

Approaching Sustainability:
Integrated Environmental Management and
New Zealand's Resource Management Act

prepared by
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PREFACE

Approaching Sustainability: Integrated Environmental Management and New Zealand's Resource Management Act is written for anyone with an interest or a role in resource management in New Zealand. The style is somewhat casual and the messages are sometimes blunt. I trust you will not be offended by this quality of writing. My goal with the project was to stimulate dialogue by providing an "outsider's perspective." At the end of the day, I am less interested in telling New Zealanders what to do or how to behave than I am in simply sparking interest and dialogue about the fascinating topic of sustainable management in New Zealand. The public and private sponsors of the Ian Axford New Zealand Fellowship in Public Policy funded the project. The Ministry for the Environment, as my "host institution," provided technical and administrative support as well as a healthy dose of tea and coffee support. Finally, without the invaluable support of Dianne Sharpe, Lauren James, Lindsay Gow, Jenny Gill and Philip Savage the project would not have been possible.

The Ian Axford (New Zealand) Fellowships in Public Policy were announced by the New Zealand Prime Minister, the Rt Hon. Jim Bolger, on 4 July 1995. The Fellowships programme is named after Professor Sir Ian Axford, an eminent New Zealand astrophysicist. The fellowships are a joint public sector-private sector initiative which provide mid-career opportunities to outstanding American professionals to study, travel and gain practical experience in public policy in New Zealand. The fellowship programme complements the longstanding Harkness Fellowships programme which is funded by the Commonwealth Fund of New York. Both programmes are administered by the New Zealand-United States Educational Foundation. The Foundation is primarily responsible for the administration of the Fulbright Programme in New Zealand.

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ABSTRACT

New Zealanders love the outdoors, and for good reason. Aotearoa is remarkably beautiful, rugged and accessible. Almost every one of New Zealand's 3.6 million citizens has a personal relationship with nature: a place, a river, a coastline, valley or mountaintop. New Zealand Maori, the tangata whenua, or people of the land, trace their genealogical links to the Earth Mother and Sky Father. Many New Zealand Pakeha, or people of European descent, identify with their pastoral and farming ancestors who subsisted off of the land from the early 1800s. In this small country, comparable in area to the UK or the state of Colorado, place names are familiar, the local news is national, and people feel close to the environment. Accordingly, there is a perception that New Zealand is a nation of environmentalists. While this perception could be harnessed to protect the environment, instead it seems to perpetuate denial about the very existence of environmental problems and the need for environmental laws.

The Resource Management Act is New Zealand's principal environmental legislation. Designed to deliver superior environmental protection with greater economic efficiency and public accountability, the RMA is a masterful piece of legislation. It advanced New Zealand's reputation of "clean and green" when it was enacted in 1991, but 7 years hence, its merit is the subject of a heated public debate.

The greatest threat to sustainability in New Zealand is that political wrangling will short-change the RMA before the realisation of its long term benefits. This paper evaluates RMA implementation and recommends steps to improving RMA practice through the adoption of integrated environmental management (IEM). IEM is an approach that can deliver both better environmental outcomes and greater economic efficiency.

IEM is neither well understood nor systematically practiced. The economic, political and social changes of the 1980s left a reform culture and a system of accountabilities that cares more about legal requirements than the quality of environmental outcomes. Preoccupation with economic efficiency threatens to make RMA implementation an exercise in cost minimisation rather than an exercise in integration which simultaneously promotes good business and good environmental practice.

Barriers to integrated environmental management are not insurmountable. New Zealand has a history of looking for institutional and legislative fixes. Improvements to RMA implementation will come not through institutional reform, but from people through leadership, vision, cooperation and kaupapa. The Act was boldly conceived. It must be boldly implemented as it was envisioned: in an integrated fashion, by focusing on outcomes and by employing a full range of policy instruments to respond to the issues, priorities and values of New Zealand's varied communities.

INTRODUCTION

In New Zealand, sustainable management is the law of the land; it is also the law of the water, the air, the wildlife, the heritage, buildings and culture. In 1991, the New Zealand Parliament confidently added to its catalogue of “firsts”-- first country to give women the right to vote, first country to ban nuclear weapons -- when it became the first country to sanction sustainability. The Resource Management Act of 1991 has only one objective, “to promote the sustainable management of New Zealand’s natural and physical resources.” It is a public policy masterpiece designed for efficacy, efficiency, equity and transparency of process. It provides for the establishment of national policy direction, and standardised planning, permitting and enforcement, but extends to local and regional agencies the flexibility and autonomy to identify the most suitable and least cost implementation methods.

A two-year intensive resource management law review process, involving hundreds of people and thousands of submissions, helped establish the conceptual framework for the Resource Management Act (RMA). The extensive public review process planted reasonable expectations into the minds of New Zealanders, both Pakeha and Maori, that the RMA would deliver something for everyone.

To the satisfaction of New Zealand environmentalists, the RMA gave credence to the concept of “intergenerational equity,” referring to the 1987 Brundtland Commission’s definition of sustainable development and imploring current generations to consider the impact of their actions on future generations. Environmentalists believed, too, that a “precautionary principle” would obligate decision makers to err on the side of the protection in cases with uncertainty about environmental effects.

The business community was hopeful that an “effects-based” orientation to the RMA would eliminate heavy handed governmental prescriptions and thus liberate economic growth and development. The private sector was also satisfied that requirements for cost benefit analysis in section 32 would serve least-cost policy options and that property rights and consumer choice would give individuals, rather than central government, the key to resource management decisions.

Maori were optimistic initially that the Resource Management Act would promote self-determination and that Maori concepts would inform resource policy. They hoped that new partnerships would secure Maori involvement in resource management and that resource treasures, burial sites, sacred places and cultural heritage would be protected by the RMA.

The general public was encouraged by the openness with which the Fourth Labour Government approached resource management reform. It marked a dramatic departure from the closed-door approach used in the past by parliamentary special committees. There was hope that implementation would proceed with a similarly accessible style.

Optimism at home was matched abroad as New Zealand was internationally recognised for coupling economic efficiency and ecological sustainability as matter of national environmental policy.

It is well known that the RMA was part and parcel of a massive reform programme in New Zealand that lasted from 1984 through 1990. A hot-bed of neo-libertarian thinking, New Zealand's Fourth Labour Government embraced public choice theory and managerialism to overhaul New Zealand's economy, local government, health and education systems, state sector, social welfare and resource law. Two objectives evident in every area of reform were economic efficiency and public accountability.

These two reform objectives featured prominently in resource management law review. But there was a third driver of resource management law reform – the desire for superior environmental protection. A new resource management law and policy took shape out of the alignment of “pull and push” forces.¹ The “pull” came from government reformers anxious to replace regulations with market-driven approaches to resource policy. The “push” came from environmental advocates, both within and outside government, who were disappointed with the Muldoon-led government's environmental record and were demanding superior environmental protection.

The concept of **integrated environmental management** provided reformers with a response to the demands for both greater efficiency and better environmental protection.

This paper explores the idea of integrated environmental management (IEM), whether it is happening in the context of RMA implementation, and why or why not. It critically analyzes the concept of IEM and in so doing, contributes to RMA implementation.

Integrated environmental management is a worthy topic of study for several reasons. Most importantly, it provides a suitable framework for identifying and resolving complex resource problems such as biodiversity or estuary protection, which may escape detection in non-integrated management approaches. Second, it helps management agencies with limited resources perform their functions efficiently and effectively. Just as the concept of sustainable management provided a basis for rationalising resource policy development, the concept of integrated management can and should provide the basis for rationalising resource policy implementation. Integrated management does this by coordinating the actions of multiple management agencies, removing redundancies, consolidating information, improving communication, and promoting a holistic understanding of the environment. Third, IEM can reduce the time and cost associated with RMA implementation. It can offer benefits to resource users and interested parties by enabling “one stop shopping” and convenient customer service delivery for consents, inquiries, and assistance. Furthermore, until such time as there are better data and methodologies for quantifying, identifying and monitoring sustainable management, IEM serves as an indicator or a proxy measure. Thus, if one sees evidence of integration, it is probable evidence that progress is being made in the correct direction -- toward the long-term goal of sustainable management.

¹ Interview with Denise Church, 23 April 1997. It is worth noting that those who advocated for replacing regulation with market-driven approaches consistently failed to accept that market-approaches invariably operate within a regulatory framework. Accordingly, the alignment of push and pull forces is a matter of finding the

In spite of the common-sense appeal of integrated environmental management, it is largely considered “puffery,” or a luxury for planners to entertain after the “real work” is complete. This perception is stifling innovation and obscuring opportunities for cost savings and better environmental outcomes. It could well be that getting a few things right about integration would go a long way toward getting RMA implementation right all together. As Dennis Bush-King, an environmental manager at Tasman District Council astutely remarked at a recent Planning Institute Workshop, “the search for integration produces a number of important contributions to achieve the purpose of the Resource Management Act.”² The benefit of integrated environmental management does not depend on answers, models, or proof. Simply asking questions and making connections will engender new ways of thinking about resource management, which is a necessary precursor to achieving sustainable management.

The RMA does not define integrated environmental management, but common wisdom and years of experience tell us what it is not. With the intention of making IEM a little more user-friendly, this paper shares lessons and observations from around the country. The fieldwork was strictly qualitative and reflects certain biases which are best stated directly and up front: First, more environmental data and better access to that information is unequivocally good public policy; second, easy and meaningful public participation in environmental decision making is also by definition good public policy; third, government has a role to play in environmental policy; and fourth, Maori values for the environment should inform local, regional and national resource management and policy. Throughout my research which included 120 meetings with individuals around New Zealand, I have endeavored to keep my biases in check and my mind open to bring a fresh look to the matter of environmental policy in New Zealand.

The first section -- **A LOOK AT THE REFORM** -- reviews the social and economic context of the Resource Management Act to understand how the theoretical underpinnings and political drivers of the RMA are relevant to the topic of RMA implementation seven years later. The second section -- **IEM IN THEORY AND PRACTICE** -- outlines the RMA and explores how practitioners interpret and operationalise the concept of integrated environmental management. This section describes observations from the field. The final section -- **GETTING FROM HERE TO THERE** -- is a discussion of the drivers and barriers to IEM and recommendations for improving RMA implementation through integrated environmental management practices.

² Dennis Bush-King, “Integrated Resource Management” Paper presented to the 1997 New Zealand Planning Institute Conference, Palmerston North.

PART I. A LOOK AT THE REFORM

Elected in 1984, the Fourth Labour Government exploited popular discontent and launched a six-year period of radical reform unprecedented in the history of New Zealand and possibly the western world.

A review of this radical period in New Zealand's recent history is a useful backdrop to an evaluative study of the RMA because the laws, institutions, accountabilities and culture that brought into effect to the RMA are direct products of the reform or were influenced by it. Four topics are discussed: economic liberalisation, state sector reform, local government reform and New Zealand culture. A discussion of resource management law review and the RMA then follows.

Readers with an interest in the reform era are encouraged to review the literature such as: *Theoretical Underpinnings of State Sector Reform*, by Jonathan Boston, or *The Spirit of Reform*, by Allen Schick. The State Services Commissions prepared a good summary report entitled *New Zealand's State Sector Reform: A Decade of Change*.

Economic Liberalization

Auckland journalist David McLoughlin argued in his 1992 popular account, *New Zealand's Twenty Year Fall Towards the Third World*, that "New Zealand's slide since 1973 is so remarkable and so unprecedented in the developed world there was no ready word or phrase to describe it, so I had to invent one. I came up with the term 'the undeveloping nation', because the more I looked, the more I became convinced that New Zealand has become a Western-style developed nation that is literally undeveloping."³

The economic problems that triggered the downturn McLoughlin contemplates can be traced in part to the 1970s oil crisis, which reduced overseas demand for New Zealand products. The Muldoon government maneuvered to stabilise the economy by controlling exchange rates and imposing trade protection. Overseas borrowing was increased to launch what became an environmentally-problematic development campaign of "Think Big" energy projects marketed to the public as a way to stimulate the economy and reduce dependence on foreign oil.

But by 1984, the economy was in near-crisis. The annual budget deficit had reached \$3 billion and public overseas debt exceeded \$8 billion. Unemployment and inflation were high; wages and the standard of living were low. Imposition of nation-wide wage and salary freeze became an infamous decision which helped clinch the Labour Party's victory in the 1984 elections.

As government had been involved in nearly every aspect of the economy, liberalisation was the first order of business for new Labor Government. The guiding objective was to "get government out of the economy."

The changes included:

- devaluing and floating the NZ dollar and eliminating controls over foreign exchange;
- reducing marginal income tax rates and adopting a consumption-based tax;
- eliminating agriculture and consumer subsidies, import licenses and export incentives;
- applying a progressive surcharge to the superannuation scheme to recover a portion of the costs;
- creating an independent Reserve Bank to focus exclusively on price stability.

The topic of economic reform is relevant to RMA implementation in several ways. As a matter for foreign trade, steady international demand for “clean and green” New Zealand products could secure market share for New Zealand in the competitive world economy. The essential question is whether the RMA can serve as a verifiable “eco-label” and capture that share of the market willing to pay for environmentally-friendly goods.

The desubsidization of agriculture is a second area that links economic reform and RMA implementation. Early in the reform, government ended subsidies to farmers. A downturn in wool and meat markets coupled with the perception that urban and green interests had allied against farmers has created suspicion within the farming community and a belief that environmental planning necessarily threatens their private property rights. The incisive split between urban and rural interests plays out in competition over land use (e.g., rural residential vs. primary productive) and the protection of natural areas. In mid-1997 the farm lobby launched a fighting fund to support their interests in RMA-related legal matters.

State Sector Reform

Government involvement in commercial activity began in the early twentieth Century as infrastructure and utilities were established to accommodate New Zealand’s growing population. Between 1950 and 1980, a second wave of state involvement in the economy occurred to attempt to diversify the agriculturally-dominated economy. With partnerships and incentives the government targeted new industrial enterprise. By 1984, 20% of the gross investment in New Zealand was public money and government spending accounted for 40% of the gross domestic product.

The guiding objective of state sector reform was to make government more efficient and accountable. New Zealand leadership imported public choice theory, managerialism and institutional economics -- an ideological trilogy that fueled the removal of government from the marketplace and from individuals’ lives. This was achieved through deregulation, privatization and corporatisation.

The State Owned Enterprises Act of 1986 decoupled the policy functions of government from its commercial activities to rectify inherent conflicts of interest and to make commercial activities competitive as they should be. Before the reform, New Zealand Forest Service ran commercial timber operations and at the same time was responsible for conservation activities. The reform separated these functions. Forestry Corporation, a state owned

enterprise, was created to run commercial operations and the Department of Conservation was created to manage the conservation estate. The policy functions of the Forest Service were ultimately housed with the Ministry of Forestry.

For some state-dominated industries, such as financial services, broadcasting and transport, wholesale privatization was preferred over corporatisation. Between 1988 and 1993, 14 state owned enterprises were created through corporatisation (e.g., Airways Corporation, Coal Corporation, Electricity Corporation, New Zealand Post, etc.) and \$13 billion worth of government assets were sold outright to private companies.

The State Sector Act of 1988 concentrated on those services which would remain in the public domain. Focusing on performance, accountability and efficiency, the State Sector Act:

- decentralised control of money, personnel and resources giving managers autonomy over key input decisions such as salaries, hiring, organisational structure, and work programmes;
- brought an “output focus” to agency work programmes where ministers and their ministries to agree to a set of outputs which in turn become the basis for annual contracts or purchase agreements;
- strategically placed incentives and accountabilities to make managers accountable for money spent, and used rewards as incentives to promote the desired behavior.

Local Government Reform

As the central government busily divested its powers and responsibilities, territorial authorities and the marketplace were being prepared to pick them up. Local government reform was a twofold effort. First it consolidated the basic units of local government. Then it created capacity within the amalgamated units of government for the assumption of financial and decision making authority. The reason for devolving authority to subnational organisations was to move the locus of decision making closer to those who bear the brunt of policy decisions. Decentralization can also be more efficient than centralization by allowing for geographic and demographic variability.⁴ Decentralised responsibility for policy development and implementation is also desirable in that community values may be incorporated into the process from the bottom up.

In 1987, the Minister of Local Government, Hon. Dr. Michael Bassett, announced plans for a comprehensive review of local government structure. At that time, local government was a labyrinth of more than 800 local authorities, regional bodies, special boards and elected boroughs held over from a century of fragmented and *ad hoc* expansion of the public service. When the Local Government Act Amendments were passed in 1989, there were 86 sub-

⁴ There is some confusion over the difference between devolution and decentralisation. Devolution has been defined as the transfer of some amount of authority, responsibility, and funding from central to lower levels of government. In these cases, the local authority may or may not share the mission of the central agency, although the central agency expects its objectives will be adequately met by the local authority. Decentralization (deconcentration, delegation) on the other hand, is the distribution of functions from the central agency to

national self-financing units of government: 12 regional councils delineated for the most part by catchments and 78 local councils (74 cities and districts, and 4 unitary authorities).

