Zealand.

The appointment of Anne Duncan as NZAIA's part time paid administrator has been a big help to running NZAIA. The membership / mail list database is now completely redesigned and updated for NZAIA. Anne has got up to speed with the job very quickly, and maintains the core NZAIA administrative systems with the exception of the web site. She also does the layout for IANZ in consultation with the editor for each issue. Thank you very much Anne!

**James Newell, NZAIA secretary
(sec@nzaia.org.nz)**

Conference Update

NZAIA's inaugural conference will be held in Auckland at Auckland University's Department of Planning on Friday and Saturday 3, 4 December 1999. It will be preceded by a training and professional development day on Thursday 2 December.

The conference will be a first step in realising the vision of a joint social and environment focus in NZAIA by

- ⇒ bringing together those concerned with social and environmental impact assessment
- ⇒ emphasising the links between social and environmental assessment
- ⇒ focusing on current practice in impact assessment using the experience of local case studies where possible.

The conference's proposed theme is "Improving Practice in Integrated Impact Assessment". It is expected that this will be a participatory style conference combining some keynote speakers and discussion panels with interactive workshop sessions focusing on local case study material and special interest issues.

Dr Tom Fookes is currently developing an interesting and varied conference programme. If you have ideas for the conference programme or would like to contribute in some way please contact Tom.

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We will be working to keep conference costs to a minimum. Full details on the conference and training day, and registration forms for both, will be available on the website and posted to members at the end of August.

Marilyn Stephens
Conference Co-ordinator
Ph (04) 471 9388 (bus.)
Email
marilyn.stephens@parliament.govt.nz

Quotable Quote...

"Smoking kills. If you're killed, you've lost a very important part of your life." - Brooke Shields, during an interview to become spokesperson for a federal anti-smoking campaign

"The police are not here to create disorder. They're here to preserve disorder." -Former Chicago Mayor Daley during the infamous 1968 Democratic Party convention

RISK MANAGEMENT AND IMPACT ASSESSMENT

Janet Gough

*Taylor Baines and Associates
(www.tba.co.nz)*

ABSTRACT

Risk management as promoted in the generic Australian and New Zealand Standard (AS/NZS 4360: Risk Management) is both a culture and a process. While the process is directed towards managing risks, one of the steps of the process is concerned with analysing impacts or potential effects on the organisation or activity being addressed. Potential effects are risks. By adopting a broad perspective, risk management can be used as a framework for analysing and addressing a wide range of social, health, environmental, cultural, economic and technical impacts.

RISK MANAGEMENT

The most common definition of risk is that risk is a combination of the likelihood of occurrence of a particular event, and the magnitude of consequence if that event occurs. One of the most difficult issues to resolve in calculating risk is how to measure the magnitude of consequence, or how to value the impact.

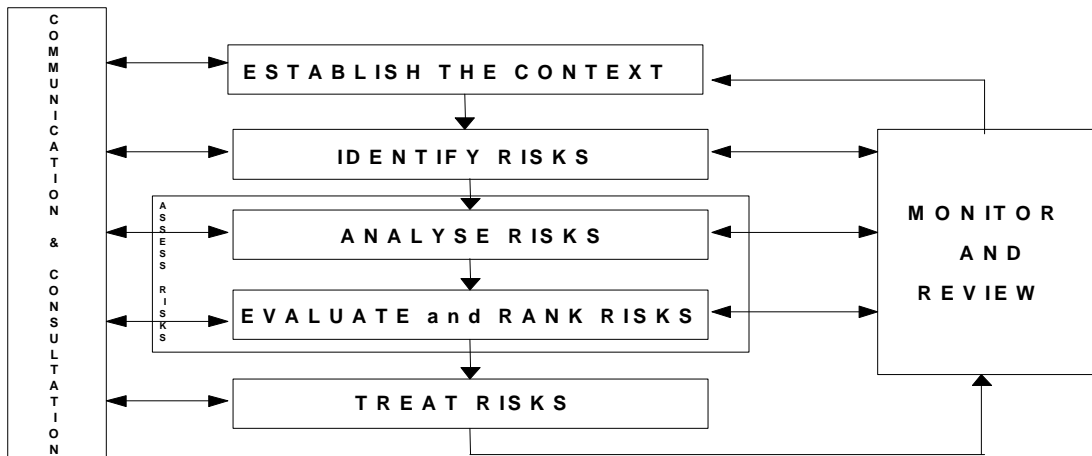
For example, the cancer risk to an individual from exposure to low-level radiation (such as that emitted by cell phone towers) is the likelihood or probability of developing cancer from

