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The Public Value of Regional Government: how New Zealand's regional councils manage the environment

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Abstract

A new regional level of government was formed in late 1989 as part of a comprehensive reform of New Zealand's local government. Regional government was not new, but the comprehensiveness of reforms established a comprehensive regional layer of government across all of New Zealand and was part of a wider decentralisation of government functions. The new regional councils were intended to be the primary environmental policy and implementation agencies underpinning the parallel environmental resource management law reforms, promising a new era of regional government.

This thesis examines the public value of this regional government structure two decades later using environmental management as a case study. Public value was assessed using substantive value, authorising agency and operational feasibility drawing on published data and a survey of perceptions held by environmental resource practitioners and stakeholders.

The results indicate a low level of public value. Despite some improvements, and some regional variation, overall environmental conditions have deteriorated nationally since 1989. The councils also show low public support and apparent sector capture and vary in capability to undertake their functions. While sub-national environmental conditions and problems were identified, they do not match existing regional council jurisdictions, nor match each other. Most councils share many characteristics, suggesting uniform rather than separate management regimes are appropriate. Consequently, the efficacy of the regional council-based model for managing the environment is questioned.

The role of the councils is also queried. Although classified as part of local government, these democratically elected regional councils are really multi-special purpose authorities that parallel a national government decentralised regional administration. Despite being endowed with a broad mandate to promote their communities' well-being, most regional councils continue to exercise a narrow set of functions. These are based on their historical role as environmental management agencies. This discourages allocative efficiency, limiting their sustainable development capability. Importantly, the hierarchical policy-making system developed has been compromised by an ongoing lack of national level government policy.

Recommendations for alternative environmental management institutional arrangements in New Zealand are made, while more broadly the implications of the research for regional studies identified.

Preface

Regional institutions have long fascinated me, stemming from postgraduate regional economic geography studies, while my interests in environmental management were encouraged by postgraduate biogeographical research into the vegetation of braided Canterbury riverbeds guided by Peter Holland at the University of Canterbury.

In 1988 as a portfolio private secretary to the then Environment Minister, Geoffrey Palmer, and Associate Environment Minister, Philip Woollaston, I was a close observer to some of the early decisions in the genesis of the much vaunted Resource Management Act 1991 that brought regions and environmental management together. Observing the process supported Otto von Bismarck's aphorism, "there are two things you don't want to see being made – sausages and legislation"¹, as different interests, ideologies and personalities swirled within the context of neo-liberalism, environmentalism and Gro-Harlem Brundtland's sustainable development manifesto, *Our Common Future* (WCED, 1987).

The precariousness of political decision-making was made clear to me when Ministry for the Environment Deputy Secretary, Lindsay Gow, returned to the office after a Cabinet ALG Committee meeting one Wednesday morning and performed a little jig, exclaiming 'we did it, we did it!' The decision taken was that the new regional councils were to have their boundaries defined by river catchments. I had until then assumed that that decision was an obvious and foregone conclusion, but Lindsay assured me it was a close-run thing, with a range of other social, cultural and administrative based options being strongly in contention.

Returning to the Ministry for the Environment, some of the tea-room conversation revolved around the new regional councils and how eventually they might become fully fledged regional governments with health, police and education functions. The regional councils, with their critical environmental management functions, autonomy, and powers were appealing and I joined the new Waikato Regional Council and nearly three years later accepted a position at the Manawatu-Wanganui Regional Council, where I remained for the next eleven years. These experiences made me aware of both the possibilities and limitations of regional government as it is presently constructed. The chance element within politics also showed. The decision to establish separate district health boards, rather than enlarging the task span of the regional councils, appeared to condemn the councils to single purpose authorities. More recently the LGA2002 has reopened the possibility in a very general sense of a more widely encompassing regional entity. Together with ongoing concerns about the governance of metropolitan Auckland, regional government is not static but appeared to lack clear conceptualisation.

I also took the opportunity of a LGNZ-Shell scholarship to visit European government agencies in 1995 (McNeill, 1996). The visit helped me reconceptualise regions – on one hand a typical German Land (state) such as Hessen, has the same physical size as the Manawatu-Wanganui region, but with six million, rather than our 220,000 people. The Länders' autonomy also had a certain resonance with New Zealand regional councils, at least with regard to environmental management.

¹ "Beim Wurst- und Gesetzmachen sollte man nicht so genau hinsehen sonst wird es einem schlecht!" – attributed but unverified to Otto von Bismarck.

On the other hand, Belgium, a country the size of the Manawatu-Wanganui region, but with a population of 10 million people, was in the process of reconstructing itself as a federal state consisting of three largely autonomous regions based on linguistic differences. The plasticity in definition of region was underlined when my Flemish hosts also explained that they had 'regional' linkages and shared interests with the Netherlands and French Flandres region based partly on a shared language, but also with their other regional partner, Kent, England, on proximity and economic significance. This notion of a 'Europe of the Regions' where sub-national jurisdictions cooperated and formed alliances that transcended national borders was further reinforced while undertaking research in the European Parliament, Brussels in 2004 under the auspices of the NCRE, University of Canterbury.

These experiences have led me to question increasingly the primacy of the central state within New Zealand and to reconsider the role of the regions within the governance structure. New Zealand had begun with provincial government in the 1840s; after a century of centralisation, the renaissance of regionalism is hinted at. But is this belief in devolution justified? A colleague, reflecting on the roll-out of the RMA and the apparent duplication of effort among regional councils as they independently wrote their statutory plans and documents, together with a perceived abdication by central government of its responsibilities in environmental management, commented "it seems a funny way to run the country". A throw-away comment by a mentor about the performance of his regional council seemed to sum up the problem, "the council doesn't know if it is the bowler or wicket keeper; it doesn't know what its role is."

My experience working with local, regional, national and international government politicians gives me no illusions that the research findings presented here will impact in any way on the future direction of regional government in New Zealand; my experience in politics shows decision-making is largely pragmatic with one eye firmly on the Six O'clock television news and the front page of the newspaper. The incrementalism of muddling along is preferable to enjoying the deferred benefits of immediate electoral pain from making hard decisions. Nevertheless, some of the findings may assist in improving performance at the margins. Whether this will be sufficient to protect and manage our environment for my children to enjoy is another story.

Acknowledgements

I have been very fortunate to have in Dr Christine Cheyne and Prof. John Holland, Massey University, two supervisors who have made this project so stimulating and satisfying, as well as enjoyable. Our wide-ranging discussions over our coffees that ranged from tracking elephants in Africa and motor-cycle touring in outback Australia to cycling and tramping in Europe and America, along with occasional contributions on baroque bassoons and Belgian beer, were sometimes possibly even more esoteric and interesting than the dissertation nominally under discussion. I am very appreciative of and grateful for their support and interest.

Prof. Claudia Scott, School of Government, University of Wellington, leading the Foundation for Science, Research and Technology funded research into strategic planning in local government, *Local Futures*, that formed my 'co-doctoral' research, has provided ongoing stimulus. I am grateful to Prof. Martin Holland, New Zealand Centre for Research in Europe, University of Canterbury, Janet Lowe, New Zealand Embassy, Brussels, and Francis Jacobs, ENVI Secretariat, European Parliament, Brussels, for assistance in undertaking a placement at the European Parliament in 2004. That experience helped very much to focus my thinking on multi-level governance and wider considerations of technical content in decisions within democratic institutions. Rachel Summers, Senior Lecturer GIS, Massey University, provided valuable assistance by undertaking a GIS interrogation of the LENZ and REC database to produce the initial data tables from which comparisons between regions were subsequently made.

I have been greatly assisted by several mentors and champions. Dr Mike Bebb provided much sage advice as a friend and mentor, quite apart from his role as official Jiminy Cricket and cheer-leader. Eugene McNeill has been an excellent sounding-board and proof-reader and who, together with Rona, gave me the foundation and impetus to undertake doctoral studies.

I remain deeply indebted to Marise for her ongoing support, patience and forbearance, without which this project could not even have been contemplated, together with her unflagging expectation that the dissertation would be completed and sooner, rather than later. A very special thank you.

This research is for Alicia, Alexandra and William. While they are unlikely to read this book, part of the motivation was to help make a difference to the world they inherit.

JKM

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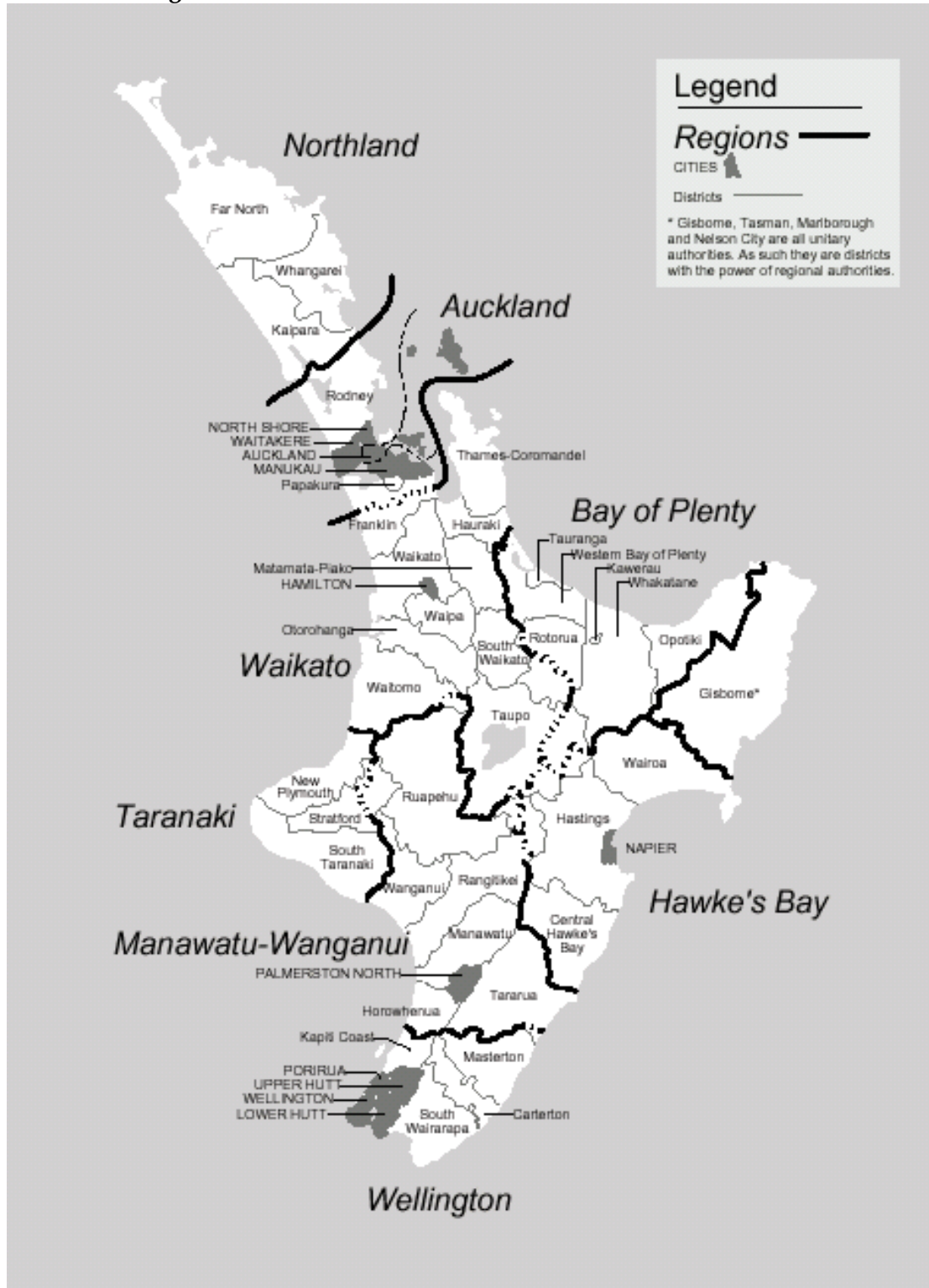
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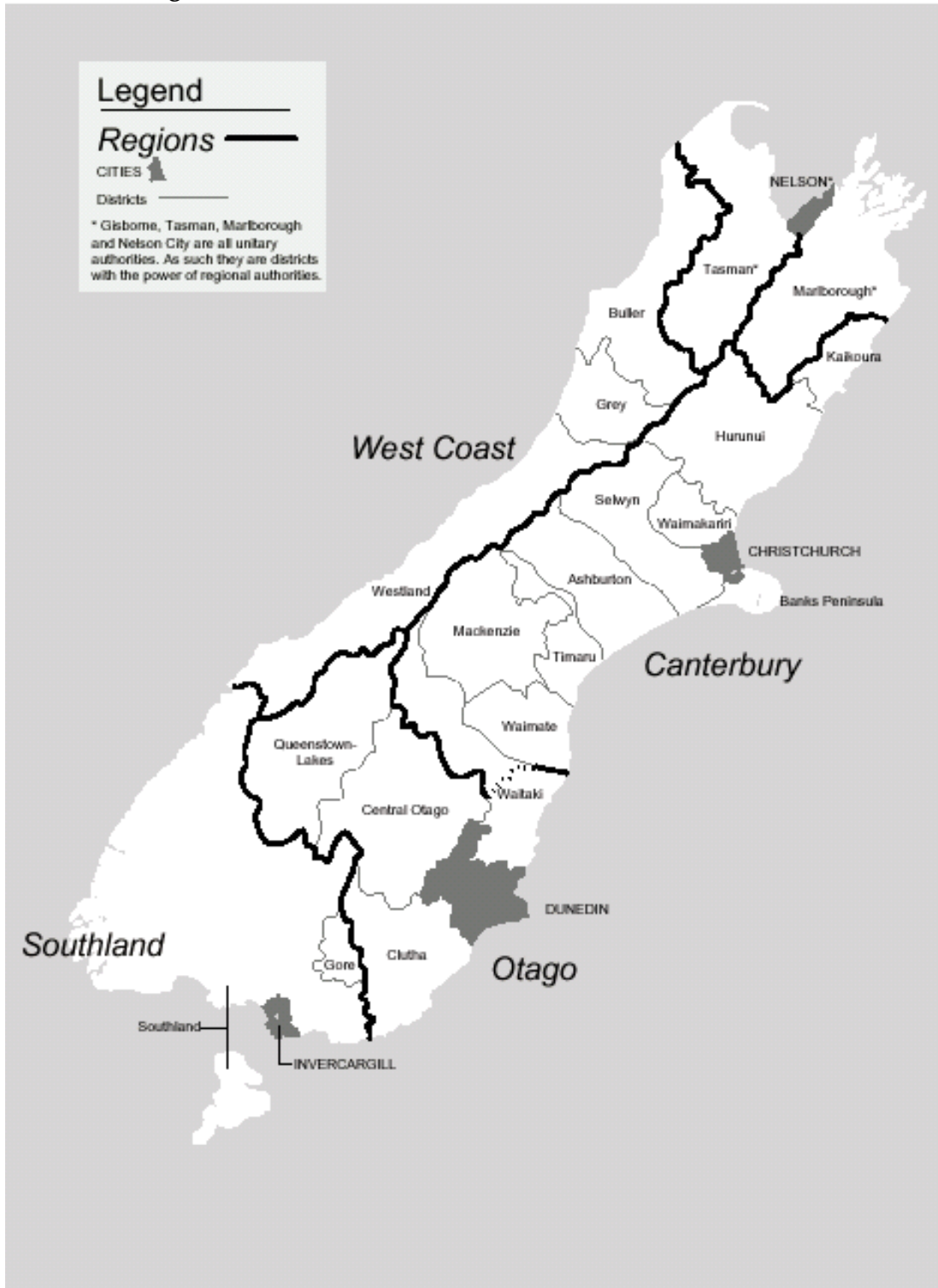
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North Island regional and territorial councils



South Island regional and territorial councils



List of Abbreviations

ARA	Auckland Regional Authority
CAA	Clean Air Act
CBEM	Community based environmental management
CUC	Canterbury United Council
DIA	Department of Internal Affairs
DoC	Department of Conservation
DOH	Department of Health
EPA	Environmental protection agency
EU	European Union
FOCJ	Functional, overlapping and competing jurisdiction
GIS	Geographic information system
GUEDO	Government's Urban and Economic Development Office
LENZ	Land Environments of New Zealand
LGA	Local Government Act
LTCCP	Long Term Community Council Plan
MAF	Ministry of Agriculture and Forestry
MED	Ministry of Economic Development
MDS	Multi-dimensional scaling
MFAT	Ministry of Foreign Affairs and Trade
MfE	Ministry for the Environment
MFish	Ministry of Fisheries
MoWD	Ministry of Works and Development
NGO	Non-government organisation
NIWA	National Institute for Water and Atmospheric Research
NPM	New Public Management
NPS	National Policy Statement
NWASCO	National Water and Soil Conservation Organisation
NZCA	New Zealand Conservation Authority
OECD	Organisation of Economic Cooperation and Development
PCE	Parliamentary Commissioner for the Environment
POP	Persistent Organic Pollutant
QANGO	Quasi-autonomous non-government authority
RC	Regional council
REC	River Environments Classification
RF & BPS	Royal Forest and Bird Protection Society
RMA	Resource Management Act 1991
RMLR	Resource Management Law Reform
RPS	Regional Policy Statement
SLUI	Sustainable land use initiative
T&CPA	Town and Country Planning Act 1977
TLA	Territorial Local Authority (district and city councils)

Regional Councils and Unitary Authorities

ARC	Auckland Regional Council
EBOP	Bay of Plenty Regional Council (Environment Bay of Plenty)
ECAN	Canterbury Regional Council (Environment Canterbury)
EW	Waikato Regional Council (Environment Waikato)
GW	Wellington Regional Council (Greater Wellington)
HBRC	Hawke's Bay Regional Council
HRC	Horizons Regional Council (Manawatu-Wanganui-Regional Council)
MWRC	Manawatu-Wanganui Regional Council
NRC	Northland Regional Council
ORC	Otago Regional Council
SRC	Southland Regional Council
TRC	Taranaki Regional Council
WCRC	West Coast Regional Council
WRC	Wellington Regional Council
GDC	Gisborne District Council
MDC	Marlborough District Council
NCC	Nelson City Council
TDC	Tasman District Council

Chapter 1: The regional experiment

1. The regional experiment

New Zealand in the late 1980s was an exciting place for political observers, politicians and bureaucrats as ‘the New Zealand Experiment’ was initiated. The fourth Labour Government was embarking upon a wide and comprehensive array of reforms across the economy, state sector and society, any one of which, commentator Colin James in his review of those times claimed, would have earned it a place in history (James, 1992). The economy was liberalised and the public service transformed in what James (1992), as well as the then prime minister, David Lange (1998), called a public sector revolution.

A new regional level of government was formed in late 1989 as part of a comprehensive reform of New Zealand’s local government. Regional government and administration were not new, for New Zealand had in the nineteenth century been governed provincially while more recently, catchment boards, regional councils and united councils formed a mixed regional government structure. But the comprehensiveness of reforms that brought these organisations together, providing a comprehensive regional layer of government with structures and functions duplicated across all of New Zealand, and treated as an equal with municipal government were significant. The new regional councils were intended to be the primary environmental policy and implementation agencies underpinning the parallel environmental resource management law reforms, promised a new era of regional government. The regional councils were part of a wider decentralisation of central government that included public health and education. In Wellington, some officials involved wondered aloud whether the new regional councils might eventually assume these and other regional government and administration functions. They wondered that, perhaps in twenty years, New Zealand might be ready for a more comprehensive regional government.

Since then, many of the 1980s reforms have been softened. The regional councils have never been fully embraced by their communities and recent surveys of environmental management performance (OECD, 2007, Ministry for the Environment, 2007), for which they have considerable responsibility, have provided less than glowing reports., Nearly twenty years later, it is timely to reflect on the efficacy of the regional council experiment.

2. Regions in the hollowed state

New Zealand’s regional council formation can be seen as part of a wider initiative for devolution and decentralisation². Since the 1980s, new public management inspired reform programmes in western democracies involving decentralisation, agentification, privatisation and deregulation have sought to reduce the role of the nation state level of government. Dispersal of authority from the centre has been both horizontal and vertical

² The term ‘devolution’ is used by different authors in different ways. The definitions used by Boston *et al.* (1996) are adopted here:

- **Devolution** is the transfer of power, authority, and *responsibility* from a national to a sub-national level; and
- **Decentralisation** is the delegation of power and authority to lower levels, with ultimate responsibility remaining at the national level.

(See Chapter 2 for a discussion these terms.)

(Figure 1-1). The 'rolling back of the state' has seen off-loading of previous core-government functions through privatisation of activities on the one hand and contraction of state interventions such as subsidies provision and to civil society on the other. As well, vertical dispersal has been upwards to supra-national governance organisations, driven largely by demands for economic harmonisation, primarily through bilateral country agreements with establishment of free-trade zones, the World Trade Organisation, and in Europe the expansion in scope and jurisdiction of the European Union. Dispersal has also been downwards, to local government as well as from government department head to sub-national offices. The extent of the resulting 'hollowed state' varies between countries and it is even debated whether there is a hollowing out, or rather only a reconfiguration of the state.

2.1 Pressures for institutional change

Change in institutional design has been driven by several pressures. Some are exogenous, driven by macro-economic and geopolitical changes and are, by definition, outside the control of decision-makers. Others are more endogenous in character as decision-makers within the institution seek to change the responsiveness and efficiency of institutions.

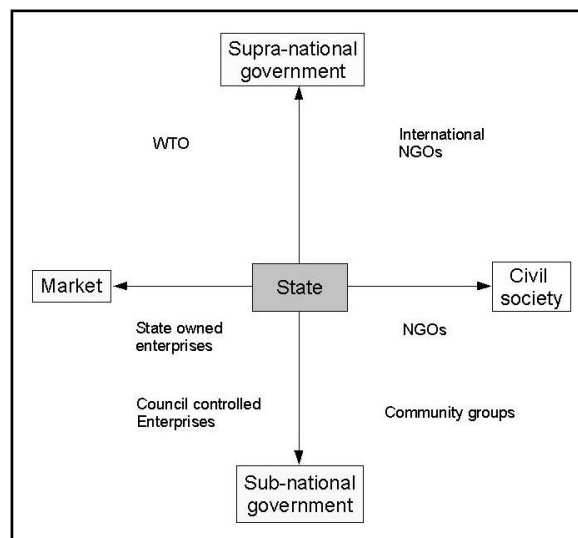


Figure 1-1: The hollowing out of the state

The perceived importance of governing institutions, and, indeed, their composition, in explaining overall government performance has waxed and waned over the last century. New ways of thinking about the role of the state and its administration over the last thirty years has had consequences for how authority is allocated at the sub-national level. There is now general agreement that new ways of steering society to reach collective goals have emerged over the last thirty years. These have resulted in dispersal of formal authority from central states to both supra- and sub-national government, as well as to civil society, giving rise to the slogan 'the hollowing out of the state' (Rhodes, 1996).

Writers such as Pierre and Peters (2000: 2-3) see in western countries an historical progression from government (as state-centred authority) to governance (diffused authority) by the end of the twentieth century, following a progression of:

- Democratic state: consolidation of democratic government and development of bureaucratic structures to separate policy implementation and political decision-making

- Welfare state: Expansion of the political sphere of society, embarking on political projects of regulation, nationalisation and economic redistribution, resulting in increased public expenditure on public services and welfare state provisions
- Rolling back of the state: government was increasingly defined as the cause rather than the solution to societal problems, resulting in market driven, private-sector models resulting in privatisation, cut-backs in public spending and monetarist economic policies
- Governance state: typified by 'third-way' politics of achieving social objectives within a society prone to follow market ideals, resulting in engaging with other levels of government, civil society and the community.

The last two phases, rolling back the state and the governance state) have seen a dispersal of state authority, apparently resulting in smaller central government, or at least authority accountable to the state that combine to result what has been popularly called 'the hollowed state'. Whether in fact the state has been hollowed out, or merely reformulated is a moot point for state sector expenditure and state sector employment in western democracies remain high, but the salient point is that there is now a greater dispersal of national level authority than before.

While there had been long-standing calls for the rolling-back of the state (e.g. Hayek, 1944), demands for dispersal gained traction with the following changing conditions in the last quarter of the twentieth century:

- Concern with efficiency of existing bureaucratic government to deliver services efficiently, and to be able to respond to increasingly volatile economies;
- The rise and increasing power of supra-national organisations, that in turn have been driven by globalisation of economy; and the
- Rising concern about the legitimacy of government decisions and role of individuals and communities.

At the same time, new international finance and globalisation trends, as well as increasing significance of supra-national organisations and government to harmonise international trade has seen a concentration of authority at supra-national levels. European supra-government continued to extend and consolidate its legitimacy and place, from its beginnings in the post World War II European Coal and Steel Community. It evolved through treaty and was driven by increasing economic interdependence to create a single European market with increasingly sophisticated institutions to form the current European Union covering twenty-seven countries (Corbett, Jacobs and Shackleton, 2005). As well, international trade and high mobility of global capital has resulted in supra-organisations such as the World Trade Organisation to harmonise international trade.

2.2 Institutional design

Each of these decentralising approaches has been subject to considerable analysis. For example, Helm (1986) is one of many to have analysed the political economy of the rolling back of the state through privatisation and corporatisation. The 'new-governance' school has sought to examine the role of non-government organisations and initiatives (e.g. Pierre, 2000; Rhodes, 1996; Stoker, 2000) while communitarians have argued for a greater role for community based governance (Etzioni, 1996). The role of supranational organisations has similarly attracted considerable interest, primarily within the context of globalisation and the emergence of the European Union. Also, wider post-Fordist economic globalisation has led some to suggest the 'hollowing of the state' (Rhodes, 1996). While that analysis is possibly

somewhat premature, nevertheless these centrifugal forces have seen the transformation of the state as it addresses the realities of multi-level governance (Pierre, 2000).

A feature of sub-national governance is the range of configurations resulting from combinations of authority, responsibility and functions that are devolved. Yet beyond agreement that governance has become multi-layered, there is no consensus about how it should be organised (Hooghe and Marks, 2003). One can differentiate between general purpose, multi-functional local government and specialised single-function organisations, such as catchment and education boards. As well there is contention over the proper locus of these functions, whether they should be at the local, regional, or national level. As discussed in chapter 2, a body of largely normative theory privileges local government and communities as the most appropriate local for many functions. A revisionist literature suggests the gains from such decentralisation are not necessarily borne out in reality.

2.3 Regional government

Within this governance constellation has been the growing support for the region as a viable unit of coordination, or government. This has been particularly pronounced within the European Union, with a discourse of the 'Europe of the Regions' manifested within the EU institution as the Committee of the Regions with advisory powers, consisting of representatives from regions within member-states. Its pragmatic manifestation is the plethora of regional government lobby offices in Brussels seeking to influence supra-national decision making directly, for example, the Bavarian office is a mere 200 metres from the European Parliament. However, much of the recent focus has been on city-regions and economic regions comprising groups of cities focusing on economic development, although environmental issues are also addressed at the regional level often defined by common catchments or shared impacts.

Simple comparisons of regional government performance between polities is however fraught. In addition to configuration issues identified above, scale issues are significant. Different regional governance models are employed in western countries, with different authorities, responsibilities, and functions, ranging from federal states, as in Germany, where the Länder are similar in both geographic size and arguably share similar levels of autonomy to New Zealand regions (McNeill, 1996), to single purpose decentralised government departments. At the other extreme are the virtual city-state regions, such as Hamburg with its New Zealand spatial analogue of Nelson City (population 42,000), which also has regional functions, but is manifestly sub-regional in size.

At the same time, there has been some disquiet about the consequences of some of this devolution, while the democratic legitimacy of the devolved structures has also been questioned. This disquiet addresses both the agencies' ability for political decisions to derive from authentic preferences of citizens; and their ability to achieve the goals that citizens collectively care about to create public value. Underlying it is the need to understand which functions and instruments are best centralised and which are best placed in the sphere of decentralised levels of government (Oates, 1999: 1120).

Having created a highly disaggregated and decentralised apparatus, there are now concerns at lack of accountability of subordinate organisations to higher levels of government, difficulties in coordination and coherence and the achievement of outcomes. This has led to a perceived need to rebuild state capacity through recentering. While not universal, recentralisation is observed in several countries, notably the Scandinavian countries and the

Netherlands, driven in part by the need to speak with a united national voice to the European Union and WTO (de Vries, 2000).

2.4 Recent deconcentration in New Zealand

New Zealand is a centralist state in the Westminster tradition and has been at the forefront of some of these public sector reforms (Scott, 2001). As such, it has been part of this decentring trend, leading the way through the New Public Management inspired state sector reforms in the 1980s and 1990s (Boston, *et al.*, 1996). The creation of state-owned enterprises, many of them subsequently privatised, and a contraction of services resulted in a horizontal decentring. As well, decision-making within several policy arenas has been devolved and sub-national institutions rationalised and strengthened. Initiatives covered a wide range of policy sectors, including education, health, natural resource management and nature conservation and heritage. The reform of the local government sector, that resulted in twelve directly elected regional councils, a reduction in the number of territorial authorities from more than 200 to 74, and the absorption or abolition of over 400 special purpose authorities in 1989 (Martin, 1991) was signal.

But this relocation of authority and responsibility has not been uniform in form or function. A variety of organisations have been established, each differing in their lines of accountability, degree of autonomy and governance arrangements (Gill, 2002). Further, boundaries of these new organisations continue to be modified. Some have become more porous to include stakeholder organisation and private sector involvement and influence. These boundaries also have become blurred as the national government, using more recent communitarian-influenced, or third-way, legislation, sets cross-cutting responsibilities for local government for promoting their communities' social, economic, environmental and cultural well-being.

Notably, local government, as a sub-national, locally elected and accountable entity capable of self-funding and ability to legislate, remains attenuated in comparison with other western countries. Local authorities (city and district councils) can be seen primarily as property service agencies, with half of their budgets devoted to public roads (Local Futures, 2006). Regional councils, with their primary responsibilities of natural resource management (Auckland and Wellington regional councils, with their significant public transport budgets, are exceptions), have been aptly described as 'ad hoc special purpose authorities' (Bush, 1996). Education, policing, public health, and many other social services and functions commonly found in other western local governments, at either the local or regional level, are either absent or at the margin of New Zealand's local government.

Some functions, notably environmental management, education and health, were devolved to special purpose geographically defined sub-national organisations. Whereas education was devolved down to individual schools, environmental management and health management were located primarily at the regional level. The institutional configurations differ between organisations. Many, but not all, government departments have regional level administrations with decentralised decision-making authority, for example the Department of Conservation (DoC) conservancies and Ministry of Social Development regions. In part this has compensated for the contraction of the state, for example, the loss of a previous decentralised, regional authority such as that held by the District Commissioners of Works, though some government departments, notably the Ministry of Social Development (MSD), with its 13 regional commissioners, and Police, and the Department of Conservation with its 13 regional conservators retain a strong regional

presence. At the sub-national level, then, New Zealand's governance is a hodgepodge of agencies with decentralised or decentralised power.

With a wider legislative mandate under the Local Government Act 2002 (LGA 2002), subject to conditions, regional councils are now able to expand the extent of their functions. Also, central government appears to struggle with regional presence and influence; recently the Ministry of Economic Development (MED) has sought to realign its regional economic development along regional council jurisdictions (MED, 2006). However, regional councils were designed primarily to manage the environment, and remain a tangible expression of the theories underlying 1980s New Zealand state sector reforms. Their relevance and the role they should play nearly twenty years later operating under governance regimes informed by evolving public sector management theory can be debated.

3. The challenge of regional government

Concerns about lack of capacity and capability, duplication of efforts and poor coordination and alignment within and between levels of government have been persistently raised regarding their ability to set and implement policy. Industry has complained of different regulations applying to the same activities between regions. Public concern on the other hand has grown about increasing environmental degradation as a result of agricultural intensification, especially dairying, leading to a 'dirty dairying' campaign in 2002. The value local representation adds to decision-making quality can also be questioned. As elaborated on in chapter 3, the Resource Management Act 1991 (RMA) contains mechanisms for resolving policy disputes by judicial rather than political mechanisms. Further politicians are asked to make decisions within a technically complex policy arena. Questions can be asked about how politically elected representatives have the competence to understand the full implications of the different policy choices available to them.

Lack of coordination between local authorities and central government, and council capability have led to concerns about significant major development, compelling a letter to the editor of a major newspaper published under the caption 'Bring back the Works Ministry' lamenting:

under this Government and current regional council management, we are moving well down the rankings from being a First World country with First World infrastructure (*Dominion Post*, 11 January 2007).

It can be asked whether issues are sufficiently geographically different to warrant individual regional responses or whether a single, national, response is more appropriate. Indeed, it is now accepted that some issues, most obviously global climate change, are supranational in scope. This does not in itself dictate only supranational political management. Indeed consensus at the 1992 Rio Summit mandated local action for global actions, but at the same time, duplication of effort as different organisations tackle common issues in a partial fashion is not likely to be efficient.