In addition to amalgamating local government, the Act also:

- established direct election for regional councilors;
- reduced number of ad hoc or special purpose authorities from 400 to 7;
- separated regulatory functions from operational and policy functions;
- corporatised trading activities;
- established new accountability procedures for “objective led corporate planning” with requirements for public input;
- specified appointment of chief executives on contracts (parallel to the State Sector Act of 1988).

Local government reform is related to RMA implementation in several ways. First, the legislative reviews of local government and resource management were coupled; they shared a select committee for the review of draft legislation. Consequently barriers or drivers to RMA may be within local government laws and structures. Second, an ecological feature -- water catchments -- provided a basis for delineating regional boundaries thus linking human and natural systems. Third, while central government develops national policy direction under the RMA, local government implements it. Fourth, achieving integrated management requires coordination among district, regional, central and iwi authorities.

Cultural Reform: The Forgotten Sector

Unuhia te rito o te harakeke kei kea te komako e ko? Ki mai koe ki au, 'He aha te mea nui o te ao?' Maku e ki atu, 'He tangata, he tangata, he tangata.'

Pluck out the centre of the flax bush, and where would the bellbird be? You ask 'What is the most important thing in the world?' I would reply, 'Tis people, 'tis people, 'tis people.'

Muriwhenua proverb

The popular Maori whahatauki above illustrates a cross-cultural truth -- the values held by society come from people. Had there been a Minister of Culture in the late 1980s, surely she or he would have undertaken a comprehensive review of New Zealand's culture, as change management is a necessary part of the reform. The shape and direction of society is as much a function of people's attitudes, behavior and values as it is a function of the economy, the laws, and institutions.

Are the people in New Zealand ready for the RMA and its necessary departure from the status quo? This question must not be read as accusatory or value-laden. It is simply a statement that getting from an old way to a new and improved way requires commitment from people to take risks and change. Consider that some laws are “technology forcing.” They set emission standards at levels that are not achievable with existing technology. Thus, a “technology forcing” law actually “forces” new technologies on to the market.⁵ In a similar

⁵ An example of technology-forcing regulations are the Maximum Achievable Control Technology standards

vein, the RMA is a “behavior forcing” law. Its objectives, namely integrated environmental management, cannot be met with the existing behavior, attitudes, and norms. Compliance with the RMA is “forcing” new behavior, new ways of doing business. The resistance to change stifles innovation and makes compliance unnecessarily costly and slow.

Another issue related to culture is the importation of foreign ideas into New Zealand society. In the 1980s, several New Zealanders (who later became leaders in the reform) traveled to England and the United States. There they were introduced to new models of planning, impact assessment, public participation and deregulation. With little tailoring, these ideas became part of the RMA fabric.

Take, for example, the idea of using market mechanisms, as opposed to rules, to achieve environmental objectives. In the US, market mechanisms are viable policy instruments because environmental quality data and corporate emissions data are widely available to market. Without that information, the market cannot allocate efficiently. In New Zealand, there is a presumption of privacy. Corporate emissions data is believed to be private. Environmental data are not readily available to the market or to the public which limits the use of information and market-based mechanisms as viable alternatives to regulations.

Attitudes toward public participation illustrate another way in which culture influences RMA implementation. The RMA provides for extensive participation by divergent interests such as iwi or community groups. This “multi-stakeholder” model of participation moves the process of reconciling competing resource values to the front end of the policy process. It is increasingly common in the United States where it is successful because third parties and nongovernmental organisations (NGOs) are equipped with resources, experience, access and the capacity to participate fully. In some cases federal or local government funds NGO participation to guarantee a fair and balanced process is achieved. Collaboration of this sort is a new paradigm of participation in New Zealand. It inverts the conventional consultation method of formal notification and eleventh hour submissions followed by possible courtroom battles. Moving to the new approach envisioned by the RMA requires (among other things) a cultural transition from legal formalism to approaches that use informal negotiation and consensus building techniques.⁶

Lynton Caldwell summarized well the importance of culture when he wrote: “ Individual and institutional change must proceed together if society is to be transformed. Human behavior is at once individual and social; it is structured and reinforced through institutions. A strategy for action must, therefore, apply to individual, institutional and social behavior simultaneously.”⁷

Resource Management Reform

industry-wide emission limits based on the best performing technology within the industry sector thus forcing others up to performance standard that is better than the current level.

⁶ In addition to cultural barriers there are other problems with public participation in RMA planning and implementation such as the cost of obtaining expert witnesses and the threat of the awarding of costs against under-resourced community groups.

Before the RMA, New Zealand environmental law, policy and administration -- like that of many other countries -- was an assortment of uncoordinated and often overlapping statutes, regulations, principles and procedures. There were several organisations, catchment commissions and water boards acting under multiple and conflicting mandates. To be sure, the dis-integrated framework made environmental management and compliance inefficient, expensive, and in certain cases, grossly ineffective.

Not surprisingly then, interest in resource policy reform was brewing well before the Fourth Labour government came into power in 1984. The Water and Soil Conservation Act had been under review 10 years prior to Resource Management Law Review (RMLR); the Town and Country Planning Act had been challenged in the early 1980s because it was perceived as too slow and too costly; the Minerals Law was also under attack for its exclusion of the public in the process (apart from formal appeals).

The National Development Act of 1979 was an early attempt to rationalise the soil, water, and mining laws for projects considered nationally significant. Its streamlined processes allowed the quick siting of several large-scale development projects such as Methanex, a methanol to petrol plant in Taranaki, and the Manapouri hydroelectric plant in the South Island. Though some national funding was made available to assess the environmental effects of the projects, the Think Big era helped crystallise the environmental community around stopping what they perceived as government-sponsored environmental destruction.

By the mid 1980s, the Labour Party had its finger on the pulse of citizen disquietude. Maori and environmentalists, though not a united front, shared several concerns: access to information, the recognition of Maori and environmental values in economic considerations, the cost of hearings, excessive power of government, failure to involve diverse interests in decision making and overall inadequate protection of resources.⁸ The Labour Party responded to these and other matters by pledging, in its election manifesto, to review New Zealand resource laws. In January 1988, Deputy Prime Minister Geoffrey announced a comprehensive review of the Town and Country Planning Act, Water and Soil Conservation Act, Soil Conservation and Rivers Control Act, Minerals Act, as well as the procedures for assessing environmental effects.

The RMLR was an enormous and impassioned effort. Its conceptual influences were Maori ideas about stewardship and sustainability, the 1986 Brundtland Commission report on sustainable development, *Our Common Future*, international trends toward deregulation, decentralization and community empowerment, existing New Zealand resource law and public reaction to deficiencies within those laws, as well as the ideas of efficiency and accountability that were at the heart of economic and state sector reform.⁹

⁸ Ali Memon, page 87

⁹ For instance, concepts about stewardship of the earth were drawn from Maori values kaitiakitanga while the

The RMLR was coupled early on with the legislative reviews of local government, coastal resources and minerals.¹⁰ The process was managed by the Ministry for the Environment and a core group of environmental professionals who drafted several policy papers for wide circulation and discussion. The public was engaged through traveling meetings and a free phone line.¹¹ Hundreds of individuals were directly involved in the process and thousands more made written or oral submissions.

In spite of its impressive effort, the Labour Government was unable to pass the Resource Management Bill into law before the October 1990 national election which returned the National Party to government. The National Party made several changes to the Resource Management Bill. Finally in June the RMA was passed and in October 1991 it came into effect.¹² Treasury went along with the RMA believing that its agenda, “to minimise all restraints on the utilization of New Zealand’s resources” would be served.¹³

Readers wishing a more in depth discussion of the resource law reform period will find several useful sources including: *The Politics of Clean and Green*, Ton Buhrs; *Keeping New Zealand Green*, P. Ali Memon; the 1996 *OECD New Zealand Environmental Performance Review, An Institutional Framework for Sustainability*, Owen Furuseth and Chris Cocklin; and *Water Resource Management and Environmental Policy in New Zealand: Regionalism, Allocation and Indigenous Relations*, Lloyd Burton and Chris Cocklin.

¹⁰ Coastal legislation review was initiated under the Department of Conservation. In September, 1988 it merged with the RMLR. The minerals sections of the RMA were ultimately pulled out and enacted in separate legislation, the Crown Minerals Act, but nonetheless, the legislative review was undertaken as part of the RMLR.

¹¹ The Core Group consisted of Denise Church, Joan Allen, Shane Jones and Kathryn Ashley-Jones.

¹² The Resource Management Bill was subjected to several changes including extraction of the crown minerals provisions from RM Bill; inclusion of section 7(h) which protects the habitat of trout and salmon protection of trout fisheries, inclusion of section 7(b) regarding the efficient use and development of natural and physical resources. A companion recommendation regarding legal aid provisions for public participation was rejected for being potentially too costly.

PART II. IEM IN THEORY AND PRACTICE

THE THEORY

The preceding section reviewed the New Zealand reform period and very briefly outlined forces that shaped resource management reform. The discussion now turns to the results of the reform and its aftermath. The first part is a very brief overview of the Resource Management Act. The second part is a discussion of integrated environmental management: its definition, benefits, and mechanisms under the RMA.

A path of development which recognises the interdependence of economic, social, and environmental imperatives is known, today, as “sustainable development.” Sustainable development is a vision for the future which requires commitment from businesses, governments, and private citizens.

With passage of the RMA, New Zealand leapt toward that vision by making sustainable management a matter of national law and policy. The practical means of achieving the long term goal is integrated environmental management.

Resource Management Act

The Resource Management Act of 1991 is the principal legislation for all of New Zealand’s natural resources -- land, air, water and ecosystems -- and physical resources -- soils, geology, and the built environment -- as well as noise, pollution, and geothermal activities.¹⁴ The RMA was conceived as a framework for integrating and rationalizing environmental management in New Zealand. It repealed 59 statutes and modified 50 regulations. It established one ambitious long-term national goal: sustainable management.

The Act is based on several assumptions, including:

- the environment is a dynamic system comprised of interconnected elements -- air, land, water and ecosystems -- and should be treated as a whole;
- those governing bodies closest to resources are the most appropriate to govern the use of resources; therefore, responsibility for implementing the RMA is decentralised to local and regional authorities;
- efficiency comes from shifting attention and regulation away from ‘activities’ such as logging or grazing, and onto the ‘effects’ of activities such as sedimentation or eutrophication;
- the RMA recognises the Treaty of Waitangi and the partnership that exists between the Crown and the Maori. It was in 1840 that the Maori succeeded *kawanatanga*, governance, in exchange for *rangatiritanga*, absolute guardianship of resources by the Maori.

¹⁴ Allocation of certain resources (e.g., fisheries, mining) is addressed by means other than the RMA.

The purpose of the Act is found in section 5, which states:

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, "sustainable management" means managing the use, development, and protection of natural resource in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while --

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.¹⁵*

The RMA reconciles the tension between conservation and development by controlling the effects of activities rather than the activities themselves so that externalities will be accounted for in decision making.

The RMA establishes a hierarchy of roles and responsibilities. The role of the central government is to set policy on matters of national significance and monitor implementation of the Act. In setting national policy direction, central government may issue national policy statements, prepare national environmental standards, or call-in any resource consent application for a Ministerial decision. To date, the role of central government has been quite limited. As of October, 1997 only one national policy statement, the Coastal Policy Statement, had been written and there were no enforceable national environmental standards.

Implementation is decentralised, relying almost entirely on subnational units of government for environmental planning, programme development, permitting, enforcement, and financing of activities. Sections 30 and 31 of the Act assign the broad implementation and monitoring. Regional councils manage water, soil and geothermal resources and they control pollution. They also control the use of land as it effects natural resources. Region councils are required to monitor four things: the state of the environment, consent compliance, plan effectiveness, and the outcome of transfers of power. Regions prepare regional policy statements (RPS) and coastal plans.¹⁶ The RPS, with a 10 year time frame, establishes an overall policy framework for the region, and in so, doing provides a basis for integrated environmental management. The RPS, the coastal plan, and any other regional plans must not be inconsistent with national policy statements. Regions may charge fees and collect rates to perform their functions.

¹⁵ Resource Management Act 1991, Part II Sec 5.

¹⁶As management of the coast is shared by regional councils and the Department of Conservation, coastal plans

Territorial local authorities (TLAs) are responsible for land management, subdivision and noise control. TLAs are required to develop district plans which must not be inconsistent with relevant regional and national policies and plans.¹⁷

For the four unitary authorities in New Zealand (Gisborne, Nelson, Tasman and Marlborough), the distinction between regional and local responsibilities disappears altogether as all RMA planning, implementation, monitoring and financing responsibilities reside within a single organisation.

The RMA serves as a *framework*, not a *blueprint*. Accordingly, it gives local authorities enormous responsibility and flexibility to identify the most efficient means of achieving the goals of the Act and meeting the needs of communities. Local authorities may write plans with rules, they may use market mechanisms, or they may use outreach and advocacy so long as they avoid, remedy and mitigate the effects of activities on the environment. On private land, activities are allowed unless specifically prohibited in a plan or rule. For all other natural resources, the reverse presumption holds -- that is, activities are prohibited and require a consent, unless expressly allowed in a plan.

The Act identifies five types of resource consents -- land use, subdivision, coastal, water and discharge -- and classifies activities into broad categories ranging from permitted activities (where no consent is required) to prohibited activities (an activity that is expressly prohibited). The three categories in the middle allow activities, but require certain conditions to be met. Regions issue coastal, water and discharge permits. TLAs issue land use and subdivision consents under the RMA.

Permission for activities is granted based on an assessment of environmental effects which must accompany a consent application.

The public has a right to be heard in both the resource consent process and the planning processes including both plans and regional policy statements. The public also has right to seek a declaration by the Environment Court on RMA or plan provisions. The public may also apply to the Environment Court for enforcement orders to restrain environmentally damaging activities.

Local authorities can issue abatement notices require remediation. Failure to comply with the abatement notice constitutes an offense under the Act and can result in prosecution where fines or imprisonment may be imposed.

What Is Integrated environmental management?

Integrated Environmental Management (IEM) is a way of thinking about the environment as a whole and managing the environment in a way that recognises links between elements of the whole. Lynton K. Caldwell was the first to suggest that addressing the question of

¹⁷ In this paper phrase "local authorities" refers to all regions, districts, cities and unitary authorities. The

environmental quality as a matter of public policy would necessarily be integrative and comprehensive. In 1972 he wrote:

*To cope with major environmental problems there is need for administrative organisation that (1) is sufficiently comprehensive to encompass the problems under attack; (2) facilitates coordination of all related efforts; (3) is adaptable to the dynamics of environmental change and to progressive stages in the solution of environmental problems, and (4) is capable of obtaining, evaluating, and applying appropriate science and technologies to the problems.*¹⁸

The need for integrated management became evident as western bureaucracies grew in size and became more fragmented and compartmentalised. Separate laws, institutions, and policy objectives developed for each sector of society -- transportation, agriculture, commerce, health, natural resources, and so on. Development and welfare decisions were made without regard for the short or long-term ecological impacts because matters environmental were not part of agency missions, corporate visions, or pioneering lifestyles. Creating a new area of public administration to address environmental impacts necessarily implied looking across departments, disciplines and sectors.

There are many definitions of IEM in the literature. The Ministry for the Environment (MfE) commissioned a paper to review the literature¹⁹ With that background, MfE synthesized the following working definition:

*an approach to environmental management which requires recognition of the linkages between different parts of the environment, and adopts a range of tools to identify and manage environmental effects across these different parts, and to ensure co-ordination across institutional barriers such as agency boundaries.*²⁰

The definition implies certain qualities including: inclusive, anticipatory, systems-based, intergenerational, unified, dynamic, interdisciplinary and proactive so competing values are reconciled early in the policy process.²¹ Integrated environmental management conveys a sense that the environment is enormously complex; that it is alive and always changing.

Native people around the world have understood the reciprocity and interconnectedness of places and things for generations, but for many westerners it is a new orientation; one which challenges the status quo.

There are several dimensions to an integrated approach. Some of these are:

- a dimension of time where the impacts of today's decisions are considered on future generations;
- a dimension of justice where the distribution of risks and benefits (environmental, social and economic) are considered;

¹⁸ Lynton K. Caldwell, page 200.

¹⁹ see KPMG draft Integrated Environmental Management

²⁰ KPMG, page 7

- a biophysical dimension where matter- and energy-flows through systems are understood, monitored, and accounted for;
- a values dimension where common goals are established and competing values are balanced (e.g., recreation, commercial use, spiritual significance, aesthetics or landscape, mauri, culture and heritage);
- a legal dimension where multiple codes of practice are reconciled (e.g., reconciling international treaties, domestic laws, regional policies, district plans, local ordinances, religious beliefs, and personal moral codes);
- an institutional dimension to coordinate roles and responsibilities and improve communication-flow between various management authorities.

IEM is a complicated subject because it has several dimensions. To make sense of the interactions, links, and elements, and to understand how a complex system like the environment changes over time, analysts develop models. One model recently developed by MfE looked at a process of integration where several resources were managed by different authorities, each of which operated under a different legislative mandate. The analysis found that to achieve integration, agencies must begin with an objective-setting process:

As integrated management requires attention across agencies, environmental media, and legislation, the objective setting exercise requires interagency co-operation and an acknowledgment of both environmental and human values. ²²

The RMA can be considered a working model of integration whose primary objective is achieving sustainable management. The question for the practitioner is: “How can we institutionalise practices so that good practice under the RMA produces *de facto* integrated environmental management?” RMA implementation should be thought of as a way to incrementally approach sustainability.