that source combined with an estimate of the magnitude of the consequence if that event occurs. Typically we measure the consequence in terms such as loss of life expectancy, and sometimes we quantify life expectancy (or death) by surrogates such as loss of income, loss of productivity, or other economic measures.

The Australian and New Zealand generic risk management standard defines risk management as “the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects”. This stresses the importance of seeing risk as being both threat and opportunity, and also explicitly acknowledges that in most circumstances we cannot address risks without also addressing benefits.

For example, we may choose to buy a house in an area known to be prone to flooding because we like living beside the river (views and recreation), and because land is cheaper in that area. In making decisions of this nature we are implicitly managing risks; we are balancing the risk of flooding against perceived personal benefits and thus accepting the risk (though we will probably adopt another risk treatment option and obtain insurance).

The Standard also defines the risk management process as the systematic application of management policies, procedures and practices to the tasks of identifying, analysing, assessing, treating, monitoring, and communicating risk. The following figure adapted from the standard illustrates this process.



Establish the context

This step identifies the strategic, organisational and risk management context, and establishes the structure of the analysis and the criteria against which risk will be assessed. Stakeholders are identified and communication and consultation policies are defined.

Identify risks

Identify, as the basis for further analysis, what can happen, why and how, including hazards and aspects. Identifying risks requires looking at the *source* of the risk and the *area of impact*.

Analyse risks

Analyse the risks in terms of their likelihood and magnitude of consequence. This analysis can be quantitative or qualitative. If there is a number of different types of risk it is often better to analyse them qualitatively since it is easier to compare qualitative estimates.

Evaluate and prioritise risks

Compare the estimated levels of risk against the criteria determined when establishing the context. Risks are ranked to identify priorities for management

Treat risks

Develop and implement a management plan, using the options of accepting, avoiding, mitigating (reducing), transferring or retaining risks.

In addition to these steps there are two over-arching concepts or activities: there should be appropriate review and monitoring at each step and for the process as a whole; and appropriate consultation and communication.

Monitoring and reviewing the risks, addresses the performance of the risk management system and the changes that may affect it.

Consultation and Communication involves dialogue conducted both within the organisation, and between the organisation and external parties. It can occur (and should be considered) at each step of the risk management process. Stakeholders will often have different views as

to the impacts and the likelihood of those impacts. There are different ways of incorporating stakeholder viewpoints into the risk management process. In most cases some of the criteria used to determine acceptability will incorporate stakeholder perceptions.

LINKS TO IMPACT ASSESSMENT

While the risk management process as described above identifies, analyses and treats risks, the basic process is a generic systems process and is applicable to all forms of impacts.

Risk assessment is a useful way of addressing impacts because it refers to potential impacts, and therefore allows an element of likelihood to be incorporated.

An advantage of applying a risk management process to different types of impacts (or risks) such as social, cultural, health, economic and technical impacts is that they can all be addressed within the same process. Since the purpose of the risk management is to prioritise and decide which risks to address, in most cases there is no need to convert all risks to a common numerate as is required in a formal cost-benefit analysis. On the other hand, risk analysis is subject to one of the main limitations of cost-benefit analysis; unequal distribution of risks and benefits.