More widely, Boston *et al.* (1996: 7-11) suggested that despite the dramatic and far-reaching reform of New Zealand's public management initiated in 1980s and 1990s, several perennial issues remain. These include determining the appropriate balance between centralisation and decentralisation and in particular, how many levels of government should there be, the appropriateness of a federal versus unitary state, the need or otherwise for both regional and territorial government, the assignment of public functions and taxing

powers. Over a decade these issues remain largely unresolved and indeed largely undebated.

These concerns about functional specialisation, capacity and capability, and overall efficacy of regional organisations generally, and regional councils specifically, suggest the current governance model, while elegant, may be inappropriate to New Zealand needs and conditions. Are the regional councils, as they portray themselves, really part of local government or simply a special purpose authority, the extent of their functions, and also their role in the public policy process, as policy-makers or implementers? As one informant described this ambiguity, “the [regional] council doesn’t know whether it’s the bowler or the wicket-keeper.”³ Taken together, these concerns raise the need to determine an appropriate role for regional councils in New Zealand.

4. Research

4.1 Aim and objectives

The aim of this research is to elucidate the efficacy of and an appropriate role for regional councils using environmental management in New Zealand as a case study. The research objectives to achieve this aim are to:

- Review the rationale for regional level of government;
- describe New Zealand’s regional level institutional arrangements;
- Assess the efficacy of regional council performance using environmental management as a case study;
- Suggest an appropriate role (functional scope, authority and responsibility) for regional councils in New Zealand, with particular reference to environmental management.

4.2 Scope and limitations

The study is necessarily limited in scope in order to remain feasible and timely. The choice of environmental management reflects the emphasis most regional councils place on this function which is common to all of the regional councils (see Chapter 3). In undertaking an assessment of regional council roles, the study purposefully excludes some important aspects of environmental management; notably sustainable development (as opposed to sustainable natural and physical resource management), internal council management and administration and the role of iwi (Maori tribes).

The sustainable development paradigm contains three pillars. The economic, environmental and social goals and policies are interrelated, requiring at the least recognition of competing demands and need for tradeoffs between policy domains. This research is constrained to examining only the environmental management policy domain as a proxy for the other domains. This constraint means that no comprehensive examination can be made at the meta-policy level, of the recognition and resolution of these competing demands across government, and the need for ‘whole of government’ approaches and solutions. Within the environment policy arena, several sub-themes are identified but not elaborated on as they fall outside the strict ambit of this research into institutional arrangements. Importantly, except in a general way through the LGA 2002, regional

³ This metaphor has a resonance with Osborne and Gaebler’s (1993) metaphor of government as rower or steerer, but in this case underlines the distinction between responsive and proactive action.

councils have not had a mandate to manage for sustainable development, only sustainable resource natural and physical resource management under the RMA and related legislation.

It is recognised that individual executives and politicians can have considerable impact on individual organisational performance. However, this study focuses on the formal institutional arrangements and configurations of regional councils. The aim of determining an appropriate role for these organisations means that research is focused on the overall governance system, not on individual organisational performance. To be successful then, any recommended role must be sufficiently robust to cope with performance variation of individual councils, where leadership can be expected to fluctuate over time as personnel come and go.

The most conspicuous and important of these limitations is the placing of the indigenous First People of Aotearoa-New Zealand, the Maori. This omission is conspicuous, firstly as Maori are themselves aligned sub-nationally, with iwi identifying and identified with their own turangawaewae (tribal lands), defined in relationship with the local or regional geography. Secondly, the Treaty of Waitangi (1840) locates management, or kaitiātanga (guardianship), of New Zealand's natural and physical resources with the tangatawhenua, the people of the land, which is given limited effect within the RMA and LGA 2002.

This limitation is justified on the grounds that these issues, although revolving around ownership of environmental resources, are as much about fundamental constitutional issues and the relationship between signatories of the Treaty. The Seabed and Foreshore Act 2004 and other special purpose legislation such as the South Island Pounamou Act passed in order for the Crown to address and give effect to Treaty of Waitangi Tribunal decisions that redress previous injustices, redefine fundamental property right regimes at a national level. The Seabed and Foreshore Act debate highlights primarily constitutional rather than environmental issues. Its resolution also remains at the national level, between the Crown and individual iwi, where neither party envisages any role for sub-national government except to implement any relevant agreed resolution steps; Maori have made it clear that they view local government as merely agents of the Crown. Accordingly, although the role and participation of individual iwi are important when evaluating New Zealand's environmental management performance, they provide less of an insight into the wider functioning of existing multi-layer governance arrangements. However, the governance arrangements that do emerge as a consequence of resolving the Treaty claims may well be significant in the future and may well necessitate revisiting the role of regional councils at that time.

5. Overview of the Study

The remainder of the study reviews the theoretical underpinnings for regional governance and environmental management in New Zealand as a case study for evaluating the role of regional councils. The efficacy of these regional governance arrangements is assessed and finally, recommendations for improving the existing institutional arrangements are made and wider practical and theoretical implications identified.

Chapter 2 situates regional councils as a subset of devolved government and identifies the significance of and challenges to and posed by devolved governance. It also provides an evaluation of the major theories from a range of disciplines underpinning devolved governance. The concept of subsidiarity is discussed, along with implications of fiscal federalism and new governance theory, related to the new institutionalist framework. This

is contextualised within a framework that describes and advances the generation of public value within a multi-layer government framework. Critically, it explores the spatial dimension of government and the impact of scale. This framework provides a basis for assessing the efficacy of multi-layer government.

Chapter 3 provides a background to the establishment, form and function of regional councils in New Zealand. It outlines a brief history to their establishment and canvasses the legislation within which they operate. In particular, it describes the palimpsest of previous institutional arrangements, underlining both that ‘institutions matter’ as well as the ‘inefficiency of history’ (Olsen and March, 1989).

Chapter 4 provides a background to environmental management policy generally and its appropriateness for use as a case study in investigating the role of regional councils. The multi-scalar nature of environmental issues is explored and the consequences for designing institutional structures capable of addressing them identified. New Zealand’s institutional arrangements for managing the environment are described to provide a context for the case study for evaluating the regional council model of regional government.

Chapter 5 describes the research design to explore the public value of New Zealand regional government, using environmental management as a case study. It sets out a research framework for evaluating the efficacy of the regional council model, with particular application to the New Zealand environmental management framework. This includes evaluating both national and sub-national levels of government. The framework used here draws on the notion of public value, but develops it to take account of multi-layer government.

Chapter 6 reports on the public value of regional councils’ management of the environment using a range of published data in order to obtain quantitative assessment.

Chapter 7 reports the findings of perceptions of New Zealand experience in managing the environment within the broader multi-layer theoretic, drawing on results of a survey of environmental practitioners and stakeholders.

Chapter 8 evaluates the published data and perceptions reported in the previous chapters to assess the public value of New Zealand’s regional councils’ environmental management.

Chapter 9 draws conclusions for both the New Zealand regional council government model and more generally for devolution theory and recommendations are made in light of these to improve policy performance and inform theory. Finally, areas for further research are suggested.

6. Wider application of Research

Removing the ambiguity and clarifying the role of regional councils is important if policy outcomes are to be achieved. This need is particularly salient given the government’s concern for the need for linked-up government generally, but also given the drive for sustainable development which crosses and requires trade-offs between policy sectors. Assessing the efficacy of this devolved model for developing and implementing policy in the light of the twenty years experience following local government and environmental management reforms is also now appropriate. It also contributes to the wider multi-level governance theory, by examining in depth one particular element and its interaction with

other layers. Such research is particularly topical given government's recent (2002) broadening of the regional council task-span to address wider social, economic and cultural well-being, and current consideration of the role of metropolitan governance of Auckland. More broadly again, it has implications for other regionally administered government functions, including conservation and public health.

Chapter 2: Theory and practice of regional government

1. Introduction

The previous chapter outlined the focus of the research, namely, of the efficacy of and appropriate role for regional councils. This chapter provides a theoretical context within which to locate this research.

The obvious feature of regional government is its intermediate spatial and authority position within the formal institutional structure of government. Located between national and municipal local governments, it is part of a larger multi-layered governance structure. Consequently it is influenced by changing national level institutional arrangements, especially the apparent diffusion of national level government. While some of this diffusion has been to sub-national governments, with a particular focus on municipal local government, the implications at the regional level have by comparison been somewhat neglected. Rather, academic interest has focused on economic development, or, and in many cases related to, the European Union's 'Europe of the Regions' initiative and emerging trans-national rather than sub-national regions. The growth and management of large metropolitan city-regions has also generated interest (see Bush, 199, 1; Frug, 2002 and Pezzini, 2003), but this is only one type of regional government and typically addressing only a small albeit important part of a nation state.

The first part of this chapter examines the role of government within the literature on new institutionalism. Concepts of the value and legitimacy of such institutions are then explored in order to structure a framework for assessing the current regional institutional arrangements. The second part of the chapter then explores the logic of devolution, of which regional governments are a product. It identifies the characteristics of regional governments and also places them within a multi-layered institutional configuration in order to focus the research. Such an exploration is inevitably multi-disciplinary in scope, so the intention is to provide an overview within which to situate regional government rather than to be exhaustive within particular disciplines.

2. Institutions matter

In searching for a more comprehensive rationale for regional government, this review examines firstly the significance of institutions in determining policy development and outcomes, and their changing shape and nature in recent times. A starting point for this analysis is the proposition that institutions matter, that the rules, organisations and structuring of governance systems influence decision-makers' decisions (March and Olsen, 1984; 1989; 2005) and therefore impact on societal well-being. This builds on March and Olsen's now widely accepted response to the then prevailing thought that politics was a reflection of society and political phenomena were the aggregate consequences of individual behaviour. Action had been seen as the result of choices based on calculated self-interest, history as efficient in reaching unique and appropriate outcomes, and decision making and the allocation of resources as the central foci of political life. March and Olsen (1984) therefore proposed a reassessment of the role of institutions within this context. This new institutionalism emphasizes the relative autonomy of political institutions, possibilities for inefficiency in history and the importance of symbolic action to an understanding of politics.

New institutionalism is now firmly established though with a range of versions (see Lowndes, 1996, 2001; Kjaer, 2004). It takes as a starting point that political democracy depends not only on economic and social conditions, but also on the design of political institutions. Importantly, the concept of institution is broadened to include informal norms and mores of organisations, as well as the formal, legal and constitutional structures of earlier political scientific interest. Bureaucratic agencies, legislative committees, and appellate courts are seen as arenas for contending social forces, but they are also collections of standard operating procedures and structures that define and defend values, norms, interests, identities, and beliefs. This claim of institutional autonomy is necessary to establish that political institutions are more than simple mirrors of social forces (March and Olsen, 1989: 17).

Kjaer (2004: 7) summarises the differences between the various institutionalisms as between two assumptions about human behaviour: rational and sociological behaviour. The rational behavioural model assumes preferences are exogenous from the institution and individuals decide which alternative would best maximise their individual utility and then act appropriately, the logic of consequentiality. The sociological behavioural model assumes preferences are endogenous to the organisation so that individuals are socialised into having certain values and norms that determine behaviour. Individuals evaluate a situation and act according to what is most appropriate in that situation, rather than considering the consequences, the logic of appropriateness. As a result 'action is often based more on identifying the normatively appropriate behaviour than on calculating the return expected from alternative choices' (March and Olsen, 1989: 22).

Ostrom (1991) reconciles these two positions by proposing that the two are not incompatible, instead, she suggests, individuals exhibit rational self-regarding behaviour bounded in its scope by the sociological mores and conditioning of the institutions they occupy. Kjaer therefore proposes a common definition of an institution as:

formal and informal rules, behavioural codes and norms that constitute prescriptions ordering repeated, interdependent relations. Thus institutions may be informal requirements and norms about what is appropriate, but they also exist in the form of written documents, such as constitutions (Kjaer, 2004: 9).

This broadening of definition has brought about a rethinking of the locus of authority, especially in the context of an apparent diffusion of national level government, discussed in the previous chapter. Importantly, while authors such as March and Olsen define institutions also to include social entities, others, such as Scharpf (1997) prefer to reserve this meaning to 'organisations' or 'corporate actors'. Lowndes (2001: 1956) argues that fragmentation of elected local government and the growing importance of networks clarify that:

'institutions' are not the same as 'organisations' and that 'weak ties' can be as important as formal constitutions.

This new institutionalist approach sees a transformation into the new paradigm of 'governance' as opposed to 'government' with the recognition that with this diffusion in multi-level systems there may well be no centre of accumulated authority, but rather variable combinations of governments on multiple layers of authority with relationships built on mutual cooperation (Hooghe, 1996). But like 'institution', the term 'governance', while popular, is imprecise. Rhodes (1996) identifies at least six uses of the term, referring to: the minimal state, corporate governance, the new public management, 'good governance', socio-cybernetic systems, and self-organising networks. He uses governance to mean 'self-

organising, inter-organisational networks' and argues that these networks complement markets and hierarchies as governing structures for authoritatively allocating resources and exercising control and co-ordination. He suggests that such networks are part of service delivery in Britain, at least, based largely on trust and mutual adjustment. Kjaer (2004: 10) proposes a broad institutional definition for governance that provides a common ground to all the different perceptions as:

the setting of rules, the application of rules, and the enforcement of rules.

Such a conception has implications for the role of the state and Jon Pierre poses the question:

what significance or meaning remains of the liberal-democratic notion of the state as the undisputed centre of political power and its self-evident monopoly of articulating and pursuing the collective interest in an era of economic globalisation, a 'hollowing out of the state' (Rhodes 1994), decreasing legitimacy for collective solutions, and a marketization of the state itself? (Pierre, 2000: 3).

To answer this, Pierre suggests two perspectives can be taken: the state-centric focus and the society-centred focus. The central question from the state-centric perspective is to what extent the state has the political and institutional capacity to steer and how the role of the state relates to the interests of other influential actors, a conceptual representation of coordination of social systems and the role of the state in that process. The society-centred perspective focuses on co-ordination and self governance, such as manifested in networks and partnerships. He further defines two modes of governance: old governance, how and with what outcomes the state steers society and economy; and new governance, applied more generically at coordination and forms of formal and informal types of public-private interaction, most predominantly on the role of policy networks.

Pierre and others are suggesting not so much a decline of the state as more of a state transformation. In contrast to Rhodes' (1996: 660) assertion that 'networks are not accountable to the state', Sbragia (2000) pithily notes, 'only the state can dispatch the police', underlining the underlying shadow of coercive authority of the state within which they operate. Such a transformation situates Peters' (1996) challenge: what new forms and shapes can and should the pursuit of the collective interest take and to what extent do we need to rethink the traditional liberal democratic model of the state?

Although much of the focus of 'new institutionalism' has been on the sociological interactions within the institutions, several researchers have explored the importance of institutional context. The importance of institutions to explain policy effectiveness is challenged to no small degree by a rediscovery of the importance of exogenous forces on institutional performance, notably the level of social capital (Putnam, 1993). Social capital captures relations of trust, reciprocity, common rules, norms and sanctions, and connectedness in institutions built up through collaboration and interaction that are shaped by wider societal and historical forces. Putnam suggests the social milieu within which institutions operate has a decided impact on their performance, in Italy correlating regional council performance with regional choral society and football club membership.

The attraction of social capital to many policy-makers is that the institutions themselves have been seen to help generate social capital through adopting collaborative interaction with their communities (e.g. Dollery and Wallis, 2002; Pretty and Ward, 2001) rather than to explain institutional performance, which seems almost tautological. It also seems overly

optimistic; as a leader from an ‘uncivic’ region exclaimed when Putnam told him the research results:

You’re telling me that nothing I can do will improve our prospects for success. The fate of the [regional] reform was sealed centuries ago (Putnam, 1993: 183).

Putnam suggests that changing formal institutions can change political practice, with formal change inducing informal change and becoming self-sufficient. However, the finding that “ecological” factors, such as social or economic structure of a region or its civic tradition of which the institution is part, as well as those of the institution itself, may explain contemporary institutional performance.

Similarly, Jänicke and Weidner (1997), examining national environmental policies in western democracies, note that a country’s capacity for achieving policy outcomes is not and cannot be restricted to government policies, but is increasingly dependent upon societal forces, capacities for the environment constituted by:

1. organised government and non government proponents of environmental protection of government institutions, non-government organisations (NGOs), environmental groups, media and ecologically innovative firms;
2. framework conditions:
 - a. Cognitive-informational framework of technical knowledge, public awareness and the prevailing paradigm;
 - b. Political-institutional framework of participative capacity. Level of decentralisation, and integrative capacity for cooperation and capacity for strategic action; and
 - c. Economic-technological framework including, subsidies, and macro-economic policy.
3. the strategy, will and skill of proponents;
4. situative opportunities to mobilise support, related to the kind of problem or policy salience determined by perceived urgency and power, resources and options of the target group(s).

Different exogenous forces combined with internal informal configurations can be expected to lead to spatially heterogeneous institutional landscapes, even when structured formally in the same manner.

3. The rationale for sub-national institutions

The dispersal of government both horizontally to markets and vertically, to supra-and sub-national governments has been a feature of the modern polity. Devolution is one manifestation of this dispersal, resulting from central and local government reform and reallocation of responsibilities, both within the government structures and more widely to the private sector and civil society. Many of the arguments for dispersal are not new and often contain multiple goals. These include the efficacious provision of services, ensuring democratic process through encouraging greater public participation in government and providing a nursery for national government, counterbalancing the power of central governments and freeing the markets. While many arguments across a diverse literature across disciplines support devolution, they are less consistent in determining at what level particular responsibilities should most appropriately be located. At the same time, concerns are also raised about devolution. Accordingly, this section identifies and assesses the rationales that support such an approach and the threats to developing good policy that may result as a consequence of adopting this approach.

3.1 Defining devolution

The terminology of decentralising functions is confusing; decentring, devolution, delegation, deconcentration and decentralisation are used in different ways that can obscure the design and nuances of institutional configuration. As Fougere suggests:

the term's currency comes about precisely because of its ambiguity – an ambiguity that allows the term devolution to speak to widely shared concerns at the same time as it lends itself to radically different prescriptions for change (Fougere, 1988: 137).

A range of definitions suggest not only the room for misunderstanding, but also the appropriation of terminology to frame particular ideological positions. The OECD (1997) uses **devolution** to mean a transfer of responsibility from a central government to a subordinate level of administration. It may be either through:

- **Decentralisation:** transfer of responsibility to democratically independent lower levels of government; or
- **Deconcentration:** transfer of responsibility from central ministries to large offices or more autonomous agencies.

Kjaer (2004: 29) uses the term **decentralisation** to denote when functions and powers are transferred to lower levels, which she distinguishes two types:

- **Deconcentration:** policy-making authority remains at the central level and only policy implementation is decentralised; and
- **Devolution:** all authority is decentralised and the local government is no longer accountable to the central level, but to the local population through local elections.

Boston *et al.* (1996:163) suggest convenient definitions 'probably in accordance with New Zealand usage':

Devolution: the transfer of power, authority, and responsibility from a national to a sub-national level; and

Decentralisation: the delegation of power and authority to lower levels, with ultimate responsibility remaining at the national level.

Responsibility here is taken to include political accountability; thus devolution involves some level of sub-national autonomy while decentralisation remains an administrative measure of central government.

Despite the confusion, these definitions all distinguish clearly between establishing a sub-national presence of central state and a relocation of responsibility and autonomy to sub-national government. They address jurisdictional and functional configuration of institutions. Embedded in the definition is a spatial conception of power and territorial devolution.

In comparison, McKinlay uses **devolution** more expansively to mean:

a shift of power from central government to other, subsidiary, levels of government or to institutions or individuals outside the government structure altogether (McKinlay, 1990: 1).

In this sense, devolution is more consistent with government shedding responsibilities and serves to underline the ideologically driven agendas for relocating state authority that have played out since the 1980s. It is not inherently spatial in conception; shifting power to

arms-length Crown-owned entities or to the market does not necessarily redefine jurisdictional boundaries.

Seeking to resolve any terminological confusion is perhaps futile; but awareness is necessary to recognise that different authors using the same words may well be intending different levels of power and authority placement. For the purpose of this discussion, and for no better reason than they propose, the definitions used by Boston *et al.* (1996), previously proposed by Martin (1991), are used here: **devolution** as the transfer of power, authority, and *responsibility* from a national to a sub-national level; and **decentralisation** as the delegation of power and authority to lower levels, with ultimate responsibility remaining at the national level. **Dispersal** is used as a generic term that in addition to devolution includes privatisation and transfer of state authority to supra-national organisations and to non government organisations.

This definition situates devolution as acting within formal institutional arrangements and distinguishes it from wider informal institutions, such as civil society. It also embeds territoriality within the meaning. A corollary is that the locus of power can be relocated, both upwards and downwards. However, the extent of the power transferred and the geography of the sub-national units of government are contested. Similarly, the level of focus on the state is also contested, paralleling the new institutionalist and new governance literatures. McKinlay (1990) and others clearly see devolution as a catch-all for the rolling back of the state and clearly parallel with Stoker's observation that governance means 'the acceptable face of spending cuts' (Stoker, 1998: 39).

3.2 Rationales for devolution

The interest and importance afforded decentralisation and devolution clearly indicate a strong belief that institutional configuration is an important factor in determining policy outcomes, that 'institutions matter'. They suggest that there is in the minds of institutional designers an optimal configuration, or at least a view that some configurations are better than others in achieving these outcomes. The dominant contemporary arguments supporting devolution and decentralisation can be conveniently grouped as either public choice or a more societal-focused political argument. The irony is that one considers the way to reduce propensity for government failure is to reduce its size whereas the other seeks to strengthen government institutions.

3.2.1 New public management

Public choice theory (Niskanen, 1994), which in turn informed market-based philosophy in the public service of New Public Management (NPM) movement in the late 1980s (Hood, 1991), substantially set the policy agenda from the mid-1980s to the mid-1990s. This saw government failure very much in terms of agency driven by self-regarding, marginal utility maximising behaviour of individuals within the institutions that distorted policy goals and implementation. As well, the state was seen to lack the capacity to deal with contemporary issues. This disillusionment in the state has manifested as a roll-back of the state to allow a far greater market role in determining the allocation and employment of resources and to institute control mechanisms on individuals within the bureaucracy. The roll-back of the borders of the state (Helm, 1988), saw a reduction in state involvement in the market, but it has also resulted in new institutions of profit driven state and local government owned trading enterprises.

While a wide range of reform measures were enacted under the NPM umbrella, Kjaer (2004) notes there is no agreement as to the exact composition. Rather, they include a range of mechanisms for dispersing national government both horizontally and vertically, through:

- Transfer of private sector management principles to the public sector rather than policy;
- Privatisation: transferral of public sector enterprises to private ownership, contracting out, and contestability in public service provision;
- Agentification: establishment of semi-autonomous agencies responsible for operational management, so that there is distance from the central department to give freedom to manage;
- Competition: introduction of quasi-markets into the public sector (e.g. school vouchers);
- Devolution⁴: relocating functions to lower levels of government so that decisions can be taken that are more responsive to local community needs, together with development of new reporting, monitoring, and accountability mechanisms; and
- Citizens' empowerment: accountability of public officials to their clients and users (Kjaer, 2004; Boston, 1991: 9).

Although associated as being part of the NPM stable, the inclusion of devolution and citizens' empowerment can be debated (Kjaer, 2004:206). For example, Turner and Hulme (1997: 232) note that New Zealand's reforms, which have been among the most comprehensive NPM reforms, have been characterized as having 'a preference for retaining key governmental powers and responsibilities at the central government level with only limited devolution to sub-national government.' Rhodes (1997) notes that British prime-minister Margaret Thatcher's reforms reasserted central authority, resulting in simultaneous centralisation and devolution resulting in 'more control over less'.

On the other hand, decentralisation had been considered a core part of progressive 1980s management practice: It was championed by management gurus Peters and Waterman (1982:15) who found top-performing (large) American firms getting close to their customers, and that decentralised, loose-tight structures – that 'pushed autonomy down to the shop floor ... and are centralists around the few core values they hold dear.' Decentralisation was described as part of a 'new wave' in which 'new political parties, new philosophies, and new management techniques sprung up and explicitly attacked the centralist premises of the previous ruling paradigm' (Toffler, 1981: 268). As Cummings (1995: 110) identifies, this tradition holds that a balance between centralisation and decentralisation exists for each organisation.

Peters and Waterman (1982), writing about the private sector, and Osborne and Gaebler (1992), examining the public sector, promote a bottom-up, loose-tight configuration. Most decentralised functions are services, implementing policy. Policy, establishing the rules of the game, is reserved to higher levels of government. Osborne and Gaebler, while championing decentralisation note that the federal system would still have responsibility for providing funds and setting an overall policy framework, even if it is not delivering services, including:

⁴ Kjaer uses the term "decentralisation".

- policy areas that transcend capacities of state and local government, e.g. international trade, macroeconomic policy, and much environmental and regulatory policy;
- antipoverty policy, which requires investment in regions with the least resources;
- social insurance programs - if equal benefits are wanted across the country, cannot expect rich and poor states to shoulder the same burden; and
- investments that they are so costly they require sizable tax increases that might discourage business from locating or staying in a city or state (Osborne & Gaebler, 1992: 276-279).

In short, steering, but not rowing, should remain centralised.

A substantial political economy of local government exists informed largely by public choice theory (e.g. Helm and Smith, 1987; Dollery and Wallis, 2001). This literature focuses on municipal local government and service delivery functions. Its application is less applicable to regional level government policy institutions, except where they provides services, but even then the friction of distance at the regional scale appears to reduce its relevance.

Much of the theory for determining the physical size of jurisdictions draws on fiscal federalism in the public finance literature (Dollery and Wallis, 2001). Underlying this is the 'correspondence' principle, where public goods and services are provided over a geographic range that matches the positive and negative externalities they generate. This achieves symmetry between decisions relating to expenditures and revenues. This theory is largely built on Tiebout's hypothesis (Tiebout, 1956). This hypothesis assumes first that different municipalities offer different mixes of services at a variety of prices, and second that people have different preference sets for services and their quality and ability to pay, individuals will choose to locate, or move until they find a municipality that maximises their personal utility. Where a municipality does not provide such utility, its citizens will 'exit', or 'vote with their' feet, relocating in another that does, forcing underperforming municipalities to improve their performance to attract and retain citizens to fund them.

Tiebout's 'exit' strategy relies heavily on a high level of fragmentation of local government so that citizens have an effective choice of local government by locality. This may be applicable to countries such as the United States of America and Australia where municipalities are often very small. However, it is less relevant where larger councils predominate, as in New Zealand or the United Kingdom, and even less so at the regional level where relocation requires substantial spatial relocation with attendant social and economic disruption to individuals. In any case, Tiebout's theorem is hypothetical; transactional costs of relocation are for most people going to exceed any benefits achieved by relocation, except in very mobile societies where frequent house sale and purchase is the norm.

Public choice theorists, drawing on Tiebout and others, accordingly favour jurisdictional fragmentation, including metropolitan areas, so that inhabitants of individual jurisdictions share homogenous preferences, avoiding externalities (Frug, 2003). On the other hand there also exists a strong theoretical and pragmatic economic argument for amalgamating municipalities to create economies of scale. In small councils economies of scale can undoubtedly be gained in some areas, allowing greater efficiency and unit outputs and increased productivity through greater use of underutilised assets.

This is underlined by the simultaneous demand for making local government units both larger and smaller. For example, amalgamation to improve performance is proposed in

Australia, not only for shires most of which have less than 5,000 people, but also within the Sydney conurbation (Dollery and Johnson, 2005). Similarly, there is pressure in Canada for further amalgamation, especially among large metropolitan cities, such as Toronto (Bish, 2001). Simultaneously, pressure is mounting to break up large cities such as San Francisco, and some smaller sub-districts want to secede for the same reason (Bish, 2001). This apparent paradox can be explained by local government services having different optimal sizes, which in turn may not match communities of interests. A mismatch results in both inefficiencies and ineffectiveness.

With the possible exception of special purpose authorities, there is accordingly no functionally optimal size for local governments that maximises efficiencies of all services. For example, the optimal service district for fire services is unlikely to coincide or even resemble garbage collection, public parks or sewage treatment services. Also, coordination and control of activities can become more difficult in larger organisations, reducing efficiency. Economies of scale typically apply where capital is dominant, for example infrastructure, but are less evident in labour intensive activities. Accordingly, scale efficiencies for one activity may also produce diseconomies for another.

Public choice theory suggests decentralised government may be better informed about needs of individuals or communities, and reflect preferences of individuals (Helm and Smith, 1987). However, it also recognises there may also be benefits from centralised administrative economies of scale and need for central or national solutions to address market failure. Rather, Helm and Smith suggest the balance will shift with different policy areas, so that there is no *a priori* right answer to the proper degree of decentralisation, independent of the characteristics of the goods and services provided.

3.2.2 Social and political arguments

Other reasons also exist for devolving power, primarily subsidiarity and communitarianism. Subsidiarity, the transfer of power to the lowest competent authority, seeks to reduce the central power of the state. The subsidiarity principle states that matters should be addressed by the lowest level of competent authority. Although it shares much in common with fiscal federalist thinking, in seeking to match scale of decision-making with the scale of impacts of decisions, it ultimately is about asserting identity. Subsidiarity has had expression for over 400 years, in the writings of Althusius in his *Politica Methodice Digesta*, (1603), as a means of preserving his town's survival and independence from higher authorities at the close of the Thirty Years' War. It was taken up by the liberals as a means of harnessing the power of the state and was a guiding principle in the late nineteenth and early twentieth centuries by the Catholic Social Movement, as a means for attaining metaphysical ends (Endo, 2001; Norton, 1994). These forces have been significant within the European Union, being formally recognised in the 1993 Maastricht Treaty establishing the European Union. This has generated practical and theoretical work in implementation. The underlining of the identity is reflected in the negotiations leading up to Maastricht; rhetoric and concern initially focused on strengthening sub-national government at the expense of the state. Its support by the centrist British Prime Minister, Margaret Thatcher, was rather a means to hobble the EU in its interference in the affairs of member states (Endo, 2001).

Subsidiarity is also supported for other reasons. Rainbow (1993: 83) describes fundamentalist Greens supporting radical decentralisation as a means for driving a self-sufficient way of life, decoupled from the market economy, leading ultimately to the disappearance of the state. Libertarians also see decentralisation as important, reducing the state so individuals are free to make choices (through the market).

The other move has been that of building and utilising the power of communities, which necessarily require decentralised authority to function successfully. This saw a move from purely representational to direct democracy (Hambleton, 1988), and also to a sociologically defined constituency invoking the concept of community through (see for example, Etzioni, 1996, 1997).

A reaction to perceived weaknesses and failures of the Rawlsian 'fairness' of the 1970s and 1980s Hayekian 'free-market' models of government has been the so-called 'Third-Way', social-market economy model emerging in the mid-1990s (Parsons, 1995). This was most obvious under the 'communitarian' banner championed by Amitai Etzioni (1996, 1997). Etzioni's 'welfare capitalism' is in response to the recognition of the inability of developed nations' economies to generate large amounts of additional public resources demanded by their peoples from increased tax revenues (1996: 302). Rather, communities of individuals can sustain the social realm, upon which individual rights are able to sustain the social realm. Here the 'community can be defined with reasonable precision' as a web of affect-laden relations among a group of individuals. These often criss-cross and reinforce one another and provide a measure of commitment to a set of shared values, norms and meanings (Etzioni, 1996: 305).

This model locates power with communities, rather than with the 'Leviathan State' or mass of individuals. Communitarians argue for renewal of the idea of community on the basis that modern atomised societies have lost a sense of community and social solidarity. They suggest the underlying social fabric therefore needs protection or rebuilding and that selfish liberalism needs to be balanced with more responsibility and sharper sense of morality (Etzioni, 1994, 1997). Communitarianism is seen by its proponents as property of neither the left nor the right, but charting a middle way between excess of state regulation and control, and reliance on pure market forces on the other. It calls for a strong, but scaled-back, core of the welfare state to be maintained, but for other government tasks handed over to individuals, families and communities determined using the principle of [upwards] subsidiarity.

3.2.3 Arguments against decentralisation

In contrast to this almost panglossian historical progression to decentralisation, alternative points are suggested. There are also a good many arguments against decentralisation, many of which are the converse of the arguments for centralisation. Paradoxically, while decentralisation is seen as a means of attenuating the power of the centre, over-decentralisation is capable of devolving power to self-governing units sufficiently homogenous to exclude or discriminate against minorities. Rainbow (1993) notes that it is often centralised bodies that have stepped in to ensure rights of minorities, and force environmental management and development, both nationally and internationally, over poor performance or discrimination at the sub-national level. The need for inverse, or positive, subsidiarity indicates the ultimate appropriate locus of power is a balance sensitive to counter-forces seeking either more or less power.