Integrated environmental management under the RMA

The RMA does not define integrated management but it does provide for it in several ways: (1) as part of the vision (reflected in the definitions, purpose, principles sections); (2) as a framework for implementation by local authorities; and (3) by providing mechanisms to assist with integrated planning, implementation and monitoring.

The definitions of environment and effect, in particular, reflect a comprehensive understanding and treatment of the environment. “Environment” is defined as including ecosystems, people and communities, natural and physical resources as well as amenity values. “Effects” are defined as including cumulative effects, temporary effects and potential effects.²³ The purpose in section 5 reinforces the claim that the RMA is about biophysical integration – that the RMA is a framework for comprehensive environmental management. The principles in sections 6-8 provide a legal basis for the claim that the environmental

¹⁷ *Integrated Environmental Management: From Theory to Practise*, page 6.

management under the RMA will invariably call for integrating and balancing divergent values of resources.

Sections 30, 31 and 59 establish the means for institutional and functional integration by requiring regions and districts to achieve integrated management of natural and physical resources.²⁴

The regional policy statement is described as the overall integrating framework that allows communities to define sustainable management in their own terms.

The RMA states:

*The purpose of a regional policy statement is to achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region.*²⁵

Clearly, integrated management is at the very core of the RMA. It is a means and an ends that synthesizes science and policy. But because the RMA does not define what is precisely meant by “integrated management,” it is the job of regions and TLAs to define IEM through the trials and errors of implementation.

Regional policy statements are supposed to help by providing an overall framework for implementation. The Act requires that RPSs provide:

an overview of the resource management issues of the region and the policies and methods to achieve integrated management of the natural and physical resources of the whole region.

The RMA also provides mechanisms that enable integrated management. Some of the mechanisms are: transfer of powers, delegation of functions, an integrated planning hierarchy for making national and local policies consistent and for coordinating RMA plans with other plans (e.g., iwi management plans and annual plans), combined planning, cross boundary matters, consultation, assessment of environmental effects, notification, pre-hearing mediation, joint hearings, combined hearings and coordinating consent processes.

In sum, the RMA provides for integration of the biophysical environment. It provides for integration of institutional responses. It recognises the existence of various and competing resource values and provides for a public process to establish community objectives and goals. In nearly every function, duty and power conferred on local government there is an opportunity for integration. Why should policy and implementing authorities pursue IEM as a strategy for RMA implementation? What are the benefits?

Benefits of Integrated Environmental Management

²⁴ Resource Management Act 1991, s30(1)(a) and s31(a)

Limited evaluative research on integrated environmental management exists so I was not able to establish an empirical basis to the discussion of IEM benefits. With more time, one could quantify the costs associated with non-integrated management -- for example, the costs of functional overlaps, inefficiencies, duplicative permit programmes, cross-media and cross-border pollution problems -- and assume that those costs would be avoided by integrating environmental management.

We can assume certain economic and environmental benefits of IEM including:

- cost savings from one-stop permit shopping;
- government streamlining and greater administrative efficiency;
- greater environmental protection;
- better quality information and science from economies of scale and coordination;
- better community participation and thus enhanced accountability;
- greater attention to Maori values
- recognition that economic, environmental and social dimensions deserve attention in decision making;
- better ecosystem protection;
- time savings and cost savings from multi-media monitoring and synchronizing reporting cycles;
- improved customer service delivery;
- better understanding of resource systems promoting greater protection over a longer time period.²⁶

THE PRACTICE

The preceding sections contemplated integrated environmental management from a theoretical perspective. It was argued that integrated environmental management is a management approach that treats the environment comprehensively, and accordingly allows greater environmental protection with greater economic efficiency and enhanced accountability. The discussion turns now from the theoretical to the practical. Is there evidence of integration? Is it resulting in better outcomes than would otherwise have been achieved?

Case study methods

I visited three councils to observe IEM in practice and investigate drivers and barriers to integration. The study locations were selected to ensure variability (size of council, location, types of pressures, type of council) and whether there were plans and programmes in place to investigate. A comparison of the three sites provided the basis for general recommendations to improve the practice of integrated environmental management under the RMA.

Planning and policy documents were reviewed and meetings were held with regional and district staff/managers to determine if and how IEM is understood by RMA implementers. Statutory and non-statutory implementation programmes were investigated; monitoring protocol and reports were reviewed; and additional meetings were held with a range of interested parties and stakeholders including farmers, councilors, environmental activists, business representatives, iwi representatives, central government and community groups.

What does evidence of integration look like? It includes such things as: a shared objective-setting processes; information collection and processing which improves the understanding of the biophysical environment; flow of information to other agencies and to the public; processes that balance competing values and uses of resources; processes to engage third parties, stakeholders, iwi, community groups; development and use of feedback mechanisms to incorporate monitoring data into policy process.

I looked for evidence of integration in regulatory and non-regulatory areas. The regulatory areas included regional policy statements, combined plans, joint hearings, transfers of authority, assessment of environmental effects, environmental data, pre-hearing negotiations, state of environment monitoring, granting of resource consents and related conditions and monitoring and enforcement protocol.

The non regulatory areas included: personnel management systems, organisational structure, advocacy and outreach, information management systems, communication methods within and between organisations, voluntary programmes, coordination with organisations such as district councils, Fish and Game, iwi, Department of Conservation, etc.

Table 1. Profile of Case Study Sites

	Taranaki Region	Auckland Region	Tasman District
Population	105,000	1,100,000	40,000
Operative planning and policy documents as of 6/97	RPS, Coastal Plan, Air Quality Plan, State of Env. Report, Plant Pest Mgmt, Animal Pest Mgmt, Oil Spill Contingency Plan, Land Transport Strategy	Proposed RPS, Proposed Sediment Control, Proposed Coastal, Proposed Passenger Transport, Proposed Animal Pest Mgmt, Proposed Plant Pest Mgmt, transitional regional plan, Proposed Farm Dairy Discharges	RPS, Moutere Water Mgmt Plan, Transitional Planning Documents, State of Env. Monitoring Strategy, Land Transport Strategy, Pest Mgmt Strategy, State of Env. Report
Location	west coast of North Island	northern North Island	northern South Island
Priorities	water quality from dairying (ring plain) and erosion (hill country)	urban growth mgmt, air quality, infrastructure, stormwater mgmt, transport, water quality, habitat loss, coastal ecosystem, energy and resource consumption, land contamination, amenity values and local communities	water allocation, spray drift from horticulture, nitrate contaminated groundwater, gravel extraction, smog, natural areas protection, visual effects of forestry, land disturbance, aquaculture, contaminated sites, competing land uses
Urban vs.Rural	Rural quality but 80% of residents live in urban areas	90% urban	mixed - teo2 relative large urban areas and 25 smaller residential communities
Districts	Stratford New Plymouth South Taranaki	Rodney District North Shore City Waitakere City Auckland City Manukau City Papakura City Franklin District	n/a unitary council

TARANAKI REGION

Profile

The Taranaki Regional Council (TRC) is recognised as a leader in RMA planning and implementation. The region's policy statement, which became operative in September 1994, received a merit award from the New Zealand Resource Management Law Association and the State of the Environment Report, released in mid-1996, earned a congratulatory visit from Minister for the Environment Simon Upton

The dominant feature of the Taranaki region is Mt Taranaki or Mt. Egmont, an active volcano that at 8620 feet towers over the Taranaki region of the North Island. The mountain features in Taranaki's past, present and future with god-like authority. According to Maori legend, the mountain god Taranaki did not always reside where he stands today. The story goes that Taranaki lived further north, alongside of the other mountain gods Tongariro, Ruapehu and Ngauruhoe, in the center of the North Island. All four of the mountain gods were in love with the nearby mountain Pihanga. Taranaki made advances to Pihanga, which triggered a mighty conflict between Ruapehu and Taranaki and caused an enormous and angry eruption. When the ashes and darkness disappeared and peace finally came, Ruapehu was standing close to Pihanga, while, Taranaki, torn with grief, had lifted himself by the roots and fled westward toward the Tasman Sea, carving the bed of the Whanganui River in his tracks. Overnight as he rested, the Pouakai Range grew a spur that trapped him in the spot where he stands today.²⁷

The Taranaki region covers 723,610 hectares, 3% of the New Zealand total land area. Roughly 80% of the region's 105,000 residents live in urban areas. The largest town is New Plymouth with a population of 49,000. The second largest town is Hawera with 11,000 residents.

Agriculture (primarily dairy farming) dominates the regional economy. Dairying continues to expand and intensify as the international wool and meat markets decline. Over the past 20 years, dairy stock has increased by 16%.²⁸ Many of the small towns in the region that depended on dairy processing have not recovered from a dramatic amalgamation of the industry which shrank the number of processing facilities from 26, in 1975, to one in 1997. The Kiwi Cooperative Dairies plant at Whareroa is now the largest dairy processing plant in the Southern Hemisphere.

Agro-forestry is growing as grazing land in the steep eastern hill country is converted to plantation forestry. The conversion from pasture to plantation is seen throughout New Zealand at a rate of 80,000 hectares per year. The fast growing, wind resistant *Pinus radiata* is the most common crop. Oil and gas production are also found in the region.

²⁷In 1986, the New Zealand Geographic Board officially renamed Mt. Egmont, Mt Taranaki or Mt. Egmont.

Resource Management in Taranaki

Environmental quality is generally good in Taranaki, but 100 plus years of pastoral farming and urban development have contributed to the loss of riparian vegetation, hill country erosion, flooding, and destruction of natural habitat.

The greatest environmental concerns to the region are erosion and sedimentation (in the hill country) and nitrogen-contaminated run-off (in the ring plain). The churning Tasman Sea and abundant rainfall on Mt. Taranaki provide enormous mixing capacity for the region's water resources, though water quality tends to deteriorate in the mid- and lower catchments as a direct consequence of intensive pastoral farming. Groundwater supply is not a concern, as recharge rates surpass abstraction; neither is groundwater quality a concern. The first measurements were taken in the late 1970s and a major study was undertaken in the mid 1980s. Some nitrate contamination in shallow groundwater was discovered when measurements were again taken in 1996. Ambient air quality is very high, but the number of air-related complaints has risen in the recent past largely as a result of more active air quality management regime adopted by the council since introduction of the RMA in 1991. Few high quality wetlands remain in the region due to extensive land clearance and drainage for agriculture. Egmont National Park contributes significantly to the 30% of the land in Taranaki which remains as native bush.

The Taranaki Regional Council (TRC) has an operative regional policy statement, an operative air quality plan, and an operative regional coastal plan. The council is in the process of developing a freshwater plan which will include discharges to land and water, taking and use of water, river and lake beds. The council expects to release a draft regional soils plan in 1998. TRC published a state of the environment report in 1996. The region has developed additional plans and strategies under other statutory mandates including its Marine Oil Spill Response Plan, Plant and the Animal Pest Management Strategies and the regional Land Transport Strategy.

TRC's environmental management agenda is driven by the desire for sustainable management outcomes with maximum economic efficiency. To that end, planning is considered by the region as a worthwhile exercise because it allows the permitting of groups with similar activities thus avoiding the costs associated with case by case consent processing. The region's organisational culture is infused with a "no frills" attitude toward efficiency that focuses on getting the job done without fanfare or delay. The regional council has earned trust and respect from rate payers who appreciate the consistency, accessibility and structure of the council.

The 100 person staff is structured in three departments: resource management, operations and corporate services with specialist sections in each department including consents, planning, enforcement, etc.

Findings

1. How is IEM understood?

TRC defines integrated management in the regional policy statement as “managing (i.e., identifying, prioritizing, and acting on) issues arising from the use, development, and protection of natural and physical resources as a whole.” The regional policy statement recognises several dimensions of integration including biophysical, inter and intra-organisational, and cultural (with respect to Maori values).

Integration is discussed by top management as a way to bring together environmental, economic and social objectives, but it is operationalised primarily in terms of cost minimizing measures. Most important to the achievement of integration, according to TRC, is coordination between management agencies and improving traditional regional functions to maximise economic efficiency (that is, doing what has always been done but with greater speed and efficiency). TRC is diligent about clarifying boundaries between management agencies to produce good and effective plans. The region also equates integration with “one stop shopping” and the prevention of cross media transfers.

2. Is there evidence that integration is taking place?

2a. In planning

The TRC regional policy statement says that:

In the natural world, everything is connected to everything else. However, in an effort to provide for understanding and ease of access to information, the ‘environment’ as defined in the policy statement, has been compartmentalised into boxes with artificial boundaries. These boxes have been entitled: land, water, air, the coastal environment, energy and resource management systems and processes.

The regional policy statement reflects a deep appreciation and understanding of the concept of integrated environmental management. For example, the RPS discusses the dimensions of integration as: integration across resource systems, integration with social and economic objectives, integration across time scales, integration across management agencies, integration within management agencies, integration of methods, integration among cultures including tangata whenua²⁹.

Other ways in which TRC integrates planning include: (1) cross-referencing sections within RPS; (2) cross-referencing RMA requirements and other relevant legislation; (3) identifying possible actions and methods for territorial authorities to adopt; (4) clarifying boundaries between the regional and district authorities; and (5) trying to make the RPS as user friendly as possible.

The result is a seamlessly stitched and well integrated policy statement. Some issues are identified as requiring integration such as Issue 3.3.6, “water quality degradation resulting from diffuse source run-off.” The corresponding objective illustrates that the writer of the Taranaki RPS understood integration in biophysical and values-terms. For example, the objective that follows Issue 3.3.6 is “to maintain and enhance the quality of water resources of Taranaki for water supply purposes, contact, recreation, shellfish gathering for human consumption, aesthetic purposes, cultural purposes and aquatic ecosystems by avoiding, remedying...contaminants from land.”

2b. In implementation

There is evidence of integration in many facets of RMA implementation in the TRC. First, with a long farming history, it is no surprise the region has experience managing land use impacts on water quality. This experience has engendered a familiarity with the idea of sustainable land management. Second, rather than relying heavily on rules, the region utilizes a range of policy mechanisms, especially advocacy and outreach, to address resource issues. Third, since the late 1960s TRC and its predecessors have dedicated resources for monitoring and retaining a qualified scientific and technical staff. The region values cooperation with its territorial local authorities and other management agencies and organisations such as Department of Conservation, QEII National Trust and Crown Research Institutes.

Some examples of integrated environmental management in Taranaki are:

Riparian planting

The council offers free advice to landowners about retiring land along the banks of rivers and streams, and will develop individual riparian plans jointly with landowners. Riparian margins constitute the area where aquatic and terrestrial ecosystems interact. Protecting these margins results in water quality improvements, reduction in water temperatures (promoting instream biodiversity), minimization of stream bank erosion, reduction in flood impact, habitat enhancement, aesthetic enhancement and minimization of stock loss. To date, 90 ring plain farmers have opted into this programme.

Comprehensive farm plans (formerly sustainable land management plans)

TRC develops plans to help farmers identify the most beneficial land uses over the entire farm. Where appropriate, the council may develop an agroforestry plan to facilitate the conversion from animal farming to tree farming. Approximately 10% of hill country farmers have opted into Sustainable Land Management Plans. Conservation plans are also prepared to deal with site-specific problems stabilizing sand dunes or localized erosion problems.

Land use mapping

Land Use Capability (LUC) is a mapping technique that assesses the suitability of land for sustained agricultural production. LUC inputs physical parameters such as rock type and soil type, slope, erosion and vegetation cover to identify land management practices that minimise adverse environmental effects.

Pre-hearing meetings

The region has a 90% success rate at resolving consent matters thereby avoiding a formal hearing.

Resource Consents

Prior to local government reorganisation, air matters were managed by the central government's Health Department or by local territorial authorities and water matters were managed by catchment commissions. With all resource matters now under the auspices of TRC, the region has closed the gap on cross-media transfers. For example, TRC placed conditions on the resource consent for McKechnies metal manufacturing facility that not only control effects on air quality, but also control effects associated with deposition from air to soil. Under the old, Clean Air Act issued-license, the plant was permitted to discharge at a level that neglected this cross-media problem.

Joint Hearings

TRC has conducted 3 joint hearings (two with New Plymouth District and one with Stratford District).

2c. In monitoring

The TRC 1996 State of Environment Report was New Zealand's first regional state of environment report. The region has budgeted in its 1997-98 annual plan to continue to develop state of environment monitoring.

Each year, TRC issues 120 monitoring reports for specific facilities or industries.

3. What makes it work?

Smart people

Taranaki Regional Council is successful in part because of a stalwart team of people who combined intellectual vigor, an unshakable commitment to work and a flawless ability to anticipate opportunity and to get the job done.

Good communication

TRC deploys cross media teams for plan preparation. Within TRC, morning and afternoon tea is faithfully attended which is an effective and informal means to assure informal communication. The entire staff of 100 convenes in the canteen twice daily for 15 minutes. People talk and people like each other. The regional council has also worked diligently to establish trust and rapport with Taranaki residents, especially the farm community.