EXAMPLE

As a short illustrative example consider a proposal to build a highway bypass around a small town that has developed a strong economy based on tourism and passing trade from motorists.

There will be significant social

(community), economic and environmental impacts (the bypass is planned to run through a noted swamp area). If the impacts are defined as risks, then they can be assigned a likelihood (note that risks can have a probability of 1, equating them to certainty) and a value of the consequence in qualitative terms (for example, insignificant impact, low impact, moderate impact, high impact and catastrophic). This allows the impacts/risks to be ranked according to a qualitative measure of severity or surrogate level of risk.

While undertaking a risk management process does not negate the need for comprehensive impact assessment, it can provide additional information about the relativity of different types of impacts that can be used to set priorities for mitigation.

CONCLUSION

Risk management is a tool that can be used to enhance impact assessment in two ways. *Firstly* it can be used as an umbrella under which a number of different types of impact can be addressed, and *secondly* it provides a mechanism for prioritising impacts.

As with most processes, it is often the analysis of the issues (in this case in terms of likelihood and consequence) that provides the greatest value by providing a better understanding of the activity or organisation being examined.

Risk management and impact assessment, however, is only another tool, and in many cases should be used in conjunction with other types of analysis to provide additional information for the decision making process.

AN INTRODUCTION TO THE HSNO ACT AND ERMA NEW ZEALAND

Jayne Harris
***The Environmental Risk
Management Authority***

The Authority

The HSNO Act is one of the most comprehensive pieces of legislation of its type anywhere in the world. It brings together, within a single framework, everything to do with managing the introduction of new organisms and controlling hazardous substances into New Zealand.

The Environmental Risk Management Authority (ERMA New Zealand) is the key agency under the Act. Its main function is to consider applications to introduce new organisms (including genetically modified organisms) or to import or manufacture hazardous substances. As well as making decisions on applications, ERMA New Zealand is also responsible for:

1. educating the public on HSNO risks
2. advising the minister for the Environment on policy and the effectiveness of the Act
3. international arrangements
4. inquiries into incidents and emergencies
5. overseeing enforcement (enforcement for new organisms is done by MAF using its powers under the Biosecurity Act).

The Authority itself is a quasi-judicial body of eight people appointed by the Minister. It has very limited powers of delegation and must make most decisions itself, or through committees of the Authority.

Types of application

New organism applications can be conveniently divided into four categories:

Release of a new organism (including GMOs), either by importing directly or releasing from containment. Applications in this category are publicly notified. This means a public hearing can be called if any of the parties (applicant, submitters, the Authority) requests it. For 'low risk' organisms there is a rapid assessment provision which does not require public notification. Release decisions are 'yes/no' decisions – it is not possible to attach conditions or controls.

Development of GMOs in containment. Applications in this category are not generally publicly notified, although the Authority does have discretion to notify an application that comes directly to the Authority if it is considered to be in the public interest. Low risk GMOs can be dealt with under delegated authority. This authority has already been widely delegated to scientific institutions.

Import into containment of new organisms and field testing of non-GMOs. Applications in this category are also not publicly notified but must be dealt with by the Authority i.e. the decision-making cannot be delegated.

Field testing of GMOs. These applications are publicly notified and can lead to public hearings. The Authority cannot delegate these decisions.

How applications are considered

The HSNO Act requires the Authority to assess and weigh up risks, costs and benefits. The weighing up process is crucial and is where the judgement of the eight Authority members comes most into play. The Authority can only approve an application if the benefits outweigh the costs and risks. But the weighing up process is not always a complicated task. One of the most important working rules in the Authority's methodology is that if the risks are judged to be negligible, a thorough application is likely to be enough evidence of counterbalancing benefit. Many containment applications fall into this category.

There are two important points to note:

1. for release applications, the Authority must be satisfied that a set of minimum standards will be set.
2. for containment applications, the Authority must be satisfied about the adequacy of containment and the risk of escape of the organism.