Walker (2002: 5) in his critique of localism makes the case for more, not less centralism:

Centralism has come to be synonymous with bureaucracy, rigidity and control freakery. These vices are contrasted with the virtues of local and regional diversity, creativity and innovativeness. The beauty of devolved government is that it can do things differently. But what if along with difference go inequality, under-provision and capriciousness? What if the obverse of central government's "initiativitis" is local

government's passivity? In the United Kingdom wealth and income are maldistributed, along with the life chances they buy. Should we none the less celebrate the "diversity" of widespread poverty, huge inter-regional gaps in GDP per head and geographical concentrations of deprivation? In the territory of England as within the UK major differences in resources exist between areas and nations. "Equalisation" is necessary not just for more effective public services everywhere but in pursuit of the goal of equality of access. Equalisation requires a strong, self-confident centre. In that sense we need more not less "centralism".

This is not a new position; nearly three decades earlier Bulpitt (1979) suggested that an uncritical assumption existed in British political science that the consequences of centralisation were 'obvious, automatic and inevitably bad'. Page (1982: 7) was similarly critical of the British 'principle that local government autonomy is a "good thing", and that which limits it is a "bad thing"' endorsed by British public opinion and the major political parties despite actions to the contrary.

De Vries (2000) identifies three principal arguments that can be categorised as problems of inequality of individuals, free-riding, and lack of capability to handle complex issues. Tellingly, he contends that:

it can be concluded that the theoretical arguments are hardly convincing. Arguments such as democratic character, legitimacy and efficiency... have been used to defend and promote both decentralisation and centralisation. In practice, the arguments put forward commonly in favour of decentralisation are also used to argue for centralisation (De Vries, 2000: 217).

3.2.4 Devolution revisited

De Vries (2000), analysing political manifestos for several European countries, shows countries have undergone cycles of decentralisation. He argues that decentralisation in these countries was:

first and foremost a reaction towards a perceived problem in the previous period, be it a formerly supercentralised state (Germany in the 1950s), the previous growth of central control over the day-to-day work of local authorities which hindered public participation at the local level (in the UK in the 1960s), overregulation by central government (Sweden in the 1980s) or the perceived inefficiency of the central government apparatus (Netherlands in the early 1990s) (De Vries, 2000: 210).

He makes the point that the actual trends of centralisation, decentralisation and recentralisation are continuously shifting. Despite the tendency in recent decades for a tendency towards decentralisation, some governments are now going back on that trend (Cummings, 1995). In the Netherlands, for example, recentralisation is occurring as the merits of decentralisation are disputed (de Vries, 2000). The UK has also seen recentralisation of functions from local government, while decentralisation of the historical kingdoms predating the nation-state continues.

Cummings (1995) also observes a cyclic tendency oscillating between centralising and decentralising in the private as well as the public sector. This can be seen as a reaction to the perceived disadvantages of the preceding configuration (de Vries, 2000). But it also appears to be driven by the changing technological and social context as bottle-necks and constraints to performance are addressed. The dynamic business computer network architecture that has shifted from mainframes, to distributed networked desktop computers

and now to networked servers, provides a clear example. Indeed, a primary enabler for decentralisation in Osborne and Gaebler's 'Reinventing Government' is the change in communications speeds brought about by new technologies, between locations (1992: 250). But more significantly, Cummings seems to suggest *Zeitgeist*, within the nature of human beings, rather than any rational basis *per se* can explain the preference for a particular locus of power.

Prud'homme (1995), writing for the World Bank, sounds a caution in adopting decentralising programmes, noting that its benefits are not as obvious as the standard theory of fiscal federalism suggests, and that possible serious drawbacks should be considered when designing any decentralisation programme. An analysis of these dangers makes it easier to understand some of the real choices. He cautions governments should consider what functions to decentralise, in which sectors, and in which regions, rather than decentralise in general. He suggests in many cases the issue is less about which level of government should provide a service, but rather how to organise the joint production of the service by the various levels. Rather, decentralisation should be seen as a means to the end:

Decentralisation measures are like some potent drugs, however: when prescribed for the relevant illness, at the appropriate moment and in the correct dose, they can have the desired salutary effect; but in the wrong circumstances, they can harm rather than heal. ...a better understanding of its dangers will contribute to a wiser application of potentially desirable decentralisation programs (Prud'homme, 1995: 201).

This overview of the literature of devolution and decentralisation reveals ambiguity in definition, but widespread support based on a wide range of ideological and theoretical arguments. The compelling rationale is the decentring of power. However, as writers such as de Vries (2000) note, many of the arguments for decentralisation can also be used as arguments against it. Both centralised and decentralised systems have their advantages and disadvantages, but that rather than generic solutions, a fit for purpose institutional design to meet government functions is required.

4. Characteristics of sub-national institutions

It is one thing to determine that sub-national government may, for whatever reason, increase public value; it is another to determine the optimum scale, function and territorial dimensions of the sub-national government organisations. While the public value and legitimacy frameworks provide a means for assessing institutional design, they do not provide guidance on what the functions or shape of regional government.

What distinguishes sub-national from national government is its spatial dimension. This is apparent when it is considered that core national government functions are aspatial; defence, foreign policy, social welfare and fiscal policy for example are all universally extended across a nation state, though implementation may have sub-national or local impacts or focus. In comparison, sub-national government is inherently spatial, reflecting competing geographic centrifugal and centripetal political forces that seek simultaneously to recognise diversity within and seek homogeneity across nation-states. It is underpinned by the notion that diversity within the polity is represented or correlated with space. It is thus territorial in conception and place-based, rather than identity-based policy-making. Place-based policy development and implementation is thus located within sub-national 'local government' as opposed to parallel national identity-based agencies such as Te Puni Kōkiri

(Ministry of Maori Affairs) and the Ministry of Women's Affairs in New Zealand. This is not to say that there are not spatial elements to the policy arenas they address (see Rivers and Drage, 1990).

4.1 Scale

The scale of institutions has become of interest to human geographers, who have come to recognise that space and scale, 'the embodiment of social relations of empowerment and disempowerment and the arena through and in which they operate' (Swyngedouw 1997: 169) are socially defined rather than intrinsic attributes (Marston, 2000). Within nation-states boundaries are socially defined, and also the scale. Purcell (2006) contends that it is dangerous to make any assumption about any scale. Scales are not independent entities with pre-given characteristics. Instead, they are socially constructed strategies to achieve particular ends. Therefore, any scale or scalar strategy can result in any outcome resulting in a more democratic or less democratic institution. All depends on the agenda of those empowered by a given scalar strategy. Purcell does not reject the local scale, therefore, but argues that we should reject the local trap.

Closely related to scale is the spatial delineation of regions. The core zone is usually obvious; its boundaries are less clear and formed in previous times, most markedly in recent historical times following the Great War and the break-up of the European empires. Distinctions can be made between frontiers of separation and frontiers of contact, where natural barriers such as mountain chains or rivers result in 'natural barrier frontiers' developed within frontiers of separation, while 'artificial boundaries' developed in frontiers of contact, the borderlands or 'voisinage' (Fawcett, 1918). Accordingly, Prescott considers a boundary must be considered within its territorial context (Prescott, 1978: 29), a view started by Ratzel who saw the boundary as an abstraction and the boundary zone as the reality: 'the border fringe is the reality and the border line the abstraction thereof' (Ratzel, 1897: 538). Although territory often coincides with geographic boundaries, this is not a given; political boundaries have historically been defined as where the front-line was when the opposing armies stopped fighting (Prescott, 1978).

Fiscal federalist theory, a subset of public choice theory, promotes the notion that 'fiscal equivalence' should apply to ensure effective services (Oates, 1972; Bailey, 1999). Fiscal equivalence exists when citizens who benefit from expenditure for a service are those who make or influence the decisions and pay the costs, enabling clear specification of type and quality of services to be provided. Larger jurisdictions include a wider range of communities of interests with competing values and needs, resulting in overlapping benefits and costs. Also, local governments become less representative, and more distant from and less accountable to their constituents. Within this context, interest groups can dominate the political agenda and rent-seeking is more difficult to avoid, compromising what services are to be provided to and to what service level for the citizens.

Although various researchers and policy analysts have explored how best to define appropriate scale and hence inform boundary drawing of sub-national administrations, De Vries (2000: 203) dismisses this as 'the fantasy of the optimal scale'. Simply, different functions have different scales as they impact on communities and their environment, so that what is appropriate for one function will not necessarily fit another. Additionally, organisations have their own scale issues, including administrative and plant economies of scale and ratepayer burden distribution, that do not necessarily correspond with the scale of

benefits. In short, all boundaries require compromise and satisficing rather than optimising goals.

4.2 Functional scope

The functions of sub-national government are, in Westminster systems, determined by the national government. These are in turn shaped by ideological thinking, but run a wide spectrum from minimalist, local services provision to empowered government with a wide range of discretion (Table 2-1).

Table 2-1: Minimalist, intermediate and activist functions of local governments

Minimal Functions	Intermediate Functions	Activist Functions
Providing local public goods	Addressing externalities Regulating monopoly Overcoming imperfect information	Coordinating private-public partnerships Developing social capital

Source: Dollery and Wallis, 2002: 78.

Sub-national government functions are therefore a sub-set of national level functions. The national government chooses whether to bundle within a single organisation, or split functions among a range of organisations. Hooghe and Marks (2001) identify two types of governance (Table 2-2). Each has quite different characteristics and mode of operation. They describe Type I jurisdictions as federalist, concerned with power-sharing among governments operating at just a few levels with bundled functions, and general purpose, with decision-making dispersed across jurisdictions, but bundled into a few units. General-purpose local authorities are examples of Type I jurisdictions. This type is also the classic multi-level governance jurisdiction, with layered central-regional-local governments.

Table 2-2: Types of multi-level governance

Type I	Type II
General purpose jurisdictions	Task-specific jurisdictions
Non-intersecting memberships	Intersecting memberships
Jurisdictions at a limited number of levels	No limit to the number of jurisdiction levels
System-wide architecture	Flexible design

Source: Hooghe and Marks, 2004: 17.

On the other hand Type II jurisdictions operate at numerous territorial scales, are task-specific, multiple, independent jurisdictions and fulfilling distinct functions, and overlapping so that citizens have a choice of service provider. Known in the literature as functional, overlapping and competing jurisdictions (FOCJ) (Frey and Eichenberger, 1999), their efficiency discipline comes from market-based competition. Examples might include waste management services and (under an open roll system) schools and tertiary education institutes. Pure FOJC systems provide for contestable government, which remains largely hypothetical at present. However, Hooghe and Marks (2001: 21) contend this poly-centred governance is conceptualized by neoclassical political economics and public choice theorists. They envisage this jurisdiction of a public sector composed of many distinct public service industries, such as police, fire protection and welfare. Within this conception hierarchy is replaced by a wide range of public and private actors who collaborate and compete in shifting coalitions.

This is appealing to economists such as Bailey (2004: 225) who consider that while service responsibilities should be allocated to local rather than central government, it does not

mean that local governments need provide the services themselves. Rather by ensuring that 'the money follows the user', the breakdown of local government service monopolies allows for a virtual 'voting with one's feet' by citizens. Providing a plurality of suppliers strengthens opportunity to 'exit' a government and strengthens citizen voice without having to change location to another jurisdiction. These arrangements thus reduce transaction costs of Tiebout 'exit'.

The two models have quite different policy-making implications. Type I jurisdictions are reliant on vote or exit to signal public preferences. They are able to reallocate resources across policy arenas that should enable allocative efficient decisions to be reached to maximise their constituents' welfare. The contra is that the inhabitants are captured unless they can migrate to another jurisdiction, providing little incentive for process efficiencies within the organisations. Type II jurisdictions have clear accountability, as agencies have defined policy arenas within which to operate. At the same time, they have limited ability to address cross-cutting issues; more significantly, they are limited in allocative efficiency, unable to make trade-offs between policy arenas, such as appears necessary for sustainable development.

This dichotomy raises significant issues, suggesting trade-offs between technical and allocative efficiency. Special purpose authorities are able to develop specialist capacity relevant to their functions to allow technically efficient policies. The separate, or silo, institutional structure, however, means that decisions across institutions are not easily coordinated and separate funding arrangements and policies and goals discourage allocative efficiency⁵.

It is suggested that this typology needs to be broadened to include an additional (Type III) task-specific jurisdictions that have many of the characteristics of Type I jurisdictions, for example, hospital and catchment boards. It could be argued that because they have the disadvantages of both Type I and II jurisdictions, their territorial monopoly reduces productive efficiency, while their limited functional scope leaves little room for allocative efficiency.

Bailey (2004), taking a public finance perspective suggests a distinction needs to be made between strategic and pragmatic perspectives to local government design that would appear equally to apply to regional government. Building on his earlier studies on local government economics (Bailey, 1999), he argues that structure, function, and finance have 'profound multidirectional interdependencies'. A strategic approach to public finance therefore requires consideration of all three elements in order to minimise public finance requirements, while ensuring local governments meet their civil, social and economic responsibilities. A pragmatic approach tends to result in the conventional approach to the financing of local governments, which is the consideration of how financial arrangements

⁵ An example was an attempt to develop policy to manage air pollution in small central North Island townships. The regional council wanted to limit emissions by banning or restricting open fires while the district health board was more concerned with reducing mortalities from cigarette smoking. Certainly the ambient air quality mortality rate was indiscernible within the smoking mortality figures. Accordingly, the health board preferred to resource smoking cessation policies which would have greater human health outcomes, but this goal was outside the regional council's responsibilities so could not be supported in any substantive way. Importantly, the driver for both issues is poverty in the townships – outside both organisations' purviews.

can be made consistent with service responsibilities. In comparison, the pragmatic approach, tends to result in increasing levels of central or regional financing an increasingly greater proportion of local government income, as service responsibilities increase over time, while their financial arrangements remain unchanged (Bailey, 2004: 223-4).

Bailey suggests, therefore, the following economic principles for the functions of local government:

1. the majority of public sector services should be provided by local government because their benefits are localised
2. central government should only provide national pure public good such as defence and foreign policy
3. local government should restrict its provision of services to those cases where local market failure is high and the risk of government failure is low
4. this implies that local governments should restrict their service provision to core functions, irrespective of any powers of general competence conferred upon them by central government

... and further,

1. local government should be as small as possible without forgoing the potential efficiency gains of economies of scale
2. the jurisdictional areas of local governments should, as far as practically possible, be conterminous with the areas benefiting from their provision of services
3. these benefit areas should also match financing areas so as to prevent tax exporting
4. matching of financing and benefit areas may require regional (rather than local) government for the provision of some services
5. Benefit areas will have to be periodically reconstituted as service technologies and transport infrastructure change over time (Bailey, 1999: 326).

4.3 Autonomy

Bailey (1999: 18) describes decentralisation from a functional perspective. He identifies three forms of decentralisation and argues that these must be kept conceptually distinct in order to appreciate that which is of relevance to economic theories to be developed:

- Economic decentralisation is concerned with location of economic decisions, these being decentralised by definition within perfectly competitive markets (i.e. consumer sovereignty);
- Political decentralisation is devolution of political decision-making to local and regional governments. Sub-national governments are vested with powers to levy own taxes and user-charges to finance provision of a self-determined mix and level of public sector outputs ; and
- Administrative decentralisation refers to creation of regional offices of central government departments with or without decision-making powers independent of sanction by the centre.

Similarly, Rondinelli (1999: 2-3) distinguishes four different types of decentralisation, which he regards as useful for highlighting its different dimensions and needs for coordination, and which appear in different forms and combinations. Political decentralisation gives citizens and their elected representatives more power in public decision-making and requires constitutional or statutory reforms and creation of local political units and encouragement of effective public interest groups. Administrative decentralisation redistributes authority, responsibility and financial resources for providing public services among different levels of

government. It in turn has three forms: (i) deconcentration, where the redistribution of decision-making authority and financial and management responsibilities among different levels of the central government; (ii) delegation, where central governments transfer responsibility for decision-making and administration of public functions to semi-autonomous organisations not wholly controlled by the central government, but ultimately accountable to it; and (iii) devolution, where authority for decision-making, finance, and management is transferred to quasi-autonomous units of local government with corporate status. Local governments have clear and legally recognised geographical boundaries over which they exercise authority and within which perform public functions. Fiscal decentralisation, a core component of decentralisation, provides self-funding.

There is an overlap between the different types of decentralisation and varying degrees of sub-national autonomy. Political decentralisation is by definition highly autonomous – for example, the political devolution of Scotland and Northern Ireland. Administrative and fiscal decentralisation both exist along a continuum and it is possible to have configurations where one facet is more autonomous than the other. Again, drawing on the UK, English local government is administratively highly autonomous, undertaking a wide range of devolved functions, but is reliant for some 80 percent of funding from central government via inter-governmental transfers. As a consequence English local government is seen to have limited autonomy. Although the above definitions suggest a polarity, others, such as Scharpf (1976), suggest interdependence between levels of government, where no one level is capable of governing alone is more likely.

The salient distinction Boston *et al.* (1996) and Rondinelli (1999) make between decentralisation and devolution is the different locus of responsibility; the relocation of power and authority are common to both concepts. In **decentralised** government systems responsibility resides with central government, even though some decision-making may be delegated to the centre's local representative, as in a prefecture. Accordingly, decentralised agencies remain agents of the government. In **devolved** systems responsibility is also relocated to a sub-national level, which in western democracies at least, implies some form of local government. Devolved systems therefore are more autonomous though, again, the extent of this autonomy can vary. For example, New Zealand United Councils established under the Local Government Act 1974 consisted of members appointed by the territorial authorities. However, the resulting lack of direct accountability to the electorate was seen as a weakness of the system.

4.4 Coordination

The distinctions between deconcentration and decentralisation underline that different forms of formal institutions can be employed at the sub-national level, operating in parallel but with different responsibilities and lines of accountability. This serves to emphasise means for aligning and coordination activities, both horizontally and across layers of government so that different organisations do not operate against each other. A lack of policy consistency between levels can be problematic, for example, if the national government has a fiscal policy to deflate the economy, but sub-national governments have large and expanding expenditure; or if the national government wants to reduce the welfare state, but local governments seek to provide more social services to fill the perceived social welfare gaps.

Wood (1995) suggests a hierarchical model of coordination, where each level of sub-national government is anticipated to develop its own policy reflecting the intention of the

higher level policy, while tailored to the needs of its own geographic territorial area, resulting in a cascading policy framework (Figure 2-1). The problem of coordination is that institutional operators can attenuate or distort top-level policy, especially when transmitted through several layers of government (Brown, 2001).

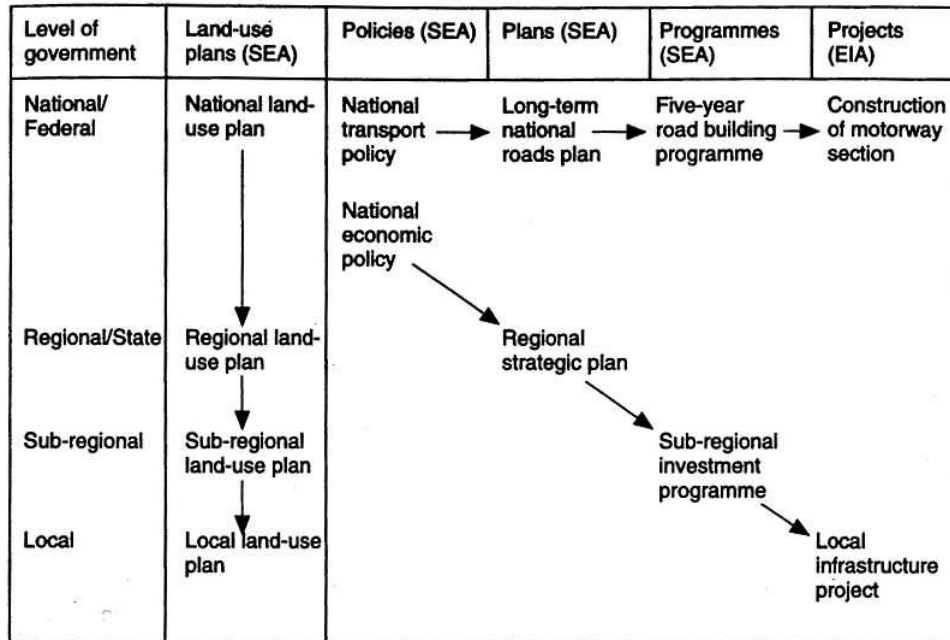


Figure 2-1: Strategic environmental assessment: an example of hierarchical policy-making (Wood, 1995).

Brown, addressing EU environmental policy implementation, raises significant questions. The most important is that the EU level policy attenuation caused by the formal and informal determinants operating in the national and sub-national layers between that formulated at the EU level and as transposed into local laws and actions may reflect an undermining of policy intentions; it may also be a consequence of local adaptation in response to local information. It automatically assumes the correctness of supra-national policy. In any case, the resulting 'implementation deficit' may be more apparent than real, with technical rather than substantive breaches in implementation (Glachant, 2000; Börzel *et al.*, 2003).

5. Regions and regional government

This section explores firstly the meaning of regions and their significance for governing. It then addresses the role and function of regional governance institutions, before assessing the logic of decentralisation of functions to the regional level and the perceived value of institutional arrangements that a regional system of governance can realise. It also explores a framework for considering how the value of a regional organisation can be assessed. It is suggested that regions require a different approach from that of national or municipal local government, recognising the regional authorities' intermediate position, needing to recognise that they form part of a larger multi-layer governance institution.

Such a consideration is challenging as the literature addressing regional political level of governance is relatively sparse; Pierre (1995: xviii) notes that:

the regional level of the political system has not been of any major interest to political scientists. Instead, their focus has been either on the level of the state or the local level, or on the interaction and exchange processes between these two

tiers of government. Regions are typically seen as not very interesting simply because for a very long period of time regional politics did not address those areas which political scientists seem to find interesting. Redistributive policies, foreign policy and defence policy are typically matters of the state, just as the delivery of public service is normally conducted at the local level. Indeed, regional politics *strictu sensu* was normally either confined to less salient policy-areas or mainly concerned with monitoring the implementation of nation-state programmes.

5.1 Defining regions

While there is evidence in western countries over the last few decades of decentralisation of power, much of the focus has been on local government. However, Sharpe (1997) notes the rise of the 'meso', an intermediate level of government between national and municipal governments. Perhaps unsurprisingly, while regions and regional governance are prevalent in western democracies, their form and function vary remarkably from country to country, making comparisons or generalities difficult (Norton, 1994). This 'rise of the meso' challenges us to define what is meant by the term 'region' especially in light of Keating's observation that 'region, like the related concepts of state and nation defies descriptive definition' (Keating, 1997: 17).

An examination of the literature pertaining to regions and regional policy quickly shows that they apply to a wide range of geographic scales and institutions. Often 'region' is a shorthand term for groups of countries, such as South-east Asia or North America Free Trade Area (e.g. Mansfield and Milner, 1997) and sub-national areas within individual countries, such as the English North Country or New Zealand's Southland. 'Regional institutions' also vary to include democratically elected sub-national governments or administrative units of national government. Increasingly, they may apply to new institutional forms that transcend the nation state, formed by alliances between contiguous sub-national administrations in different states with common objectives. An example is the Baltic Sea Region which has developed into a highly dynamic area of cross-border cooperation and trans-national networking within sophisticated structures including the Helsinki Convention international regime, Baltic 21 (regional Agenda 21 international policy network), and the Union of the Baltic Cities trans-national network (Kern and Löffelsend, 2004).

Rather than viewing regions as spatially defined entities, Keating (1997: 17) observes that the region takes on different forms in different places and a variety of spatial levels. It is characterised in most states as a contested area, both territorially and functionally. It is also, Keating notes, a value-laden concept, reflecting different conceptions of political character and potential and different abilities and concerns of its citizens. Pierre (1995: xix) views regions functionally in economic terms, either as 'belts' stretching across the American continent, such as 'sunbelt' or 'rustbelt', or as areas associated with economic development and inequalities in Western Europe.

Keating and Laughlin (1997: 2-5) identify four different definitions of regions, each referring to territories but differing in the way they conceive of that territory:

- 1) Economic regions, where territories are determined by economic criteria such as urban-rural or sector (e.g. ship-building and electronics). More recently, they identify emergence of endogenous growth regions. Economic regions are market-driven and respond to macro-economic conditions;

- 2) Historical or ethnic regions, where societies within them share common histories and cultural/linguistic features that differ from that of the dominant society of the state. These regions can seek some degree of autonomy, either as home-rule or the formation of a new nation-state;
- 3) Administrative or planning regions, which all states use for purposes of policy-making or statistical data collection and analysis, and as such have no political function; and
- 4) Political regions, which possess democratically elected councils or assemblies. However these range widely, from federal governments such as in Australia and Germany, to single or limited function organisations within unitary states.

These different types of regions are not necessarily exclusive and examples can easily be found where the different types all coincide, such as with Belgian Wallonia or French Alsace. This is a typology of geography of identity, where inhabitants of an area differentiate or are differentiated by disjuncture.

Keating and Laughlin also distinguish between drivers for creating regions, which they argue are important in order to structure both understanding and effective policy. Regionalisation is the process where national governments define policies for or impose them on, regions; regionalism is ideological and to political movements which demand greater control over the affairs of the regional territory by the people residing in that territory. The difference is that while regionalisation is a top-down, imposed process by the state (or in Europe, the EU in its Europe of the Regions), regionalism is bottom-up, a desire by the local populace to formalise their separateness.

This investigation into New Zealand regional government is concerned only with sub-national regions. This is made somewhat simpler to justify than may be the case in other parts of the world. New Zealand is dominated by two large islands over a thousand kilometres from any other state, so that the oceanic 'frontier of separation' has effectively isolated its sub-national regions from those of other states. The remainder of this investigation therefore addresses only regional-level institutions.

Glocalisation and the hollowing of the state drivers, leading to a loss of confidence in national governments have already been canvassed in this overview. But although these arguments make the case for relocating power and authority to lower levels of government, they do not provide insights into the appropriate scale of localness. Much of that literature appears to view this relocation to be to the local municipal government level or is otherwise quiet on the scale. However, Sharpe suggests that much of the decentralisation observed by the OECD and others is actually to the meso rather than local level of government, resulting in:

the emergence of an intermediate level of government between the centre and the basic municipal or communal level... this new institutional form takes the form of an entirely new system of regional elected government exercising executive, and sometimes legislative powers, or is a strengthened and refurbished county level of local government (Sharpe, 1993: 1).

Keating (1997) suggests that Sharpe's assessment overstates the level of rise of the meso, but acknowledges that the meso has been a recipient of national government decentralisation to local government.

Sharpe (1993: 31) identifies four drivers for regional government:

1. rational-functional reasons for enlarging local government structure to compete with urbanisation and new service responsibilities by restructuring to capture larger geography and population; and to modernise local government;
2. ideological, where decentralisation is seen inherently more democratic and also a bastion of liberty against depredations of modern state;
3. sectional interest, where political parties, individuals or professional groups promote regional locus of power. Political parties, especially those in opposition seek to exploit a regional support base trying to wrest central government or use it as a shop window for their policies. Alternatively, the institution can be used for personal gain, for example, to grow bureaucratic empires, reflecting public choice theory. Finally, regional locus may allow technocratic independence away from politics of lower and higher government. This can allow professional autonomy in the regional decision-space while centre may like to insulate itself from perennial problem of increasing expenditure of technical and expensive issues such as health; and
4. central advantage, where the national government favours meso-level government for off-loading functions to reduce its own taxation.

These show some of similarities with Keating and Laughlin's drivers for region formation and reflect the regionalisation-regionalism dichotomy.

5.2 Metropolitan regions

Pezzini (2003: 2) identifies regional trends in OECD countries showing not only important differences among nations, but that territorial disparities within countries are particularly significant. As well, income levels, unemployment and poverty rates differ more between regions within some states than between states. He also notes that these territorial disparities are persistent and in the large majority of countries, total unemployment has decreased while regional disparities in unemployment rates have increased.

Individual regions have different ability to utilise capability and as a result spatial polarisation is observable. Pezzini notes a quarter of many OECD countries' national GDP is produced in a single sub-national region, while in certain other areas, sometime bordering with the most successful ones, things have largely worsened and exclusion from mainstream of economy and society has become an increasing concern. In many countries a significant component of GDP and bulk of population are found in a single region and then often in a single metropolitan area which largely acts as the engine of growth. This raises equity issues and can also generate democratic tension between growth and decline regions with the political power able to be wielded by dominant economic engine regions.

Closely intertwined with growth regions are metropolitan regions, where the entire region consists of one metropolis, conflating regional and local government. They are a feature of the last fifty years with the continued growth of dominant cities so that their physical size and economic presence reaches beyond other regions. They have largely emerged from amalgamation of smaller municipal local authorities or are established as a whole metropolis coordinating body. Their status varies; several European nation states have city-regions with federal state status, for example Berlin, Hamburg and Bremen in Germany, and Brussels Region in Belgium.

There are continuing calls for amalgamation, but evidence for benefits resulting from amalgamation is conflicting and suggests uncertain benefits at best. A 2002 review of literature of twenty-two amalgamation efforts in the UK and USA, and nine in Australia

concluded that there is a great deal of uncertainty about whether economies of scale exist in local government service provision (Byrnes and Dollery, 2002).

Downs (1994) and others (e.g. Bush, 1991) identify population growth and the rise of middle-class, lower density suburbs outside established city limits as the major driver of the metropolitan cities. These suburbs of similar middle-class values have their own local governments whose politicians respond to their citizens' desire to avoid negative externalities generated by the city they surround, while enjoying their positive externalities. This is not a problem only of big cities, but applies at many scales. However, it becomes particularly pronounced with large metropolitan areas, given the sheer number of municipalities, population size, land area involved and financial implications. The arguments for and against amalgamation are ongoing; one can simultaneously observe amalgamation demands to create large whole of city governments, for example in Australia and also Auckland, New Zealand, and pressure to de-amalgamate large cities such as Toronto. Bish, reviewing 50 years of big city governance in Canada, found:

Metropolitan areas composed of a multiplicity of local governments and production arrangements are more responsive to residents' needs and generally provide local government services at less cost than monolithic amalgamations. The superior performance of such a polycentric structure for local government stems from rivalry among governments and from their use of a variety of production relationships with organisations of various scales, including cooperation with one another. In addition, multiple local governments are no hindrance to economic growth; indeed, some of the fastest-growing metropolitan areas are also among the most governmentally fragmented. Amalgamation, on the other hand, tends to eliminate the very characteristics of local government that are critical to the most successful and least costly systems (Bish, 2001: 1).

He suggests that large-scale hierarchical organisations are obsolete and discredited and policy-makers need to review how these cities operate and need to function successfully.

5.3 Regional institutions

Regional level institutions are a pervasive part of modern polities. Regional or meso scale institutions, like regions, vary between countries. Norton (1994) notes that regional governance institutions vary according to the political structure and constitutional arrangements of the state. In governance terms, the region may better be described as a 'decision space' rather than level of government, a level within the government structure that is more appropriate for certain kinds of decisions and policies than either central or local government. Their importance also is seen as variable. Pierre observes that in a market economy regional politics seems only to make a difference at the margin of economic prosperity. Accordingly, he asks:

how important is policy choice and political conflict at this [regional] level? Well, judging from the literature, not terribly important (Pierre, 1995: xix).

He modifies this by suggesting that the significance of regional political institutions is directly related to the structure of the state. The regional level is significant constitutionally and democratically, as well as in fiscal and political terms within federal systems. The regional level in some countries, such as Germany or Belgium, has very wide task-spans and constitutional presumptions that most government functions are to be undertaken at the regional level, with a few exceptions such as defence and foreign policy. Other countries,

such as New Zealand, have much narrower task-spans and can be seen to be essentially regionally situated special purpose authorities.

Regional level government institutions show a wide diversity in functions and autonomy. They may be autonomous, with devolved powers or rather the regional presence of national government. They may also be either special purpose authorities undertaking specialised technical functions or undertake multiple or general tasks, suggesting four different types of regional government institution (Table 2-3).

Table 2-3: Typology of regional government institutions

Task-span	Autonomy	
	Low – deconcentrated	High – devolved
Special purpose	State government	Regional councils
Multiple purpose	Administrative regions Prefecture	Regional government

Source: Author

The national government can have a regional presence with administrative regions that have low autonomy. Multiple purpose deconcentrated institutes, typically a prefect, represents the national government at the local level and as such exercises the powers that are constitutionally attributed to the national government. The prefect issues ordinances written for the application of local law. Examples include the French prefecture and the Swedish regional governors. The relationship is not necessarily merely top-down; Johansson (2000: 132) observes that the Swedish County Administrative Boards have been described ‘both as the long arm of government out in the county and as a representative of the county vis-à-vis the central state authority.’