Scale

The region is small enough to draw on local knowledge about places and resources. The nature and distribution of known environmental problems allows attention to be focused on a few manageable problems -- e.g., land impacts on water quality. As of June 1997 there were approximately 2,600 dairy farms in Taranaki. Apart from some large point sources (large industries) and sheep and beef farms which are concentrated in the hill country, TRC can clearly focus on dairy farming. Furthermore, the amalgamation of dairy processing greatly

reduced the overall monitoring burden in the region, making the targets even more easily visible.

Also, because there are only three districts in the Taranaki region, the regional staff can realistically participate in district planning efforts and seem to add value to the process

Organizational culture

The TRC organisational culture favours efficiency and results over all else; wherever the region has defined goals, it achieves them proficiently. The region has adopted a decision guide for consent notification that streamlines administrative procedures. Minor activities are essentially exempted from notification requirements, thus further reducing the cost of consent processing.

Resources

Following enactment of the Port Companies Act of 1988 and local government reorganisation in 1989, the TRC employed a harbour master on contract to undertake the council's navigational safety responsibilities. This decision resulted in significant savings for the council. TRC retained 100% ownership of the port company, Westgate Transport Ltd., from which a steady revenue stream supplies 25% of the TRC operating budget.

Pre-existing conditions

The establishment of large scale energy projects in the Taranaki region in the 1980s brought auxiliary benefits to the region such as central government money to conduct environmental assessment and monitoring. Technical capacity was enhanced at the regional level at that time. To the credit of the early technicians and managers, the capacity and support for good science and monitoring has remained.

A user pays system was operative in Taranaki under the former catchment commission so resource users are accustomed to paying for monitoring costs, etc.

Common ground

The presence of Mount Taranaki or Mt. Egmont is a powerful solidifier of community values and a great teacher of environmental awareness. The love of the Mountain is something that everyone in the region shares.

4) What are the barriers to integration?

Inadequate information

Taranaki is starting from a more informed position than most of the rest of the country because of the strong scientific and technical tradition in the region. Still, TRC needs better baseline information about the state of the environment, especially groundwater, hazardous substances, and epidemiological data. There is insufficient data available to conduct integrated impact assessments.

Lack of advocacy of an environmental vision and leadership

The single matter the region openly recognises as a problem is hill country erosion. While the region is a demonstrated leader in matters of efficiency and customer service delivery, TRC

has failed to become a leader in advocating an environmental vision. One Taranaki manager was genuinely surprised by the possibility that IEM was about superior environmental performance (in addition to economic efficiency). The TRC rewards production time not production quality.

Resistance to change

The management style is one which de-emphasizes change. Wherever possible, the region retained what it could from pre-RMA days. The RMA is sometimes referred to as the “Soil and Water Conservation Act on steroids, ‘It is the same thing but a little tighter, with a little more bite.’” The region has failed to embrace a precautionary principle. The Taranaki region is sparsely populated, has high rainfall, and heavy winds. Prevention has never been a priority and the effects-basis to the RMA has been used to justify the continuation of “dilution as the solution.”

The citizenry of the region is relatively homogenous and traditional. They want to trust that the government will take care of problems and will inform them when they need to be informed. But, the regional council may be underestimating the interest and capability of its citizens to actively shape their future, as opposed to being shaped by the movement of the market. There are win-win opportunities available to this region in tourism and sustainable forestry, but the people of Taranaki have not yet expressed a vision of their future.

Process for coordination between management agencies

The issue of protecting outstanding and regionally significant natural features and landscapes illustrates how difficult it is to reconcile competing resource values and how important it is for management agencies to work together from the start.

When TRC developed its coastal plan, the council identified certain estuaries as “regionally significant” based on a set of ecological parameters, with consideration of scenic, recreational and cultural values. The New Plymouth District, in preparing landscape provisions for the district plan, used a different set of criteria for identifying significant features. The district looked at visual effects/aesthetics for the protection of river mouths. The landscape focus group valued their private property first and foremost. Department of Conservation employed a fourth set of criteria based on conservation values to develop a conservation management strategy for the area. The Fish and Game Council valued the resource for recreational fishing. Iwi attached historical value to cave sites and other features in the area. One can count at least 7 different sets of values that influence management of this resource.

Conclusions -- Taranaki

The Taranaki Regional Council has a no-frills organisational culture that values time at a premium, focuses on goals and inspires a pleasant, professional and efficient work environment. Institutional memory is concentrated in senior management which has retained from the pre-RMA systems all that was useful and abandoned all that became obsolete after the reform. With an affirmative vision of Taranaki’s future and a more informed understanding of where they are starting from, the Taranaki region could harness its extraordinary motivation and know-how to achieve integrated environmental management. For the time being, however, TRC resource management decisions resemble cost minimization exercises more than an active pursuit of win-win opportunities for the regional environment and economy. The region believes the RMA has triggered a few new things including statutory planning functions and provision of tools to conduct policy development, discretion for

choosing to notify consents or not, and capability to approach pollution as a multi-media problem.

AUCKLAND REGION

Profile

With a population of 1.1 million, the Auckland region is the largest region in New Zealand. Auckland City, part of the region, is also home to more than 100,000 Maori and 100,000 Pacific Islanders, making it the largest Polynesian city in the world.

The Auckland region covers 2% of New Zealand's land area. There are 7 territorial local authorities: Auckland, Manukau, North Shore and Waitakere cities and Papakura, Rodney and Franklin districts.

Thirty-two percent of the nation's workforce and 38% of the business enterprises reside in the Auckland region. The economic indicators such as retail trade, building activity and employment point to continued growth well into the next century. Many of the physical resources in the Auckland region, such as utilities, factories, commercial centers and tourism facilities, are arguably of national importance. Rural resources are also an important contributor to the national economy, with the Franklin District alone producing approximately 40% of New Zealand's vegetables and fresh milk supply.

Auckland's character is shaped by an extensive port system, low density suburbs and outlying productive rural areas. Urban expansion was encouraged from the 1950s with construction of the motorway, the provision of bulk utilities and drainage services to greater Auckland, and a government housing policy which encouraged migration to suburbs. These conditions were attractive to would-be residents in search of space and privacy with all the conveniences of a thriving metropolitan area.

Cropping up in Auckland's cityscape is a rich and varied natural world. There are 50 volcanic cones and craters in the area, forests in the western Waitakere Ranges, and a coastal environment comprise 70% of the region. The coast provides scenic, cultural, recreational and commercial value to Aucklanders and visitors to the area.

Resource Management in Auckland

The key challenge for the Auckland region is accommodating population and economic growth with the requisite homes, jobs, transportation, infrastructure, and recreation while minimizing environmental impacts and preserving the quality of life that attracts so many people to the area.

One hundred and fifty years of human settlement and expansion have taken a toll on the region's cultural and natural resources. There has been extensive loss of Maori ancestral taonga -- within metropolitan Auckland -- over 50% of the pa sites have been modified or destroyed. Less than 30% of the indigenous terrestrial habitats remain and there has been a loss of fresh and saltwater wetlands and forests. Fragmentation of natural areas has

contributed to extinction and endangerment of plant and animal species and a loss of riparian and coastal margin vegetation.³⁰

Water quality in the coastal, harbour and estuarine areas is generally good apart from localized problems in urban estuaries and harbour areas. Contaminants from the land are transported quickly, by way of an extensive system of paved roads, to the Waitamata and Manakau harbours. Some of region's freshwater lakes are severely effected by run-off while others remain in good quality. Water quality of streams and rivers varies depending on the degree of vegetation removal, stock damage, and piping or channelization of the water courses. Combined sewage overflow, stormwater run-off and litter threaten many of the urban streams.

Water quantity is a potential problem due to: (1) a demand for surface and groundwater that equals or exceeds availability in parts of the region; (2) competition for abstractive uses continues.

The Auckland Regional Council uses ambient air quality criteria based on New Zealand Ministry for the Environment, UK Department of Environment Guidelines, and World Health Organisation air quality guidelines for Europe. The council has published a review of all ambient air quality monitoring results for the region between 1964 to 1995 and is currently compiling the 1996 and 1997 reports. According to this report, CO, caused primarily from mobile sources, is the most significant concern to the region. PM₁₀, caused primarily from domestic sources is also a major concern. NO₂, caused primarily by mobile sources, is a concern, especially due to the relatively large percentage of the Auckland population which suffers from asthma. The report found that other air quality indicators including TSP, SO₂ and Pb are on downward trends. Groundlevel ozone is not believed to be a problem although data from this year has not yet been analyzed.³¹

The region identifies its key resource issues as declining water quality (from sedimentation and stormwater run-off), declining air quality (from motor traffic), loss of natural and built heritage, infrastructure, loss of coastal ecosystem, soil erosion, land contamination, energy and resource consumption, impacts on amenity values and local communities.

The region has a proposed regional policy statement and has notified plans for coastal management, farm dairy discharges and sediment control. There are also several non-statutory RMA-related plans and plans developed under other legislation that relate broadly to resource management. These include the regional pest management strategies, regional land transport strategy, urban stormwater management project.

In addition to resource management, the ARC is responsible for transport planning and parks functions. The region spends 43.1% of its budget on transport planning, 16% on parks and 15% on environmental management.³²

³⁰ All figures are taken from the Auckland Proposed Regional Policy Statement

³¹ Auckland Regional Council, Auckland Ambient Air Quality: Monitoring Results for the Auckland Region 1964-1965, ARC Technical Publication No. 88, October 1997

The regional council staff numbers approximately 400 people. The structure of the organisation has been under reform since early 1997 and will be completed in early 1998. The reform is aimed at flattening the structure, pushing out responsibility and accountability and encouraging full integration across the organisation.

It must be noted that the observations of the Auckland Regional Council are somewhat problematic because, at the time of my visit, the region was undergoing substantial restructuring and change. Some of the observations reflect conditions which existed under the previous executive leadership.

Findings

1. How is IEM understood?

Senior managers understand IEM as a way of minimizing the cost of customer service delivery, associating IEM with institutional consolidation, coordination and one-stop shopping. ARC management believes that, because the environment is integrated and the RMA is an integrating framework, integration will occur by focusing on outcomes.

The science and technical staff understand the concept of integration in terms of biophysical matters, but they struggle to achieve integration in their work because some managers discourage “cross departmental” work in order to protect their territories and budgets.

2. Is there evidence that integration is taking place?

2a. In planning

Regional Policy Statement

There is evidence of integration in the Auckland Regional Policy Statement. The RPS identifies issues, organisations, and mechanisms that require integrated environmental management (e.g., joint hearings, transfers of authority and consultation and mediation). The RPS also notes the need to integrate with the Coastal Policy Statement, national policy statements, DoC conservation management strategies, iwi management plans, regional and district plans, and regional land transport strategy.

The general approach to resource management (RPS, section 1.10) outlines several elements that serve integration: precautionary principle, use of catchment-wide management plans, pollution prevention, statutory and nonstatutory submissions, advocacy and cooperation.

The RPS contemplates the integration of Maori and Pakeha values of resources. Policy 3.4.13 notes, “the ARC and TAs [territorial authorities] will enable the practical expression of kaitiakitanga by tangata whenua” through the following methods: “...identify opportunities to involve iwi in the management of ancestral taonga, including consideration of transfers of functions...”³³

The RPS recognises that “energy management is closely linked to, and in part determines, policies relating to urban form, transportation, waste management, air quality, and water quality.”³⁴ Over the past decade, Aucklanders have increased the number and distance of vehicle trips and have been using cars for a much higher proportion of these trips. The ARC recognises that traffic congestion not only visually impacts the quality of life, but it also contributes nearly 3 million tons of CO per year, causes noise pollution, and deteriorates water quality in the harbours and waterways.³⁵

2b. In implementation

Auckland region urban stormwater management project

The Auckland Regional Council and the seven territorial local authorities are developing a comprehensive 20-year strategy to protect the mauri of fresh and marine waters from stormwater run-off. Stormwater quality management is a good example of a resource matter that requires integrated management because, under the RMA, districts or cities control land use, maintain sewerage, and stormwater drainage while regions are responsible for water quality and the discharge of stormwater to natural water bodies.

Contaminated stormwater run-off is a significant threat to water quality. Stormwater is rainwater that collects on impervious surfaces such as roads, roofs, and parking lots and runs-off into streams, lakes, and coastal waters. It can cause flooding, channel erosion and contamination. Historically, the stormwater quality problem has not attracted attention from the public, even though it causes “the most widespread and ongoing degradation of the environment [in Auckland.]”³⁶ The Stormwater Management Strategy further exemplifies integrated environmental management because it deals not only with the technical merit of stormwater management methods, but it also addresses the feasibility of implementing stormwater management recommendations. For example, the strategy will assist the ARC and territorial local authorities with the development of asset management plans, catchment management plans, and financial strategies to increase the likelihood that the strategy is actually implemented.

Growth Forum

Another example of IEM in implementation is Auckland’s Growth Forum. The Auckland Regional Growth Strategy Forum is a joint effort by the ARC and the TLAs, in conjunction with stakeholders, interest groups, and Ministry for the Environment, to manage adverse environmental effects associated with growth -- Auckland region’s population is increasing annually by 25,000. The project has a budget of \$1,476,000 for strategy development including: urban monitoring and analysis, rural matters, intensification, natural and physical resources, consultation and communication, growth management techniques, social infrastructure, physical infrastructure, and economic development. The forum expects to complete a draft strategy by May 1998.³⁷

³⁴Auckland Regional Council, draft Regional Policy Statement, page 5-1

³⁵ Auckland Regional Council, draft Annual Plan 1997/98, page 51

³⁶ Auckland Regional Council, Draft Stormwater Strategy

Co-Management of regional parks

The Auckland Regional Council is supporting a trial of co-management of the Tawharanui Regional Park, located on the coast in the northeastern part of the region. The goal of the project is to look at how key stakeholders in parks can be included in the management process, and what level of collaboration in park management is appropriate, or feasible. One of the objectives is to engage local and regional communities in fundraising efforts to construct a "pest fence" that would create an ecological island on the peninsula. The council is currently investigating models of community involvement and will evaluate the effectiveness of the programme over time.

2c. In monitoring

The council talks about integrated monitoring but to date progress is only a paper exercise. The ARC is in the process of developing an integrated monitoring strategy which would satisfy the monitoring requirements of the RMA. Regional staff understand that the importance of solid environmental monitoring because "it closes the loop in the plan-do-monitor-review process." The draft monitoring strategy explains that "completion of the 'feedback loop' is dependent on the integration of the monitoring process from the primary stages of data collection through analysis and interpretation and back into policy development and review."³⁸

3. What makes it work?

Smart people

ARC has a number of natural resource scientists who, on a case by case basis, are striving to integrate environmental management in the region. There is also enormous scientific and technical capacity at the ARC, as it is the largest regional council.

Enlightened leadership

The new CEO is committed to conducting the work of the region in accordance with community values, which makes consultation an integral part of resource management. The council is also striving to focus on customer satisfaction and efficient service delivery.

4. What are the barriers?

Politics

Historically, there have been power struggles between the territorial local authorities and the regional council as well as within the regional council itself. While the RPS was conceived and written as an overall policy framework for achieving integrated management of Auckland's natural and physical resources, it may not be operationalised as such because of the political nature of the region. Some of the new councilors, elected after the RPS was prepared, oppose certain provisions in the document, such as the recognition of iwi and hapu as partners in resource management contained in section 3 of the proposed RPS.

One source from Huakina Development Trust (a management committee of 23 Waikato marae and Papakainga, and the Environmental Authority of the Tainui Maori Trust Board), explained:

We have been informed by senior council executives that this council [Auckland Regional Council] does not feel obligated or committed by the content of the RPS given that the current Council is not the elected council that prepared the document. In our experience this has been brought out in practice. For example, the Auckland RPS includes policy that commits the council to support and encourage tangata whenua initiatives such as Taiapure. At the commission of inquiry of the Manakau Taiapure hearing in June 1997, the ARC submission, while it did not categorically disapprove of Taiapure, it did nothing to support or encourage the initiative. The question arises, “if the regional Council is not committed to its own policy document how can it ever ensure that territorial authorities maintain consistency with regional policies?”

It should be noted that some current projects at the region (e.g., Growth Forum, Chief Executive’s Forum) indicate that the region has adopted a collaborative approach to environmental management. The council has also recently directed the Chief Executive to explore a partnership with Huakina.

Pre-existing conditions

The “environmental management” side of the ARC is the science side. Its organisational predecessor was the Auckland Water Board, largely a technical organisation that worked on water quality and soil conservation. The “strategic policy” side of ARC is the planning side. It focuses on urban growth and policy, as did its organisational predecessor -- the Auckland Regional Authority. In 1989, this science/policy split was re-institutionalised at the ARC and has made integration of science and policy difficult.

Lack of environmental vision

While senior leaders at the ARC are champions of accountability and efficiency in service delivery, they do not appear to embrace the delivery of superior environmental protection with a comparable degree of vigor.

Insufficient information

The consents database was developed before the RMA came into existence, therefore, certain RMA features that should be monitored cannot be tracked with the existing information systems. For example, compliance with statutory timeframes is not currently tracked and there is no record-keeping of the cumulative effects of permitted activities, making state of environment monitoring a critical check in RMA implementation. The region is in the process of developing an improved consents database.