When it comes to assessing risks, costs and benefits, the HSNO Act is quite prescriptive about those matters that need to be considered. These include:

1. sustainability of valuable flora and fauna
2. intrinsic value of ecosystems
3. public health
4. Maori interests
5. economic and related matters
6. international obligations.

There is also a general obligation of the Act to safeguard the life supporting capacity of ecosystems and to provide for people and communities to look after their own economic, social and cultural well-being.

For GMO applications to date, the Authority has only made decisions on applications to field-test or develop such organisms in containment. The Authority has approved them with controls. Applications to release GMOs in New Zealand are expected later this year.

For more information on the HSNO Act and ERMA New Zealand please visit our website at www.ermanz.govt.nz

STOP PRESS!

RMA Submissions - Deadline Extended

On 22nd July we received notification from the Clerk of the Transport and Environment Committee at Parliament with regard to the Resource Management Bill. The committee has changed the closing date for submissions. It was 13th August, 1999.

It is now 1 October, 1999

If you wish to make a submission on the RMA, you need to forward 25 copies to: David Bagnall, Clerk of the Committee, Transport and Environment Select Committee, Parliament Buildings, Wellington. For further information, telephone (04) 471-9525.

CASE STUDY

A Social and Economic Study of the Pukekohe Onion Industry

**Chris Cosslett, Corydon Consultants
Ltd.**
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Introduction

Corydon Consultants Ltd, DWI Associates Ltd and Vegcon Services Ltd have been commissioned by the Horticulture and Food Research Institute of New Zealand Ltd (HortResearch, a Crown Research Institute) to undertake a series of social and economic studies into horticultural industries and the communities they support. One aim of these studies is the development of a framework for socio-economic risk assessments within the primary production sector.

The first study, carried out in 1998, focussed on the onion growing industry in the Franklin District (essentially the wider Pukekohe area), with particular reference to a serious fungal disease (onion white rot) affecting that industry¹. The study sought an understanding of the possible economic and social consequences arising not only directly from the disease, but also from possible resultant changes in the focus and structure of the vegetable growing industry in the area. The framework developed for this study formed the basis for a subsequent study of the summer-fruit industry in Central Otago. Below is a brief summary of the findings of the onion industry study.

The industry

New Zealand's production of onions

has grown significantly over the last 30 years, from about 2,000 tonnes in 1965 to approximately 180,000 tonnes at present. This rapid growth is attributable mainly to expanded plantings in response to growth in the export market (approximately 84% of New Zealand's production is currently exported).

In general, onions are more profitable than other crops grown in the Pukekohe area. This high profitability has encouraged a steady recruitment of new growers to the industry. The Franklin District has traditionally been the major onion growing area in New Zealand and the proportion of onions produced by Franklin growers continues to increase.

Social and economic relationships between growers and the wider community

The study found that onion growing is an important contributor to the Franklin community and economy. It is one of the most important revenue sources for the district. It generates significant employment, both directly (on farm) and indirectly through secondary industries. Most farms employ several family members, and up to 20 full-time employees. There is a high demand for labour during the harvest season, which provides employment opportunities for residents of both south Auckland and Franklin District. The industry is also the largest generator of business for local rural service industries, such as exporters, transporters, and chemical and equipment suppliers.

Many of the growers surveyed were second, third, or fourth generation

vegetable growers and had significant personal investment in the community. Most of the farms studied supported extended families and most of these families included school-aged children who attended local schools. Growers and/or their spouses tended to play significant roles in their local community through membership of industry based, community and sporting organisations.

Onion White Rot

The production and profitability of an increasing number of farms are now being affected by white rot disease. The disease is caused by a soil-borne fungus which is extremely easy to spread through the movement of soil on vehicles and equipment and can persist in the soil for up to 20 years in the absence of onion crops. It is impossible to eradicate and difficult to control with existing technology. Producing onions on land infested with white rot incurs additional expense and introduces a high level of risk. In many cases, land has been retired from onion production altogether, forcing growers to find new uninfested ground in order to continue farming. Soils suitable for growing export-quality onions are in limited supply. As a result, growers are turning to other areas (particularly the Waikato Basin) for access to uninfested growing land.