The government may be represented by regional administrative regions, with a regional commissioner as part of the national government applies national law within a particular functional sector with special purpose agencies. In New Zealand, examples include Department of Conservation conservators, and Ministry of Social Development commissioners. The regional level of government may alternatively have authority devolved to it, with local accountability and high autonomy. Special purpose authorities would include regional councils and catchment boards, while multi-purpose organisations are effectively regional governments. It follows that parallel organisations may co-exist at the regional level, with a combination of decentralised and devolved special purpose authorities – though not where expansive regional governments exist.

Bish (2001) and others suggest that institution architects and reformers need to abandon what they see as discredited nineteenth century hierarchical concepts in designing modern governance structures. Instead, they need to recognise that an optimal institutional arrangement fits the specific situation in a specific area in a specific country given the specific problems at stake. Recommendations for general solutions for all problems in all countries may well be detrimental to the development of adequate policy making for each of those problems. Bish suggests a polycentric solution, comprising self-governing, fiscally equivalent local governments of a variety of sizes that draws in turn on a variety of different organisations for the provision of local services in a competitive environment, rather than applying traditional large-scale monopolistic government (Bish, 2001: 28). This solution still does not resolve coordination between organisations within an institutional framework; rather it points the way to governance rather than government. Foster and Plowden (1996:

131) sound a warning for any enthusiasm for rearranging regional government, remarking that the 'costs of changing the status quo in any direction are greater than the efficiency gains from doing so.'

6. Measuring institutional performance

Given political institutions define the framework within which politics take place (March and Olsen, 1984), there is a need to consider performance of these institutional reconfigurations. Are the new institutions 'better' than those they replace or have transmogrified from? In this section a framework for considering institutional performance is outlined. Such a framework is normative, in that it assesses 'better' within the context of western democracies.

Putnam notes that 'who governs?' and 'how well?' are the two basic questions of political science. Drawing on political science literature he asserts that good government is not only a forum for competing viewpoints, but that it also gets things done. For him:

good democratic government not only considers the demands of its citizenry (that is responsive), but also acts efficaciously upon these demands (that is, is effective)" (Putnam, 1995:63).

March and Olsen (1995: 92-95) have sought to identify the basic building blocks of institutional capacity: the rights and authority to act; the necessary resources; the competencies and knowledge to use those resources; and the organising capacity to apply them effectively. These capacities do not assume that there is one best way; rather, they ask questions about institutions and their exercise of power, about strategies and options, about the mix of skills and the generation of support, and about processes and outcomes.

These concerns about institutional capacity for responsiveness and effectiveness have been teased out in other writings to provide frameworks for considering institutional performance. Fritz Scharpf (1997: 14) poses the challenge directly:

How we should handle normative issues if we are not trying to play politics on our own account,, but instead are seriously committed to the maxims of "scientific objectivity" or at least, "neutrality."

Two separate strands of literature, reflecting different historical and cultural contexts can be identified to inform research, the European-centred legitimacy focused literature (see for example, Scharpf, 1997) and the Anglo-American public value focused public administration literature (see for example, Moore, 1995) . The two strands have different starting points. The corporatist Europeans take the pervasive presence of government largely as a given, the focus of enquiry is more on the legitimacy that different levels of government have within a democratic governance framework. It has been driven in some major way by the concerns of a 'democratic deficit', demonstrated as a perceived loss of public interest in and support of democratic government institutions. It has been seen particularly in relation to the legitimacy of the EU, brought into focus by the moves for a European Constitution. The Anglo-American approach is liberal-based, and challenges the presence of government within a particular policy arena in the first instance. The focus of enquiry is the justification for government on the basis of generating public value; addressing the public good when the market fails to deliver.

6.1 Institutional legitimacy

Taking Kjaer's definition of governance as the setting, application and enforcement of the rules of the game raises issues of accountability of those governance structures and the legitimacy by which the rules can be made and promulgated, underlining different perceptions of what 'good' policy might look like. Scharpf (1997) proposes researchers should differentiate between *criteria of "good" policy* on the one hand and *legitimacy of the policymaking system* on the other. Criteria for 'good policy' are often generally recognised for uncontroversial issues, and Habermasian deliberative discourse may surface common 'good' definitions for controversial policy problem definitions and solutions.

Government uses the coercive power of the state to coordinate collective action and social activity to achieve societal rather than individual goals. Legitimacy only becomes problematic where in the interests of some are made to suffer or they are forced to act against their own preferences in order to achieve the 'common good'. The challenge is to justify the role and level of intervention of government, and is inherently normative. Scharpf (1997: 15) suggests justification is controversial unless welfare production and distribution are simultaneously addressed. From an institutional legitimacy, of concern then is the capacity of policy systems to reach good choices, rather than the rightness of the individual policy choices.

The European literature has been motivated by the real and immediate challenge of seeking the legitimacy of supra-national government, specifically the European Union, and how in the first instance it relates to national governments, and how it can be integrated within a democratic government framework. Legitimacy concerns have developed within a wider context of multi-level governance and the appropriate hierarchical locus of power. A focus has been the so-called 'democratic deficit', though concern about performance 'implementation deficit' by the European Commission is also a driver (Brown, 2001; Glachant, 2000; Börzel, 2003).

Scharpf (1997: 153-155) has proposed a model of institutional legitimacy that has been widely taken up within the discipline. Scharpf distinguishes between *input-legitimacy*, where institutional legitimacy is derived from citizen input and direction, and *output-legitimacy* that derives from the institution's effectiveness. Input legitimacy concerns democratic decision-making through citizen and interest group participation, ensuring different values are recognised in the decision-making process. Output legitimacy concerns general efficiency and effectiveness in dealing with problems, a technocratic source of legitimacy, though both are needed to obtain legitimacy (Scharpf, 1999: 268). Input legitimacy is ultimately derived from agreement of those who are asked to comply, while output legitimacy refers to effective policies that serve the common good and conform to criteria of distributive justice

Haus, Heinelt and Stewart (2004) propose an intermediate legitimising step, process-legitimacy, to Scharpf's framework (Table 2-4). Process-legitimacy requires the decision-making process itself to be transparent and accountable. It also recognises the importance of institutions in determining who can participate and the quality of that participation.

Table 2-4: Different forms of democratic legitimation

legitimation	principle	criteria	phenomena of crisis
Input legitimation	participation	consent	decrease of voter turnout etc.
Throughput legitimation	transparency	accountability	opaque institutions etc.
Output legitimation	effectiveness	problem-solving	policy failure etc.

Source: Haus, Heinelt and Stewart, 2004 s2.

Output legitimacy is always required, but several authors suggest that input legitimacy is not always necessary for democratically legitimate institutions (Scharpf, 1997; Majone, 1989; Sbragia, 2000). Sbragia (2000: 299) suggests that in particular situations, primarily where there is technical complexity, and an ultimate oversight institution that is publicly accountable, and low public concern, output-legitimacy is a more appropriate means for gaining legitimacy. She cites the European Central Bank and the United States Supreme Courts as examples of institutions that draw their legitimacy from their outputs rather than democratic inputs.

These address the challenges presented by technically challenging issues. How institutions address technically complex matters is a challenge for modern democratic processes. Democratically elected representatives are typically drawn from the wider community and can be expected to have only a lay-understanding of technical matters. At the same time, they are being called on to make legislation to address a range of technically complex issues. This creates a dialectic between citizen participation and system effectiveness; the ability for pluralist values to be recognised within the policy formulation process, while also ensuring interventions adequately address technical issues.

This has particular relevance to the European Union which is seen to face increasingly this dilemma between democracy and technocracy. Historically, it has been seen to lack democratic legitimacy, in favour of a technocratic bureaucracy. The European Parliament, as the EU's only directly legitimated body, is considered to play an increasingly important role in bridging this gap. However many public policy issues are becoming more technical and complex, making decision-makers more reliant on technical knowledge of specialist experts. Bouwen (2002) suggests such information asymmetries create opportunity for access by lobbyists and thus risk of sector capture where a market for information will be cleared when specificity of information provided meets decision-makers' needs to address technical, member country and European impacts.

The environment policy arena is challenging to democratic institutions and the public: cause and effect are not immediately or easily observable; nor are second order effects of interventions readily apparent (Lafferty and Meadowcroft, 1996: 4-7). This privileges technocratic solutions provided by the few experts who understand the complexity, while reducing ability for wider participation. Majone (1989) suggests therefore that policy areas differ in their need for [input] legitimacy. He considers a non-democratic legitimacy exists where a normative consensus exists on outcomes, combined with a low political salience in technically dominated arenas such as the environment. It also presupposes the existence of professional standards and professional systems of discourse by which it is possible to judge the interpretation and application of such norms, and the technical means employed for the attainment of consensual goals.

Boedeltje and Cornips (2004) examine citizen participation for democratic legitimacy. They argue that input and output legitimacy pose different demands on citizen involvement.

They suggest two criteria for legitimacy; input-oriented legitimacy derives from the extent to which the participative process meets the criterion of fairness, whereas a high level of competence is needed to achieve legitimacy on the output side. The question is to what extent these two criteria of fairness and competence can be realised simultaneously. It is argued that both criteria are conflicting, as a high level of fairness can only be achieved at the expense of the level of competence. Therefore citizen participation should primarily focus on the criterion of competence, contributing to output legitimacy.

However, process legitimacy is only part of the overall legitimacy. Memon and Perkins (2000) and May *et al.* (1996), examining the efficacy of New Zealand's environmental management legislation passed in 1991, predicate their analysis on the basis that good process will result in good outcomes. This approach is possibly optimistic, though understandable; given the short time after the passing of the legislation had been passed when there was still a paucity of evidence of the impacts on the environment. The focus on process also underpins both the RMA and LGA 2002 in planning where in each case the government mandated a process but only provided a general statement on outcomes. While these authors may overly rely on good process to derive good outcomes, good process in the absence of clear leadership or direction does not guarantee the desired outcome. They nevertheless reinforce the notion that institutional process is important as well as outcomes, especially where democratic input may be attenuated. Thus McNeill (2005) examining the European Parliament's decision-making for regulations to control fluorinated gas emissions from motor vehicles, suggested procedural matters of accountability and transparency are important to ensure confidence when institutions are required to make complex technical decisions that are often poorly understood by both public and many of the decision-makers. McNeill suggests that process legitimacy is important where institutions, such as the European Parliament have an intermediate role and their performance cannot easily be ascertained due to the mediating effects of other parts of the institution (in this case the European Commission that proposes and implements directives, and the European Council that adopts and transposes them).

From this literature a legitimacy triangle can be formulated of input, output and process legitimacy. The model suggests the three modes of legitimacy contribute to an institution's overall legitimacy independently of each other. Accordingly, to consider government failure means that ('good') policies are measured or judged according to whether political decisions and their implementation achieve the effects or objectives that are intended, and whether they are accepted and supported by the social environment of the political system and are not repulsed, thus eventually losing their status of having binding force; and whether political decisions make the best use of or are able to mobilise further resources (time, funding, etc.) (Haus, Heinelt and Stewart, 2004: s2.1).

6.2 Public value of organisations

Notions of public sector performance can be and are contested, driving to the heart of recent public sector reforms and the role of government. Government intervention has historically been couched in terms of 'public interest' (see Campbell and Marshall, 2002, for a review) that accepts the need for restricting individual freedoms for achieving the greater public good. This public interest has been invoked to justify policy decisions in the past. However, post-modern theory has devalued this imperative; Sandercock (1998: 197), for example, asserts that

class, gender, and race based critiques have left this particular notion of 'the public interest' in tatters, as have the lived realities of late twentieth century existence.

Nevertheless, as Stoker (2006), Kelly *et al.* (2001) and others note, governments do prevail in the face of market competition, with, in European polities at least, a strong public desire for public sector provision for health and education services among others. These authors suggest that this expectation somehow transcends pure efficiency appeal for service provision to provide some greater public value. Stoker (2006), drawing on Kelly *et al.* (2001), describes an evolving view of public sector management, each addressing the perceived shortcomings of the one it replaces. New public management (NPM) in the 1990s was a direct response to perceived inefficiencies generated by the former public administration model that prevailed (Hood, 1991). It sought to insert private sector management processes and discipline and structures such as those offered by Osborne and Gaebler (1992) to 'reinvent government', despite earlier admonitions of Allison (1983) and others to the contrary, to provide a more efficient delivery of public sector services. NPM has been much more focused on justifying, and by implication limiting, government intervention on private individuals and firms. Welfare economics theory, for example, has underpinned policy thinking, such that the justification for government intervention is couched within a market-failure paradigm, where the default setting is the market (e.g. Stokey and Zeckhauser, 1978).

NPM's narrow utilitarian focus has in turn been found to be wanting. Rather than focusing the efficiency of service provision, Mark Moore (1995) has outlined a framework for justifying government intervention where it is able to create *public value*, meeting public wants and needs.

Horner and Hazel succinctly summarise such public value as:

... a correlate of private value, which is measured by shareholder return. Think of citizens as shareholders in how their tax is spent. The value may be created through economic prosperity, social cohesion or cultural development. Ultimately, the value — such as better services, enhanced trust or social capital, or social problems diminished or avoided — is decided by the citizen. Citizens do this through the democratic process, not just at the ballot box, but through taking part in local authority consultations and surveys, for example. Citizens' involvement as coproducers of services, taking responsibility for improving what the outcomes look like, for example being healthier, more law abiding and so on, is critical to the creation of public value. Public managers and politicians, as the custodians of public money, are thus accountable for how well money is spent, allocated and invested
Horner and Hazel (2005: 5).

Moore's structures public value as a as a triangle consisting of authorising agency, substantive value, and operational feasibility. Authorising agency is the political authority for institutions to intervene and is derived from representative democratic power. Substantive value is the policy output, the social welfare surplus after the cost of government intervention that typically can be measured through conventional analytics such as cost-benefit analysis. Operational feasibility refers to the capability of the institution to produce the policy output.

Moore makes the point that all three factors need to be satisfied in order to achieve public value: authorising agency is required to ensure an intervention is valued by the public; the desired outputs need to be obtained, which in turn is dependent upon the institution being capable of delivering it. The triangular relationships that exist in both the legitimacy and

public value frameworks, with their similar concerns over policy accountability, results and means, suggests possible value in amalgamating the two to explain public policy value. In particular, Moore, by recognising that the authorising agency is a mechanism for expressing collective preference, as opposed to individual preferences, confers a democratically derived legitimacy for public sector intervention. This suggests three pairs of synonyms; substantive value-output legitimacy; authorising agency-input legitimacy; and operational feasibility-process legitimacy.

The two significantly differ. Moore's framework is commutative, requiring all three components to be met; substantive value can only be achieved if the institution has the operational feasibility to undertake the actions to deliver outcomes. As well, authorising agency is needed to identify what the outcomes and means should be. Thus any assessment of good government requires a decision as to whether input or authorising agency is important or not, so that the two frameworks may diverge when considering non controversial policy topics.

Moore originally envisaged public value to be applied within organisations focusing on public value management; how managers should establish goals and run their organisations to achieve them rather than examining the wider polity. The public value paradigm has become of some considerable interest in recent times, particularly through its teaching in Australia where a literature is developing (see Rhodes and Wanna, 2007). As a result, the basic public value paradigm is being extended to apply to a widening range of interests. At its broadest, Stoker (2006) suggests public value management is useful as a narrative for understanding modern polities, not only within an historical context, but also how different players within networked governance systems should interact. As a result, the dimensions described by Moore have undergone reassessment and redefinition. For example, Smith (2004) and Stoker (2006) extend the scope of the public dimensions to incorporate wider civil society as well as public sector organisations, including both as part of the authorising agency and the operational feasibility.

The composition of the authorising agency has come under particular scrutiny compared to the other dimensions. Moore envisaged within the authorising 'agency public executives as neither clerks nor martyrs, but explorers commissioned by society to search for public value' (1995:299). This perspective reflects Moore's original and ongoing interests in organisational performance and the role managers play within them (Moore, 1995, 2007), which is explored further by Kelly *et al.* (2001). However, Horner and Hazel (2005) and Rhodes and Wanna (2007) suggest that managers may not have such a mandate as Moore suggests to identify and create public value, at least within Westminster polities. Compared to American elected public sector executives, such as 'strong-mayors', Westminster systems, with their more tightly politically directed but apolitical public services, leave less scope for the 'platonic guardians' of the bureaucracy. But rather than discrediting the public value paradigm, this comparison between polities may suggest different allocation of functions within the public sector to achieve public value may be appropriate. Aply, Rhodes and Wanna (2007:418) pose the simple question, 'should managers be 'doing politics'?' Moore in the American context would say that they are already.

While Horner and Hazel (2005) draw on British experience, Smith (2004: 72), drawing on Australian public sector experience, warns that the components of Moore's public value triangle are fluid and their scope dynamic. He notes, for example, that government demands for public consultation have expanded the authorising environment. The policy environment has become more ambiguous, with neo-liberal agendas and newer ones

competing. He suggests the operating environment encapsulates contesting agendas of management reform within the public service, with multiple models in play. These observations suggest that some caution is necessary in applying public value as management rationale, taking care to recognise fit with different jurisdictions, but they do not detract from the power of public value to frame discussion on organisational performance.

A challenge to public value has been to operationalise it; otherwise it faces the same criticism levelled at the public interest paradigm which is seen as too broad to inform decision-making and to compete with market-failure paradigm in any practical sense. Moore (2007) suggests that public value can be recognised in two ways, intuitively and technically. He suggests that traditional economics based cost-benefit analysis or statistical programme evaluation were found wanting; not only are they difficult and expensive to calculate, but they do not provide indicators of value. He suggests, rather that, like the private sector managers, public service managers should focus less on 'profit' surrogates, but softer service quality indicators of client satisfaction. Importantly, ultimate determination of both policy outcomes and satisfaction levels are collectively decided through political voice. Moore notes that this requirement is not constant, but is in need of ongoing re-identification as in turn political ambitions respond to electoral influence. As well, as Stoker (2006) and others suggest authorising agency is extended to include other organisations and key stakeholders. This approach suggests difficulties in identifying legitimate interests, as opposed to sectoral capture and rent seeking, and risks relitigating the arguments previously mustered against 'public interest'.

The attractiveness of public value as a metric of organisational performance is considerable. A considerable literature has developed to measure and align organisational strategic performance. Private sector initiatives such as the balanced score-card (Kaplan and Norton, 1996) that have been adapted to the public sector provide means for measuring organisational performance. They have been criticised by Moore (2003) as they still focus on financial bottom line imperatives, rather than wider public value. Their internal, organisational focus also means they also cannot provide a means for evaluating wider systems performance.

Unlike the private sector where value is created by expenditure of resources, creating public value requires expenditure of both tangible resources (finances) and authority, reflecting government's power of coercion and the loss of individual freedom necessary to achieve collective, as opposed to individual goals. Public value thus reaches past purely zero-sum redistributive consequences of addressing electorate wish-lists to create additional value to citizens and therefore provides a new dimension for assessing public sector performance. Successful public services will create added value from the resources appropriated by government, while poor performing agencies will not, their officials presiding over rather than managing organisations (Moore, 2007).

Bozeman (2002) has sought to operationalise public value through a public-failure framework. Arguing that although it is difficult to identify value, he suggests instead identifying where public value has failed through a set of criteria (Table 2-5). He describes it as a framework for deliberation rather than a decision tool. These criteria thus provide a useful counter to the market-failure criteria of Stokey and Zeckhauser (1978) presumed on *de minimis* government intervention. Its efficacy comes from matching of scale to policy decisions, as Stokey and Zeckhauser do. These criteria are analogous to market failure criteria of information asymmetry, capture and failure to provide goods and services.

As such they provide a useful framework for assessing not only policy, but also institutions. Thus an institution's ability to identify public value and the nature of capture to ensure outcomes reflect public preferences and the feasibility of institutions to implement policy to achieve these outcomes are addressed in a structured manner.

Table 2-5: Public-Failure Criteria (Source: Bozeman 2002:151)

Public Failure	Definition	Example
Mechanisms for articulating and aggregating values	Political processes and social cohesion are insufficient to ensure effective communication and processing of public values.	The combination of the U.S. Congress's seniority system and non-competitive districts led in the 1950s, to legislative bottlenecks imposed by just a few committee chairs who held extreme values on civil rights, national security, and other issues.
Imperfect monopolies	Private provision of goods and services permitted, even though government monopoly is deemed to be in the public interest.	Private corporations negotiating under-the-table agreements with foreign sovereigns.
Benefit hoarding	Public commodities and services have been captured by individuals or groups, limiting distribution to the population.	Restricting public access to designated public-use land.
Scarcity of providers	Despite the recognition of a public value and agreement on the public provision of goods and services, they are not provided because of the unavailability of providers.	Welfare checks are not provided due to the lack of public personnel or failures of technology for electronic checking transactions.
Short time horizon	A short time horizon is employed when a longer-term view shows that a set of actions is counter to public value.	Policy for waterways that consider important issues related to recreation and economic development but fail to consider long-run implications for changing habitat for wildlife.
Substitutability vs. conservation of resources	Policies focus on substitutability (or indemnification) even in cases when there is no satisfactory substitute.	In privatization of public services, contractors must post bond-ensuring indemnification, but provide inadequate warrants for public safety.
Threats to subsistence and human dignity	The core value of subsistence is violated.	Man-made famine, slave labour, political imprisonment.

Bozeman's framework does not address failure to achieve outputs or outcomes, a key part of the public value triangle; presumably Bozeman regards failure to achieve specified outcomes the consequence of one or more of public failures he identifies. Nevertheless the criteria are scalable, providing a yardstick not only for measuring policy proposals, organisational and political system performance.

The public value framework almost, but not quite, falls into the same trap as the 'public interest' paradigm. Public interest struggles to respond successfully to the challenge of pluralist society, where no single public or indeed interest can be identified, or single preferred outcome is desired, but where a single decision is required. Its weakness is that the definition of these terms is exogenous to the decision-system and can be endlessly debated. In contrast, public value explicitly internalises the authorising function as part of its framework. Outcomes are defined within the framework by an authorising agency that in turn defined within the overall democratic system to provide internal consistency.

Importantly, it recognises that the composition and intentions of the authorising agency can change over time and that new outcomes may be defined as a result. System and organisation performance is accordingly determined with reference to the democratic system it is operating within. Importantly, it takes consideration beyond the narrow confines of public administration and NPM.

7. Summary

This review confirms the wide variation in possible institutional forms regional level government may take, with different task-spans and autonomy, ranging from single-purpose authorities accountable to the centre, to highly devolved regional governments. Although there are strong normative presumptions for devolution drawing from a range of different theories, these are contested. The geometry of regional space is also contested. Size, task-span and capability are interconnected. Spatially defined regions are unlikely to undertake multiple functions equally well but remain contested political spaces, with tradeoffs between high level of fit or correspondence for individual functions and compromise for multiple functions, with attendant risks of inequality and free-riding. On the other hand broad-function regional institutions are better placed to achieve allocative efficiency through ability to reallocate resources between functions, as opposed to single-purpose institutions that are confined to making technical efficiency gains. Even where size and function correspond, there is no guarantee that the resulting unit has the capability to undertake its functions efficaciously, especially where the issues are complex with a lack of expertise at the comparable scale of government, or where the community does not have the resources to support the interventions. These in turn have implications for the legitimacy of regional institutions, either in engaging and mobilising citizen support to provide input legitimacy, or potentially in delivering policy outcomes.

Together these observations suggest that there is no generic solution and that institutions need to be designed to match the purpose and conditions in which they operate. There is however an acknowledgement that some functions do sit at a 'regional' level, in the sense that they are broader geographically than community-based municipal local government, but are a sub-set of national functions needing to be addressed sub-nationally. This suggests regions are inherently unstable, lacking community-based support that local governments can expect to enjoy.

More fundamentally, this instability and ambiguity underlines the need for institutional designers to consider what the functions and purposes of interventions are before drawing lines on maps; a regional government will likely look and be configured very differently from a single purpose regional authority and with different compromises required. The danger is that ad hoc allocation of new functions to existing regional authorities will compromise new and existing functions.

Chapter 3: Regional government and administration in New Zealand

1. Introduction

The literature examining regional government identified that the region is a constructed notion of geopolitical space, remarkable for its plasticity of form, purpose and institutional arrangements. Individual regional institutions appear inherently unstable, though there appears to be durability in the need for such institutions.

There have been many different conceptions and configurations of regional government agencies in New Zealand since the 1840s. New Zealand's regional councils are generally regarded as part of New Zealand's local government. They share the same legislation as territorial authorities (city and district councils) and share elements of a common history. At the same time, most draw on a substantially different heritage of sub-national special-purpose authorities with their own identity and history. Although regional councils have been in existence only since 1989, New Zealand has experimented with regional level administrations apart from territorial local government over much of its history. This chapter provides an historical survey of regional government and administration in New Zealand and an insight to how regional level government is viewed, to reveal a range of models and roles for regional government over this time. In particular, it identifies environmental management as a key regional level function. It also identifies challenges to their existing roles and opportunities for the future.

2. Background

Regional government in New Zealand has been shaped by its geography, constitution and history. New Zealand's rugged and diverse geography has created boundaries of separation, isolating communities from one another, building regional identity, but also substantiating arguments for sub-national solutions. The constitutional arrangements have determined the nature and durability of regional institutions, while the history of New Zealand politics has shaped those institutions. History is not necessarily efficient but casts a long shadow, constraining actions in the present (March & Olsen, 1989). While local government history has been reviewed by Polaschek (1956) and Bush (1995), less attention has been paid to the impact of multi- and single-purpose regional government bodies.

2.1 Geography

Geographers recognise there are few places like New Zealand where such striking difference in the landscape are found within such short distances (Marcus, 1987). As a result, New Zealand has quite distinct physically differentiated regions. Although regional spatial definitions are social constructs, basic cores are clearly apparent, even though the transition zones between regions are often less clear and are contested. Cumberland and Fox (1958) in their regional geography of New Zealand identify eleven distinctive geographic regions, each with their own generalised characteristics or 'personality' derived from a broad uniformity of physical, biological and cultural features. Although these do not correspond directly to administrative boundaries, they do approximate the larger regional identities (Figure 3-1) which form the basis for administration. Historically, this physical regionalisation has focused particular regional communities of interest that in turn have informed regional organisation.

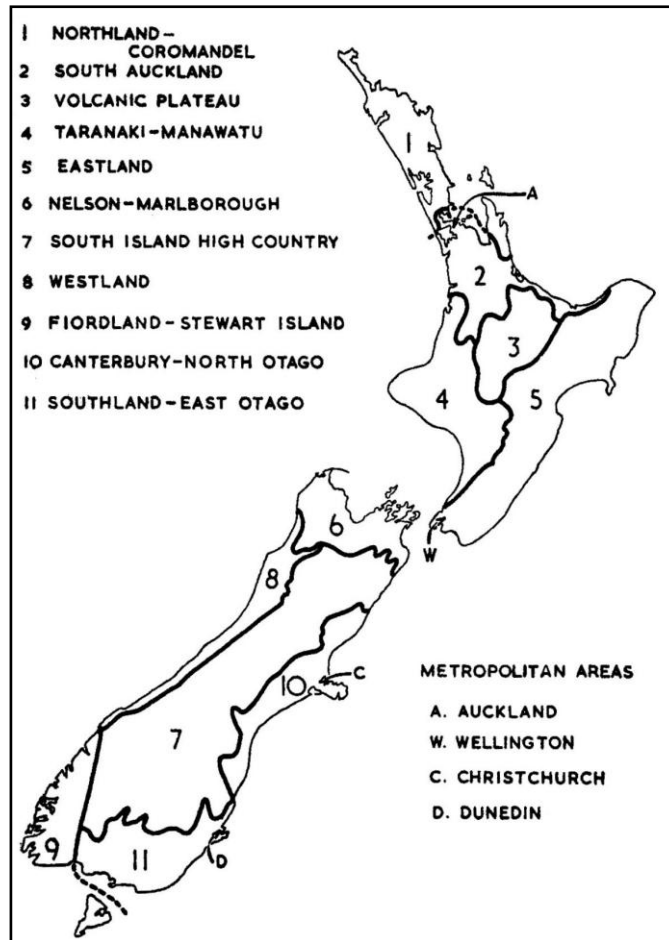


Figure 3-1: New Zealand geographic regions (Cumberland & Scott, 1958: 8)

Perry (1992: 241) suggested an earlier Ministry of Works and Development (MoWD) review (MoWD, 1987) captured the state of the regions. It distinguished four types of regions with differing economic prospects: the metropolitan centres of Auckland and Wellington; the rural heartland of Waikato, Bay of Plenty, Manawatu, Nelson, Marlborough and Canterbury; the transitional regions of Northland, Taranaki and Hawke's Bay, and the remainder making up the periphery. Transition regions in particular were seen by the MoWD as facing a spiral of decline in the face of the economic restructuring being undertaken at the time. The West Coast and East Cape were seen as facing particularly bleak futures. Perry notes the report was regarded as too pessimistic by the fourth Labour Government that sought to suppress it, but that 'subsequent events suggest that the review was not far wrong' (p241).

Sixteen years later, McNeill (2003) suggested on the basis of population, socioeconomic factors three types of region were apparent: the Auckland metropolitan region; city-regions of Canterbury and Wellington, and to a lesser extent Otago and Waikato, each with a large city dominating their hinterlands; and the remaining provincial regions of rurally-based economies with a smaller city acting as service centres.

2.2 Constitutional setting

Despite a geographical regionalisation, New Zealand's government is based on a unicameral Westminster system of government. Sub-national authorities are creatures of statute and have no legislative powers beyond the authority to make regulations (or by-laws)

within the limits allowed by their constituting acts. New Zealand local government, including regional government, unlike that in many western countries, does not have an independent constitutionally protected existence or defined functions. This allows for functional and geographic plasticity unknown in many western countries that allow sub-national government to be more politically influenced and malleable. It is a creature of statute created by Parliament, not the agent of central government. This subordinate position is, however, underscored by various central government interventions that have abolished or restructured elements of local government over the last 160 years.

3. Regional antecedents

Within this strong central government system, New Zealand has a long, but variable history of regional government. Its early expression forms part of a larger history of local government described by W.B. Sutch (1956) as a 'history of defeat'. Graham Bush (1995) in his comprehensive account of New Zealand local government relates a local government history of parsimony, fragmentation and parish pump politics, with an emphasis on roading, interspersed with periodic but largely fruitless attempts to reform the system. Layered over this has been a centralisation of functions as a result of perceived and actual lack of capacity of local government to undertake them, combined with an egalitarian ethos seeking uniformity of services across the country.

Other settler societies, such as Australia and Canada share similar experiences, though attenuated by their federal polities that allowed a level of regional variation and accountability. It has been suggested that this formation of local government has more to do with immediate imperatives of providing basic infrastructure than with philosophical ideals of freedom and autonomy characterising the much older European local government. This functional and instrumental conception reflected as much:

the centre's [early] reluctant recognition that certain decisions would have to be left to localities if only because of the sorry state of national finances. The contingent nature of these arrangements helps explain the centre's tendency to revisit regularly the functions that localities undertake. The result was a gradual erosion of services and responsibilities away from the locality and into the hands of the emergent state as concerns with infrastructure and the need for national investment began to dominate. National provision of those services which are deemed to require universal access but confer wildly dispersed benefits would be reflected in a number of decisions made about the allocation of functions during the coming century (Local Futures, 2004: 3).

From a historical perspective regional government can be seen to have three phases:

- Nineteenth century provincial government;
- Dual special purpose and nascent regional planning authorities from 1940s to 1980s; and
- Modern regional council regime, dating from 1989 local government reform.

As well, and as Bush and others argue, in response to the attenuated power and capability of local government has been the rise of and significant role played by sub-national special-purpose authorities that in other polities could be expected to come under the wing of local government.

3.1 Provincial government and its aftermath

New Zealand's first century is one of a failed regionalism. Six provincial governments were established in 1853; Auckland, Canterbury, Nelson, New Plymouth, Otago and Wellington,

forming the first general and systematic attempts to organise local government. Subsequently a further three, Hawke's Bay, Marlborough, and Westland, were added, forming more or less natural administrative areas. These reflected identity-based differences between regions, accentuated by difficult communications between them; as Sir William Molesworth, opposing their formation, concerned that the measure would bring about permanent division among the scattered communities, spoke in the House of Commons:

It is said that the various settlements of New Zealand were founded upon distinct and exclusive principles. That 1,500 Presbyterians went to one corner; that 3,000 Episcopalians emigrated to another spot; and that 4,000 'what-do-you-call-'ems' settled in a third place, and 1,400 bumpkins in a fourth, and the two remaining settlements, with a population of about 7,000 each were composed of publicans and sinners... Therefore it is said that each of these exclusive Lilliputian settlements should have its own little kingdom of Brentford, with its own peculiar and exclusive laws. I should be very sorry if the exclusive character of these settlements is preserved, with their narrow animosities, religious feuds and jealousies.