Lack of clarity between regional, territorial and iwi boundaries

Achieving integration in resource management requires that the ARC work with several iwi and several territorial authorities. The boundaries of responsibility are not well established with respect to RMA responsibilities.

Conclusion – Auckland

The Auckland Regional Council is fortunate in having some of the most qualified staff in the country. These scientists, planners, and support personnel are capable of defining and operationalising integrated environmental management. The ARC also has enlightened leadership deeply committed to efficient customer service delivery. It is too early to say with confidence whether these factors will combine to deliver integrated environmental management as a matter of policy and practice for ARC. Some major barriers exist. It seems that politics strongly influences the direction of resource management in the Auckland region. Custom-fitting the RMA to urban environments is a particular challenge for the ARC. It is a test case for adaptable the effects-basis of the RMA to urban problems.

TASMAN DISTRICT

Profile

The Tasman district's 40,000 people are situated on 966,500 hectares in the northeast region of the South Island. There are two relatively large urban areas, Richmond and Motueka, and more than 25 smaller residential localities between Richmond and Golden Bay. There are 6 iwi within the Tasman District. Much of the land area is hilly or mountainous, and 53% of the land is in the conservation estate.³⁹

The economy is well diversified. Forestry, horticulture and fishing are the primary export areas. Dairying, wineries, and beef and sheep production also contribute to the economy. Three national parks -- Abel Tasman, Kahurangi and Nelson Lakes -- provide tourism and recreational opportunities as well, although, because the Tasman District is somewhat off the beaten track, tourism has not fully achieved its potential as a revenue generator for the region.

The Tasman district is a popular spot for retirees, young families and lifestylers; and, as "country living" gains prominence, new cottage industries, such as pottery, are becoming viable. At the same time, there is an intensifying competition over land use between rural residential and primary farm production. Some commercial users of this valued land argue that productive soils are of national importance and should be preserved for food supply. The Minister for the Environment contends, however, that prime farmland need not be protected for production and that residential development is a sustainable use of land.

Resource Management in Tasman District

The Tasman District Council (TDC) is a unitary authority that was created out of the amalgamation of four district councils: Motueka, Waimea, Richmond and Golden Bay, and in 1992, the disestablishment of the Nelson Marlborough Regional Council. As a unitary authority, TDC has both regional and district duties, powers and functions under the RMA.

The resource management issues in Tasman district are diverse. The district administrators perceive the pressing problems as water allocation, spray drift from horticulture, nitrate-contaminated ground water, gravel extraction, a growing smog problem, protection of natural areas, visual effects of forest harvesting, land disturbance, aquaculture in Golden Bay, and contaminated sites. TDC is home to one of the largest contaminated sites in New Zealand -- the former Fruitgrowers Chemical Company site at Mapua.

The Tasman District Council Regional Policy Statement was notified in July 1994. TDC is in the process of developing a Tasman Resource Management Plan (TRMP) which combines the district plan, the regional coastal plan and regional plans. The first sections address land use and coastal management. Later chapters will be developed for rivers and lakes, water, and discharges. The combined TRMP is a mix of old and new policies. It builds largely on preexisting district schemes for Waimea, Motueka and Richmond, water management plans and an old land plan. But, with the TRMP, the district is committed to investigating a wide

range of policy options to manage regional and coastal resource issues.⁴⁰ The district has an approved Land Transport Strategy (combined with Nelson City) for the management of roads and roading. It is TDC's intention to review the strategy once the national government clarifies the national strategy.

TDC has 140 staff members divided into the following departments: corporate services, engineering, community services and environment and planning.

Findings

1. How is IEM understood?

Council management believes integrated environmental management is about improving communication, coordination, and efficiency of traditional council functions (i.e., consent processing). There does not appear to be clear understanding of integrated environmental management as way of treating the environment comprehensively in biophysical terms. The priorities of senior officers are customer service, infrastructure, staff training, and annual planning. Staff members (who were with regional councils prior to amalgamation) are concerned with the substance resource management which reflects their understanding of the environment as a complex system.

2. Is there evidence that IEM is happening?

2a. In planning

Both the Tasman Regional Policy Statement and the combined Resource Management Plan illustrate integration in planning. These documents refer to integration on several levels including biophysical, institutional and human values.

The RPS states that: "Our natural and physical environment, together with our local community, function as a single system."⁴¹ The RPS goes on to explain:

Integrated management seeks to

** manage the different effects of resource use activities together, and not separately or in a fragmented fashion*

** bring the resource management work of different organisations together in a coordinated and co-operative way, rather than allowing different approaches to issues to be taken in isolation from each other.⁴²*

The combined Tasman Resource Management Plan is one of three combined plans. To a certain extent, it exemplifies integration in planning by its very existence. Instead of preparing

⁴⁰ As of May 1996 the TDC had prepared more than 30 policy documents.

⁴¹ Tasman District Council, Proposed Regional Policy Statement, page 2

separate district, coastal and regional plans, the TDC opted to undertake one grand planning effort. Albeit cumbersome and time-consuming, the combined planning process increases the likelihood that integrated approaches will take place and superior outcomes will result. As background to the plan, the council developed policy papers for complex problems including “Coastal Margins: Settlement Patterns, Uses and Interactions with the Coastal Marine Area”, “Rural Cross-Boundary Effects Paper,” “Effects of Afforestation on Water Yield Policy Paper.” These important policy papers provide the conceptual basis for IEM in the Tasman district. Whether they find expression in implementation to achieve desired outcomes is a related question.

2b. In implementation

Committee structure

Joint committee meetings of engineering services and environment and planning committee. In the winter of 1997, TDC Engineering and Environmental committees met together for the first time, a small though important first step toward institutional integration.

Resource consents

TDC issues consents or licenses for RMA-related, building permits, sale of liquor license. Land use and subdivision consents are processed by one staff (former district staff), and water, coastal and discharge consents are processed by a separate staff (former regional staff). There is reasonable communication among the staff members, but there is not a streamlined or integrated consent process that was created to take advantage of a unitary organisation.

Innovative research

TDC is researching the effects of land use on water resources. One project looks at the effect of certain vegetation changes on groundwater recharge rates. Planting tall vegetation can intercept rainwater which evaporates from leaves before ever reaching the ground where it would ordinarily recharge groundwater water supply. Taking water for irrigation is a second example of how land use effects the water resource. TDC is taking account of these potential cross-media effects.

The TDC initiated an innovative Land Use Survey Aquifer Protection Zone for the Waimea Plains to assess the potential impact of changing land uses -- lifestyle blocks, horticulture and forestry -- on water quality. The survey compares past and present land uses to identify and prioritize threats in the aquifer recharge zones. On the basis of staff recommendations, the council may decide to initiate advocacy and awareness-raising on sustainable fertilizer application and land management.⁴³

2c. In monitoring

There is too little monitoring to assess the degree of integration.

3. What makes it work?

Unity

Unitary authorities have jurisdictional and legislative unity. They have greater flexibility and discretion than regional councils with respect to levying rates and resolving conflicts internally. There is a perceived advantage of housing district-type and regional-type functions under the same roof. The benefits are due mostly to ease of communication and cross-fertilisation of ideas. Good communication is not unique to unitary authorities but it does come easier than it does where multiple organisations are involved, such as with regional and district councils.

Smart people

Good communication within the organisation helps the staff and managers think broadly about their work. In particular there is important research and policy development underway for complex resource problems. The political leadership is not “sold” on much of the research agenda, so the good science is not certain to be applied or continually funded.

Understanding the vision behind the RMA

One senior manager at TDC was instrumental in the RMLR and drafting of the RMA. Overall staff and managers at the TDC seem to understand well the purpose of the Act and their roles and responsibilities under it.

4. What are the barriers?

Pre-existing conditions

Creating the Tasman District Council as a unitary authority was a two step process. First four districts were amalgamated. Then, following the split of the Nelson Marlborough Regional Council, the Tasman District assumed regional responsibilities. So, not only has the TDC adopted policies from its predecessors, it has also inherited the pre-existing physical infrastructure, drainage plans, roads and roading.

Organizational structure

In general, staff and managers with a good understanding of resource management are less visible and less influential in the TDC organisation than those who came from a district background. Regional functions appear to have been an add-on rather than a thoughtful integration. Consequently, in battles over asset management versus environmental outcomes, asset management wins. One senior manager explained, “there is an in-house tension between the engineers who want to go on building things and the resource consent types who ‘stuff up progress.’”

Lack of resources

One would expect the rate base for a unitary authority to equal rates for regional services plus rates for district service minus whatever economies of scale or efficiency gains are achieved by virtue of integrating organisations. This equation is not so in Tasman, where according to the CEO there are “double the complexities of a regional council and double the complexities of a district council.” It appears that resource management issues (i.e.. what used to be regional-

type functions) are neglected most often because they do not pay for themselves. Monitoring, in particular, is an expense whose environmental dividend is invisible to the councilors. Unlike Taranaki which has a strong history of cost sharing programmes, it will take time for Tasman resource users to accept user-pays arrangements.

Split between Nelson City Council and Tasman District Council

The Mayors of Nelson and Tasman agree that the public rather than the councils should decide if and when to amalgamate the two unitary authorities that share air space, the coast, roads and infrastructure and so on. A regional poll conducted in mid-1997 found strong and consistent support for amalgamation among Nelson residents, in contrast to Tasman where support overall was 32%. Support fell in Tasman in the more rural areas.

Conclusion – Tasman District

In general, the Tasman District Council is aware that integrated environmental management is a means toward achieving sustainable management. There is evidence that the council is thinking about integration, but the organisational structure impedes integration. Pre-existing conditions within regional and district functions were carried over following the amalgamation. The slate was never cleaned. The benefit of unifying asset management, environmental management and regulatory delivery are not yet evident but due to good communication and smart teamwork, the TDC should find its way forward.

PART III. GETTING FROM HERE TO THERE

What have we learned from the experience of three management authorities? The findings will be discussed as answers to the following questions:

1. Is integrated environmental management understood?
2. Is integrated environmental management happening?
3. What factors encourage integration?
4. What are the barriers?
5. What should we do about it?

1. Is integrated environmental management understood?

Integrated environmental management is a fitting ethic in the post-reform New Zealand public sector because of its versatility and ability to deliver multiple policy objectives: environmental protection, economic efficiency and public accountability. However, RMA practitioners do not understand its meaning or applicability enough to derive the benefits of an integrated approach. Local and regional officers and councilors associate IEM with economic efficiency, and in particular, effects on ratepayers. “One stop shopping” for resource consents is the most commonly cited example of integration in action and it is described as a cost saving measure rather than an example of comprehensive environmental protection. This overly narrow understanding of integrated environmental management is reinforced by a system of accountabilities (put in place by state sector and local government reform) that pays more attention to efficiency and legal compliance than it does about the quality of environmental outcomes.

Mid-level managers understand of the concept of IEM and its many dimensions and they are familiar with the limitations of the fragmented pre-RMA framework (many of them even worked on the Resource Management Law Review). Yet, they are not inspired to pursue IEM as their own management approach. They dismiss IEM as “puffery” and academic and fail to see how IEM can help them with what they define as their principal concern: compliance with the legal requirements under the RMA. They focus on protecting their respective budgets and have become risk averse. Some discourage or prohibit interdepartmental work if it consumes staff time. Their literal and narrow interpretation of RMA requirements leaves little room for flexibility, innovation or policy entrepreneurship. They cannot be blamed. They do their jobs well, but their value, creativity and insight has not yet been tapped. Again, we must look at the system of accountabilities to understand this behaviour.

Staffers seem to appreciate that integrated environmental management is a delivery system for superior environmental outcomes with greater economic and social benefits. They are keenly aware that resource management needs to be better integrated. They have the expertise and willingness to develop integrated approaches but they are rarely called on to do so and are not empowered to break away from local traditions. Institutional memory is highly concentrated in a few senior people and the newer staff are not sufficiently experienced to navigate the degree of change that is needed.

There is a growing gap between the RMA implementers in the regions and the national policy hub in Wellington. While the Wellingtonians and academics publish articles and develop models of integrated environmental management, they speak in terms that are not meaningful for practitioners who are involved too little and too late for learning to occur. They fail to see the potential value of empowering and engaging their fellow resource managers in the regions and districts.

One observation is that IEM is easier when outcomes are clearly articulated because “what” and “who” needs to be integrated is situation-dependent. For instance, the issues that dominate Taranaki’s resource agenda are different from the growth management and urban run-off issues in Auckland. When community-defined outcomes provide a starting point, integrating resource management is more easily grasped as a means or an approach. But without well-defined outcomes, the notion of IEM is daunting, even threatening, to the resource manager who is unaccustomed to looking across borders, sectors, or disciplines. Rather than perceiving integrated environmental management as the *de facto* opposite of the “way everything used to be done,” IEM should be perceived as promising means for achieving well defined policy outcomes.

The concept of integrated environmental management must be de-mystified. This raises a curious question: can we approach integration incrementally? Indeed, many would argue that incrementalism was one of the principal problems with pre-RMA resource policy and management. I submit that moving incrementally toward sustainability is pragmatic and feasible and the RMA is an appropriate vehicle. Good practice under the RMA can guide New Zealand toward the goal of sustainable management. Ultimately the RMA, alone, may not be capable of making the necessary macro-changes to achieve sustainability -- that is, the transformation of institutions and the economy -- but the RMA is a framework for beginning to reconcile conservation and development.

I am not the first to suggest that good environmental policy and integrated environmental policy should be synonymous. Recall that in 1963, Lynton K. Caldwell suggested for the first time that good environmental policy would necessarily be integrative. He argued that a proper approach to environmental policy is comprehensive and would account for the interconnectedness of pollution, ecology, recreation, population, energy, natural areas preservation, urbanization, resource depletion, and so on. He posited that:

a policy focus on environment in its fullest practicable sense would make more likely the consideration of all the major elements relevant to an environment-affecting decision. Whatever content is ascribed to the adjective “good,” it becomes daily more evident that public administration of the environment will not be “good” if it fails to deal with environmental problems in comprehensive terms.⁴⁴

2. Is integrated environmental management happening?

The “evidence” described below should be treated anecdotally. It is based on impressions.

2a. Evidence of integration in planning

Regional policy statement (RPS) are the policy hub with which all other plans must not be inconsistent. They provide the framework for integrating policy, implementation and monitoring. Accordingly, one would expect to see several facets of integrated environmental management in these chief documents: a description of desired environmental outcomes which reflect community values, integration of Maori and Pakeha values, a discussion of resource issues based on a comprehensive inventory of all natural and physical resources, provisions for integrated monitoring, recognition and reconciliation of all applicable codes of practice and relevant planning documents, etc.

Regional policy statements generally succeed at identifying complex resources that require integrated management approaches. RPSs recognise links in the environment. They cross-reference chapters within the RPS to bring a “multi-media” dimension to the plan. Related statutes and management authorities (such as Department of Conservation and territorial local authorities) are also referenced. Some regional policy statements clarify the division of responsibility between regions and districts/cities with respect to natural hazards mitigation. Some discuss the precautionary principle, the need for incorporating Maori values, and the importance of balancing conservation and development interests.

Plans are mostly developed by the planners, who have little to do with technical staff. On occasion, multi-disciplinary teams are deployed to develop resource plans but, in general, regional policy statements were developed by a small number of internal planning staff who, in order to meet ambitious statutory timeframes, did not have time for extensive internal or external consultation.

Some iwi are concerned that the course of RMA planning to date has set them back in their effort to achieve sovereignty over Maori resources. During planning processes, regional councils raise issues of importance to Maori. In keeping with tight statutory timeframes, regional councils attempt to quickly resolve these issues. Frequently, iwi do not have the experience or capacity to participate in planning processes or understand the longer-term implications policies they may agree to. When decisions are made they are written into then year documents. So, in the end, iwi may have agreed to a binding decision that does more harm than good.

Greg Vossler, a planner from Palmerston North, argues that mandatory strategic planning would facilitate more coordinated resource planning than is currently occurring. He writes that: “Although the preparation of strategic plans is not mandatory, the number of authorities cognizant of the need to apply an integrated approach to policy information, and of the pivotal role that strategic planning plays at attaining the effective integration of its somewhat disparate planning endeavors, is certainly on the increase.”⁴⁵ Vossler claims that

absent a mechanism to integrate short-term financial planning requirements under the Local Government Act, with longer-term resource management requirements of the Resource Management Act, an integrated policy framework “may be nothing more than illusory.”⁴⁶

While there is evidence of integration in the planning apparatus, it is still too early to answer the most important questions: (1) do RMA plans and policies lead to superior environmental outcomes, efficiency and accountability?; and (2) do RMA plans and policies allow for feedback from monitoring and evaluation so that continuous improvement occurs?

2b. Evidence of integration in implementation

In 1996, the Ministry for the Environment conducted the first annual survey of local authorities. The indicators the Ministry measured to determine whether integration was occurring were joint hearings, combined plans, transfers of authority and submissions. Table 2 below summarizes some of the findings from the survey of local authorities to gauge progress among the 84 regional and local implementing authorities.