Impacts of the disease on growers

Growers and their spouses interviewed for the study said the increased costs and reduced yields associated with white rot had impacted significantly on their businesses in recent years. Additional production costs directly attributable to onion white rot were

1. Additional labour in terms of husbandry and grading;
2. leasing or purchasing of *additional* land for growing onions;
3. buying and maintaining *additional* machinery so that equipment used on clean and infested land could be kept separate;
4. buying steam cleaners for washing down equipment;
5. using greater quantities of fungicide chemicals;
6. additional transport and travel costs resulting from growing onions on scattered blocks of land

White rot also imposed personal costs on growers in terms of stress arising from uncertainty about the disease's severity from year to year, and frustration at their inability to control it effectively

Risk management in the Franklin community

Onion growing is an inherently risky activity. Sources of risk include production, market, climatic, and financial factors. The probability of these different risks occurring varies from high to low, as do the possible consequences for each grower. In practice, most growers have adjusted to (or learned to "manage") most of these risks.

Growers' knowledge about white rot (including the factors which contribute to the spread and/or severity of the disease) was generally comprehensive. A range of control strategies was used by all of the growers surveyed. However, the degree to which individual growers adopted

particular control strategies was highly variable. Indeed, the seriousness with which individual growers regarded the risk posed by white rot differed according to the amount of white rot they had on their farms, their confidence in the ability of science to find a “cure”, and their level of personal investment in the onion growing business. Many growers considered the disease to be their most important long-term risk. While the effects of fluctuating market prices and exchange rates should balance out over the long term, the effects of onion white rot are expected to steadily worsen (in the absence of long-term controls).

The study concluded that, like other risks affecting onion growing, the risks associated with white rot disease can best be managed at the individual grower and industry levels. This suggests a strategy involving a combination of:

1. intensified on-farm disease management/control practices;
2. adoption of management practices aimed at preventing disease spread to new growing regions; and
3. greater, industry-supported, research and development aimed at sustainable disease control.

Risks to the Franklin community from white rot disease relate mainly to the probability that the above strategies may not succeed and that the disease could impoverish many local growers, reduce community incomes, and ultimately result in the industry being relocated to another district.

Possible long-term strategies and constraints

Growers regard switching to alternative crops as being neither financially nor logistically feasible. The main reasons given were the high market value of export onions compared with alternative crops such as salad greens or potatoes (which do not have an export market), and the high level of existing investment in specialised onion-production equipment and improvements to land.

Leasing or buying new land in the Franklin District is not considered to be a sustainable alternative in the long term because suitable onion-growing land will eventually run out. White rot is extremely persistent and spreads easily to new areas, so “clean” land in the district is expected to become infested eventually, despite the most careful soil hygiene practices. Other constraints include the financial costs of leasing, purchasing and developing new land.

Growing on land leased or purchased in other areas (such as the Waikato Basin) is a trend that can be expected to continue. Constraints include the limited availability of soils comparable with those of the Pukekohe area and the financial cost of relocation. Associated impacts include personal costs in terms of time spent away from home and job losses for employees who are unable to travel or relocate. The departure of growers from the Franklin District could be expected to heavily affect the people who rely on seasonal employment and on some local service industries and retailers.

The presence of white rot reduces the value of onion growing land because it limits land use options. The only alternative use which could provide a return comparable to export onion cropping is rural-residential subdivision. This option is severely limited at present because of restrictions under the Franklin Proposed District Plan that aim to protect soils of "high productive potential" (including onion growing land) from non-rural uses. Other constraints include resistance by growers to the perceived "waste" of productive land, and inter-generational pressure on growers to retain family farms.