Provincial government was not successful. Sutch suggests that the provincial governments had too many powers in the beginning, were not strong financially and either would not or could not under a property franchise undertake provincial affairs as provincial matters. Rather, in order to avoid taxation and to minimise public activities, responsibility was generally handed to the smallest local unit, which ratepayers ensured was kept small. They also formed a bar to national development. He suggests that had the provinces been turned into counties, 'New Zealand might have had some vitality in its local government with fewer functions carried out entirely by the centre' (Sutch, 1956: 22). Instead, the provinces were abolished in 1875 with functions relegated to largely to road boards, yielding to parochialism and land-owner self interest on the one hand, and in Polaschek's (1961: 88) opinion, intended probably to smash the provincial system beyond the possibility of any resurgence.

From the debris of the demolished provinces arose a fragmented municipality-based local government with a heavy focus on roading and basic property services. These were supplemented by special purpose authorities, such as harbour boards and hospital boards, although the latter were invariably the borough councils which were under ratepayer pressure not to apply unfavourable actions locally (Sutch, 1956: 27).

The shortcomings of the local government were already apparent by the turn of the century and failed attempts were made by the Seddon Ministry from the 1890s to reorganise the whole system of local government into eight provincial districts. The 1912 Ward Ministry sought to divide New Zealand into 24 provinces, while retaining the existing county and borough systems. The provinces' chief functions would relate to hospitals and charitable aid, public health, education, harbours, main roads and bridges, rivers, drainage and water supply. Following the fall of the Ward Ministry, another attempt was made by the Minister of Local Government, G. W. Russell in 1912, with the aim to ensure economy in local government where some boards' administration costs ranged from 50% - 156% of their rates. He intended to establish a:

larger class of governing body which will stand between the minor governing bodies of the dominion and the Parliament and upon which can be placed responsibilities and duties... now undertaken by the general Government... under one experienced body with one administrative head, and one staff (Russell, 1912).

This, like earlier attempts, proved highly contentious among the rate paying populace and was similarly shelved. Subsequent attempts at local government reform in 1944 attempted amalgamating rather than restructuring local government and putting financial matters on a somewhat improved footing.

3.2 United councils

New Zealand regional level governance was only really expressed through land-use planning in the twentieth century. This is logical insofar as most activities have a spatial dimension, but ignored the location of policy levers determining what activities are located where. The first Town Planning Act in New Zealand was passed in 1926 and amended in 1929 to provide for regional planning. However, planning was not mandatory and the 1930s Depression, followed by World War II reduced development pressure and the perceived need for planning. The post war climate was different, with growth pressure making evident the need for compulsory planning. The Town and Country Planning Act 1953 sought to establish a regional framework to conserve and develop regions through regional planning schemes. These regional planning schemes were intended to guide municipalities when preparing their district schemes, and any public or local authorities interested in conserving or developing resources of a region. Councils of adjacent districts were able to unite for the purpose of drawing up a regional planning scheme, the boundaries of any region to be covered by a scheme to be fixed having regard to natural geographic boundaries and to common social and economic interests.

Several regional planning authorities were subsequently formed though some major weaknesses were identified by a Review Committee reporting to central government in 1972:

- Regional planning schemes were only seen as a “guide” to local councils
- matters of regional significance and respective responsibilities of regional and local authorities were not adequately defined
- Regional Planning Authorities comprised only of nominees of the constituent local councils, who tended to put local ahead of wider regional interests, while regional special purpose authorities were full members
- All finances for regional planning were from levying local constituent councils
- Absence of obligation on central government to support and give effect to approved regional policies (Task Force on Economic and Social Planning, 1976: 132-3).

The greatest advance in a century of frustrated reform was the Local Government Act 1974. Norman Kirk's 1972 Third Labour Government had as part of its election platform 'rationalising local government by regionalisation'. Bush (1995: 54) describes it as a 'charter for regionalism', for although only planning and civil defence were mandatory functions, any new regional function would automatically fall to them. The formation of the Northland regional scheme that was intended to include the electric power, harbour, and water conservation authorities was instigated. This nascent regionalism was dealt a blow with the Muldoon Government's landslide victory in 1975, sensitive to local government concerns. It determined that elected regional councils were to be confined to urban areas with populations above 325,000 with appointed united councils serving all other regions. In practice, only Auckland and Wellington met this criterion.

The united councils were composed of constituent territorial local authority (TLA) appointees, with their administration and support provided by the principal territorial local

authority and financed by levying constituent authorities. For example, the Canterbury United Council (CUC), set up in 1979, had 26 members appointed by the 19 territorial authorities. Just over a half (52.5% in 1985/86) of its revenue came from levying constituent councils, with almost all the remainder coming from central government grants (Douglass, 1989). By the end of 1979, the statutory deadline, only eleven final regional schemes for formation of united and regional councils had been issued. These were all for united councils, though by 1983 twenty-two regional schemes were finalised.

The united councils had two mandatory functions, planning and civil defence and could not undertake optional functions on their own initiative, though did act as advocates for their regions. Even so few ventured far, 'inhibited by a suspicion that they were usurping the TLAs' legitimate functions, while the regionalist flagship was beset by vicious internal wrangling and that sought to restrict its activities' (Bush, 1995: 57). They were also required to develop regional schemes under the Town and Country Planning Act 1977 (Appendix 1). Some were successful and forward thinking; Murray Douglass, the then chief executive of the CUC, identified his council's achievements as:

1. development of public debate on planning in the region
 2. consultative approach to policy formulation drawing on public and private sectors
 3. urban transport responsibilities
 4. assessing the region's social, economic and natural resources providing the basis for its regional development strategy
 5. an employment policy and job creation resource centre
 6. establishing a civil defence organisation
 7. support to constituent councils on district planning schemes
 8. continuing air pollution and clean air programmes in Christchurch
 9. providing information and information to public and private sector
 10. recognition of regional development initiatives by local and central government
 11. increased awareness of opportunity to influence government policy
- (Douglass, 1989: 6).

Nevertheless, united councils were seen largely as prisoners of the territorial authorities that both made up the united councils and resourced them. A concern not to duplicate territorial authorities was also present. Bush reports a 1984 Department of Internal Affairs (DIA) survey showing

a patchy picture of involvement in energy, recreation, tourist [sic], employment, hazardous waste, mineral resources and health needs studies, and many were represented on regional development councils (Bush, 1995: 57).

Douglass (1989), in arguing for regional councils, identifies by implication the underlying weaknesses of the united council model:

- divided support and loyalty of appointed councillors;
- compromising of projects to ensure acceptability to the territorial councils, rather than identifying real needs of the region;
- inability to be directly involved or acting as a significant contributor in its own right in major regional development programmes; and
- funding subject to traditional and sometimes negative attitudes by some constituent councils.

3.3 Special purpose organisations

A second dominant feature of New Zealand's sub-national government has been the plethora of special purpose authorities each with its own locally elected and funded board operating in tandem to municipal local government. Special purpose boards abounded in England in the nineteenth century and New Zealand proved a fertile ground for this model, with harbour boards, river boards and education boards as early as 1870. By the 1970s these included hospital boards, catchment boards, electric power boards, harbour boards, pest destruction boards, drainage boards and other miscellaneous boards, quite apart from nearly 600 local domain or scenic boards (Scott, 1979: 145). Bush suggests their attraction resulted from the proliferation in number and diminishment of size of local government counties, town boards and boroughs, resulting in overly constricted boundaries and resources:

politically, the creation of a new single purpose unit trod on fewer toes (Bush, 1995: 12).

3.3.1 Catchment boards

Most special purpose authorities, such as noxious plants and animal pest control boards were, like their territorial authority counterparts, local in scale. However, the catchment boards responsible for water and soil management had a regional presence, which subsequently has cast a long shadow on modern regional administration, and so warrants elaboration.

The catchment boards' full history and demise is recorded in Michael Roche's (1994) historical review, covering from 1941 to 1988. Catchment boards, set up under the Soil Conservation and Rivers Control Act 1941, were part of a nationally and regionally integrated soil and water management regime. The organisations were the institutional expression of amalgamating two separate but related environmental management paradigms: river management to control flooding, which had a history back to the river boards and trusts set up under the provincial governments in the 1860s; and more recently soil conservation concerned to address accelerated soil erosion that reduced primary productivity and which choked rivers, exacerbating flooding. The catch-cry at the time was 'look after the catchments and the rivers will look after themselves' (Poole, 1983: 18).

Much later, catchment boards were given water quality and quantity responsibilities predicated on a water quality classification system, as Regional Water Boards, under the Water and Soil Conservation Act 1967. The 1967 Act brought together all management of natural water, including flood control and drainage, water supplies and pollution, as well as soil conservation (Poole, 1983: 23).

Essentially, each organisation was responsible for three different but related functions and the differences between the functions were never resolved so that the organisations operated as separate parts. One arm consisted of engineers designing, building and maintaining flood control and drainage structures, while another consisted of soil conservators developing land use plans and planting trees to reduce erosion underpinned by land-use capability mapping. A third managed pollution and water allocation through issuing of water rights acting as regional water boards.

Although the institutional structure was modified to accommodate the 1967 legislation, it remained premised on a national coordinating agency, the National Water and Soil Conservation Organisation (NWASCO) consisting of appointed members, and regional

special purpose authorities, catchment boards and later river boards, consisting of locally elected and appointed members, and, in some areas, by locally elected land drainage and river boards.

The NWASCO had a senior body, the National Water and Soil Conservation Authority, chaired by the Minister of Works and Development, with the function of advising the Minister on water and soil matters, recommending policy and overseeing the work of its subordinate councils. As well, NWASCO had a Soil Conservation and Rivers Control Council and a Water Resources Council, both able to offer financial incentives or grants for work designed to improve use and management of water and soil resources.

The NWASCO was serviced by the Water and Soil Division of the Ministry of Works and Development, with Head Office providing services required by NWASCO and the seven district levels providing oversight of expenditure of government funds on water and soil conservation works by the catchment boards. An important function of the Division was to provide special technical services to individual catchment authorities that could not economically support their own, and to undertake problem orientated research at its three research centres. Formation of catchment boards was voluntary, reflecting the educational and promotional philosophy under which they were established.

The need for wider coordination resulted in several modifications to this structure; in 1956 the Waikato Valley Authority was formed by special legislation in order to coordinate hydro-electric power generation construction along the Waikato River⁶. It enjoyed a special status with access to the Minister of Works and Development and Water and Soil Division servicing until its special status was removed in 1984 (Roche, 1994: 48).

The resulting institutional arrangements were described at the time as:

undoubtedly complex and not fully comprehended except by people working within it. This is to the detriment of public understanding. It must be remembered, however, that it has come together from markedly different directions. The practical result is the co-ordinated management of two naturally inseparable resources, soil and water, to the great benefit of the country. Simplification leading to better understanding is bound to come in time (Poole, 1983: 24).

Simplification came in 1988 with the disestablishment of the Ministry of Works and Development, including the Water and Soil Division, with residual functions transferring to the Ministry for the Environment and research to the Landcare Research Crown Research Institute. Roche (1994: 168) summarises the finale by firstly quoting a 'comparatively young politician, representing the government' [the Associate Minister of Works and Development, Peter Nielsen] at a special wind-up function of NWASCA members:

'I'm off, they're all bloody Nats⁷ here anyway.' ...This comment contained the Labour government's attitude to NWASCA in 1987: that it had subsidised farm development for several decades, that it represented centralised control, and that it combined administrative, policy and regulatory functions in an ambiguous fashion.

⁶ The Waikato River is New Zealand's largest river and is extensively dammed in its upper reaches for hydro-electric power generation to provide electricity for the North Island's population.

⁷ 'Nationals' i.e. members of the National Party, then in opposition, that had been historically linked with a rural constituency.

Perhaps its fate was therefore inevitable given it was so out of step with the prevailing political ethos.

3.3.2 Amalgamation of special purpose authorities

A consequence of excessive fragmentation of local government and substitution by local special purpose authorities led to inefficient organisations, lacking in capability and coordination. This was most acute in Auckland where by the 1950s a quarter of the country's population lived and which formed the basis for a regional amalgamation of the different special purpose authorities.

Polaschek identified thirteen special-purpose authorities in addition to the twenty-four territorial authorities functioning in Auckland in 1961 (Table 3-1). To address the consequences of this fragmentation, numerous coordinating bodies were established, including an:

Auckland Area Joint Works Committee for four Cabinet Ministers and six nominees of the territorial and ad hoc local authorities set up to coordinate government and local body works (Polaschek, 1961: 87).

This latter committee co-mingled central and local government in determining local works, further confusing governance arrangements, with apparent little effect. Professor Kenneth Cumberland summarised the situation:

We have, indeed, endless committees of important people who individually can do nothing, but together, because of their lack of authority, can decide that nothing can be done... (Cumberland, 1956: 83).

Table 3-1: Special Purpose Authorities operating in Auckland, 1961

Special Purpose Authority	Coverage
Auckland Metropolitan Drainage Board & North Shore Drainage Board	Collectively covered (more than) the whole urban area
Auckland Electric Power Board & North Shore Electric Power Board	Collectively covered (more than) the whole built-up area
Auckland Metropolitan Milk Board	Whole urban area
Auckland Education Board	Whole district plus substantial additional territories to the north and south
Auckland Hospital Board	Controlled hospital boards from Rodney County in the north to Franklin County in the south
Auckland Harbour Board	Controls Waitemata Harbour
Auckland Metropolitan Fire Board & North Shore Fire Board	Did not cover north-western or southern extremities of the urban area
Auckland Transport Board	Operated buses and licensed passenger services within the districts of nine central local authorities
Auckland Harbour Bridge Authority	Built and managed the Harbour Bridge
Auckland Regional Planning Authority	Undertook research and advised on town and country planning in area from Rodney County to Franklin County

Source: Polaschek, 1961: 85-86.

To address this problem, the Auckland Regional Authority Act 1963 established a unique regional government organisation, the Auckland Regional Authority (ARA). The ARA took over responsibility for several functions previously undertaken by special purpose authorities in the Auckland region, including regional planning, bulk water supply, main drainage, the international airport, public passenger transport and a major park. It was also made responsible for regional reserves, regional roads civil defence and metropolitan refuse

disposal, and acted as a regional water board. Income was derived by levying the territorial local authorities, a means by which the councils explicitly sought to limit the ARA's autonomy.

The success in establishing the ARA provided impetus to the Local Government Commission in 1963 to propose dividing New Zealand into about 20 regions, with the ultimate intention to establish directly elected authorities that would make most ad hoc boards redundant (Bush: 1995: 40). This proposal was not initially supported, but did pave the way for the Third Labour Government's Minister of Local Government, D A Highet in 1972 to propose the 'compulsory grouping of local authorities for regional purposes', the united and regional councils discussed above.

3.4 Central government decentralisation⁸

An alternative model existed for managing air pollution based on the English model of decentralised central government. Air quality was first managed under the Clean Air Act 1956 following advice from a recently retired Chief Inspector of the United Kingdom's Alkali Inspectorate which was then responsible for managing pollution. The impetus came from nuisance odours and gases from anaerobic decay in Auckland's Manukau Harbour and smog in Christchurch stemming from domestic hearth fires, as noted by a former Regional Air Pollution Control Officer.

Air quality control was consolidated with the Clean Air Act 1972 (CAA) that sought to abate air pollution. The legislation was administered using a two tier structure of central and local government responsible for controlling processes specified in the Second Schedule. Part A processes required a license from the Department of Health, part B (and C processes subject to bylaws) required a license from the local authority. It was an offence to obtain a license for the scheduled processes or to not comply with conditions set. By 1988, 351 major processes were controlled by the Department of Health, while local authorities controlled a further 1,000 smaller processes (Resource Management Law Reform, 1988).

Implementation was via a decentralised administration. The Department of Health (DOH) employed specialised Regional Air Pollution Control Officers and District Air Pollution Control Officers who were responsible for part A processes. The local authority responsible for administering part B or C processes either employed their own officers or paid a contribution to the consolidated fund and had their duties pass to DOH officers. Regional Air Pollution Control Officers were delegated appreciable power from the Director-General which made a decentralised, flexible enforcement of the law possible, in accordance with the specific situation. The air pollution control officers worked independently together with decentralized enforcement of the law. Ultimate responsibility remained, however with the Minister of Health. This was significant for example, in dealing with the release of confidential information; information could be held back by the regional air pollution control officer on grounds of commercial sensitivity unless release was ordered by the Minister.

A World Health Organisation review of air quality management in New Zealand (Clarenburg, 1986: 3) considered existing institutional arrangements were suitable for New Zealand. The Clean Air Act was viewed by some to provide a good basis for enforcing air

⁸ This section draws primarily upon material contained in an unpublished research project written by the author as part of the Master of Public Policy course, Victoria University of Wellington, 1992.

pollution control, and that the best practicable management principle was very suitable for meeting New Zealand needs. However, both the review and others recognised several issues under the legislation that gave rise to concern. These were largely the inevitable consequence of applying best practicable management and were similar to the British experience.

Overall effectiveness was compromised as it was not explicitly linked with the Town and Country Planning Act 1977 (T&CPA) that controlled land-use through zoning controls. A firm could obtain consent for an operation under the T&CPA without necessarily anyone fully taking account of air pollution issues. The firm may then not necessarily obtain a clean air permit. The lack of integration may lead to undesirable longer term effects, for example urban encroachment into areas where air pollution permits have been set on the basis of distance from populated areas, such as DowElanco's incinerator in New Plymouth and many operations causing odour nuisance (PCE, 1991).

Concerns were also raised about the apparent lack of accountability of the air pollution control officers' decision-making. Public participation in air pollution matters was virtually non-existent. The CAA makes no provision for formal participation. Any input was via public hearings addressing land management issues of a project, held under the T&CPA. Difficulties arose under the CAA regarding access by third parties to information used by air pollution control officers to make their decisions (Ss. 47 & 52). The nature of the relationship between air pollution control officers and industry was one built on confidentiality and trust. Commercially sensitive matters need to be taken into account regarding financial and economic aspects of a process when determining the best practicable means. This relationship was compromised by open access to information, necessary to meet the needs of full public participation.

The Best Practicable Management principle also required officers to keep up with the knowledge of current technology in order not to be outwitted by staff of the firms they are licensing and the need for skills training, no tertiary institute in New Zealand was considered providing an adequate education in air pollution to required levels. The World Health Organisation report noted the need for overseas training course to maintain standards while low salaries depleted the administration's skills base as competent officers were recruited by industry (Clarenburg, 1986).

In summary, the administration for controlling air was based on the English model of a special purpose central government organisation with technical expertise and regional representation. Its weaknesses stemmed from its technical specialisation, both in engaging with community and with other specialist organisations.

3.5 The state of regional government by 1989

In short, the history of New Zealand local government up to 1989 is one of fragmentation dominated by mendacious parish-pump parochialism. The small size of local government units meant that they lacked capacity and capability to undertake more than the basic roading and property servicing functions, indeed many councils originated in roads boards. Rather, and in keeping with a conformist egalitarian promoted by the welfare state, many functions associated in other countries with local government were the responsibility of central government. Efforts to reform local government, which included regional administrations had been thwarted in a 'history of defeat' spanning a century. The LGA 1974 had introduced the first regional government organisation, regional and united

councils, but with exception of the Auckland Regional Authority, these were the castrati singing to the tune of the municipalities.

Partly as a response to the limited functions of local government, sub-national special purpose authorities had grown in number and scope, responsible for fire service, public health, milk supply, through to catchment management. Some of these, such as the health and catchment boards, had a regional, as in supra-local, jurisdiction, but powers and funding were still subordinate to central government control. Capability also varied regionally. Published comparisons between organisations are not readily available, but there were recognised leaders within the sectors, such as the Waikato Valley Authority and the Canterbury United Council, as well as poor achievers. The consequences were attenuated functions, and spatially and functionally fragmented sub-national institutions lacking capacity or capability to operate effectively.

There were also concerns at the lack of accountability of these special purpose authorities. For example:

Ombudsman Powles pointed out hierarchical administrative structure of government agencies with environmental responsibilities does not offer sufficient opportunity for average citizen to participate in the decision-making process. NWASCO and constituent councils are composed of government and special interest appointees, largely removed from democratic control and not answerable to the complaints of individual citizens (O'Riordan, 1971).

At the regional level, the united councils and ARA had the legislative mandate immediately preceding the 1989 reforms, New Zealand had the basis of a regional planning model, comprehensive in scope that equates with contemporary social, economic, environmental and cultural well-being, but, hobbled by their territorial authorities, completely inadequate in capacity to execute their strategies. Claudia Scott in 1979 identified:

the primary reasons for the lack of progress in regional government has been the absence of a clear image of the function of such units and their relationship with both local authorities and central government (Scott, 1979: 112).

She suggested the potential role for regional governments in both regional planning and regional development had never been made explicit, but could underpin the case for strong regional governments in New Zealand.

4. 1989 local government reform

The third phase of regional government development in New Zealand resulted in the establishment and consolidation of contemporary regional councils. This can be seen to have two parts: the establishment and bedding down of the new councils created within a New Public Management ideology, and an uncomfortable and still incomplete realignment to meet the requirements of a new governance paradigm in the twenty-first century.

4.1 Scope of reform

The 1984-1990 fourth Labour government was an iconoclastic administration, over the whole public sector that included the public service, public finance, environmental management, health, education and local government, resulting in the transformation of New Zealand public and private life (James, 1992). In the local government sector the Minister of Local Government, Michael Bassett, and Local Government Commission under Brian Elwood undertook far-reaching reform announced somewhat innocuously as part of a

much wider agenda in the government's *Economic Statement* of 17 December 1987 promising that:

the comprehensive reform programme envisaged would involve a fundamental review of all aspects of local governmental functions, structures, organisations and funding (New Zealand Government, 1987).

These were to be completed in time for the 1989 local government elections.

The local government reform was largely consistent with the prevailing New Public Management ethos of the time, which directed the other reforms that together formed part of a carefully crafted, integrated and mutually reinforcing reform agenda. The main objectives under this model of public management applied to both central and local government included:

- improving allocative and productive efficiency
- enhancing effectiveness of governmental programmes
- improving accountability of public sector institutions
- reducing the level of government expenditure and size of core public sector
- minimising opportunities for non-transparent use of public power
- improving quality of the goods and services produced by public agencies and
- making public services more accessible and responsive to consumers, as well as more culturally sensitive (Boston *et al.*, 1996: 4).

Despite the apparent cohesiveness and consistency to which Boston and others allude, the development of the functions were not so rationally planned. The local government and environmental management (that were to form part of the core of the new regional councils) reviews and reforms for a long time operated in parallel with quite different processes that were then brought together to some degree. The environmental management reform also had separate strands: review of resource management legislation, Crown minerals, and the coastal marine area, undertaken by different departments. These were finally integrated into two strands and coordinated by the Cabinet Ad-hoc Committee on Reform of Local Government and Resource Management Statutes (ALG), chaired by Deputy Prime minister and Minister for the Environment, Geoffrey Palmer.

Nevertheless, the Local Government Amendment (No.2) Act 1989 created the new local government structure of regional councils, and territorial authorities consisting of city and district councils put to rest the spectre of Sutch's 'history of failure'. It rationalised local government, compacting 625 extant units into 94 by reducing:

- 22 regions to 14, all with directly elected regional councils;
- over 200 territorial authorities to 74 cities and districts; and
- over 400 to seven ad hoc or special purpose authorities.

As well, boundaries of regional authorities broadly followed catchment boundaries, while requiring greater transparency through requiring separating regulatory from other functions and instituting accountability measures, and instilling a new professionalism of the local government sector. This was by no means a given; competing definitional criteria, including *Iwi rohe* (tribal regions) and existing central government administration regions were all put up to the ALG.

A complementary sub-national governance structure for Maori was also intended based on *Iwi* (tribal) administration. This was part of the Government's intention to devolve the

Department of Maori Affairs functions. Iwi authorities were identified in the government policy statement *Te Urupare Rangapu* as the preferred institution to represent iwi in matters of service delivery and policy development (RMLR, 1988: 24). The Runanga Iwi Act 1989 establishing the iwi authorities was the last piece of legislation enacted by the fourth Labour government and its repeal was the first action of the incoming government in 1990. While it was never operative, vestigial references remain within the RMA's consultative procedures, providing a mute reminder of alternative regional governance configurations.

4.2 Regional councils

Although the 1974 Act had provided for directly elected regional councils, this option was only exercised in Northland and Wellington. The constraints on their formation had meant that most of New Zealand had united councils of territorial representatives at the regional level. A significant feature of the 1989 reform therefore was the creation of a comprehensive regional council layer of governance. The most significant governance change is that all of New Zealand was covered by directly elected regional organisations for the first time since the abolition of the provinces. Also, the councils could levy rates directly rather than relying on territorial authorities or national government for funding. Thus the councils were largely autonomous and directly accountable to their regional populations.

There had been discussion about the prospect of giving all local government power of general competence and even the hope among some national government officials of the ultimate transfer of national functions to regional councils. In the event neither transpired. Rather, the regional councils were established by amalgamating regional and local special purpose authorities; catchment boards and commissions, united councils, drainage boards, and noxious plants and animal pest destruction boards. For example, the Manawatu-Wanganui Regional Council brought together some 26 authorities (Table 3-2).

Table 3-2: Manawatu-Wanganui Regional Council's special purpose authority antecedents

Catchment Boards	Noxious Plants Authorities
<ul style="list-style-type: none"> Manawatu Catchment and Regional Board Rangitikei-Wanganui Catchment Board Wairarapa Catchment Board (part)* 	<ul style="list-style-type: none"> Taumarunui District Noxious Plants Authority Waimarino District Noxious Plants Authority
United Council <ul style="list-style-type: none"> Manawatu United Council Wanganui United Council Horowhenua United Council Tongariro United Council (part)* Wairarapa United Council (part)* 	<ul style="list-style-type: none"> Wanganui District Noxious Plants Authority Kiwitea-Pohangina District Noxious Plants Authority Oroua District Noxious Plants Authority Palmerston North District Noxious Plants Authority
Drainage Boards <ul style="list-style-type: none"> Moutua Drainage Board Makerua Drainage Board Manawatu Drainage Board Oroua River Drainage Board Sluggish River 	<ul style="list-style-type: none"> Manawatu District Noxious Plants Authority Horowhenua District Noxious Plants Authority Dannevirke-Woodville District Noxious Plants Authority
Animal Pest Destruction Boards <ul style="list-style-type: none"> South-West North Island Pest Destruction Board Central North Island Pest Destruction Board (part)* South-East Coast North Island Pest Destruction Board (part)* 	<ul style="list-style-type: none"> Pahiatua District Noxious Plants Authority Eketahuna District Noxious Plants Authority (part)*

Source: Local Government Commission, 1989.

* in respect of that part of the Tongariro and Wairarapa Regions that were included in the Manawatu-Wanganui Region.

The Manawatu-Wanganui region had 20 former authorities and 6 former part-authorities as antecedents.

It was intended to separate regional regulatory from service delivery functions, in keeping with the NPM ethos, but it was recognised that this was not feasible in all parts of New Zealand. Accordingly, Gisborne District, with its low population, was made a unitary authority having both district and regional council functions.

The antecedent authorities' functions (Table 3-3) and many of their staffs were also brought across into the new regional councils and many councils in their early years grappled with integrating the quite different organisational cultures and functions. In most cases, the largest staff and management positions tended to come from catchment boards whose cultures tended to dominate. Only a few staff came over from united councils and their functions and perspectives largely disappeared within the large catchment board planning priorities and culture.

The largest operational part of regional councils consisted of soil conservators operating under the Water and Soil Conservation and Rivers Control Act 1941; and noxious plants officers (Noxious Plants Act 1978) and animal pests officers and rabbiters (Animal Pests Destruction Act 1974). These functions largely focused on the rural sector. Public transport and regional civil defence functions came over from the united councils, but with the exception of the metropolitan regional councils, these have played an almost insignificant part of councils' operations.

Table 3-3: Regional Council functions - 1989

-
- a. preparation of regional land transport plans
 - b. passenger transport operators licensing, and distribution of subsidies
 - c. passenger transport operations (Auckland only)
 - d. Levying and collection of petroleum tax (where currently collected by regional councils)
 - e. Regional roads (Auckland only)
 - f. Specific functions of the Canterbury Regional Council
 - g. Regional parks and reserves (Auckland and Wellington only)
 - h. Sewerage and trade wastes disposal (Auckland only)
 - i. Refuse disposal (Auckland only)
 - j. Forestry operations (Auckland, Wellington, and Manawatu-Wanganui only)
 - k. Regional Civil Defence
 - l. Noxious plants control and agricultural pest destruction
 - m. Harbours management and marine pollution control
 - n. Resource management (water quality management, soil conservation and coastal management)
 - o. Land drainage
 - p. Flood protection; and
 - q. Port company shareholdings.
-

Note: Auckland Regional Council's services functions were relocated to an independent organisation in 1992.

4.2.1 Resource Management Act 1991

As well as the local government reform, the Labour government was simultaneously looking to reform environmental management. Initially these reforms were run separately by DIA

and Ministry for the Environment (MfE) and to different timetables but were soon coordinated through the Cabinet ALG Committee.

The RMLR envisaged significant roles in resource management for regional authorities, building on their existing responsibilities, and where the different elements could be brought together and considered in a comprehensive way. Their functions were seen to be primarily regulatory rather than service delivery (RMLR, 1988: 25). A critical decision was to allocate regional level resource management functions with the new regional councils, with a more limited role, primarily managing the effects of use of land to territorial authorities. Resource management was predicated on a river catchment basis, building on existing catchment board boundaries. These boundaries do not always match communities, some larger rivers inhibited closer relations with villages on opposite banks, so that there were competing bases for the regional jurisdictions put up to the ALG Committee, with no clear favourite.

The legislation came out of the same new public management stable as the public sector reform, with accountability mechanisms and community and judicial checks and balances. Underpinning it is the concept that government is not suited to determining the most appropriate resource use, which should be left to the market, but that government has a role in setting and enforcing the rules of the market to avoid externalities (Bromley, 1988).

As well as reconfiguring their legislative mandates within a new public management ideology, the new legislation widened scope within environmental management to allow for integrated management of land, air and water resources. Implications for regional government were significant in the scope of the councils' ability to plan for their regions. Regional councils were each required to prepare a Regional Policy Statement that stated:

- Significant resource management issues of the region
- Matters of resource management significance to iwi authorities⁹
- Objectives sought to be achieved by the statement
- Policies addressing the issues and objectives and methods to implement policies
- Environmental results anticipated from implementing the policies and methods (RMA s.62).

The focus is clearly on natural and physical resource management. As the only comprehensive regional level planning or policy document, it is notably lacking in wider social, economic or cultural elements. The regional policy statements were also able to be appealed to the Environment Court, opening up the documents and the processes by which they were prepared to judicial review. This provision resulted in the RPS documents not becoming fully operative for well over five years after they were started as provisions were appealed. For example, the Canterbury and Manawatu-Wanganui regional councils' RPS documents both became operative in 1998, while Waikato's became operative only in 2000.

4.2.2 Council scope

Of significance was the attenuated scope of the RMA and of regional councils generally compared to the earlier united councils that also encompassed economic and social matters (Perry, 1992). The RMA was clearly intended, through the wording of its purpose and

⁹ The Iwi authorities were originally intended to be those established under the Runanga Iwi Act 1989.

definition of environment, to focus on the management of natural and physical resources. Their only socio-economic roles were provision of public transport, regional land transport planning and civil defence management. The whole of the social and economic planning expertise and institutional knowledge built up by the more forward thinking united councils was dissipated very quickly (Douglass, 2007: *pers. comm.*). As a result from the demise of the united councils in 1989 a lacuna in regional level social and economic planning formed that still largely continues today.

4.3 The Cooper review

While the local government reform was completed, the incoming 1990 National government, guided by the Minister of Local Government, Warren Cooper, was clearly against the new regional councils, as summarised in a newspaper editorial:

Local Government Minister Warren Cooper has identified the fungus blighting the lives of ratepayers. It is regional councils. He loses no opportunity to lambaste them for being superfluous, out of touch, empire-building, preoccupied with their own agendas, and ripe to have their layers of fat stripped away (*The Dominion*, 10 June, 1991).