Table 2. Use of RMA-provided mechanisms for integration and participation

Indicator	Implementation Status
Transfers of Authority	Region to local: 12 Local to region: 3 Region to other: 2
Joint Hearings	Local: 80 out of 1734 total or (4.6%) Regional: 67 out of 290 total or (23.1%)
Combined Plans	3 out of 84
Consent application processed as notified	TLA: 1414 out of 29324 or (4.8%) Unitary: 1341 out of 8413 or (15.9%) Regional: 500 out of 2583 or (17.5%) Total: 3255 out of 40590 or (8%)
Percentage of notified consents that generated submissions	TLA: 79.7% Unitary: 82.6% Regional: 79.4%
Average number of resource consent applications in 1995-96 year	TLA: 599 Unitary: 838 Regional: 833
Number of resource consent applications involving use of pre-hearing meetings	TLA: 2.7% Unitary: 5.5% Regional: 40.5% Total (in 1995-96) 661 out of 43,845**

source: Annual survey of Local Authorities, Ministry for the Environment, December 1996

* These transfers were not conducted pursuant to section 33 and have since been reversed.

** 43,845 is the total volume of resource consent applications, notified and non-notified, received in the year 1995-96.

The Ministry concluded from this first survey data that regional and local authorities are making “limited use” of the mechanisms for achieving integrated environmental management provided by the RMA.

If we relied exclusively on these data we would not get a complete picture of integrated environmental management in the context of RMA implementation. With the survey of local authorities, MfE concentrated on a limited set of regulatory/statutory activities when, in fact, most integrated management happens as part of nonregulatory or voluntary activities. Also, the survey missed several key “mechanisms” provided by the Act for achieving integration such as assessments of environmental effects and the development of regional indicators.

Integrated environmental management does not appear to be an approach employed systematically by resource managers. However, there are many fine examples of it in resource consents, stakeholder processes, innovative research and methodologies, management approaches, and information flows within organisations. Taranaki has prepared multi-media resource consents that prevent the transfer of pollution from air to land or air to water. Auckland has made use of multi-stakeholder processes that bring interested parties to the table early in strategy development. Tasman District has launched innovative research programmes that consider the effects of land use changes on water resources so they can become more proactive as resource managers. Some research methods, such as a land use capability modeling and a macroinvertebrate index to assess the health of aquatic ecosystems, demonstrate a comprehensive treatment of the environment.

The choice of policy mechanisms can also indicate whether resource management is proceeding in an integrated fashion. The RMA provides for a range of policy instruments so that an appropriate response (i.e., regulatory or voluntary, regional or local or joint) is selected for a particular resource management issue so the scale of the solution matches the scale of the problem. Section 32 provides an analytical method for selecting the most appropriate and efficient method, policy or response. There is evidence that regions are experimenting with means other than rules to achieve their resource management objectives. Taranaki has used outreach and advocacy to work with the local farming community. Tasman is trying to develop a system of tradeable permits for water use. There is interest in expanding the use of awards programmes to make information-based policies more prominent. At an address to the Marlborough Rural Environmental Awards function Conservation Minister Nick Smith noted that persuasion and education are more likely to make a people conservation-minded than rules and regulations. Awards programmes use positive examples to demonstrate good practice rather than prohibit or punish bad practice.

Overall, integrated environmental management is happening in bits and pieces, but not systematically. There is a visible pattern where regulatory approaches, such as consents and plans, receive greater attention than longer-term or nonregulatory matters, such as environmental education and state of environment monitoring. In other words, items in the “regulatory basket” have force, while items in the nonregulatory basket generally do not. This pattern works against innovation or integration. Regulatory programmes are generally accompanied by an assessment of environmental effects, are measured against technical guidance, and are included in a document or a plan that has the effect of law. For this set of activities, monitoring and compliance provisions are developed and reporting and enforcement conditions are established.

Items in the “non-regulatory basket,” such as pest control, natural areas protection, estuary protection, pollution prevention and stormwater management, are generally more complicated but they currently receive less attention. It is in this second tier that we find most examples of integration. Nonregulatory programmes are unlikely to have numerical performance targets, do not have monitoring provisions and do not carry the force of law. They are not written into plans and may or may not be financed. Bringing attention to this set of issues that require attention, and the set of policy instruments available for application, requires leadership and vision on the part of resource managers. Those who find IEM on their “to do list” are likely to find benefits. It is my impression that this RMA territory is still seriously unexplored.

In summary, while the RMA framework is an integrated one, complex resource matters continue to escape detection because they often are: (1) subject to more than one law; (2) involve several management agencies; (3) cross-border or cross-media; or (4) not known about due to insufficient information. State of environment monitoring is an important “check” within the RMA framework. It should reveal where there are potential resource issues that need attention. But, to date, state of environment monitoring has not been a management priority because it consumes ratepayers’ money without delivering an immediate quantifiable return and it has a longer time horizon than election cycles.

2c. Evidence of integration in monitoring

Integrated monitoring is desirable for many reasons. It provides a clearer, more comprehensive picture of the state of the environment, allows trend analysis and predictive monitoring and provides a robust measure of progress toward sustainable management by accounting for not only the biophysical dimensions of integration, but also the socio-economic dimensions. It has been known for some time that baseline information about the state of the environment is needed. In the 1996 Environmental Performance Review of New Zealand, the OECD noted the need for better monitoring. A 1991 Lincoln University study stated that “a comprehensive inventory of environmental resources is needed for each planning region, along with a list of human activities that might compromise the quality and/or quantity of those resources.”⁴⁷

Is it happening? First we must determine what evidence of integrated monitoring looks like. Integrated monitoring has been defined as “the repeated measurement of a range of related environmental variables and indicators in the living and non-living compartments of the environment, for the purpose of studying large parts of the biosphere as a single system.”⁴⁸ Integrated monitoring should tell us about the “health” of the environment, the economy and the people by collecting data in a coordinated and consistent method. Monitoring data would flow within and between levels of government and management authorities. An integrated monitoring programme would contain feedback mechanisms so that monitoring information could be used to improve the future development and implementation of policies.

⁴⁷ Jonet Ward, page 11

⁴⁸ Yu A. Izrael and R.E. Munn, 1986, Monitoring the environment and renewable resources *in* Jonet Ward,

Additionally, integrated monitoring would draw on indigenous knowledge, especially given the value of Maori concepts of rahui and tapu. Rahui can be considered a local indicator that is used within Maori communities to manage a resource that requires conservation or replenishment such as fish, birds or berries. In this tradition, if the sustainability of the resource is in question then human access to the area is banned until such time as replenishment or regeneration occurs. Then by way of a kawa, the tapu is lifted and human access to the affected lake, river, forest, or other area where the resource is found, is again granted.⁴⁹

At the time of this research project, there was insufficient monitoring data available nationally and locally to assess environmental monitoring, let alone if monitoring is integrated. Several factors help explain the limited monitoring activity. First, regions and TLAs have focused on more immediate outputs with statutory timeframes -- policy statements, coastal and district plans. Second, there has been little political glory associated with state of environment monitoring -- at best it consumes ratepayer dollars to show that things are not as clean and green as everyone thought they were. Furthermore, unlike user fees for resource consents, the "user" in state of environment monitoring is harder to identify.⁵⁰ Finally, it has been difficult historically to coordinate monitoring activities within and between relevant management authorities and equally difficult to communicate information to the public.

Toward the end of this project in the Spring of 1997, there was a wave of activity that indicated increased attention to state of environment monitoring. The Ministry for the Environment released the first State of New Zealand's Environment Report which compiled for the first time environmental quality data. But, while this monumental effort constituted an essential first step, in the final analysis we still do not know what is the state of New Zealand's environment. The following excerpts illustrate:

Little national data exists on types of soil degradation other than erosion. Other types of degradation include nutrient depletion, acidification, loss of organic matter or carbon depletion, compaction, and contamination.

Given the pressures on our water, it is not surprising that the character of many of our waterways has been lost. Assessing the extent of these effects is difficult, because much of the data has been collected locally and is not in a form that can be readily combined to give national statistics.

New Zealand's biodiversity is still largely unknown.

A range of chemicals and other substances are monitored in air worldwide, but only a few have been monitored systematically in New Zealand. New Zealand's only systematic smog monitoring was 20 years ago in Auckland.⁵¹

⁴⁹ According to Marsden, Rahui is also imposed when a drowning and/or a death occurs as a way of showing respect, offering sympathy and allowing the cleansing power of the natural elements to work dissipate the tapu of the death.

⁵⁰ Regions and territorial local authorities can charge user fees for consent monitoring

Similarly at the local level there is a dearth of environmental quality data. As of October 1997, there were five regional state of environment reports. Overall, less than 10% of local authorities have reported a “baseline” knowledge of environmental quality.

One promising development is MfE’s Environmental Performance Indicators (EPI) programme. EPI is developing indicators for each of the broad goals specified in the Environment 2010 Strategy. EPI seeks to integrate the set of environmental indicators with social and economic measures. There is also work in progress to coordinate monitoring of several agencies and regional and local authorities. With money from the Sustainable Management Fund, the Ministry for the Environment, Department of Conservation and Environment Waikato are coordinating data needs and indicators for local and regional state of environment monitoring.

The development of monitoring strategies and national and regional indicators is promising. But an important test of the value of integrated monitoring strategies is whether they are implemented and improved over time. If the RMA passage is any indication, New Zealand is strong on planning and weak on implementation. The jury is still out.

The ultimate test of integrated monitoring is whether monitoring “data is used to create understanding and wisdom” that results in long-term attitude and behavior change; in other words, whether findings and lessons are communicated meaningfully to the public.⁵² There is a gap in functional responsibility for environmental education. On the one hand, those at the Ministry for the Environment perceive and present themselves as a “policy advisors,” a role strongly reinforced by the Environment Minister, and one which leaves no room for advocacy, outreach and education. It is assumed that regions and TLAs are closer to communities and therefore will do the educating. Ministry personnel could be valuable education resources. They are well informed, have access to state of the art ideas and methods and understand the RMA. Their value is under-realized because they cannot “tell the local authorities what to do.” While local authorities, in a similar vein, do not want “to be told what to do by MfE,” they could benefit from MfE assistance. MfE and local authorities must come to terms and develop a mutually beneficial partnership that closes the gap on environmental education and taps the strong points of their respective organisations.

3. What are the drivers of integrated environmental management?

The RMA legal framework drives integration in several ways including the Act's purpose and principles and decentralised implementation structure that lets local authorities develop resource management packages that satisfy local needs and values. The law unites science and policy. The RMA provides for integration of Maori and Pakeha values. It requires resource users to consider the impact of their decisions on future generations. It requires notification and consultation.

The RMA legal framework enables integration but the economic, political, social and technical conditions serve as incentives or disincentives. This section on drivers, therefore, analyses "implementation conditions" rather than legal structure. It should be noted that, while the Environment Court influences RMA implementation by interpreting the law, the role of the courts was beyond the scope of this paper. It is a prime topic for future work.

The implementation conditions that are present when integrated environmental management occurs are:

- **smart or creative individuals;**
- **enlightened leadership;**
- **pre-existing programmes or conditions that favour integration,;**
- **resources and capacity;**
- **clarity of purpose;**
- **good communication.**

Smart people

Behind everything going right there is a smart person -- someone who thinks broadly about her responsibilities, identifies links between issues, problems and possible solutions, and chooses to coordinate with other organisations, departments or management authorities. Smart people ask questions and take risks. Like Sir Ed driving a Ferguson to the South Pole, smart people are proactive and entrepreneurial. They work with available resources rather than wait for formal mechanisms or institutional perfection.

There is a tendency in New Zealand to solve problems through formal means, such as legislative reform or institutional restructuring. But, there is not a correct organisational structure to achieve integrated environmental management. No matter how resource issues are sliced, they will always be bigger than their organisational boundaries. The structure of institutions must proceed with people in mind. Organizations should be designed to deploy multi-disciplinary teams on specific tasks.

Enlightened leadership

Enlightened leaders are smart people who get ahead. They see people as valuable assets and manager their organisations to maximise communication, cooperation, flexibility and resiliency. They allow "tall poppies" to grow; in fact, they have been known to water them. Enlightened leaders know how to get the job done, with or without enough resources. They

articulate a vision, provide direction to their team and reward innovation. They look to make outputs produce the desired outcomes.

Pre-existing conditions

The legal framework of the RMA was carefully constructed.⁵³ Implementation of the law did not receive the same degree of attention. The implementing institutions were never actually rationalised. Local government was cut up and sown back together; the programmes, politics and personalities that existed before the RMA did not go away when the law came into effect. It is no surprise that some local government personnel see little new in the RMA. They have made it their job to salvage whatever could be saved from the former system. They say the “RMA is the emperor’s new clothes” or the “RMA is Soil and Water Act on steroids.” But pre-existing conditions also work to promote integration. In Taranaki, for example, a long history of user-pays makes it easy for the regional council to collect fees from resource users for consent monitoring. There is also a long history of farming which has introduced the community to a land use-water quality interface. Consequently, the region’s riparian protection programmes enjoy fine support and are successful.

Resources and capacity, clarity and direction

Resources and capacity do not cause integration to happen but where there is technical expertise and a reasonable budget, integrated approaches are more likely to be developed. Furthermore, when those resources are deployed with a clear direction in mind, or to achieve a particular task, then results occur with efficiency and quality. The RMA is unclear about some roles and responsibilities of regional and local government. Thus, it is up to managers to interpret and provide direction to the staff. One example of clarity and direction is Waitakere City’s vision of becoming an “Eco-City.” Strategic direction is gleaned from that vision. The Green Prints document establishes measurable goals and objectives for the community. Progress is measured against those milestones. Although there is not unanimous support for the Eco-City vision, Waitakere City offers a forum for a passionate debate where divergent views are given a platform.

Good communication

Good communication facilitates integrated environmental management. Where regional and local councils communicate, integration occurs. Although such a statement seems obvious, good communication can be surprisingly hard to find. The notification provision in the RMA is one formal mechanism for ensuring the flow of information to relevant management authorities and interested parties. Informal communication is equally important. It happens not because of what the law says but rather because of organisational culture and individual motivation.

The conditions discussed above are really not unique to good environmental management. They are the same factors that make the All Blacks win rugby games or allow The Body Shop to succeed in business.

⁵³ In fact the RMA incorporated many provisions of outgoing legislation: it did so by design not by default. Some would argue that the reformers simply ran out of time which is why implementation received so little

A look at the barriers may provide a more instructive discussion.

4. What are the barriers to integrated environmental management?

Several impediments to integration are found within the RMA itself. The RMA does not clearly define the roles and responsibilities of regional and territorial local authorities. It poorly develops the role of central government. The law makes many of the integrating mechanisms overly bureaucratic. Provisions for Crown ownership of certain resources impede the development of innovative policies such as tradeable water permits in Tasman District. The provisions for the awarding of costs thwart public participation in important precedent-setting court cases. Allocation of mining rights occurs under an entirely separate law. Statutory timeframes obviate more participatory, albeit time-consuming, multi-stakeholder processes and negotiations. And pivotal concepts, such as “cumulative effects” and “life supporting capacity,” are left totally undefined.

Indeed, there is a degree of unfinished business with the law, but this paper avoids a thorough legal analysis of the RMA -- not because the author ran out of time (which I did), and not because the author is not a lawyer (which I am not), but because the author believes that focusing on implementation is more important than additional legal reform. Focusing on implementation means orienting the institutions, the people, the economic factors, and information systems toward a sustainable New Zealand, and with the implementation factors corrected, the improvements will be long lasting.

The following factors were found to be the most significant barriers to integrated environmental management:

- **lack of advocacy for a strong environmental vision, kaupapa and direction;**
- **inadequate data and monitoring;**
- **inexperience with the essentials of fair process;**
- **a system of accountabilities that favours outputs over outcomes and efficiency over quality;**
- **lack of resources;**
- **an unusual cultural relationship with change that permits macro changes while it resists micro changes.**

Lack of vision, leadership, direction and kaupapa: If you don't know where you're going, any road will do

Solidifying support enough to pass the Resource Management Act was a monumental task and an exercise in judicious word choice, but in the final analysis important terms and principles were left undefined. At the top of the list of undefined terms is the very purpose - - sustainable management.⁵⁴ It was believed that clarity and meaning would be divined through locally driven implementation. This has not happened because implementation is skewed -- local leaders pay attention to efficiency and customer service delivery but not the quality of environmental outcomes.

⁵⁴ It should be noted that there has been a lively debate, involving the Minister for the Environment, Simon Upton, about the meaning of section 5, the RMA purpose section. But, it has been my impression that the

According to Peter May “the primary condition for a workable cooperative policy [RMA], is a shared set of policy objectives. Officials at local, regional, and central government levels must have sufficient desire to take on environmental problems and to engage in a process for addressing them around cooperative principles.”⁵⁵

There is a visible lack of strategic environmental direction among local authorities. In some cases, cost minimization has trumped sustainable management as the goal. In other cases, local authorities refuse to undertake “visioning” exercises because some pressure groups erroneously equate community visioning with central planning. The Ministry for the Environment at one point prohibited regional policy statements from containing vision statements. This problem worsened in 1992, when the Minister of Local Government, Warren Cooper, sponsored a bill that limited regional responsibility by reversing the presumption of “general competence.” Some regional councils since that time have become myopic with respect to their RMA responsibilities. They narrowly and literally construe their legal obligations under the law.⁵⁶ One senior manager stated that his “vision” stops 30 kilometers north and 50 kilometers east. Innovation appears to have atrophied, and in place of kiwi ingenuity, we find what Allen Schick refers to as “checklist managing.”