¹ Webber, D., Buchan, D. J., Cosslett, C.B., Santorum, A., Wood, R.J., Fullerton, R.A. 1999. "High Stakes in Pukekohe". An economic and social assessment of the onion industry with special reference to the impact of onion white rot disease in the Pukekohe area. HortResearch Technical Report No 1999/224. 53p

BLACKBOARD

If you would like to include your conference, meeting or event in this column, please send information to the editor (n.taylor@tba.co.nz)

Seminar on Social and Environmental Sustainability

The Association of Asia-Pacific Social Science Research Councils (AASSREC) one-day seminar on Social and Environmental Sustainability in Wellington, 5 August 1999. Please email your expression of interest to: gilvray.1@rsnz.govt.nz

Conference on Multiple Objective Decision Support Systems

2nd International Conference on Multiple Objective Decision Support Systems for Land, Water and Environmental Management (MODSS'99) ... AND ...

Community Participation Workshop (1-6 August 1999, Brisbane, Australia) Details on the website: <http://www.dnr.gld.gov.au/events/modss99/index.htm>

18th Annual NELA Conference

Sydney, 8-10 September. "Integrated environmental management - whole of government approaches to environmental protection". e-mail nela@effect.net.au

Resource Management Law Association

The seventh annual conference of the Resource Management Law Association, Christchurch, 30 September to 3 October 1999. Contact karol.helmink@bellgully.co.nz

Evaluation - Challenging Boundaries

Australasian Evaluation Society International Conference, Perth, 4-8 November. web site www.ca.com.au/~keynote/conf_pge/cnfleval.html

Women's Studies Association Conference Hi Raranga Wahine

Victoria University of Wellington, 5-7 November 1999. e-mail allison.kirkman@vuw.ac.nz

Conference on Technology Assessment

Challenges for Technology Assessment & Technology Forecasting: Equity, Energy and Environment. 3rd International Conference and Bi-Annual Meeting. International Association for Technology Assessment and Forecasting Institutions (IATAFI), November 17-19, 1999. The conference will be conducted in three parallel sessions in which speakers and participants have an opportunity to present their views and share experiences in areas of equity, energy and environment technologies. For more information: Ms. Sunita Wadhwa, Senior Scientific Officer. TIFAC/DST, Technology Bhawan, New Mehrauli Road, New Delhi-110 016, India. +91 11 686 8513 Fax: +91 11 686 3866. Email tifac@alpha.nic.in

Homepage

Web sites

In this section of the newsletter we highlight information about impact assessment on the internet. If you have found a site of interest, let us know about it.

Take a look at the NZAIA web page at <http://www.nzaia.org.nz>

The international Association for Impact Assessment home page is at <http://IAIA.ext.nodak.edu/IAIA/>

Visit also various IAIA affiliates:
South Africa www.oneworld.org/saep/iaia/index.html

Japan www.seiryo.ac.jp/iaia-japan/index.html

Hong Kong (host of the 2000 conference) <http://eiagateway.ces.cuhk.edu/hk/>

The Ministry for the Environment web site has recent publications that can be downloaded. <http://www.mfe.govt.nz>

NZAIA E-Mail Discussion Group

The NZAIA has an e-mail list group for news and views relating to impact assessment in New Zealand, Australia, Asia and the South Pacific, plus local perspectives on international issues in Impact Assessment. Anyone can subscribe and participate, and its free. The list is being hosted by the *Centre for Impact Assessment Research and Training*, at the Department of Geography, University of Otago, and is being managed by Dr Richard Morgan: rkm@geography.otago.ac.nz

Using the NZAIA list

To use the list server and participate in discussions on it, you must first "subscribe". To do this take the following steps:

1. send an email message to: listproc@stonebow.otago.ac.nz
2. as the body of the message (not the subject) give the following command:

subscribe NZAIA <your personal name>

For example: subscribe NZAIA Leonardo da Vinci

To unsubscribe from the list:

1. send an email message to: listproc@stonebow.otago.ac.nz
2. as the body of the message (not the subject) give the command: un-

To post a message:

<< Only subscribers can post to the list.>>

To post a message to the entire discussion group, send an email to:

NZAIA@stonebow.otago.ac.nz

Please be sure to give a concise clear subject.