However, he faced difficulties in abolishing the regional councils as the Minister of the Environment, Simon Upton, saw them as an integral part of the RMA which National had committed to support. Cabinet asked the Ministers of Local Government and Environment to jointly report back on the broad role, responsibilities, and structure of local government and that the report be prepared by a Working Group. The terms of reference given to the Working Group included:

- (a) The most appropriate way Regional and District Councils could be made more efficient and streamlined if both levels of local government are to be retained including identification of functions which could be discontinued, timeframes for change, and any cost implications;
- (b) The most appropriate redistribution of regional council functions between district councils and central government agencies in the event that regional councils were abolished, and identifying functions which could be discontinued;
- (c) The nature, scope, and cost implications of a central government agency to administer resource management legislation at the national and regional levels. (CAB(91) M 9/29)

The Working Group identified a range of regional councils that it considered were not inherently regional. The consequence was a compromise, with significant limitation on the scope of functions regional councils could undertake. At the same time, the regional council structure, a critical part of the RMA framework was kept. Under the Local Government Amendment Act 1992:

- Regional councils were restricted to an exclusively regulatory role;
- The Nelson-Marlborough Regional Council was disaggregated into three unitary authorities: Tasman, Nelson and Marlborough District Councils;
- Service provisions and commercial activities were stripped from the Auckland Regional Council and relocated within a new Auckland Regional Services Trust; and
- Hurdles to review councils were reduced, leading almost immediately to requests to the Local Government Commission to turn the Southland and Westland Regional Councils into six unitary authorities, with deamalgamation requests growing to include five regional councils by mid-1994.

Blood was however drawn with the disestablishment of the Nelson-Marlborough Regional Council to satisfy political honour and to perhaps make a Machiavellian statement where power ultimately lay and lies. The salutary lesson was well made, as was the persistent threat of unitary authorities, although none succeeded, and the collective culture of the regional councils throughout the 1990s was one of 'keeping heads down' and 'sticking to the knitting.' The councils also largely sought, not always successfully in the urban regions, to avoid aggravating constituent territorial authorities.

The only outstanding issue has been a border skirmish between Otago and Canterbury Regional Councils. Canterbury region ratepayers in the Waitaki catchment were sufficiently dissatisfied with the regional councils' performance, and given a natural community of interest focusing on Dunedin rather than Christchurch, sought to re-designate the Waitaki catchment as part of the Otago region. For the purposes of catchment management, this made little sense given the location of the Waitaki headwaters. The result was that while most of the District was re-designated to Otago, a joint catchment management regime administered by a joint board was established. Whilst this issue and its resolution can be seen as an ad hoc administrative oddity, it nevertheless has some wider Freyian democratic implications.

4.4 Local Government Act 2002

Local government's operating paradigm was challenged by a change in central government at the start of the new millennium. The Minister of Local Government, Sandra Lee, sought to imprint her left of centre Alliance party's mark on the review of the LGA 1974 that led to the Local Government Act 2002. This was clearly a product of 'Third Way' politics with its communitarian underlay that sees communities as a necessary component of delivering public goods. The LGA 2002 restates the purpose of local government, at both territorial and regional levels, together with the intention to situate local government more strategically as working with their communities.

Under the LGA 2002, the purpose of local government is to provide for democratic and effective local government that recognises the diversity of communities and to provide for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach (s.3).

Regional and territorial councils are treated as equals under the legislation, though regional councils are constrained should they wish to undertake a significant new activity where one or more constituent territorial authorities is intending to or is already undertaking the activity (LGA 2002 s.16). For the first time local government is given a power of general competence, although this is constrained by significant accountability principles and requirements placed on them. Local government always had far wider powers than it has wished to exercise, and on occasion was able to seek enabling powers to undertake new activities on an ad hoc basis through sponsoring local government legislation in Parliament.

The LGA 2002 attempts to develop a strategic definition of outcomes built on this notion of placed-based local authorities. Although local government boundaries were intended to reflect local communities of interest when they were drawn in 1989, modern local authorities were formed largely by amalgamating adjacent authorities to form viable units. At the regional level councils were formed to encompass whole river catchments rather than social communities of interest. While jurisdictions based on catchments provide for

integrated natural resource management, rivers have historically isolated communities on opposite banks, as is reflected by several district council boundaries today. These differences are noticeable at the region boundaries, drawn by the Local Government Commission in 1988 given the over-riding consideration to ensure regional boundaries should conform as far as practicable to the boundary of one or more water catchments (Local Government Amendment Act (No.3) 1988). For example the former Taumarunui Borough and County were made part of the Manawatu-Wanganui Region, despite the 'acknowledged community of interest of this area with the Waikato Region' and iwi affiliations (Local Government Commission, 1988: Section D: 7).

Councils are also required to plan strategically with their communities on a 10 year horizon. The Long Term Community Council Plan (LTCCP) process has two components; the identification of community outcomes and the councils' 10 year Long Term Community Council Plans (LTCCP) in which the councils show what steps they are taking to implement those outcomes. The community outcomes process (COP), in which communities identify desired outcomes is undertaken at least every six years, while the LTCCPs are prepared at least every three years, with intervening years' activities and budgets set out in Annual Plans. Councils are also required to report on progress towards achieving the community outcomes in advance of the COP, reporting on overall progress, not only their own contributions. Councils' draft LTCCPs were required to be audited by the Auditor General and the first full LTCCPs needed to be adopted by June 2006 so that councils could strike rates. Despite this ability to undertake new functions, regional councils have shown little enthusiasm to exercise their new freedom through their LTCCPs (Local Futures, 2007, Thomas, 2006).

It also brings to the fore the issue of span of control and location of the policy levers necessary to effect strategies. Local government's narrow task span means that at present local government is reliant on central government agencies, at either the central or regional level to implement strategy elements. This exacerbates the cross-sectoral governance issues raised above. A more comprehensive local government reduces the need for indirect vertical alignment. These are not new ideas, but had surfaced leading up to the 1989 local government reform (CUC, 1988; Britton *et al.*, 1992). In fact, that reform process led to a theoretical contraction in regional government capability as the wider social, economic, environmental and cultural regional planning ability under the Town and Country Planning Act 1977 was replaced by the much more confined, environmentally focused, regional policy statements under the RMA. The narrow focus was reinforced by the 1991 'Cooper Review' that restricted regional council functions with the stricture to 'stick to the knitting'. This wider planning capability was largely lost, along with the political and administrative will by many regional councils, so that now under the LGA 2002 many regional councils regard wider planning issues only tentatively and as marginal to their 'core business'.

There are, however, some signs of a cautious testing by some councils of expanding their scope. Recently the Wellington Regional Council has assumed the role of 'keeper' of the region's regional economic development strategy, the Wellington Regional Strategy. This is however an arm's length function undertaken by an independent economic development agency with a council committee providing oversight. Even so, the initiative was not supported by the Hutt City and Upper Hutt District Councils, primarily on philosophical grounds.

5. Current regional government and administration

Current regional governance arrangements have been now in place for some 18 years. Despite apparent stability, underlying tensions and challenges remain that ultimately question the existing regional governance arrangements. As well, regional councils are operating in a geographical polity with other agencies and organisations that stretch the governance warp and weft.

5.1 New Zealand local government model

Regional councils are identified and identify as part of the New Zealand system of local government. Local government is remarkable in that it is locally accountable and financially autonomous in comparison with these entities and therefore warrants a closer examination. It is also a considerable component of the economy, contributing 3.5% gross domestic product with an annual operating expenditure of \$3 billion, annual capital expenditure of \$800 million and 40,000 jobs (Local Government New Zealand, 2005). New Zealand local government is remarkably autonomous compared to other western countries. Its relative autonomy stems in no small part from the sector's financial independence. This is based on a narrowly-based financing power under the Local Government (Rating) Act 2001 giving local governments ability to raise property taxes and user charges (Table 3-4).

Table 3-4: Local government revenue 2001/02

Category	Proportion of total revenue (%)
General rates	52.0
Water rates	03.6
Fees and fines	04.5
Sales and charges	18.6
Investment Income	10.1
Grants, subsidies and levies	10.6
Petroleum taxes	00.7

Source: Commonwealth Local Government Handbook, 2004.

Unlike other countries, there is no mandatory or automatic revenue sharing from national income and sales taxes. The allocation of revenue by central government to local authorities is limited to direct programme grants, notably for land transport purposes and various needs-based infrastructure subsidy schemes. In the 2004/05 year national government contributions were twelve percent of local government's income. In comparison, the share of council income contributed through federal and state contributions in Australia is around twenty percent, while in the United Kingdom the figure is close to 75 percent (Local Futures, 2006).

The lack of tied grants confirms the high level of fiscal independence enjoyed by local authorities. This, coupled with a tradition of very limited central government intervention in local authority administration, has allowed significant local discretion by international standards (Bush, 1995). However, this autonomy comes at a price; compared to other western countries New Zealand's local government has a very narrow task span. Functions commonly undertaken by local governments in other countries, such as policing, education, many social services and emergency services are funded and operated nationally. Thus New Zealand local government has autonomy over little.

Strategic community planning certainly seeks to reposition New Zealand local government from Norton's Anglophone to continental European model, making it part of a wider

community framework. However, this overlooks the underlying reasons for this 'New Zealand model' of local government identified by W.B. Sutch over half a century ago:

Local government in New Zealand derives its form from English history and its feebleness from the short-sighted self-interest of the New Zealand ratepayer. Had New Zealand been a colony of Denmark, it would probably have had a logically knit system of provinces combining central administration with local control (Sutch, 1956: 12).

The Anglophone model is under pressure, in England as well as New Zealand. The Lyons Report on English local government has sought to re-position the strategic role of local government as one of 'place-shaping' and seeking to avoid becoming fixated with the service delivery role that had become so important in the last century. Rather, Lyons sees three, inter-related sets of roles that government plays, as:

- service provider
- vehicle for public infrastructure
- institution of government – a place for debate and collective decision-making.

He suggests any analysis of the modern role of local government needs to take account of all three roles, while recognising the 'appetite for self-determination is as much a part of local government's background as its role as a service provider' (Lyons, 2007: 1-2).

In New Zealand, the intent has been to broaden the scope for collective decision-making; it is unclear what inroad this initiative has had. Local government has historically been seen as a service provider and we see no significant change in this perception, either within the sector or by central government. Local government planning strategically for outcomes is difficult given the policy levers are largely held by central government agencies as are access to additional resources. The 2007 Independent Inquiry into Local Government Rates, established by the government in response to public concerns over local body rate increases, is also premised on a business as usual model and was not given the mandate to take a strategic overview of the function, structure and financing arrangements that are most appropriate for New Zealand local government (Local Government Rates Inquiry, 2007)..

Local government is more restricted in its legislative powers, restricted to making and enforcing second-order legislation (regulations) within nationally legislated arenas, notably bylaws for ensuring public health under the Health Act 1956 and resource management rules under the RMA. Further, New Zealand local government, unlike most European and North American local governments, is a creature of statute (created under the Local Government Act), without any constitutional protection.

The role and response of the different sub-national agencies to these changed responsibilities provide a rich field for evaluating the efficacy of devolution and coordination. However, it is argued that the environmental management policy arena is particularly interesting given that the agencies involved have undergone the most devolution of any sector and highly structured institutional arrangements exist for regulatory intervention and policy review.

5.2 Challenges of territorial coordination

The current configuration is not uncontested; while calls for establishing unitary authorities from the provincial councils have died off, Auckland remains a contested arena. Rivalry between territorial and regional bodies has been a hallmark of Auckland local politics reaching back to the establishment of the ARA (see Memon *et al.*, 2007). This stems in part

from the unitary nature of the metropolis with a need for services and infrastructure throughout the urban agglomeration. Arguments largely centre on whether unitary area-wide multi-functional authority or fragmented local-community based authorities are better suited to provide these services. These competing efficiency and voice arguments are canvassed more fully in the next chapter.

Matters came to a head in late 2006 with a play by the mayors of the four cities seeking to abolish the ARC and replace it with a super-city – essentially a metropolitan unitary authority. Although the attempt failed, Auckland’s regional governance was again placed on the political agenda, leading the Minister of Local Government to promise a resolution in time for the 2007 local government elections (Minister of Local Government, 2007). This issue is unique to Auckland, reflecting its singular metropolitan composition, but it does serve notice that a ‘one size fits all’ approach to regional governance in New Zealand may not be the most appropriate. At time of writing (September 2007), the Government with support from the opposition, has subsequently decided to refer the whole matter to a Royal Commission of Inquiry on Auckland Governance to report back in late 2008.

Discontent also exists in southern Canterbury, where there has recently been renewed calls for the southern districts to break away from the Canterbury Regional Council and to have their own South Canterbury regional council (*The Press*, 29 November, 2007; 3 December, 2007). These calls reflect both dissatisfaction with the regional council’s performance and concerns that its small provincial-rural voice is lost within the Christchurch City dominated council and historical separate identity.

The other challenge facing some regions is the coordination of strategic planning to manage growth across territorial jurisdictions. This is perhaps most marked in Auckland and Canterbury and Tauranga where rapid growth is being experienced that spills across borders of more than one territorial authority. In each case the challenge is to coordinate the individual territorial plans, suggesting a sub-regional organisation.

Both the Auckland Growth Strategy and the Greater Christchurch Urban Development Strategy (GCUDS) have or intend to use a governance model approximating the former united councils with members appointed from and by the constituent councils. The membership is much smaller than the united councils: for example the GCUDS proposes to draw membership from the three territorial and one regional council, as opposed to the CUC’s nine counties, borough and city councils that match the current growth strategy area. Nevertheless, the problems inherent with the united council model, identified above, must still remain.

6. Other regional government structures

While regional councils have formed the core of this survey, reflecting their dominant position at the regional level, other forms of regional government have also operated in this time. They are very briefly overviewed to gain an appreciation of the range of possible regional governance models. Gill (2002: 132) identifies some 3,000 state sector organisations operating in New Zealand of which fewer than fifty are departments of state and less than twenty state-owned enterprises. The remainder are classified as ‘Crown entities’ that operate at a distance from ministerial control. Most of these are school boards of trustees, operating at a very local level. District Health Boards and Conservation Boards however operate at a regional level in the sense of being geographically defined entities

covering several territorial authorities. These and other examples of regional entities are notable for the range of government configurations and regional definitions they employ.

Government in the health sector has been as tortured and complicated as in local government, of which it was originally part in the nineteenth century. Its history is one of tension between centralisation and devolution with competing demands for accountability for its national government funding and local communities who use the health services, shaped by ideological conceptions of how this is to be achieved. More recent precursors to the current institutional arrangements include

- Hospital Boards prior to 1983, which had a strictly hospital focus and were publicly elected (the Department of Health ran non-hospital public health and some mental health services).
- Area Health Boards (AHBs) from 1983 to 1993, which combined hospital and public health services. Their boards were partly publicly elected and partly appointed by the Government.
- Crown Health Enterprises (CHEs) between 1993 and 1996, which took over from AHBs. They were publicly owned companies, with boards appointed by the Government.
- Hospital and Health Services (HHSs) between 1997 and 2001, which were publicly owned companies with responsibilities for a wider range of health and disability service provision than CHEs. Their boards were appointed by the Government (Ministry of Health, 2007).

Established in 2001, District Health Boards (DHBs) corporate bodies owned by the Crown. They are responsible for ensuring the provision of publicly funded health and disability support services within their districts under the New Zealand Public Health and Disability Services Act 2000. Like the LGA 2002, there is an expectation for a community focus, though overall direction is provided by the New Zealand Health Strategy and New Zealand Disability Strategy. The current institutional arrangements have 21 district health boards (Figure 3-2), each consisting of a combination of seven directly elected members and up to four members appointed by the Minister of Health. All funding comes from the national government through the Vote: Health.

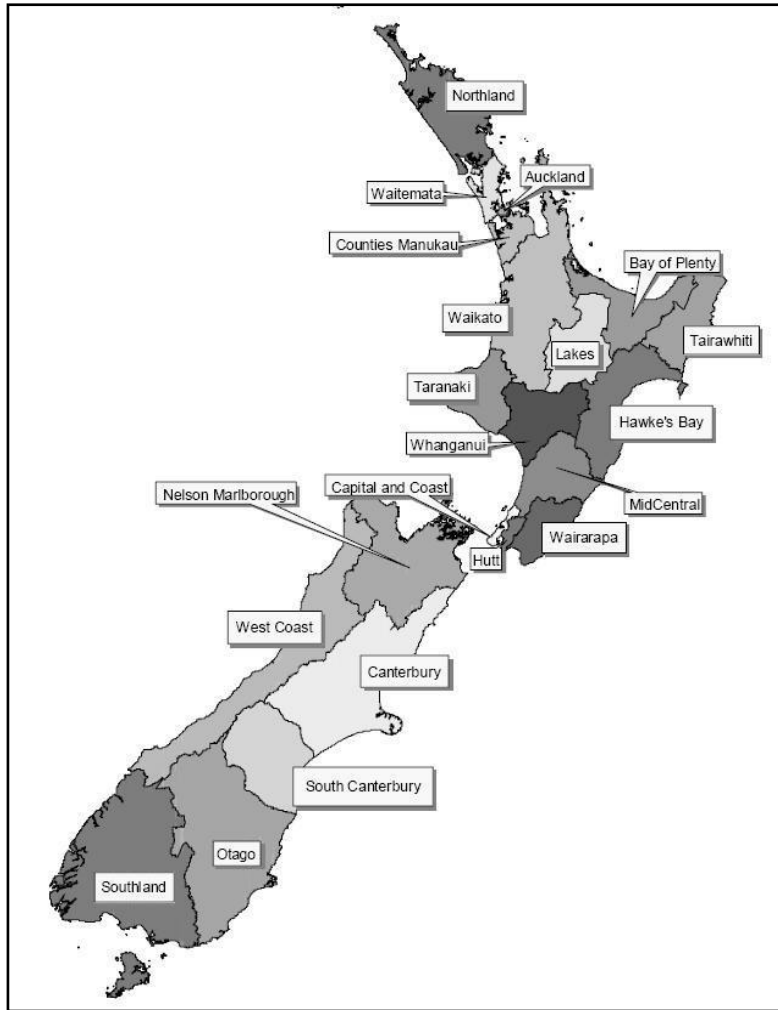


Figure 3-2: District health board boundaries

The Department of Conservation (DoC) administers its operations at a regional, or conservancy, scale. Conservation Boards and New Zealand Conservation Authority (NZCA) were established under the Conservation Act 1987. While they do not have governance responsibilities for the DoC conservancies – which remain under the control of the Minister of the Conservation, they are intended to represent the long-term public interest in conservation and are involved in conservation planning and policy development affecting the management of public conservation lands administered by the Department of Conservation. The NZCA provides advice on conservation issues at a national level, while conservation boards provide independent advice to and policy oversight of the fourteen Department of Conservation conservancies (Figure 3-3). Membership at all levels is by ministerial appointment drawn from public and other nominations. Funding for the conservancies is by national government from Vote Conservation (DoC, 2007). This is therefore very much a delegated rather than devolved government model.

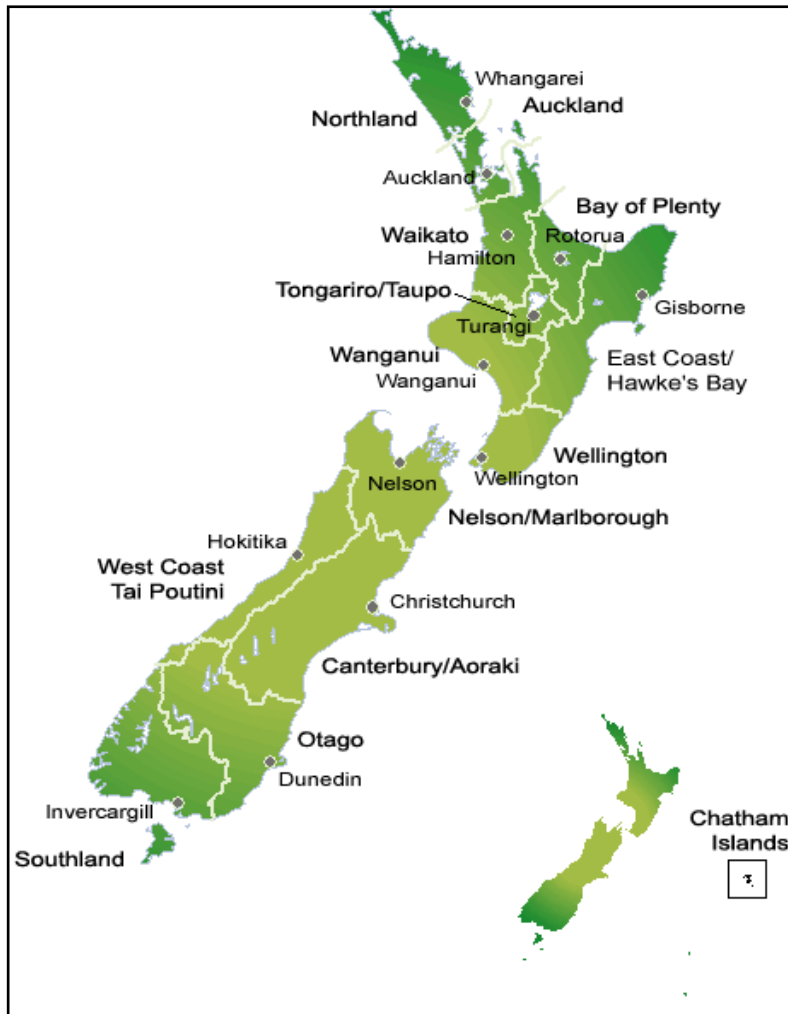


Figure 3-3: Conservation board boundaries.

A smaller example of a regional organisation relevant to this study is the New Zealand Fish and Game administration. The twelve regional fish and game councils and a national council were established under the Conservation Act 1987 to manage sports fish and game resources on behalf of anglers and hunters. The individual regional councils are public entities and twelve members of regional councils are elected every three years by license holders, and the twelve members of the New Zealand council appointed by the regional councils. The national council reports directly to the Minister of Conservation. Funding is entirely from sale of licenses to fish and hunt.

A feature of the different regionally-based organisations is a lack of any consistent geographical delineation. Thus there are sixteen regional councils (including unitary authorities), fourteen DoC conservancies, and twenty-one DHBs. Other administrative boundaries again are used by different government departments leading to a geographic palimpsest, with layers of administrative and jurisdictional boundaries scored across the country.

Some regional boundaries are more clearly defined than others, but mismatches are clearly observable. This is clearly apparent in the lower North Island, where McNeill (2003) identifies the lack of alignment between central government administrative boundaries and regional council boundaries that dilutes any regional identity. He shows that in addition to

the Manawatu-Wanganui Regional Council, the Manawatu-Wanganui Region is also administered in full or part by:

- three District Health Boards: Good Health Wanganui, MidCentral and Waikato District Health Boards;
- four DoC Conservancies: East Coast/Hawke's Bay, Tongariro/Taupo, Wanganui, and Wellington;
- six general parliamentary electorates: Palmerston North, Rangitikei, Taranaki, Taupo, Wairarapa, Whanganui;
- two Maori Parliamentary Electorates: Ikaroa-Rawhiti, Te Tai Hauauru; and
- a single Police District: Central District (which includes Taranaki).

Other government departments have different administrative boundaries again. The implications are significant. The regional council must deal with four DoC conservancies, for example on policy and resource consent matters. At the extreme, Ruapehu District's central North Island location at the northern part of the region means that its planner must visit offices in Hamilton, New Plymouth, Taupo and Palmerston North to attend meetings with central government departments' regionally based officials (Local Futures, 2007). This administrative jurisdictional confusion between central government departments is not new and was flagged as an issue by Polaschek (1961) over forty years earlier and illustrated in successive editions of the *Atlas of New Zealand Boundaries* (Marshall, 1986; Kelly & Marshall, 1996). Such an ambiguous regional identity is not unique to government; Kelly and Marshall (1996) show a range of sub-national divisions for the private sector, and McNeill (2003) noted that even regional sports teams' regions varied, even between the dominant men and women's sports of rugby and netball.

However, the resulting 'spaghetti map' is informative, notwithstanding the New Institutionalists (March & Olson, 1989) warning that history is inefficient so that boundaries do not necessarily reflect most appropriate administrations at the present time. They can also be contested, as witnessed by public debate over relocating emergency services call-centres and the trade-offs between administrative efficiency and local knowledge. Many, if not most, central government administrative boundaries are drawn by the different organisations to suit their own functional needs and so can be considered to be at least indicative of functional communities. The value of the spaghetti map is therefore to underline the truism that one size does not fit all, and that different functions have different communities and territorial areas. It also highlights distinction between regionalism and regionalisation and the extent boundaries reflect endogenous communities or serve the needs of exogenous agencies.

Moran (in Britton, 1992: 227) suggests this resulting spatial complexity has contributed to a lack of local and regional hierarchies, undermining any sense of definite administrative spatial unit. The dispersion of head or regional offices, while commendable as a means of distributing employment (Taranaki Regional Council's head office is located in Stratford, while Bay of Plenty Regional Council's is located in Whakatane¹⁰, both small towns) helped to diffuse any regional focus.

¹⁰ After vigorous discussion and opposition, the Bay of Plenty Regional Council voted in 2007 to relocate its head office to Tauranga, the region's city.

7. Challenges for regional government

Several themes can be discerned from this historical overview of regional government in New Zealand, an insecurity of the regional government model, uncertainty about the role of regional governments and their position within a local government system, and hence the functions that together lead to an ongoing exploration of alternative models of governance.

6.1 Insecurity

Perhaps the dominating and persistent feature of regional level government in New Zealand is the underlying insecurity of the regional institution. History has provided no shortage of examples of national government redefining functions and abolishing individual or even whole cohorts or regional organisations. Municipal government by comparison has been more resistant, though not immune, to interference in this manner. Such interference would be untenable under constitutionally established local or federal governance systems. The net effect is one of inculcating a culture of caution with little real enthusiasm to explore the limits of government at the regional level; 'sticking to the knitting' is its catch-cry.

There has also been periodic reconfiguration of functions that regional government is to undertake, dictated by prevailing ideology at the national level. Thus united councils were given comprehensive regional planning functions in the 1970s, while regional councils after 1989 were primarily configured as environmental management regulators under the NPM ethos. A further shift is now evident as some councils begin to explore implications of general competence in a 'Third Way' environment, though seemingly confined at this stage to building regional sports stadia. The sometimes uneasy relationship between regional and territorial authorities also remains in the background with occasionally outright hostility surfacing. With no absolute constitutional protection, regional councils are susceptible to both national and municipal government machinations.

6.2 Role clarification

A persistent theme in New Zealand local government history has been the attenuation of local government functions and their substitution in policy and provision by national government where uniform equity and service standards have been sought and by special purpose authorities at the local level. This has implications, both in expectations by the public of what to expect from sub-national government and in the capacity of sub-national government to meet those expectations. These issues were perhaps less significant in the past.

Today, discussion still revolves under the unresolved tension of whether local government, including regional government, should be a true local government with comprehensive and wide powers, or principally a property-services organisation, providing street-lighting, roading, water and sewerage. The LGA 2002 has sought to emancipate both regional and territorial councils, providing powers of general competence to promote the well-being of their communities. At the local level some councils have taken limited steps to do so, some such as Waitakere City Council well before the Act, but the reality is that most have not made significant changes to their work programmes and expenditure. Indeed, some councils, such as Central Hawke's Bay District Council clearly and explicitly define themselves as property services agencies (Local Futures, 2006).

This dilemma is particularly acute at the regional level. Regional councils have long memories; the shadow of Cooper's hatchet is long, and tensions with territorial authorities to the forefront. The relationship between territorial and regional authorities has been one

some delicacy, portrayed as one of local government complementarities rather than rivalry or usurpation:

the official line is that the very concept of regional *government* is erroneous – the regional councils are actually a regional level of *local* government (Bush, 1995: 117).

This canard is curious; regional is by definition intermediate between national and local, and the jurisdictional boundaries demonstrate a spatial hierarchy. The issue has been sidestepped by highlighting their complementary functions, but this is increasingly less tenable given the LGA2002 which provides powers of general competence to both regional and territorial government and therefore opens the possibility of competition. Bush summarised the situation:

In the local government family the regions are something of an orphan. Aspirations to be a general governing authority have been constitutionally dashed; they cannot usurp the TLAs; and yet they lack the singular purpose of a traditional ad hoc board. To group all their functions under one heading of natural resource management is untenable. The box they fit most convincingly into is labelled 'limited multi-purpose super ad hoc board'. If 'the region' is a genuine geographic and economic instrument, this provides a direct rationale for the existence of institutions to participate in its governance (Bush, 1995: 119).

In the 1990s Bush's description was certainly accurate; regional councils showed a strong desire to heed Warren Cooper's advice 'to stick to the knitting' to avoid antagonising central government and to minimise tensions with their constituent territorial authorities, quite apart from the *ultra vires* mandate. This meant most regional councils focused very much on natural resource management activities, typified by the branding themselves as environmental agencies, for example Environment Waikato and Environment Southland. The Auckland Regional Council was a special case given its high service provision involvement carried over from its predecessor, the ARA.

The LGA 2002 provided a general power of competence to both territorial and regional councils in order for them to promote the social, economic, environmental and cultural wellbeing of their communities. However, most regional councils have taken a very conservative approach, largely preferring still to 'stick to the knitting' of environmental management.

It has been suggested that this reluctance to expand their scope of activities can be explained in part by these activities being funded at the margin and reluctance to antagonise ratepayers. Projected rates increases to cover inflation and infrastructure management in Auckland provoked a rates revolt in 2006 that central government responded to by establishing an independent panel to review rates (Local Futures, 2006). This political sensitivity leads councils to undertake additional (core or otherwise) activities at a level that can be budgeted within a politically acceptable rates increase.

Of the eight regional councils that responded to a survey on 2006 LTCCP preparation, half made minor or no changes, while two each had made moderate or significant changes to council activities or resource allocation compared to their previous LTCCPs (Thomas, 2006: 29). The major departure from core environmental management functions has been a tentative dipping of toes into funding sports stadia, seen as regional assets (Auckland Wellington, Taranaki and Otago regions), hardly a core government function.

More fundamentally, ever since the abolition of the provinces in 1876, New Zealand has been a unitary state with highly centralised powers compared to other western countries. The centre has retained most of the major state functions, including education and social welfare. Only health care has been devolved again to regional special purpose authorities, district health boards. Local government generally in New Zealand has remarkably attenuated powers and little protection, and regional government even fewer powers.

The underlying reasons for this ambiguity to what Local Futures (Local Futures, 2004) calls 'the New Zealand model' of local government are likely to be many and varied, but initial institutional settings and the dominant culture and conditions at the time local and regional governments were established may help explain today's configuration. The accidents of history can throw a long shadow, and as March and Olsen (1989) note may contain and perpetuate institutional inefficiency. Certainly, the cause of New Zealand's traditional and attenuated view of the role of sub-national government was clearly seen by W.B. Sutch over half a century ago (see page 84), who he ascribed at least in part to New Zealand's settlement from England, where in 1835 it had passed the Municipal Corporations Act where 'traditional methods of local government could be adapted to a system where a group of people get to elect their rulers'. England was also a long-established sovereign state with power drawn to the centre. This is a different history compared to the more recent northern and central European states formed from independent Hanseatic league cities, and principalities with strong sub-national roots (see Spruyt, 1994) and where concepts such as subsidiarity had been developed and applied (Endo, 2001).

Polaschek argued that local government's failure to provide even basic necessities of organised and orderly social existence had marginalised local government so much that as a consequence central government took over provision or finances for amenities beyond the minimum essentials. This 'evasion of responsibilities' he considered in local body electoral and financial arrangements and primary cause of failure the self-interest of the property-owning ratepayer (Polaschek, 1956: 1-3), the atomising of fiscal federalism.

Local Futures (2004) notes that other settler societies such as Australia and Canada shared similar experiences although their states played major government roles. It suggests the growth of local government in New Zealand was driven more by the need for providing basic infrastructure than with the historical drive for freedom and autonomy that is characteristic of Western Europe. Polaschek (1961: 87) foreshadowing Mancur Olsen (1965) attributed the failure of local government to rise above petty parochialism into an efficient and comprehensive system to 'the inertia of the many, and in the self-interest of a determined few'.

Various attempts have been made to construct generic models of local government. The Local Futures (2004) overview of New Zealand's local government identifies two models that capture best the New Zealand model, drawing on the work of Norton and Naschold. Alan Norton (1994: 22) contrasts two core traditions of local government:

- the western continental European tradition, where administrative institutions are seen as part of the community and draw their legitimacy from local communities – and are often constitutionally protected and in many cases predate the state; and
- Anglophone tradition model, where local government is one of several competing local interests and are seen be central governments as one of many ways to deliver services, and where utilitarian values are emphasised.

Naschold (1997) suggests local government is modernising at different rates in different jurisdictions, identifying three broad streams:

- internal modernization, involving a focus on outcomes, output budgeting and flexible work practices
- democratising of decision-making processes, especially through the devolution of functions and greater involvement of civil society
- increasing use of market style instruments, public-private partnerships, arm's length organisations and privatization

Local Futures argues that New Zealand local government fits reasonably well with Norton's Anglophone tradition, it is also a good example for Naschold's 'modernisation thesis', noting its combination of high level of operational autonomy with a relatively narrow task profile. It suggests that the New Zealand model is unique in the level of discretion it gives councils, the small share of public expenditure they are responsible for and the high degree to which public services are provided by national government. This analysis holds even truer for regional councils, which as primarily regulators, are responsible proportionately for even less public expenditure and with an even more reduced task profile than local government.