That checklist has grown quite long. By late 1995, the regional councils had collectively committed to preparing 125 regional plans; one council alone committed to the preparing 19 separate regional plans.⁵⁷ Though some rationalisation has occurred since 1995, regional councils will still produce over 100 plans.⁵⁸ This early commitment to plan production reaffirmed local planning traditions and lessened the likelihood of developing integrated or combined plans. Another problem is the lingering and knee-jerk reaction against central government involvement in resource management. Many people who understand the RMA well and are capable of providing leadership and direction, are discouraged from speaking out if they are affiliated with central government. This sort of forced inferiority complex gets in the way of common sense.

Related to the lack of direction is a lack of order and predictability about council decision making. Developers are frustrated and rightly disgruntled by what appears to be “black box” decision making criteria for consent, notification requirements and permissible activities. Kaupapa is needed to bring consistency, predictability and certainty to resource management.

Environmental vision should come from all sectors of society. The business community in New Zealand is not yet embracing a leadership role or a vision for sustainable New Zealand. Many businesses around the world are stepping out as leaders in eco-efficiency and sustainable development. They are demonstrating that cleaner production, less waste and collaborative approaches can work well for business by improving product quality, reducing costs and tapping new markets. Achieving sustainable management cannot happen without the business community. Many New Zealand businesses appear to be caught in a reactionary mode of fighting for deregulation and privacy rather than being active partners in shaping

⁵⁵Peter May, page 4

⁵⁶Allen Schick, page 81

⁵⁷Brent Cowie, page 2

smart environmental policies and management to secure New Zealand's clean and green championship in a competitive world economy.

Lack of data and attention to monitoring: What you don't know can hurt

The OECD 1996 Environmental Performance Review of New Zealand cited several barriers to RMA implementation. At the top of the list was inadequate data.⁵⁹ The OECD report stated that "local authorities cannot yet fully implement the effects-based regulation called for by the RMA. This in part due to a lack of data about and understanding of the ambient environment by both local officials and the private sector."⁶⁰

My observations corroborate OECD's findings. Good quality data is needed to implement the Act as it was envisioned: to control the effects of activities, to evaluate the effectiveness and efficiency of policy alternatives (per section 32), to establish baselines, to monitor consent compliance and the state of the environment, to allow the development and use of market mechanisms, etc. To date, there has not been an adequate demand for this sort of information, so it is not happening.

Regions and TLAs do not appear committed to developing integrated, outcome-based indicators. There is not adequate coordination between levels of government and management authorities to consolidate information sources (especially between TLAs and regions). A similar observation was made by the OECD team who remarked:

there appears to be insufficient co-ordination and co-operation among them [regions] to enable them to find joint solutions to common problems and share the costs. Hence there is a risk of a dozen or so different monitoring systems evolving that would make it nigh impossible to obtain any national overview of the important water issues.... It would appear therefore essential for the Ministry for the Environment and the regional councils to do their utmost to establish compatible reporting formats.⁶¹

But, even if good data were being collected and good monitoring systems were in place, there is no evidence that adequate feedback mechanisms exist to ensure continuous improvement to the overall practice. Many regional policy statements were based on an incomplete understanding of the state of the environment. Tight statutory timeframes made new data collection and issue identification virtually impossible. Presently, as new data are collected, local authorities will need to adjust policies and plans. Without an accessible feedback mechanism, integrating information from monitoring and evaluation will make policy integration difficult. It would behoove local authorities to consider making mid-course corrections to RMA implementation so that 10 year regional policy statements could be revisited.

System of accountabilities that favours outputs over outcomes

The intensive period of reform in New Zealand left a culture that cares more about cost minimization than the quality of environmental outcomes or community participation. In

⁵⁹ OECD, page 110

⁶⁰ Ibid

particular, the state sector reform introduced an ideology and a lexicon that places a premium on economic bottom lines. This is not a bad thing; but while the top rung of officials in resource management agencies are held accountable for financial performance, the system does not provide them with comparable incentives or rewards for delivering environmental results, working with other agencies, engaging the community, or pursuing integrated environmental management.

Allen Schick talks about this distortion of objectives. He states:

The New Zealand version of accountability currently has more to do with purchase than with ownership, more with producing outputs than with the overall capacity of the department, more with whether managers are meeting specified targets than with whether public programmes are effective. Policy outcomes are outside of the managerial accountability framework.⁶²

It is my impression that managers see themselves as financial managers more than resource managers. Integrated environmental management obviously demands attention to both.

There is reason for concern in New Zealand, given the rigid system of accountabilities that rank environmental outcomes and community involvement as second tier objectives. Integration cannot result from a system that makes the drive for efficiency its overriding purpose. In a speech before the 8th Annual Conference of New Zealand Local Government Association, Bryan Gould tried to explain that democracy and efficiency should co-exist. He pleaded with local government representatives to:

conduct your affairs in a businesslike fashion, but that you are not businesses. Local government is a form of government -- a statement of the obvious; a truism, you may say but I do not think we should overlook it; it is the essence of what local government is about. It is a form of self-government; it is a form of democratic self-government. ... it is not something that is easily placed in figures on a balance sheet; of course that is an important aspect, but the essence ... is that local communities decide what they want, and they do so in the most democratic way that we can devise.⁶³

Inexperience with the essential of fair process

While stakeholders and third parties were integrally involved in the resource management law review process, meaningful and effective stakeholder participation is not occurring in implementation, apart from a few exemplary cases. The capacity, the conditions and the willingness to explore new participatory approaches are all missing. Furthermore, there are not principles for deciding who is a legitimately interested party nor is there assistance available to bring community groups equally into the debate. There is not an adequate flow of information to inform interested parties about the relevant issues. In Environment Court cases where expert witnesses may be needed, community groups and third parties are limited by lack of resources, and they face a continual threat of the awarding of costs.

⁶² Schick, page 73

While RMA planning, implementation and monitoring are to be outcome-based, the process has an enormous influence on the quality and efficiency of the result. The process influences which values are to be reconciled and who buys into a policy, programme or plan. Especially in cases where new issues are identified, such as natural areas protection in Tasman, it is not uncommon to see resistance to new controls or programmes. In these instances, it is extremely important to pay attention to process.

On a final note, stakeholders and businesses seem to be neglecting their responsibility. They tend to react on an *ad hoc* basis when their particular interests are threatened rather than acting constructively with attention or respect for the public good.

Lack of resources

The Ministry for the Environment does not have the resources it needs to effectively and appropriately administer implementation of the RMA. The Ministry cannot adequately monitor implementation of the Act or evaluate its effectiveness. As the environmental policy advisor, MfE should be articulating the national policy direction. Lack of resources stifles this important leadership role.

Regional and local authorities do not have adequate resources or capacity to pursue integrated environmental management. As has been stated, they do not have the data or the tools to look comprehensively at environmental impacts. They do not have the know-how to assess risks to human health or the ecology. Many local authorities do not have the capacity to manage air quality, hazardous waste and pollution prevention (new areas of responsibility since the RMA). Many do not have resources to conduct adequate state of environment monitoring and they do not have resources to become environmental educators.

Resource problems for unitary authorities are especially problematic, as it was believed that efficiency gains would be realized through amalgamation of regional and district responsibilities. In fact this has not happened.

5. Recommendations

The first step is for New Zealand's leaders to elucidate and advocate a vision of a sustainable Aotearoa. They must recreate on the front-line of implementation the passion that characterized the reform years and engage New Zealanders in a meaningful discussion about their future. Then, the baseline state of environment must be measured to gain a clear understanding of the starting point. With those two bearings -- where New Zealand wants to be and where they are starting from -- attaining the goal is a matter of: (1) improving information and tools; (2) strengthening capacity and partnerships; and (3) getting the incentives and accountabilities lined up with the desired outcomes. In the final analysis, it might take two "planning generations" to get it right. Implementing the RMA as it was envisioned is a matter of political will.

RMA implementation can be improved by promoting the practice of integrated environmental management in the following ways:

- **advocate vision, leadership, direction and kaupapa;**
- **improve data and monitoring;**
- **realign accountabilities and incentives to focus on outcomes;**
- **establish fair and effective processes;**
- **engage in genuine partnerships**
- **provide additional resources for implementation.**

Recommendation 1: Provide Leadership, Vision, Direction and Kaupapa

Implementation needs leadership. The apparent vacuum of environmental leadership may be explained by a cultural traditional of "cutting down tall poppies" whereby apart from in sports, leadership qualities are not nurtured in individuals. But, this tradition is changing and leadership is becoming recognised as important skill. Public sector reform sharpened attention to "good management" but now "good management" and "good leadership" are often confused.

According to Jo Brosnahan in her paper Nurturing Leaders: The Next Step in NZ Public Sector Reform:

Good management and hierarchical leadership are no longer enough... The Chief Executives are required to present the vision to all stakeholders, including the public at large; to inspire, to teach, to encourage and to support. They are expected to provide vision, to innovate, to communicate and to empower." She goes on to say that, "A Chief Executive in a public sector organisation should be motivating himself or herself around not just the quality of the services in their own area, but around the contribution to the nation; they should be responsible for ensuring that the outputs are making the best contribution to outcomes."⁶⁴

Implementation needs vision. Environment 2010 Strategy is a consummate document that provides a starting point and a language to articulate an environmental vision. Those implementing the RMA locally have not related to Environment 2010 as a framework for their actions.

Implementation needs direction. The Ministry for the Environment needs to clarify national policy direction so those implementing the RMA can establish a course of action. Several mechanisms can be used, including:

- national policy statements (e.g., climate change, energy);
- national standards statements to serve as a floor (e.g., for hazardous waste, water quality, drinking water, air quality);
- national goals and indicators and measurable milestones;
- demonstration projects to model good practice, and win-win scenarios;
- an information handbook of integrated environmental management that assists local and regional authorities, citizens, iwi, community groups and others with:
 - developing regional indicators
 - establishing community-based monitoring
 - working with multiple organisations

Ultimately, implementation of the RMA needs kaupapa -- a reason, a story, an explanation that clarifies why certain decisions are made. Principles that guide and explain environmental management decisions will make the decentralised implementation scheme more reasoned, predictable and consistent. Sound technical guidance must be developed and consistently applied to determine, as a start:

- what is an effect;
- what are cumulative effects;
- what are human health effects;
- when does a consent need to be notified;
- who is a legitimate interested party.

Lessons from RMA implementation show that central government could be playing a more prominent role to advocate environmental vision and clarify the direction, roles and responsibilities of RMA implementers. Articulating an affirmative vision is not the same as calling for a return to central planning or suggesting an abandonment of the use of market mechanisms to achieve environmental objectives. This recommendation suggests that implementation is not proceeding as successfully as it could or should be. Regional and local implementing authorities must be empowered, but it is nonsensical for 12 regional councils and 4 unitary authorities to reinvent the wheel on every matter -- to separately develop drinking water standards for instance. The Ministry of Health and the Ministry for the Environment should do this (in partnership with local government, of course). Central government should be involved: (1) in matters of national significance; (2) with complex matters that involve multiple statutes or multiple management authorities; (3) where the RMA has left roles and responsibilities unclear.

Recommendation 2: Improve data and monitoring

More environmental data of better quality are needed to implement the RMA in an effects-based manner. Information is needed to quantify a baseline state of environment and to track the cost of compliance. New methods must be developed to measure the “life supporting capacity” of resources so that the effects of proposed activities can be measured against a guidepost and over time. Section 32 analysis should be used to identify least-cost policy options after desired outcomes are clearly specified.

Basic and applied research is under-resourced due in part to the privatization of information in this country. Government intervention is needed to guarantee that seminal research and data collection takes place to develop and measure national and regional indicators. State of environment monitoring is the cornerstone. Without it, the RMA cannot be implemented as an effects based framework. Creating capacity to focus attention on effects is also the key to reducing the long-term cost of RMA compliance by liberating regions and districts from the tedium of prescriptive writing more rules and regulations. Specific actions include:

- scope options for a central research capability that would be available to regions and TLAs for research and technical assistance, monitoring, baselining, development of indicators, etc. The centre could be in partnership with the Parliamentary Commissioner for the Environment, Local Government New Zealand, or regional and district councils, and others;
- make existing information more widely available;
- encourage emissions reporting and if there is resistance then require it;
- expand MfE survey of local authorities to ensure appropriate and valuable data collection (e.g., information about outcomes, regulatory as well as nonregulatory practices, and information about processes and partnerships, etc.);
- provide training to regions and districts to improve their capacity for assessing environmental effects and conducting risk analysis, etc.;
- require consent authorities to notify medical officers of health wherever human health effects are possible;
- utilize Maori principles of kaitiaki, rahui and tapu to inform the development of regional and local indicators and monitoring programmes.

Recommendation 3: Realign accountabilities and incentives to focus on outcomes

Organizations at all levels should look at the accountabilities and incentives in place to see what kind of behavior and attitudes the current system induces and rewards. Are resource managers responsible for delivering outputs such as resource consents and abatement notices, or are they responsible for delivering outcomes such as clean air and drinkable water? The public sector reform created a culture whose vision is drawn by economic bottom lines. This learned myopia leaves little chance of integrating environmental management which comes through shared goals and objectives, engaging the community and working with all relevant management authorities.

Using the same ideology that influenced the reform and created the current (narrow) system of accountabilities, one can argue that incentives can be used to induce a more appropriate, broader approach. Given that integrated environmental management promotes several

outcomes -- superior environmental performance, greater accountability and greater economic efficiency -- accountabilities should be arranged to encourage several outcomes.

But, to date, managers are only be held accountable for minimizing costs. Should they not be held accountable for environmental quality and public participation, too? Can public participation and cost minimization occur simultaneously when participation takes time, and time is money?

John Martin's Devolution and Decentralization supports the notion that participation and efficiency can co-exist. He states that: "Devolution is underpinned by the belief that participation in determining organisational goals is an objective to be considered along with efficiency and effectiveness."⁶⁵

Dr. Michael Bassett, Minister of local government during its reform, argued that the outcomes can and should be achieved simultaneously. He said in a 1988 speech before Local Government New Zealand that the principles of local government reform "are embraced within the concepts of fairness, efficiency, and democracy."⁶⁶

But, as long as the system of accountabilities remains focused primarily on economic bottom lines, managers have little reason to choose integration. It is an approach that demands new ideas, new problem solving techniques, new communication and a new way of doing business. Recall the earlier discussion on "enlightened leadership." It is the enlightened leaders who are pursuing integration in spite of the fact that they are not held accountable to do so under the current system. Still the incentives need to be institutionalised so that enlightened or not, RMA implementation delivers three outcomes -- superior environmental protection, greater use of ratepayer dollars and more meaningful participation.

In addition to focusing on outcomes in annual and strategic planning, as many regions and TLAs are starting to do, action steps to realign accountabilities and to "put the incentives where the objectives are" include:

- use personnel management systems to reward integration and innovation rather than count abatement notices, resource consents and other output-type "beans;"
- write purchase agreements and contracts in a way that produces outcomes and allows flexibility to deliver them;
- write outcome-based goals and indicators, reports and monitoring protocol
- appoint regional integration "ombuddies" who are responsible for complex resource matters where more than one law or institution is involved. The ombuddy would be accountable not to a particular organisation but rather for the integration of all relevant agencies, iwi, other authorities and community groups;
- encourage interdepartmental cooperation;
- undertake any further institutional reform with the goal of maximizing flexibility, resiliency and responsiveness within the systems (so that staff have mobility);
- broaden section 32 analysis to ensure consideration of innovative policy options (both regulatory and nonregulatory).

Recommendation 4: Establish fair and effective processes

⁶⁵ John Martin, page 290

No matter how it is sliced, the RMA is a process-intensive law. Therefore, the quality of the process is a prime determinant of the quality of the product, be it a pre-hearing negotiation, a freshwater plan or a lake management strategy. For New Zealand, the RMA contemplates a new process of participation that engages third parties early in the process rather than later, when the issues have been developed. This model is characteristic of integrated environmental management, as it pays close attention to balancing competing values before objectives and policies are established. It is a proactive model which invests time up front thus avoiding costly appeals later on.

A fair process should be run according to groundrules decided on by the participants. The first groundrule should be the selection of a neutral facilitator. Many TLA and regional staff believe that looking outside of local government to find a facilitator signifies weakness or inability on the part of the government agency. This is a damaging misconception because even if they are neutral, agents of the Crown are often perceived as not being neutral. Fairness and the perception of fairness need to be safeguarded if disparate interests set out to agree on difficult resource decisions.

In addition to procedural fairness, the question of representation needs attention. Who is a legitimate interested party? Decision guidance is needed that will afford protection to legitimately interested parties while limiting frivolous complaints.