Assistance

If you have problems with the list, error messages will automatically be sent to the list manager. Should you need to contact the list manager about anything, please email Richard Morgan at: rkm@geography.otago.ac.nz

REVIEW

Urban Sustainability in New Zealand. Proceedings of a workshop sponsored by the Royal Society of New Zealand, the New Zealand National Commission for UNESCO, and the Parliamentary Commissioner for the Environment held at the Royal Society, October 1998. The Royal Society of New Zealand, Miscellaneous series 53, Wellington. 1999 62 pp. \$30 (\$24 RSNZ members).

Reviewed by Wayne McClintock

This report of a workshop organised around the theme of urban sustainability includes papers addressing its relationship to urban planning (Harvey Perkins & David Thorns), its relationship with social science research (Phil Hughes), and a series of three that focus on social drivers (Kay Saville-Smith), economic drivers (Craig Millar & Richard Le Heron) and environmental drivers (John Craig) within the urban environment. It also summarises workshop discussions which were attended by planners, academics, private consultants and representatives

of central and local government. Some of the key points emerging from these papers and workshops were the recognition that issues of sustainability must be viewed in the long term; the acknowledgement that the Resource Management Act is a relatively ineffective instrument for urban development; the necessity for a high level of community participation in the process of urban development; and the importance of communities acquiring a better understanding of sustainability.

Underlying the debate about urban sustainability in these papers is a philosophical conflict between those who view human social and community life naturalistically as part of ecosystems, and those who regard cities as products of human culture. The former view is most evident in John Craig's paper about environmental drivers and their relationships with urban environments. Craig maintains that people do not understand their dependence on nature, and thus fail to protect the natural resources that sustain their everyday lives. Moreover, he claims that councils encourage the destruction of nature through service charges and rates that only cover human services, and ignore the need to protect, and invest in, natural capital (air, water, soils etc). Craig urges communities and councils to become more environmentally aware by using financial incentives to promote urban sustainability. The opposing view is epitomised by Harvey Perkins and David Thorns who, in the first of their two papers, observe that adequate protection of the natural environment will not occur until issues of social and economic equity are addressed. They contend that adequate incomes

and housing, productive and meaningful employment, and community participation are essential prerequisites for people to take an active interest in environmental matters. Urban planning and management, they believe, requires much more attention to the social and cultural character of urban life than presently contained in ecosystems-oriented approaches to sustainability.

This philosophical debate requires our urgent attention as practitioners of impact assessment. Those of us with backgrounds in the social sciences are likely to endorse the views of Perkins and Thorns, while those with training in the physical and environmental sciences will be more inclined to support Craig's ecosystem approach. Thus the different values and beliefs associated with these two philosophies often prevent a closer integration of environmental and social impact assessments. The challenge for us is to recognise that dialogue about these philosophical differences must continue for a truly integrated approach to sustainable development to evolve.

This volume of proceedings, together with the two other publications listed below, may be obtained from The Royal Society of New Zealand, PO Box 598, Wellington. ph 04-4727421. fax 04-4731841. e-mail: sales@rsnz.govt.nz

Other publications of interest from the Royal Society of New Zealand:
Radiation and the New Zealand Community: A report prepared by the Academy Council of the Royal Society of New Zealand. RSNZ Bulletin 34, 1998. 108 pp. \$40 (\$32 RSNZ members).
Urban Amenity Indicators Workshop Report. RSNZ Miscellaneous series 52, 1998. 37 pp. \$15 (\$12 RSNZ members).