8. Summary

In summary, regional government in New Zealand has a patchy history. Lacking any constitutional protection, it has suffered from the vitiation of central government ideology and expediency. While democratically derived regional representation has its origins with the beginning of government in New Zealand, direct representational democracy has only reasserted itself in the last eighteen years. This is perhaps somewhat ironical given distinct regional physical and identity variation apparent between regions, but reflects an enduring ambiguity of the role and function of regional government, together with the tension between accommodating local variation and the search for national uniformity.

The locus of responsibility and governance of public services and functions have also been modified, so that different models coexist for different functions contemporaneously. The regional councils provide one of several models of regional governance.

Despite a renaissance in regionalism, recent regional government has remained constrained, culturally and, until recently, legislatively so that it has largely taken the shape and character of a multiple special purposes authorities rather than comprehensive government. The combination of catchment-based boundaries, existing catchment management and to a lesser extent pest control functions, their prominent role in implementing the RMA and the foundation dominance of catchment board staff established them in their own minds as primarily environmental management agencies. With the exception of Auckland, which has its own special history and metropolitan character, the regional councils have focused almost exclusively on environmental management functions: flood protection, rivers and drainage control, biosecurity and control of land, water and air use. To understand the role of regional councils therefore requires an understanding of the environmental policy arena within which they operate. This is addressed in the following chapter.

Chapter 4: Institutional arrangements and the environment in New Zealand

1. Introduction

The previous chapter mapped the development of regional government in New Zealand and identified that environmental management has been a consistent and important function since the 1940s. This chapter provides a background to environmental management which is used as a case-study for examining the efficacy of regional government in New Zealand in the following chapters. It firstly outlines the wider environmental management problematique and the responses of institutional arrangements to address it. It examines the need for decentralised or devolved institutional arrangements for managing the environment. An overview of New Zealand's environmental challenges is provided before describing current environmental management institutions.

1.1 *The environmental problematique*

The environment has moved from the fringe to a mainstream public concern, with awareness of what had been considered local or, at best, national becoming international and global issues (Helm and Pearce, 1990). Similarly, environmental management institutions now form a core part of government, even though institutions managing aspects of the environment, such as air pollution, forestry and flood management, have long histories. Before the 1972 Stockholm Conference on the Environment, most western countries had embryonic or non-existent government agencies responsible for environmental management. Now, environmental agencies are part of the mainstream policy agencies of national and international governments. For example, Collier (1997) considers environmental policy to be one of the European Union's most successful policy domains.

There, however, exists considerable ambiguity in what is meant by 'environment' and hence the scope of environmental policy. Johnson *et al.* (1997) note 'environment' and its derived terms are key terms within environmental and other physical sciences and are also used by the public, politicians and practitioners with quite different nuances. The environment is widely seen to encompass biophysical systems and ecosystems within them consisting of multi-scalar interdependent natural systems. Differences tend to focus on the place of humans and society within these systems. Narrower definitions tend to exclude societies, or at least differentiate between 'natural' environments and 'social' and 'built' environments.

The use of more constrained definitions of the environment has implications when considering 'environmental effects', for example, where depending on the definition used, economic and social considerations can be included or excluded. The ramifications are important from an anthropocentric perspective, noting that most people live in built environments of towns and cities, though ultimately they are reliant on the natural environment for maintaining their life-supporting capacity. For this research, the narrower natural environment definition is used, reflecting New Zealand's legislation, with broader social and built environments identified as appropriate.

Distinctions also need to be made between environment and natural resources, though often the two are conflated. Conacher and Conacher (2000) distinguish natural (and

physical) resources as a subset of the wider environment that provides direct human benefits. They are concerned that resource managers consequently only focus on individual resource systems, rather than taking into account the wider environmental system they are part of. Usage and practice suggests that resource management addresses human behaviour to access benefits from those resources, which may or may not result in environmental degradation.

1.2 Environmental problems and issues

Conacher and Conacher (2000: 15-16) distinguish between environmental problems and issues. They define an environmental problem as something that is perceived to have an adverse effect on people, directly or indirectly. They argue that although this definition can be criticised as anthropogenic, in management terms no action will be taken to rectify it unless humans recognise it in the first place. They then define an environmental issue as an environmental problem where different groups of people respond differently so that conflict may result from proposals or actions to mitigate or resolve the problem. This conflict can be related to recognition of problems, and allocation of costs and benefits accruing from attempts to resolve them.

However, both within the literature and in popular usage, environmental problems and issues are often conflated as environmental issues. This is perhaps not surprising as most environmental problems are escalated to be issues, given desired outcomes and means for achieving them are often contested.

In any case, both are anthropogenic responses to environmental conditions. Holdgate (1979) for example, makes the point that pollution only occurs where a contaminant reaches a recognised target and exceeds a predetermined threshold regardless of the actual impacts. For example, a chemical discharged into the atmosphere is only a pollutant when it is able to be detected and at a concentration that has been already determined to be sufficient to cause harm to a specified target such as humans. Undetected, or not considered to be harmful, the same chemical is not considered a pollutant and its discharge is not needed to be controlled. Thus environmental degradation requires scientific evidenced to identify the problem while their resolution specifying both actions and acceptable levels of impact are policy questions with political consequences.

1.3 Environmental issue characteristics

In addressing environmental issues, Lafferty and Meadowcroft (1996) identify a set of distinct features of environmental management issues: a knowledge deficit, complex geographic patterns, equity and temporal scale that together challenge decision-makers. The breadth of issues also provides a challenge to decision-makers. Together, these features challenge institutional capability.

Decision-makers face a knowledge deficit. Environmental issues are complex, involving dense networks of physical, biological and social causation, reflecting environmental systems structure. Issues are technical and understanding often requires a high degree of scientific and/or social sophistication. Ruckelshaus (1988), for example, noted that early environmental issues were obvious from observing the dead fish, scum and foams on streams as a result of pollution. However, he suggested many modern environmental issues are less obvious, requiring technical expertise to identify both the problem and solutions. Issues are also surrounded by uncertainty; we do not know enough about the processes to predict outcomes reliably.

The complex geographic patterns of impact and causation also provide challenges. Environmental problems are manifest on many different scales, involving physically remote regions and link apparently distinct social and political groupings. Those responsible for environmental change may not be those who directly experience its most significant consequences. For example, pollution such as acid rain and global climate change have distance effects, while the pull of far-off markets to produce raw materials impacts on local ecosystems.

Lafferty and Meadowcroft (1996) identify two interrelated types of problem: physical phenomena, as environmental problems have manifestations crossing human and social boundaries, and 'chains of social causation' which cross established regional and national boundaries, leading to patterns of behaviour leading to people damaging the environment. Both problems pose further problems for existing governmental domains. Within a polity, issues may cut across jurisdictional boundaries, setting different regional collectivities against each other as no one wants an environmentally dangerous process but all want to enjoy the material benefits that result from that process. Internationally, any state is potentially victim [importer] and exporter of environmental issues. Boundaries of most nation-states trace their origins to treaties resolving conflict of power, expansion and decolonisation, and local government jurisdictions to earlier historical sociological divisions, but environmental protection and improvements are ecological in scope and do not necessarily match jurisdictional boundaries.

Environmental issues and their resolution often require a redistribution of benefits, resulting in losses and gains. Lafferty and Meadowcroft note that environmental problems are typically experienced as external constraints, frustrating established expectations and require adjustment to existing social practices. Their resolution, however, can threaten a pre-existing structure of entitlements and raise issues about redistributive justice, touching different groups in different ways. Importantly, any policy will have costs, so that Lafferty and Meadowcroft reframe 'environmental politics' as simply the politics of redistributing such costs and gains. Further, the configuration of winners and losers may become complex and may continue to evolve over time as remote and unanticipated effects of original decisions come into play.

The economic-geographic element is also becoming increasingly significant as environmental policies and outcomes are sought to be integrated into new sustainable-development frameworks. Now economic, social and environmental sustainability goals are equal, with negotiation expected. Globally, the North-South socio-economic dialectic reinterprets itself in the environmental management arena. Sub-nationally, this Lasswellian challenge is expressed as land-uses are controlled, for example, as indigenous forests are taken out of production, and economic sectors are required to modify their behaviour.

At the same time, there has been a renewed interest in local impacts of environmental issues and the empowerment of local communities to respond to them. This is known as 'new localism'. In part this reflects a concern for environmental justice (Krämer, 1999; O'Riordan, 2000) and concerns about location of polluting industry and toxic dumps in low socio-economic residential areas. On the other hand this has been seen to empower more articulate groups in society who use environmental institutions and arguments to avoid having such industries or land uses such as landfills locating near to and impacting on them. The risk is that the new localism can transform into the tyranny of localism without regard to

wider processes and impacts, supporting the argument for correspondence in institutional design.

Finally, Lafferty and Meadowcroft (1996) observe that environmental problems often involve a complex array of time-scales. They note in particular incremental change, which only becomes noticeable or provoke a sharp environmental discontinuity after a fairly long period, and powerful technology that can have very fast impacts and changes. The combination of immediacy and incremental change can render environmental problems particularly resistant to effective decision making.

Many environmental issues develop over relatively long time-spans, and any resolution will similarly take considerable time. For example, at the global level, while global ozone layer depletion was only discovered in the late 1980s, the chlorofluorocarbons and halons that cause depletion have been in use since they were discovered in 1928. Conversely, it will take another 60-80 years for the ozone layer to recover to present levels even with a complete halt of all halo-carbon production. The global climate change issue is even more profound in its scale, with causes begun several centuries ago and consequences predicted for several hundred years. These, and other issues, require intervention, where the consequences of policy decisions span not only any number of political terms of office, but even generations.

Additionally, the breadth of issues provides a challenge to institutional capacity. Historically, issues have been narrowly defined, for example, as air pollution, surface water quality and soil erosion. More recently, the interdependence of environmental systems has been recognised, taking account of activities causing second order effects in other parts of the environment. Most recently, the environmental discourse has broadened to integrate environmental, economic and social goals within the 'sustainable development' paradigm. Sustainable development appeared to resolve the ideological conflict between environmental protection and economic development when it was launched in 1987 (WCED, 1987). Given impetus by the 1992 Rio World Summit (UNCED, 1992), the concept, together with the resulting Action Plan, Agenda 21, soon gained currency worldwide at a time when many countries had poorly developed or only recently established structures for environmental management at any governmental level, while economic priorities were high on policy agendas. Much of Agenda 21 sought to integrate social, economic and environmental goals and implement them at the local government and community levels. Its emphasis on empowering communities has in effect side-stepped national governments, appealing for local government to implement international policy.

A vast literature has accumulated on how the social, economic and environmental pillars interact and on the 'weak' versus 'strong' sustainable development models (see PCE, 2002), but importantly the notion of integrated, as opposed to functionally based, management has gained acceptance. This underlines the need for horizontal as well as vertical coordination so that linkages between the different policy topics at different scales can be accommodated and addressed. However, the integration of environmental concerns into other policy areas, a fundamental facet of sustainable development, challenges the status quo of economic policy-making and has not progressed very far (Collier, 1996). The result is a 'wicked issue', hard to define and to resolve.

1.4 Causes

Environmental issues have been explained by economists as allocation problems. These are usually described in the literature as externalities representing incomplete or missing markets (Tietenberg, 1988; Helm and Pearce, 1990) suggesting simple intervention to resolve. However, Helm and Pearce (1990) argue that this analysis is somewhat simplistic as institutions are complicated by monopolistic or oligopolistic markets, while risk and uncertainty about the environmental resources that are often public goods, together with state intervention all conspire to cause significant market failure. They argue that conventional market solutions are unlikely to be sufficient, but that institutions matter.

As a policy response, environmental issues can be addressed either by direct government intervention or by facilitating the market for environmental benefits. Government intervention typically relies on regulation and (Pigouvian) taxes and subsidies to modify resource user behaviour. The polluter-pays-principle is usually invoked in its support. The Pigouvian taxes are not intended to stop pollution, but to internalise externalities.

The laissez-faire (Coasean) approach relies more on facilitating the market by specifying property rights of resource attributes to facilitate bargaining for resource use benefits. Ideally the property rights to the benefit streams can then be traded. This theoretically leaves government only to specify and enforce property rights so that market can operate efficiently (Bromley, 1991). Enforcement is necessary given many environmental resources are public goods, lending themselves to free-riding (Ostrom, 1990).

However, both forms of intervention are typically flawed by uncertainty and lack of information about the natural resources and how they relate to their wider environments. This makes setting efficient tax levels and determining the appropriate level of regulation to minimise harm difficult when governments decide to intervene. The lack of understanding of the resources also means that it is difficult to specify property rights accurately. Consequently the environment tends to be undervalued by both the market and government leading to both market and government failure. As a result, environmental policy is one of the dominating themes of the late twentieth and early twenty-first centuries, with public mobilisation and the creation and evolution of institutional arrangements and capacity building to address environmental issues.

2. The institutional response

Papadakis and Young (2000) suggest environmental issues confront governments with two sets of interrelated challenges. Firstly, they need to address the environmental problems themselves, such as the consequence of the levels of pollution and the need to maintain biodiversity. Secondly, governments face a collection of policy issues involving complex choices that have significant implications for governance, for example how to resolve environmental problems without having a detrimental effect on the economy.

The information, spatial, temporal, equity and breadth characteristics of environmental issues pose functional challenges to institutional design and democratic process. In particular, they underline the difficulties of reconciling expert and lay inputs in decision-making. These include differing perspectives of risk, whose views should prevail, the interrelationship between institutions across geographic space, reconciling short-term decision-making horizons of political lifecycles compared to long term manifestation and resolution of problems, and implications for intergenerational justice (Meadowcroft and Lafferty, 1996: 4-7). This suggests three significant challenges; determining the basis of

authority for public policy decisions, the appropriate locus of decision-making and the appropriate span of institutions to address environmental issues.

2.1 Type of authority

The environmental problematique throws into sharp relief Scharpf's (1997) typing of input legitimacy, process and participation in determining policy outputs and outcomes, and output legitimacy, achieving outputs, discussed in Chapter 2. In support of input legitimacy Lafferty and Meadowcroft (1996) situate the resolution of environmental issues firmly within a democracy-environment nexus, highlighting political processes to mediate choices between different resource uses and environmental goals, many of which are public goods and to address equity issues. Political processes are best able to reveal preferences about the environment and allow their collective valuation. However, democratic checks may be frustrated within where issues are complex and have a high engagement cost. In these circumstances whereby participation may be discouraged, creating the possibility of the tyranny of the minority intent on maintaining its benefits (Olson, 1965). For example, Lane and Corbett (2005), examining indigenous people's access to community managed funding for land reserves in Australia, found a 'tyranny of localism' that further marginalised already marginalised groups.

Arguments favouring technical decision-making, emphasising output legitimacy, focus on the complexity of environmental problems in both their causes and solutions and which require specialist technical skill and ability to understand and address them. These specific competencies cannot be expected to be found within democratically elected decision-makers. Further, there is a significant discrepancy in political and environmental time-spans, with problems and their solutions often spanning many electoral cycles; simply there may be no political incentive to initiate and sustain politically and financially expensive policy solutions. Finally, environmental issues and their solutions can be argued to be common to societies in most western countries, indicating little need for political definition of problems or solution. This suggests output-based legitimacy can be achieved by locating environmental policy within technocratic organisations, provided organisational oversight is maintained and broad outcomes achieved (Sbragia, 2000).

2.2 Spatial locus of authority

As described in Chapter 2, fiscal federalist theory and community-based theories can be used to identify the appropriate spatial locus of authority. Fiscal federalism promotes the correspondence principle for government in general, suggesting that environmental management institutions should match the scale of the environmental issues they are expected to address. This theme appears in the environmental management literature and is consistent with integrated catchment management theory for example (e.g. Margerum and Born, 1995). A difficulty is that the geography of environmental problems does not necessarily align with social or political boundaries. Sub-national environmental management jurisdictions can therefore be seen to be geographically defined either using environmental or social criteria.

Dryzek (1987) argued that a strong case can be made for regional entities in addressing natural resource and environmental issues. He considered properly designed regions with jurisdictional boundaries that are congruent to natural boundaries provide a basis for managing resources and environmental conditions at a meaningful scale. As well, he suggested that a more ecologically rational democracy requires radical decentralisation of decision-making powers down to local communities. Enhanced public participation in

decision-making is seen as leading to better environmental outcomes, boosting the legitimacy of decisions, and ensuring that local values and knowledge are used in coming to appropriate decisions. Caldwell (1970, cited in Memon, 1993) suggested that the task of environmental management is so vast and complex that to be accomplished it needs to be shared between central and sub-national governments, corporations and individuals.

2.2.1 Environmentally defined jurisdictions

Environmentally based jurisdictions seek to achieve environmental correspondence, so that the jurisdiction captures the entire environmental system. Such a jurisdiction removes or reduces the possibility of exogenous decisions creating second order impacts; instead, all inputs into the system are able to be controlled. Examples of such institutions at the sub-national level have been river catchment based authorities, and, more variably, national or conservation parks.

National or conservation parks typically are designated to be of sufficient size and diversity to include complete ecosystems and within those entire habitats of keystone species critical to the ongoing sustainability of the system as a whole (Janssen, 2005). Boundaries may be porous with species migration that can result in externalities, for example marauding elephants in Africa. Foraging and migration may compromise jurisdictional boundaries; in New Zealand a native parrot, kaka, has been known to fly over 80 kilometres from wildlife reserves and raid domestic fruit trees, while the godwit annually migrates 10,000 kilometres between New Zealand and Siberia.

Catchment boards based on whole river catchments provide examples of integrated management. These institutions recognise that upstream pollution and erosion in tributaries can create externalities impacting on downstream users and that management of land and water use within the entire catchment is necessary to maintain overall environmental conditions. Whole catchment management was first promulgated in the 1930s and 1940s in the USA and became a dominant philosophy for natural resource management there and in Australia and New Zealand especially within the context of flood emergency management (Poole, 1983). It has raised equity concerns with land and water users at the top part of catchments resenting having to internalise externalities through reducing or changing land use practices for the benefit of downstream inhabitants.

The 1986 BASF chemicals spill into the Rhine River at Basel, Switzerland, that resulted in pollution impacts on city water supplies all the way down to the Netherlands highlights the need for integrated catchment management, but also that catchments do not necessarily encompass homogenous communities or even political jurisdictions. Even at a much smaller scale, in New Zealand the longer rivers, such as the Waikato and Manawatu, flow through several territorial authorities each with its own communities and identities. Smaller catchment authorities may therefore reflect communities, analogous to regionalism, but larger ones may be seen as imposed regionalisation.

The more recent recognition of global environmental issues of stratospheric ozone depletion and climate change require new types of international jurisdictions and institutions to manage impacts and solutions not only across different jurisdictions, but also very different societies with differing values and preferences.

Integrated catchment and ecosystem management philosophies of environmental management certainly suggest the regional scale as an appropriate scale. This does, however, raise the spectre of regional definition. At the extreme, the Rhine and Danube

Rivers each pass through and drain a multitude of nation-states; while these two river systems do have institutions to manage them (International Commission for the Protection of the Rhine and the International Commission for the Protection of the Danube River), the international scale provides challenges.

There has been a growth in cross-national and supra-national government as national governments seek to match better the scale of environmental problems with institutional structures. This has resulted in increased environmental international law and commitments. These operate at different scales and complexity ranging from bilateral, or contiguous multi-lateral national agreements (e.g. International Commission for the Protection of the Rhine) to International Treaties and Conventions under the auspices of the United Nations (Basel Convention on the Transport and Disposal of Hazardous Wastes and the Kyoto Protocol for Climate Change), each with their own administration and policy setting mechanisms and resulting state obligations. Other relevant supra-national government institutions, while having environmental mandates, are structured on existing national government frameworks and common interests. The European Union is an example where environmental policy, and more recently sustainable development, has been very much at the forefront of its policy agenda and a considerable *acquis* has developed (Haigh, 1992). The policy-agenda setting is also becoming international in scope as the range and scope of the issues, such as global climate change and biodiversity, are realised to be multinational in both cause and effect. Policies are now being developed at the international level in response, at the United Nations, OECD and multi-national level. Further, the impacts of remediation policies have variable geographic impacts, especially within the present global economy. European car manufacturers have told their governments seeking to abate factory pollution emissions that they will rather relocate manufacturing to other countries with less strict environmental regimes if pressed (McNeill, 1996). Such a response underlines the difficulties in designing institutions that achieve correspondence.

2.2.2 Socially based jurisdictions

There are also strong normative arguments for sub-national decision-making drawing on the localism theory arguing that local communities and resource users have the greatest interest in successfully managing the environments of which they are part. As well, they are considered to have the best information on environmental conditions and values about the environment they inhabit. Agrawal and Gibson (1999) note the locus for managing environmental issues has undergone and continues to undergo revision. They suggest that initial responses to environmental issues, largely driven by market forces, were due to failure by communities to resolve them. This has led to state intervention and centralisation of management. For example, the loss of indigenous ecosystems through local communities seeking to grow and exploit local resources led to the formation of national parks and reserves. The perceived inability for state intervention to reduce and in some cases actually to promote degradation, led to a disillusionment and distrust by conservationists and environmentalists in the state, and a renewed interest in communities as a means for achieving environmental outcomes.

Lane and Corbett (2005) note community-based planning has been developing momentum since the late 1960s (Kapoor, 2001). The United Nations Conference on Environment and Development, the Brundtland Commission, the 1992 Earth Summit, and Agenda 21 all gave significant intellectual and political support to this model. This is most strongly articulated in the Rio Declaration (UNCED, 1992), which provides a mandate for local governance, by empowering communities (s.3.7) and local authorities for undertaking a consultative process

with their communities and achieved a consensus on 'a local Agenda 21' (s.28.2). It is now evident in the programmes of national governments all over the world, and it is advocated by donor agencies and non-governmental organizations (Kapoor, 2001; Leach *et al.*, 1999).

Within the environmental management arena, the concept of community-based environmental management (CBEM) has gained popularity (see Agrawal and Gibson, 1999). Here, communities are seen to draw on wisdom of sustainable resource use accumulated over generations to guide decisions, which together with their spatial location within the environment provides an institutional framework for its management. Thus communities can draw information about local resources and revealed preferences about resource use to make wise resource management decisions.

Community-based environmental management shares many similarities with the wider community literature discussed in Chapter 2 and is open to the same and other criticisms. Agrawal and Gibson (1999) note that although current writings on community-based conservation assert community is central to renewable resource management, they seldom analyse the concept or explain how communities affect outcomes. They mostly refer to a bundle of concepts related to space, size, composition, interactions, interests and objectives: as a spatial unit, a social structure and as a set of shared norms. Agrawal and Gibson criticise these concepts as failing to explain the cause of the features or articulate effect on natural resource use, and therefore form a weak foundation on which to base policy.

Additionally, community is viewed as a spatial unit of shared space and small size, assuming resources are usually located near territorially fixed homes and settlements. This conflation may be questioned, if only because it does not take into account historical and recent migration or nomadic lifestyles that may reduce attachment to a particular environment or knowledge about it. In any case small territorial attachments may make them inappropriate because of geographical spread of resources (e.g. watershed) that make the environmental resource beyond any one community's control and overlapping communities, leading to conflict or environmental degradation.

As well, local communities and organisations may not have the capability to manage the environment. While community-based organisations may be able better to reveal local preferences, they do not necessarily know or understand why environmental systems are changing, nor how best to address them. It is suggested that this may be particularly salient where environmental conditions have been significantly modified, perhaps by changing land use, so that communities have created or at least are living in substantially new ecosystems where old norms and processes do not now operate. In New Zealand's Hauraki Plains for example, there is a big difference between a 1920s 35 cow 'Rehab' farm on a swamp land, and a modern 500 or even 3,000 cow farm on long-drained peat-land and the functioning of the remnant swamp-land kahikatea forest remnants dotted on those drained plains.

This overview suggests that while the community, however defined, may be an appropriate locus of environmental management authority, it need not be the case. Like localism, CBEM is not *a priori* appropriate. Rather, wider considerations need to be taken into account.

2.3 Special and general purpose authorities

Historically, institutions have been specialised, addressing individual environmental issues or managing environmental media, for example, air pollution, water quality and soil erosion. These may lead to technical efficiency within the individual institutions, but not address wider allocative efficiency issues. There has been increasing acknowledgement that a more integrated approach is necessary, recognising they are all part of larger environmental systems and that interventions in one media may have second-order impacts elsewhere in the environment. For example, increasing height of industrial smoke-stacks under a clean-air management regime may reduce local air pollution levels, but create soil acidification from resulting acid rain. The inter-relationship between land use and water quality has led to catchment-based management institutions. As well, more comprehensive, integrated environmental management institutions are being formed. However, they do not address the wider social and economic interactions inherent within human societies, falling under the sustainable development paradigm.

3. Institutional models

In designing appropriate arrangements for managing the environment, institutional architects face a range of conflicting demands and objectives when determining the appropriate locus of power, with three possibilities, of centralisation, decentralisation or devolution. They must also square technical and allocative efficiency demands, determining how specialist the individual agencies are to be. The dominant model has been a decentralised institution, with more recent attempts to depoliticise environmental decision-making. Devolved authority has been less often used.

Most western countries have adopted the Environmental Protection Agency (EPA) model for managing the environment. Within federal countries, such as USA, Germany and Australia, individual states also have state-level EPA type institutions. This model separates out policy from technical advice and policy implementation. As a generalisation, a small Environment Ministry provides policy advice to the government. It is in turn informed by a much larger standalone EPA which has scientific research and technical divisions. The EPA is therefore at arms' length from government, though ultimately dependent upon it for funding. Some variation can exist. For example, in the USA the head of the USEPA is a presidential appointment and can be expected to be supportive of presidential policy ambitions. Regional offices of the EPA are able to implement government environmental policy either directly or through funding sub-national agencies. Accordingly, some caution is needed in comparing environmental management arrangements between countries, recognising the different institutional arrangements such as federal versus unitary state models, the role of supra-level government, especially in Europe, and the different spans of control of different agencies.

The EPA model allows for technical efficiency, but with its clear focus on the natural environment is less able to implement integrated policy across the social and economic environment to provide allocative efficiency.

An alternative approach is to deflate environmental issues so that they are redefined as environmental problems. Rather than institutions focusing on either inputs or outputs to attain legitimacy for managing the environment, recent examples suggest a dual institutional arrangement that allows for both. Technical institutions are appropriate to address environmental problems, while more democratic institutions are appropriate to resolve environmental issues. This requires depoliticising issues, through the identification and

agreement of broad goals and objectives, so that they can be addressed technically. Failure to do so suggests solutions to environmental issues by technocratic institutions will not be enduring. Conversely, reliance on democratic input into addressing the causes and solutions to environmental problems may lead to expedient decisions that also do not endure.

A broad political consensus that the problems exist, and broad policy to address them can be agreed on spanning political parties, is required. Sweden and the Fraser Basin Council in Canada provide examples of different approaches to achieving such consensus, as discussed below.

Sweden provides an apparently successful example of this approach and has some relevance to New Zealand, to which it has been compared, both sharing a social democratic welfare state philosophy and being democratic unitary states. As well, Sweden's land mass and population are roughly double that of New Zealand's suggesting similar population densities, while both have extensive natural environments. However, there are significant differences, notably Sweden's long history, and politically its membership of the European Union. As well, populations of both countries are seen to be more environmentally aware than those of many other western countries, suggesting comparisons between the two countries are appropriate (Ecologic, 2007).

At the national level, Sweden has a small Ministry of the Environment (160 staff) responsible for policy development and thirteen implementation agencies. The largest of the implementation agencies is the Environment Protection Agency (550 staff); others include the Chemicals Inspectorate (138 staff) and the Radiation Protection Institute (105 staff). At the sub-national level Sweden has a dual decentred model of autonomous local and regional government consisting of municipalities and twenty-one counties and decentralised county administration boards. The counties are responsible mainly for medical care (80% of expenditure), owning nearly all the hospitals in Sweden, but are also responsible for cultural activities, and work with regional growth and development issues. Municipalities and counties are responsible jointly for local and regional public transit systems and are funded through income tax (on average the local government tax take is about 30% of taxable income). County administrative boards are largely autonomous central government agencies headed by appointed governors, who are responsible for implementing environmental protection and nature conservation. The Environmental Advisory Council is a multi-stakeholder body providing information to the government on its own initiative or at the government's request.

Sweden reformed its environmental legislation, adopting the Environmental Code in 1999, to provide comprehensive institutional arrangements for the environment by consolidating previously fragmented legislation, establishing environmental courts, environmental sanctions and ambient quality standards and transposing EU directives (OECD, 2004). It is founded on five fundamental principles that form the basis of Swedish environmental policy and apply across legislation specified in the code or other legislation:

1. promotion of human health
2. preservation of biodiversity
3. preservation of cultural heritage assets
4. preservation of ecosystems' long-term production capacity; and
5. wise management of natural resources.

The Code stipulates that the government can apply environmental quality standards for land, water, air, or the environment in particular a geographic areas or for all of Sweden. These are addressed through 15 environmental quality objectives (EQO) (Table 4-1). The EQOs set long-term strategic orientation, identify interim targets requiring medium term planning and a decentralised implementation of policies. These include: reduced climate impact, clean air, natural acidity only, a non toxic environment, zero eutrophication, flourishing lakes and streams, good-quality groundwater, a balanced marine environment, thriving wetlands, sustainable forests, a varied agricultural landscape, a magnificent mountain landscape and a good built environment, while a 16th EQO, on biodiversity, is being prepared (OECD, 2004). The 15 EQOs were adopted by parliament in 1999 and interim targets were set to provide medium-term planning tools.

Table 4-1: Example of Swedish water-related environmental objectives

EQO 7. Zero Eutrophication: Nutrient levels in soil and water must not have adverse effects on human health, the prerequisites for biological diversity or versatile land and water use.		
Sub-objectives To be achieved in one generation (by 2050-25)	Interim targets	Progress to date
Deposition of airborne nitrogen compounds does not exceed the critical load for eutrophication of soil and water anywhere in Sweden.	By 2010 waterborne anthropogenic emissions in Sweden of phosphorus compounds into lakes, streams and coastal waters will have diminished continuously from 195 levels.	Over 1995-2000, P emissions fell by some 15% overall, with agriculture emissions down 19%, sewage treatment plants 10%, pulp and paper sector 15%.
Groundwater does not contribute to eutrophication of surface water.	By 2010 water borne anthropogenic nitrogen emissions from Sweden into the sea south of the Aland Sea will have been reduced by 30% compared with 1995.	N emissions fell by an estimated 11% over 1995-2000.
The nutrient status of lakes and streams in forest and mountain areas is the same as in nature.	By 2010 ammonia emissions in Sweden will have been reduced by at least 15% compared with 1995 levels, to 51,700 tonnes.	Emissions fell by 13% overall from 1995-2001, with agriculture down by 17%.
The nutrient status of lakes and streams in agricultural areas does not exceed natural concentrations, which means that water may at most be nutrient-rich or moderately nutrient-rich.	The ecological status of lakes and streams, as defined by the WFD, is good.	Note yet assessed.
Nutrient concentrations in coastal waters and seas are essentially the same as in the 1940s, and nutrient inputs to the sea do not cause eutrophication.	The ecological status of Sweden's coastal waters, as defined by the WFD is good.	Not yet assessed.

Source: OECD, 2004: 57.

Note: WFD: EU Water Framework Directive.

Sweden has effectively depoliticised environmental policy through development of consensual approach across the main political parties to identify commonly held priority environmental issues. Rather, adoption of the long-term EQOs by parliament was obtained by consensus and provides the basis for an enduring policy framework. The significant point of the Swedish model is that the political authorisation focused on the broad environmental outcomes and is broad in its scope, reaching beyond the natural environment to include wider social and economic considerations.

The Fraser Basin Council (FBC) in British Columbia, Canada, provides an alternative approach to depoliticising environmental management integrating multi-level government levels to provide integrated catchment management. The Fraser Basin covers the area of 240,000 km² (89% of New Zealand) with a population of 2.7 million inhabitants and includes 91 First Nations. It also contains 80% of the British Columbia's economic output (FBC, 2007). The FBC was established in 1997 and is actively involved in resolving some 50

sustainable development issues in the Fraser River Basin while remaining impartial, transpartisan, independent and non-political. The 36 member Board of Directors oversees the work of the FBC and sets strategic priorities. FBC directors are:

drawn from four orders of Canadian government, the private sector and civil society work together as equals to tackle big issues, overcome conflict, find common ground, make informed and responsible decisions, generate long-term solutions to complex issues and take advantage of opportunities to enhance sustainability "on the ground (FBC, 2007).

The directors are thus multi-stakeholder and multi-level (Table 4-2).