Another essential ingredient of an effective and fair process is providing for consistent and informed participation by legitimate parties. This may require technical assistance or legal aid to ensure that everyone who needs to be involved can be involved. Regional and district councils may also need assistance developing capacity that allows them to address new issues that come with integrated environmental management such as working closely with iwi and consensus-building.

To improve the effectiveness and fairness of RMA processes, the following action steps should be taken:

- prepare principles for determining who is an interested party;
- provide legal aid to those identified as interested parties;
- encourage use of third party facilitators, especially local facilitators;
- allow for an extension of statutory timeframes insofar as more participatory approaches will be tried in RMA planning, implementation and monitoring;
- make processes transparent by improving access to decision record.

Recommendation 5: Engage in genuine partnerships

With no fewer resource management issues than the United States, and 1/80 the number of people, New Zealand has to be rather creative to find solutions to its resource management problems. Implementing the RMA as it was envisioned will require the involvement of New Zealand's best and brightest. The resource management law review was a massive partnership that drew on a broad idea base to draft the bill. Implementation needs to tap again the potential of New Zealand's best resource -- the people. Partnerships and participation are ways to do this.

Integrated management should be triggering hundreds of new partnerships and institutional arrangements, cooperation, public private funding partnerships, co-management, combined planning and joint hearings. With a particular objective in mind, regional or local authorities should establish a management regime of an appropriate scale and duration with the appropriate agencies. In some cases, boundaries must be clarified for integration to occur. As John Hutchings argued: “The assessment of the boundary of responsibility for any function is a prerequisite to the efficient development of regional plans. Without such an assessment, and the associated exploration of opportunities for integrated management, regional plans and the Resource Management Act itself, will be severely maligned.”⁶⁷

Some examples of partnerships are: central-regional-local government; public-private sectors; Maori and Pakeha groups; rural-urban interests; health-conservation administrations; and all resource management authorities (e.g., the Department of Conservation and the Ministry of Fisheries).

Although resource priorities will vary from place to place, and the nature of partnerships will vary accordingly, some general recommendations can be provided. They are:

- move Maori divisions to partnership status within all resource management organisational structures (central, regional and local government). Maori values of reciprocity, respect, sustainability and connectivity help define sustainability and should inform resource management, policy, monitoring and evaluation;
- develop capacity for co-management, co-funding, co-monitoring;
- utilize regional and local expertise in the development of national programmes, policies and standards;
- encourage cross-fertilization of ideas by sending central government personnel to regional and local government and bringing regional/local personnel to Ministry for the Environment for a meaningful period of time;
- improve communication;
- expand public-private partnerships with special attention to creating new nonregulatory programmes.

Recommendation 6: Resources for New Zealand’s future

Improving the efficiency and effectiveness of RMA implementation requires an investment of additional resources. How much more money? Significantly more than \$1.8 million spread over three years, which was the amount dedicated by the 1997 Green Package funds for the Ministry for the Environment.

To be sure, there are basic cost saving measures and economies of scale that can reduce the cost of implementation, such as multi-media inspections, auditing and monitoring. For example, when an inspector goes into the field to look at building codes (under the Building Act), there is no reason why she or he cannot inspect environmental effects such as sedimentation (under the RMA) at the same time. Other cost savings can come by

empowering people closest to the problems at hand (i.e., regional and local people) to come up with solutions. People must be empowered through training, good information systems and delegation. Public-private partnerships can also stretch resources.

Specific recommendations include:

- increase MfE's budget to enable full realization of the role of policy advisor and to allow MfE to stimulate regional and local capacity-building;
- fund environmental education;
- guarantee a "demand" for environmental quality data, state of environmental monitoring, and tracking of compliance costs to allow ongoing evaluation of RMA implementation;
- increase funding for Parliamentary Commissioners Office to develop an "integration ombudsman" at the national level.

Even with streamlined implementation and cost saving measures in place, resources are needed to establish the local, regional and national capacity for proper RMA implementation. At the end of the day, the lack of adequate funding to implement the RMA can only be interpreted as a lack of political commitment to pursuing sustainable management in New Zealand.

CONCLUSION

The RMA is an impressive law, but the reality of implementation, though it could, does not yet match the vision behind the law. The time is now to draw on lessons from the first seven years of implementation and make informed mid-course corrections to RMA practice. The legal framework and implementing structures are set to achieve the goal -- "sustainable management of New Zealand's natural and physical resources" -- achievement of which is good for people, good for the economy, and good for the environment. The Act provides for integrated environmental management as a means to the goal. Integrated environmental management is not magic or rocket science, it is mostly social science, a code for good practice under the RMA. It works best when a vision -- a set of outcomes -- is well defined and clearly understood. It works best where there is respect, dialogue and feedback. And it requires political will to allow time for learning and fundamental changes to come about.

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BIBLIOGRAPHY

Unpublished Sources

Auckland Draft Annual Plan 1997/98

Auckland Region Urban Storm Water Management Project Draft, Version 3, May 1997

Berke, Phil 'Planning Under a Cooperative Mandate: Preliminary Results, Regional and District Postal Questionnaires', Draft, 29 May 1997

Berke, Phil 'Planning Under a Cooperative Mandate: Preliminary Results, Regional Policy Statements and District Plans', Draft, 29 May 1997

Buhr, Ton, 'Integrated Environmental Management: Towards a Framework', Draft, 16 July 1995

Church, Denise, Interview, 23 April 1997. Tape on file with New Zealand United States Educational Foundation, Fellowships Office Level 4, 120-124 Featherston St, Wellington.

Dixon, Jenny and Crawford, Jan, 'Planning Under a Cooperative Mandate: Regional Policy Statements: Synthesis of Plan Quality Coding Results, Postal Questionnaire and Interview Findings', Draft, 9 June 1997

Dixon, Jenny and Crawford, Jan, 'Preliminary Analysis of Interviews with Regional Councils Concerning the Preparation of Regional Policy Statements', Draft, 9 June 1997

Erickson, Neil 'Planning Under a Cooperative Mandate: Research Overview'. Local Government New Zealand, 'Boundaries of RMA Responsibilities of TLA and Regional Council', Draft, Wellington, 7 October 1997

Ministry for the Environment, 'Integrated Environmental Management', Draft, KPMG, 6 December, 1996

'Nitrogen Inputs at land Surfaces and Groundwater Quality, A Review of Current Practice, Regional Councils and Unitary Authorities', Unpublished report prepared as part of contracts between Lincoln Ventures Ltd, and Canterbury Regional Council David Painter, Sub-contract Consultant, July 1997

Pollack, Greg, 'Chapter Three, Co-management', Draft, 15 June 1997

Pollack, Greg, Baddon, Lesley, and Bird, Michael, 'Environmental Monitoring Strategy, Project Brief', Draft, Auckland Regional Council, 1997

Resource Management Law Reform 'Impact Assessment in Resource Management: Working Paper No. 20', Ministry of the Environment, November 1988

Resource Management Law Reform 'Implementing the Sustainability Objective in Resource Management Law: Working Paper No. 25', Ministry of the Environment, November 1988

Resource Management Law Reform 'Objectives for Resource Management: Why, What and How?: Working Paper No. 13', Ministry of the Environment, December 1988

Resource Management Law Reform 'People, Environment, and Decision Making: the Government's Proposals for Resource Management Law Reform', Ministry of the Environment, December 1988

Resource Management Law Reform 'Sustainability, Intrinsic Values and Needs of Future Generation; Working Paper No. 24', Ministry of the Environment, January 1989

Taranaki Regional Council, '1997/98 Annual Plan', Draft

Waitakere City Council, 'Greenprint', Final Draft, July 1996

Ward, Jonet C., 'Integrated Environmental Monitoring', Unpublished Report for the Ministry for the Environment, Center For Resource Management, Lincoln University, May 1991

Yin, Robert K., 'The Abridged Version of Case Study Research: Design and Method', Draft, COSMOS Corporation, February, 1996

Published Sources

Arnold, Jr., Chester L. and Gibbon, C. James, 'Impervious Surface Coverage: The Emergence of a Key Environmental Indicator', *Journal of the American Planning Association*, 62, No. 2, (Spring 1996), pp. 243-256

Auckland Regional Policy Statement (Proposed), September 1995

Auckland Regional Council, Auckland Ambient Air Quality: Monitoring Results for the Auckland Region 1964-1965, ARC Technical Publication No. 88, October 1997

'Act of Nature', *Consumer*, 359 (May 1997), pp.11-15

Bartlett, Robert V, 'Integrated Impact Assessment as Environmental Policy: The New Zealand Experiment', *Policy Studies Review*, 12, (Autumn/Winter 1993)

Blunden, Greg, Cocklin, Chris, Smith, William, and Moran, Warren, 'Sustainability: A View From the Paddock', *New Zealand Geographer*, 52, (1996)

Bolger, Rt Hon J. B., 'What the Resource Management Act is Supposed to Do', Speech delivered at the Opening of the Business and Environment Conference, Wellington, 8 August 1993

Bolger, Rt Hon J. B., 'The State of New Zealand Environment', Speech delivered at the Parliamentary Launch of 'The State of New Zealand Environment', Wellington, 1 October 1997

Boston, Jonathan, Martin, John, Pallot, June; and Walsh, Pat (eds.), *Reshaping the State: New Zealand's Bureaucratic Revolution*, Oxford University Press, 1991

Brickell, D.G.A., 'Land and Water Management Planning: An Integrated and Anticipatory Approach', Speech delivered at the Water Conference, Auckland, 1982

Brosnahan, Jo, 'Nurturing Leaders: The Next Step in Public Sector Reform', Speech delivered to Harkness Fellows, Indianapolis, June 1996

Burhs, Ton and Bartlett, Robert V., *Environmental Policy in New Zealand: The Politics of Clean and Green*, Oxford University Press, 1993

Burton, Lloyd and Cocklin, Chris, 'Water Resource Management and Environmental Policy Reform in New Zealand: Regionalism, Allocation, and Indigenous Relations', *Colorado Journal of International Environmental Law and Policy*, 7, No. 1 (Winter 1996), pp. 75-106

Caldwell, Lynton K., *In Defense of Earth: International Protection of the Biosphere*, Indiana University Press, 1972

Centre for Environment and Resource Studies, University of Waikato, and Department of Resource and Environment Planning, Massey University, 'Planning Under a Cooperative Mandate: Research Instruments', 30 May 1997

Cowie, Dr. Brent, Director of Resources for the Manawatu-Wanganui Regional Council, 'The Preparation and Integration of Plans at the regional Level to Achieve the Purpose of the Resource Management Act', Speech delivered at the Annual Conference of the New Zealand Planning Institute, Palmerston North, 16-18 April 1997

Crow, Steve, 'The Real Cost of Compliance', *Planning Quarterly*, (March 1997), pp. 25-26
Cullingworth, J. Barry, 'Alternate Planning Systems: Is There Anything to Learn From Abroad?', *Journal of the American Planning Association*, 60, No. 2, (Spring 1994), pp. 162-171

Department of Internal Affairs, *The New Zealand Government and National Identity*, June 1996

Eggers, Dr. William D., 'The Wonder Down Under', *Government Executive*, (March 1997), pp. 32-39

Elliot, Michael, 'From RMA to Regional Policy Statement', *Planning Quarterly*, (December 1992), pp. 17-21

Furuseth, Owen and Cocklin, Chris, 'An Institutional Framework For Sustainable Resource Management: The New Zealand Model', *Natural Resources Journal*, 35, (Spring 1995), pp. 243-271

Glasby, G. P., 'A review of the Concept of Sustainable Management as Applied to New Zealand', *Journal of the Royal Society of New Zealand*, 21, No. 2 (June 1991) pp. 61-81

Gow, Lindsay J. A., 'Implementing Sustainability: New Zealand's Experience with its Resource Management Act', Speech delivered to the World Resources Institute/New Zealand Embassy Seminar, Washington DC, 6 June 1995

Grinlinton, David P., 'Integrated Resource Management: A Model for the Future' *Environmental Planning and Law Journal*, (February 1992), pp. 4-19

Grinlinton, David, 'Does the RMA need more reform?', *Resource Management Bulletin*, 2, No. 5, (16 August 1997), pp. 49-60

Harris, B.V., 'Sustainable Management as an Express Purpose of Environmental Legislation: The New Zealand Attempt', *Otago Law Review*, 8, No. 1 (1993), pp. 51-76

Hutchings, John, 'Policy Framework for Plans: A Paper to a Continuing Professional Development Seminar', New Zealand Planning Institute, June 1994

Jackson, David, 'Residential Infill Development', *Planning Quarterly*, (March 1997), pp. 14-16

Kingsley, Thomas G., 'Perspectives on Devolution', *Journal of the American Planning Association*, 62, No. 4, (Autumn 1996), pp. 419-425

Martin, John, 'The Schick Report: An Evaluation of State Sector Reform', *Public Sector*, 19, No. 4 (December 1996), pp. 10-13

May, Peter J., 'The Mandate for Planning: An Outsider's Perspective Concerning the Resource Management Act', Speech delivered at the Annual Conference of the New Zealand Planning Institute, Palmerston North, 16-18 April 1997

Memon, P. Ali, *Keeping New Zealand Green: Recent Environmental Reforms*, University of Otago Press, 1993

Miller, Donald, and de Roo, Gert, 'Integrated Environmental Zoning: An Innovative Dutch Approach to Measuring and Managing Environmental Spillovers in Urban Regions', *Journal of the American Planning Association*, 62, No. 3, (Summer 1996), pp. 373-379

Ministry of the Environment, *Environment 2010 Strategy: A Statement of the Government's Strategy on the Environment*, Wellington, September 1995

Ministry of the Environment, *Awarding of Costs by the Environment Court: Costs Which Can Be Ordered Under the Resource Management Act 1991*, Wellington, December 1996

Ministry of the Environment, *Monitoring the Effect and Implementation of the Resource Management Act 1991 From 1996-2001: A Monitoring Framework Under Section 24*, Wellington, February 1997

Morris, Deborah, 'The State of New Zealand Environment', Speech delivered at the Parliamentary Launch of 'The State of New Zealand Environment', Wellington, 1 October 1997

Mulgan, Richard, 'The Schick Report: Commentary from an International Perspective', *Public Sector*, 19, No. 4 (December 1996), pp. 7-9

New Zealand Local Government Association, '*Evolve or Devolve? Roles for Local Government*', 8th Annual Conference, Nelson, 10-12 July 1995

Nixon, R. C., 'Peripheral Urban Growth', *Planning Quarterly*, (March 1997), pp. 20-24

Organisation for Economic Co-Operation and Development, *New Zealand, Environmental Performance Reviews*, Paris, 1996

Orman, Tony, 'Persuasion, Education Favoured by Minister', *Marlborough Express*, 12 May 1997

Pavletich, H. and McShane O., 'Taking the Heat Off the RMA', Speech delivered by Hon Simon Upton, Minister for the Environment, 22 May 1997

Resource Management Act 1991, Wellington, New Zealand. Published under the authority of the New Zealand Government, 1994

Robinson, Erle, 'Growing Frustration: Is the RMA Working?', *New Zealand Local Government*, 33, No. 5, (May 1997), pp. 10-12

Schick, Allen, *The Spirit of Reform: Managing the New Zealand State Sector in a Time of Change*, August 1996, State Services Commission and the Treasury, Wellington, 1996

Smith, Ian (Chief ed.), *The State of New Zealand's Environment 1997*, The Ministry of the Environment, Wellington, 1997

State Services Commission, *New Zealand's State Sector Reform: A Decade of Change*, Wellington, 1996

Taranaki Regional Council, *Riparian Management Information Sheet*

Taranaki Regional Council, *Management of Riparian Margins in Taranaki: A Discussion Document*, August 1992

Taranaki Regional Council, *Management of Riparian Margins in Taranaki: Implementation Strategy*, February, 1993

Taranaki Regional Council, *Regional Policy Statement for Taranaki*, September 1994

Taranaki Regional Council, *Resource Consent Monitoring Programme, Annual Report 1994-1995, Technical Report 1995-1997*, December 1995

Taranaki Regional Council, *State of the Environment: Taranaki Region 1996*, July 1996

Taranaki Regional Council, *Riparian Plan 008: Sustainable Land Management Programme*, April 1997

Tasman District Council *Proposed Regional Policy Statement*, Notified 30 July 1994, incorporating decisions made following hearings on 20,21,24 and 30 August 1995

Tasman District Council, *An Introduction to the Proposed Tasman Resource Management Plan: Plan Guide No. 1*

Upton, Hon Simon, Minister for the Environment, 'Monitoring the Resource Management Act', Speech delivered at the 10th Annual Conference of Local Government New Zealand, 9 July 1997

Van Kregten, Hans, 'Rotorua-Council-Driven Revival', *Planning Quarterly*, (March 1997), pp. 17-19

Vossler, Greg, 'Integrated Environmental Policy: Attainable, or Illusory Grail?', *New Zealand Local Government*, (January 1994), pp. 21-22

Waikato Iwi Management Plan: Manuka, 1996, Prepared by Huakina Development Trust on behalf of Tainui Maori Trust Board, 1996

Whittle, Jo, 'Monitoring the RMA', *Planning Quarterly*, (March 1997), pp. 7-9