Reminder

We can only review books, publications and reports when we have copies to look at! If you would like to have a new publication listed or reviewed then please send a copy to our book review editor. Or get in touch with him to discuss your latest efforts.

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OBITUARY Ken Ackley (1923-1999)

Ken joined the Joint Centre for Environmental Sciences (later the Centre for Resource Management) at Lincoln in 1973. Lincoln had initiated New Zealand's first post graduate diploma in Natural Resources and Masters in Resource Management. Ken brought qualifications and experience in law, planning and engineering to the programme, and took on the development and teaching of core papers until he retired in 1985. He was an unassuming, friendly man, "laid back" in today's terms, but was also a scholar and clear thinker about the environment and environmental policy. He influenced strongly the many graduates from that time, who today, in turn, have influenced the development and implementation of the Resource Management Act, and the policy and practice of resource management and environmental impact assessment in New Zealand. Ken died in his beloved Gore Bay, where he opened his home to many of his students over the years as part of staff-student "camps". Our sympathies to his wife Margaret, daughter and son.

NEW PUBLICATIONS

New books

Environmental Impact Assessment: Second Edition. By Professor M. Husain Sadar, Carleton University press Inc., 1998. The Impact Assessment Centre, Carlton University. Can\$30.00. Order from Available in English, French, Spanish and Portuguese.

Restructuring Global and Regional Agricultures: Transformations in Australasian Agri-food Economies and Space. Edited by David Burch and Jasper Goss. Published by Ashgate, 1999. Hardback A\$115.00.

New reports and articles

Proposed approach to Indicators for Urban Amenity. Environmental Performance Indicators, Technical paper, No. 54, Urban Amenity. By David Hill, Ministry for the Environment, Wellington, June 1999.

Community Profile Report: Kapiti Development Trends Study. James Newell. Monitoring and Evaluation Research Associates Ltd, Wellington, March 1999. 149 pp. and *Growth Projections Technical Report: Kapiti Development Trends Study.* James Newell. Monitoring and Evaluation Research Associates Ltd, Wellington, March 1999. 37 pp. These two reports were prepared for the Kapiti District Council. The profile report, which was prepared for local communities as well as officials of the Council, describes changes in the communities of the Kapiti Coast District based on an analysis of the results of the 1996 census. It focuses on population growth, demographic features, Maori, income support, households and families, employment, travel to work, building consents and population projections. These results are frequently presented in a life cycle framework to illustrate the changing characteristics of the various age groups that comprise the district's population. They are illustrated by very detailed tables and figures that are probably too complex for most lay people to eas-

ily understand. The technical report on growth projections presents the methodology and findings from population, household, and employment forecasts prepared for the services and infrastructure planning process of the Kapiti District Council. The projections were compiled using a computer based model to derive scenarios at the area unit level which were consistent with recent residential settlement patterns, overall population projections, and various other local level assumptions. The report discusses the long term outlook for population growth and the distribution of growth within the district. Planners, and others interested in the quantitative aspects of social change, may find the model applied in this report useful for deriving their own forecasts of population growth for other localities in New Zealand.

Both of these reports are available from James Newell, Monitoring and Evaluation Research Associates Ltd e-mail him at

Forestry Communities in Transition. Wayne McClintock & Nick Taylor. New Zealand Journal of Forestry 44(1): 29-34. May 1999. *Abstract:* Resource communities, those at the interface between a society and its natural resources, are very dynamic, and have experienced considerable change in New Zealand. There are characteristic cycles of boom and bust. This paper reports research on forestry communities, with case studies of Kawerau, Murupara and Tuatapere. Results show that the economic context has changed with the internationalisation of the industry and the changed role of the state. The communities are vulnerable to global prices for wood products, pulp and paper. With rationalisation and capital-intensive technology, workforces have been reduced substantially, and productivity raised through shift work and contracting. Other government and private sector rationalisation has concentrated services and businesses in regional centres, with multiple effects on local economies. These local economies can be strengthened by reducing their dependence on forestry.