Table 4-2: Fraser Basin Council Composition and mandates

Officials from 12 Federal Government Departments (3)	Officials from 14 Provincial Government Ministries (3)	Elected from local/regional governments (8)	Elected from First Nation Bands and Aboriginal Peoples (8)	Selected sectoral/geographical (10)	Selected Basin wide (4)
Fraser Federal Caucus	Fraser Provincial Caucus	From 65 Basin cities, towns and villages in 8 regional districts	From 97 First Nation Bands and Aboriginal Peoples in 8 language groups	Greater Vancouver/Squamish/Pemberton Thompson, Fraser Valley, Upper Fraser Cariboo/Chilcotin	Economic Social Environmental Impartial Chair

Source: Fraser Basin Council, 2003.

The salient feature of both of these examples is the purposeful depoliticisation of the decision-making process within the context of a democratic system. Both cover land areas comparable to a country such as New Zealand and rely on political will that transcends party politics, despite political representation and input in the process. Apparently successful, they indicate that alternative institutional approaches may redress input legitimacy challenges to environmental management without compromising output legitimacy.

4. New Zealand's environmental issues and drivers

The previous section identifies the environmental management problematique and institutional designs for addressing it. This section firstly provides an overview of the major trends and characteristics of New Zealand's environmental issues. It scopes the major environmental impacts on contemporary New Zealand environment from the use of the natural environment.

4.1 Environmental problems and issues

New Zealand's environmental problems are well-rehearsed (MfE, 1997) and show resilience; a comparison with environmental issues identified in 1992 (MfE and MFAT, 1992) are consistent with those 14 years later identified by a panel of experts (*The Listener*, 2006) (Table 4-3). At a generic level they appear little different from problems identified in other OECD countries, although their relative significance may differ, reflecting New Zealand's unique conditions.

Table 4-3: Persistence of environmental issues between 1992 and 2006

Environmental resource	1992	2006
Atmosphere	Ozone Layer protection Global climate change Air Quality	Air quality Global climate change
Energy	Supply and demand Intensity	Energy consumption Oil/petroleum dependency
Forestry	Indigenous forests Exotic forests	
Sustainable land use	Soil loss and erosion Agriculture in drought-prone areas	Farm land degradation
Conservation of biological resources	Loss of biodiversity Biodiversity and agriculture Biotechnology Impact of genetically modified organisms	Indigenous biodiversity loss biosecurity
Oceans	Fisheries management Marine mammals protection Marine pollution Coastal zone management Marine minerals	Fisheries management
Freshwater resources	River control and flood mitigation Water allocation among competing uses In-stream uses and amenity values Waste quality and waste disposal	Water quality degradation and depletion
Waste Hazardous substances	Waste production and mitigation	Contaminated land

Sources: MfE and MFAT, 1992; *The Listener*, 2006.

These differences reflect New Zealand's late European settlement, its unique and highly endemic native biodiversity, relatively low population and the development of a post-industrial economy reliant on both primary and tertiary sectors, but with only a small industrial sector; and the cultural sophistication and expectations of post-industrialist society built on a pre-industrial based economy.

New Zealand's environmental issues have also evolved over time. Historically, environmental issues have focused on the impact of mining, forest logging and conversion of wetlands and forests into farmland, so that until the mid-1980s environmental debate was largely in terms of dialectic between preservation and exploitation of natural resources (Pawson and Brooking, 2002; Young, 2004). These issues were largely resolved by the 1980s with government legislation and commitments to halt logging and clearance of native vegetation, so that the large-scale forest clearance has now largely halted. Terrestrial ecosystem loss is now largely through degradation of the quality of remaining ecosystems and of predation largely by introduced species such as possums, mustelids and rats (Young, 2004). This is more attrition by neglect, though this is partially addressed as a second-order benefit from possum control in native forests for controlling bovine tuberculosis.

Nevertheless, New Zealand's approach to managing biodiversity and ecosystems is markedly different from many other countries with a separation between the two different ecosystems functioning in parallel in New Zealand. They consist of the indigenous 'museum' ecosystems requiring preservation and agro-ecosystems consisting of introduced

agricultural species that are exploited to support the farming industry (Young, 2004). This dialectic is possibly unique among western countries where anthropogenic influences have long permeated and influenced the landscape. As Ellenberg notes, by the birth of Christ, there was hardly a wood in thickly settled central Europe that humans and their animals had not roamed (Ellenberg, 1982: 36).

Attention has since turned increasingly to pollution issues, of point-discharges of sewage and effluent to coastal areas and waterways, air pollution and more recently from farming activities. These issues had a long history, air pollution has been a significant issue locally in Christchurch and around the Manukau Harbour since at least the 1940s, and Fleming (1970) was warning of eutrophication of waterways in 1970. There is now general agreement that point-discharges have been largely controlled under the RMA, with focus turning to environmental impacts of non-point discharges to the environment and depletion of water supply especially by agriculture.

Environmental issues have a cultural perspective, as iwi seek redress for loss or confiscation of tribal natural and physical resources and redress of mana and re-establishment of identity, cultural and economic ties and associations with these resources (Keenan, 2004). These challenges are unique to colonised countries and have ethical and social implications, involving redress for previous appropriation of natural and physical resources. They are also potentially redistributive as redress results in returns or reassert ownership of resources to individual iwi, in effect 'privatising' a presumptive public property and hence are also politically sensitive.

4.2 Environment and agriculture

Despite New Zealand's cultural and aspirational ties with first world post-industrial OECD countries, its economy and environmental problems are in some regards quite different. In the absence of any significant industrialisation, the major environmental impacts result from agriculture. New Zealand is economically unique in that the biology-based part of its economy contributes 60% of its exports, of which three-quarters comes from livestock. Agriculture accounts directly for 9% of GDP, 10 times as much as other developed countries (Oram, 2006). Oram also notes that the largest single milk processor, Fonterra, has about 30% world market share of milk products traded across borders. Environmental pressures are likely to reflect this economic structural bias.

The greatest environmental impacts from resource use in New Zealand result from agriculture, of which the dominant land use is grazing (Figure 4-1). Within the grazing sector, sheep farming has been the dominant land use, reflecting hilly topography and lower carrying capacity of much of New Zealand's agriculture land, and a scarcity of sufficient water to support more intensive agriculture such as dairying.

While agricultural production has intensified in all sectors over the last 20 years, the environmental impacts have been greatest in the dairy industry which has both intensified production on existing dairy farms and expanded through land conversions from extensive farming and forestry within the last 10 years. Also, arable land is now increasingly used to grow silage for dairy cow feed (PCE, 2004). In particular, the large increase in dairying over the last decade has been driven by an ongoing boom in milk commodity prices and lower prices for sheep products, resulting in conversions to dairying in some regions and intensification in existing dairying regions.

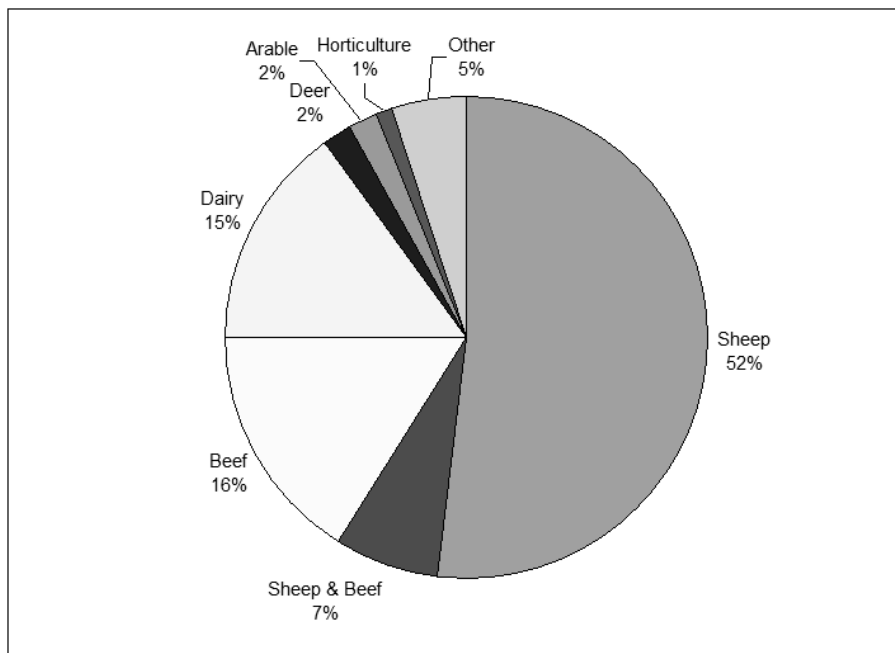


Figure 4-1: New Zealand agricultural land area by farming type, 2002 (MAF, 2002).

Increases in regional dairy herd size are smaller in established dairying regions such as Waikato and Taranaki and reflect their existing near-capacity enterprises. In other regions growth has been much higher with over 100% increases between 1994 and 2002 (MAF, 2002). The greatest changes were in Southland, Hawke's Bay, Canterbury and Otago. While this changed the ranking of the regions by herd size, Waikato, distantly followed by Taranaki, remains the dominant dairying region.

Conventional dairy farming practices impact on the environment by overloading the assimilative capacities of the ecosystems and biochemical systems within which farms are situated. Non-point pollution occurs in several ways, through discharge of nitrogen and phosphorus nutrients and pathogens in excreta to surface and groundwater water. More recently increased irrigation to support higher pasture yield in order to support dairying on moisture limited soils has impacted on water quantity and indirectly on quality. Intensive dairying contributes to increased nutrient and suspended solid loads in waterways (Sharpley and Syers 1979; Monaghan *et al.* 2002). Point-discharges from dairy sheds or feed pads, which historically directly discharged hose-down into creeks and streams have largely ceased as regional councils under the RMA have encouraged and coerced farmers to treat effluent through two-pond treatment systems and disposal to land. However, land disposal requires good management so that localised ponding and overland flow to waterways occur, especially on heavy soils.

Diffuse or non-point discharges are more ubiquitous and difficult to identify, but are widely recognised to be a significant source of waterway pollution in extensive grazing systems. Concentrations of nitrogen and phosphorus in cow excreta and also pasture fertiliser can overload the pasture and soil assimilative capacity and enter groundwater, where the nutrients enter the groundwater system or flow to streams, wetlands and lakes. Many paddocks in wetter parts of the country have field tiles or mole drainage to stop pugging. Research (Houlbrooke *et al.* 2003) shows that leaching losses from soils drained using these methods were well above levels necessary to prevent aquatic weed growth in fresh water bodies. As well, overland flows, especially during rainstorms following dry periods wash contaminants from cowpats directly into water ways, as evidenced by high pathogen levels

in stream floods. Direct contamination is exacerbated by farmers allowing animals to graze stream and riverbanks and also by animals crossing streams.

Dann (2004: 279) suggests New Zealand's dominant industry, primary production, is an intensified application of industrial methods. The result has been to treat land like a factory without understanding its ecological capacities, resulting in extensive erosion and associated silting up and eutrophication of lakes and harbours. Farming is identified as a major pressure on the environment as a consequence of the large role it plays in the economy and the land it encompasses.

Public concern about agricultural impacts have long-been muted. Until the 1980s the government actively sought to encourage agriculture, with government departments actively 'breaking in' native ecosystems, or subsidising catchment and drainage boards drain wetlands to expand the area of productive agricultural land. Successive governments also heavily subsidised fertiliser and by the late 1970s were providing guaranteed sheep prices and loans to farmers to clear 'marginal lands' (Young, 2004). Public concerns focused therefore largely on loss of native ecosystems and these lost much of their impetus when all agricultural subsidies were removed in 1986 as a result of the reforming activities of the Fourth Labour Government.

Only a few raised concerns with non-point pollution. In 1970, Charles Fleming, in his prescient call to arms, *Are We Killing a Dream?* Wrote:

We also tend to think that pollution is farther off for us than it is for others... There are rivers throughout the country that are a-biotic as a result of dairy-factory effluent - sacred cow industries that we have depended on have been allowed to go on polluting our rivers. A day or two ago we had what I think was a belated warning to farmers no longer to release cow-shed effluent into the Manawatu. The dairy factory on the Tauherenikau River in the Wairarapa I think is responsible for a completely lifeless river from there to Lake Wairarapa, and it will have effects on the lake itself.

Until Rotorua hit the headlines I think a lot of people thought our lakes as big and good and able to take pollution... We think nothing can go wrong with Lake Taupo, the largest of our lakes, but Lake Taupo is roughly the same size as Lake Geneva, and Lake Geneva is one of the biggest pollution problems in Europe. We can't afford to wear blinkers. I am aware that plans for the development of the area around Taupo take this into account, but there is a real possibility of eutrophication occurring through fertilisers coming off the land (Fleming, 1970: 13).

Rather, public disquiet about agricultural impacts has only been recent, responding to the quite noticeable environmental impacts as a result of the large scale expansion of the dairying industry, leading to the 'Dirty Dairying' campaign launched by the Fish and Game Council in 2002. This campaign sought to embarrass the dairy sector through an ongoing media campaign. The disquiet was given intellectual rigour with the report by the Parliamentary Commissioner for the Environment's report, *Growing for good: intensive farming, sustainability and New Zealand's environment* that drew on published material and interviews and found that the:

use of synthetic nitrogen fertiliser appears to be leading to farming systems that are financially and environmentally 'brittle'... because a high proportion of the nitrogen that is applied, directly or indirectly via livestock, reaches ground and surface

waters and leads to the problems in ... lowland water bodies in too many parts of New Zealand (PCE, 2004: 5).

These agricultural issues are not unique to New Zealand; non-point discharges of nitrates and phosphorus from intensive agriculture are common throughout first world countries. These have been addressed quite specifically, for example, by the EU Nitrates Directive, and the requirement for strict on-farm nutrient budgeting in European countries. What is different is the sheer scale of New Zealand agriculture structured for an intensive export market and at the same time a lack of any other significant industries in most parts of New Zealand outside Auckland that can impact on the environment. At the same time, it is facing increased pressure in its international markets from consumers who are becoming increasingly sophisticated and concerned about environmental implications of the produce they consume and competitors in those markets prepared to leverage those values (e.g. the 'food miles' debate).

4.3 International tourism

Agricultural impacts on the environment are also in conflict with other sectors of the economy. The international tourism industry is also reliant on New Zealand's natural and physical resources. It has become one of New Zealand's largest export industries, worth about \$6 billion, or some 15.7% of export earnings and 10% of GDP (Ministry of Tourism, 2007). International tourism treats the natural environment as a key resource for its operation applying a market strategy based on a '100% Pure New Zealand' slogan since 1999 (Tourism New Zealand, 2007). The value of the environment for tourism has been calculated at over half a billion dollars (MfE, 2001). While agriculture, stylised as images of white sheep on a verdant green pasture, forms an important part of the marketing image, agricultural practice is often at odds with the 'clean green' image and potentially sets tourism against the agricultural sector.

International tourism also appears to have had significant environmental impacts. Initially, concerns have focused on overcrowding and overloading assimilative capacity, reducing visitor experience and degrading localised areas in particular tourist destinations including parts of national parks. More recently, phytosanitary concerns have been raised, with the introduction and establishment of human water-borne diseases such as the now widespread *Giardia lamblia* parasite by tourists. Most recently, several South Island rivers have come under threat from adventive Didymo alga (*Didymosphenia geminata*), threatening indigenous ecosystems, recreation use and hydro-electricity generation. The introduction of this alga is widely conjectured to be a result of contaminated fishing gear brought into New Zealand by overseas tourists.

While international tourism has always traded on the natural environment, recent developments have served to highlight potential for conflict between significant export industries on how the environment is used and valued.

5. New Zealand's environmental management institutions

This section provides a brief overview of New Zealand's environmental management, with a particular focus on the regional implications that arise. It is suggested that current institutional arrangements reflect historical arrangements and a separation of productive from conservation landscapes.

5.1 Background

New Zealand environmental management can be seen to have had four resource themes and influences of all four themes are evident within current institutional arrangements. Government institutions actively supported, or undertook resource exploitation up to the 1980s, for example, forest clearance by undertaking and allowing native forest logging and providing subsidies to farmers. Concerns about specific environmental issues led to creation of thematic institutional approach to addressing these issues, for example, managing air and water pollution. This resulted in a dual themed institutional arrangement, where sections within government development departments such as the Ministries of Agriculture and Forestry, Lands and Survey, and Works and Development on the one hand were promoting resource exploitation; while other sections within the same departments were promoting environmental protection goals (see Commission for the Environment, 1984).

These resource use policies were promoted under separate legislation and with different goals until the mid-1980s environmental reforms when explicit environmental management organisations, such as the Ministry for the Environment and Department of Conservation, were established at the same time as the demise of many of the resource development departments, such as the Ministry of Works and Development and the Ministry of Energy. This culminated in integration of environmental law and the promotion of a sustainable natural resource management purpose in the Resource Management Act 1991.

The fourth phase, sustainable development, has been promoted at various times since 1988, but has still not been formalised institutionally although the Local Government Act 2002 states the purpose of local government, which includes regional councils, is *inter alia* 'to promote social, economic environmental and cultural well-being of communities, in the present and for the future' (s.10(b)). While institutional arrangements remain unchanged, greater scope is allowed to local government to take initiatives to promote sustainable development. So far any changes are seemingly only at the margins, with no coherent path mapped to achieving this, but have a promise (Local Futures, 2007).

5.1.1 Antecedent institutional arrangements

Present environmental management institutions have evolved over a considerable period of time. Although function-specific organisations existed, for managing river catchments and air pollution, integrated environment-focused management has been gradual. Even the Labour Government reforms occurred over a lengthy period of time, beginning with the Environment Forum in 1985, the landmark RMA passed in 1991, with Hazardous Substances and New Organisms Act (HASNO) not passed until 1996. Even within this time thinking continued to evolve rather than follow a blueprint. For example, prescriptive requirements for Environment Impact Assessments (EIA) of large projects were originally to be inserted by an amendment as Part III of the Environment Act 1986 (MfE, 1987). They finally emerged as a generalised checklist as Schedule IV of the RMA. Similarly, the HASNO provisions were originally intended as Part XIII of the RMA.

Momentum had been building up before then; the National Development Act 1979, decried for its draconian powers by environmental groups and constitutionalists (Palmer, 1979) alike, but for different reasons, was a clear statement of the need for rationalising the plethora of regulation and law governing natural resource use (see Palmer, 1995: 151-52). The 1981 OECD review, *Environmental Policies in New Zealand*, documents the patchwork, but also quotes the New Zealand Government's own submission recognising this:

The overall effectiveness of this structure which has developed in an incremental and fragmented fashion, has not been subject to detailed scrutiny... [There is a] need for improved co-ordination not only between government departments and statutory agencies but also between these bodies and local authorities. ... [with] considerable scope in existing arrangements for administrative overlap or duplication... A large number of advisory bodies often with common or interrelated environmental interests have developed... [with] confused interrelationships between departments and organisations with environmental responsibilities and “unresolved” issues that can be expected to grow in importance, such as the need to develop appropriate public participation mechanisms (OECD, 1981: 17).

The OECD distinguished three broad categories of central government institution (it did not focus on sub-national government):

- Advisory bodies and administrative agencies whose sole or predominant concern is some aspect of environmental policy, protection and enhancement. Some were established in response to growing environmental concerns in the late 1960s and 1970s.
- Government departments and administrative agencies in which environmental protection is associated with management or development for a particular sector of the economy. Most of these pre-date the early 1970s and have since seen their mandates modified to accommodate environmental concerns.
- Government departments and administrative authorities whose sole or predominant concern is the management and development of natural resources in a particular sector. The activities of these departments tend to pre-determine the framework within which environmental policies operate. Some blurring occurs, for example with Forestry (p15) (see Table 4-4 for classification of agencies using this categorisation).

Over this parchment is another ink of different philosophies of government reflecting on the one hand political expediency and a penchant to establish specialised ad hoc agencies such as boards and commissions to address immediate concerns of the day and which tend to persist with a life of their own. On the other hand, different national styles of government have been apparent in environmental regulation, and these, quite different styles have been championed within particular segments of the state sector. Air pollution control was explicitly modelled on the British Alkali Inspectorate model, reflecting the very strong British influence within the Ministry of Health and the following advice from the then recently retired Chief Inspector of the Inspectorate who had been invited by the New Zealand Government to advise them in 1955. Subsequent air pollution control was undertaken by the Department of Health with decentralised regional offices. In comparison, river control and soil conservation drew largely on American experience. It was coordinated by a national government council, but operationalised at sub-national level by locally elected and funded catchment, or soil conservation boards (see Roche, 1994).

Until the major legislative reforms beginning in the late 1980s, this meant that the legislative base, while reflecting the country's history lacked any unifying principle or approach. Although permission was usually required, this lack of coherency meant individual policy goals and outcomes could and were inconsistent or even contradictory with each other. Production forestry versus indigenous forest preservation provides only one example of this.

Table 4-4: National government agencies responsible for environmental management immediately preceding the 1980s reforms

Government agency	Agencies
Bodies and boards predominantly concerned with environment	Commission for the Environment Environmental Council Nature Conservation Council Wildlife Division of Internal Affairs
Sectoral agencies	Statutory authorities: Queen Elizabeth II National Trust National Parks Authority and Constituent Boards New Zealand Forest Service* Department of Lands and Survey* Ministry of Works and Development Water and Soil Division Town & Country Planning Division Department of Health
Resource use and development agencies	Statutory organisations: Agricultural Chemicals Board National Water and Soil Conservation Authority Ministry of Agriculture and Fisheries Ministry of Energy New Zealand Forest Service* Department of Lands and Services

Source: Author.

* These agencies had multiple and conflicting functions, being responsible for both environmental management and resource use.

The government established by Cabinet Minute the Commission for the Environment in 1972 as New Zealand's response to the Stockholm Conference in the Environment, but it remained in an advisory role, and at one time was threatened with disestablishment for its opposition to some of the Think big projects in the early 1980s. Several quasi autonomous non government organisations (qangos), the Nature Conservation Council and the Environment Council, also existed to provide independent advice to the government on conservation matters.

5.1.2 1980s reforms

Environmental management, however, has been one policy arena where a more mature and diverse multi-level government has emerged. The late 1980s saw a radical reorganisation and reallocation of responsibilities both within central government and to local government. Of the seventeen agencies listed in Table 4-4, only the Queen Elizabeth National Trust survives today; the government departments were abolished, or extensively reconfigured, while the statutory agencies and boards were absorbed into new agencies.

The fourth Labour Government reorganised its own environmental management administration, collecting the "Green Dots" spread over a range of government agencies into single function government agencies, and concurrent local government reform that provided a framework for regional environmental management.

The late 1980s Elwood-Bassett led local government reform forced significant changes. The most noticeable result was the reduction from 780 to 78 local authorities, the abolition of many old types of agencies and creation of regional councils. Rigorous accountability

requirements also sought to place local government on a more mature and professional administration.

Concurrent with the local government reform was the Palmer-led resource management law reform which consolidated the institutional arrangements for environmental management. Existing legislation was abolished or severely pruned and new comprehensive legislation, the Resource Management Act (see below), promulgated. Slightly in anticipation, the central government Water and Soil Division of the Ministry of Works and Development (along with the entire Ministry) was disestablished with resource management responsibilities devolved to MfE and catchment boards which themselves evolved into the new regional councils.

The outcome of the reforms, with the Environment Act 1986, Conservation Act 1987, and the Resource Management Act 1991, combined with the disestablishment of the large omnibus government departments and ad hoc qangos, was to amalgamate the green dots in the new Ministry for the Environment and Department of Conservation, and provide a coherent and much more integrated and comprehensive approach to environmental management. Both agencies sought to have sub-national presence. The Ministry for the Environment has a token regional representation with three regional offices. The Department of Conservation, however, created fourteen Conservancies with deconcentrated power to government-appointed Conservation Boards. Both agencies also play roles in and are influenced by international law and institutions.

5.2 Current institutions for managing New Zealand's environment

Current institutions for managing New Zealand's environment are shared between national and regional government, reflecting parallel decentralised and devolved administrations to implement a variety of legislation.

5.2.1 Legislation and organisations

Current institutional arrangements for managing the environment are sketched out in Table 4-5. Different parts of the environment are managed by a range of different organisations under different legislation. This has led to the formation of a range of parallel decentralised and devolved institutions with differing accountability and financial resourcing. Some overlap also exists, resulting from political imperatives of the time they were put in place, for example, the Department of Conservation shares responsibility with Regional Councils under the RMA for managing the coastal zone. This resulted from the merging of previously parallel reviews of land and freshwater resources during the drafting of the Bill.

The main models are the Regional Council model for managing natural and physical resource use primarily under the RMA, and the DoC conservancy model that is responsible for indigenous species and ecosystems protection and national parks management under the Conservation Act. Natural and physical resource uses are managed primarily by the 12 regional councils and four unitary authorities under devolved powers under the RMA. The councils are autonomous local government organisations with local representation, ability to raise their own finances through user-charges and land tax (rates), and limited ability to make their own second-order legislation. The native environment is managed by a decentralised authority by DoC with a national government head-office with policy-making ability, subject to Cabinet approval, and 13 conservancies each headed by a career public service conservator.

Table 4-5: Multi-layered responsibilities for managing New Zealand’s environment

Environmental Focus	National Agency	Sub-national agency	Authorising Legislation
Land	MfE	Regional councils Territorial authorities	Resource Management Act 1991 Soil Conservation and Rivers Control Act 1941
Water	MfE	Regional councils	Resource Management Act 1991 Soil Conservation and Rivers Control Act 1941
Air	MfE	- Regional councils (discharges) Territorial authorities (nuisance)	Ozone Layer Protection Act 1996 Resource Management Act 1991
Indigenous biodiversity (including national parks)	DoC NZ Conservation Authority	Regional Conservation Boards/Conservancies	Convention on Biological Diversity [1992] Conservation Act 1987 Wildlife Act 1953, Marine Reserves Act 1971, Reserves Act 1977, Wild Animal Control Act 1977, Marine Mammals Protection Act 1978, National Parks Act 1980, New Zealand Walkways Act 1990
	QE II Trust	-	Queen Elizabeth the Second National Trust Act 1977
	MAF MfE	- Regional councils Territorial authorities	Forests Act 1949 (1993 Amendment) Resource Management Act 1991
Pests	MAF	Regional councils	Biosecurity Act 1993
Marine environment	MFish DoC	- Regional councils	Fisheries Act 1996 Resource Management Act 1991 (to 12 Mile limit)
	Ministry of Justice	-	Foreshore and Seabed Act 2004
Energy	MED EECA	-	Energy Efficiency and Conservation Act 2000
	Electricity Commission	-	Electricity Act 1992
Hazardous substances	ERMA (MfE)	Territorial authorities	Hazardous Substances and New Organisms Act 1996
Minerals	MED	-	Crown Minerals Act 1991
	DoC	Regional Conservation Board	Ngai Tahu (Pounamu Vesting) Act 1997
Sustainable development	MfE	Regional councils	SD Plan of Action (non-statutory)
	MED	Territorial authorities	Local Government Act 2002
Systems oversight	PCE	-	Environment Act 1986
Miscellaneous	MfE	Regional and territorial authorities	Hauraki Gulf Marine Park Act 2000
	DoC		

Source: Author

Advice is provided by the New Zealand Conservation Board and, as noted in chapter 3, the 13 conservation boards consisting of members appointed by the national government. Funding is largely through the national government supplemented by concession fees and

user charges. The split in natural resource use management and indigenous environment responsibilities between regional councils and DoC reflects the dialectic in New Zealand attitudes towards the environment between biological preservation (conservation) and exploitation.

Other environmental functions are provided by centralised government institutions. The Environmental Risk Management Agency (ERMA) is an arms-length statutory authority with centralised decision-making organisation with implementation of much of its policies at the territorial authority level under the Hazardous Substances and New Organisms Act. However, it relies on city and district councils' hazardous goods inspectors to implement its hazardous substances regulations. Government departments are responsible for managing a range of other natural resources, such as minerals (Ministry of Economic Development), native forest harvesting (Ministry of Agriculture and Forestry) and the marine and some aspects of coastal marine environment (Ministry of Fisheries).

An environmental ombudsman, the Office of the Parliamentary Commissioner for the Environment (PCE), was also established under the Environment Act 1986. The PCE is an independent Officer of Parliament and is independent of government. The PCE reports directly to Parliament and is responsible for holding government to account for its environmental policies and actions. The PCE is a relatively small office with a budget of about \$2.3million and 15 staff in 2006.

Supra-national government institutions, although still weak, are part of the polity. These range from international commitments and relationships with United Nations, for example addressing global environmental management issues such as stratospheric ozone protection and global climate change, but also to Australasian liaison and harmonisation bodies, such as the former Australia and New Zealand Environment Conservation Council and its replacement, the (Australian) Natural Resource Management Ministerial Council.

5.2.2 Devolution and decentralisation

The formation of regional councils in 1989, together with the consolidation of many of the smaller territorial authorities and boards, represents a significant, albeit curtailed, step towards decentralisation for environmental management. Indeed, local government within its fields of competence now displays remarkable devolution.

As a consequence, environmental management in New Zealand is a palimpsest with overlays of local, central, and even international law and institutions managing different aspects of New Zealand's natural and physical resources. It is one of the few policy areas addressed by central, regional and territorial local government, if only because of the regional councils' attenuated functions. Further, three different models of multilevel government are used to manage the environment in New Zealand (Table 4-6).

Table 4-6: Devolution models used for managing New Zealand's environment

Devolution type	Policy Area	Agencies
Decentralisation	Conservation	Department of Conservation and appointed Conservation Boards.
Devolution	Natural and physical resource management	Ministry for the Environment and autonomous Regional Councils and TLAs
Delegation	Hazardous substances	Environmental Risk Management Authority and autonomous Territorial Local Authorities

Source: Author

The specific policy issues addressed within each policy arena are largely independent, although overlaps do exist. However, the same players populate the roles within the policy arena. Further, public groups and coalitions with environmental interests have interests spanning all three policy areas.

5.2.3 Resource Management Act 1991

The key legislation for environmental management in New Zealand is the Resource Management Act 1991 (RMA). It provides a comprehensive, multi-levelled management framework for integrated management of the environment. The RMA was an ambitious attempt to reform natural and physical resource management in New Zealand. Its genesis was the intention to integrate land, freshwater and air quality management, reflecting contemporary concerns with the existing media-specific management regimes, before widening to include a separate coastal management reform being undertaken by DoC. It relied on the parallel reform of local government to provide the regional council-based model of local government to provide for its implementation.

As an indication of its comprehensiveness, the RMA repealed 59 statutes and amended 55 other statutes. Many statutes had addressed localised historical circumstances, such as the Kumara Sludge Channel Act 1889, but important and comprehensive legislation covering rivers and drainage, air quality, water and soil conservation, geothermal energy, town and country planning and harbours were also brought under the RMA umbrella. Despite initial intentions, hazardous substances and Crown minerals, including coal and gold, were addressed separately due to the sheer size of the reform, while native biodiversity conservation and national parks and biosecurity management were always excluded.

The RMA's purpose is to promote the sustainable management of natural and physical resources. Sustainable management is defined as:

- ...managing the use, development, and protection of natural and physical resources 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 (RMA s.5).

Environment is defined in a way that emphasises the natural and physical environment:

Environment includes—

- (a) Ecosystems¹¹ and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters (RMA s.2).

¹¹ Ecosystems had previously been defined in the Environment Act 1987 as:

Ecosystem means any system of interacting terrestrial or aquatic organisms within their natural and physical environment (s.2 Interpretation).

The RMA is enabling legislation that provides a high level of autonomy to regional and territorial authorities to set their own policies and regulations (regional and district rules) that they consider appropriate for their jurisdictions. There is also considerable scope for public input in the decision-making process, through consultation, submissions on drafts and ability to challenge decisions in the Environment Court.

The legislation is enabling rather than prescriptive legislation, providing regional and territorial councils considerable measures of autonomy in policy setting and implementation. It is couched in terms of outcomes rather than processes. This provides flexibility to regulators, allowing them to utilise the most appropriate tools to meet local conditions. This flexibility, which recognises that a variety of behaviours may all achieve the desired objective, allows tailor-made solutions to local conditions. At the same time, the price of flexibility can be uncertainty for businesses and individuals about how regulations will affect them (Kerr, 1998).

The mechanisms are very much structured on a property-rights regime; whereby resources are enjoyed through specific resource consents granted by the councils or as permitted activities, subject to conditions which are intended to internalise externalities. A feature of the legislation has been integrating management of all environmental media under one process, instead of under the previous administration of separate legislation with different mechanisms and purposes.

Firstly, the RMA establishes a policy hierarchy. The Minister for the Environment can make recommendations on the issue of national policy statements (NPS) and national environmental standards, which have the power of regulation, though the New Zealand Coastal Policy Statement is the only policy NPS required to be prepared under the RMA. The purpose of an NPS is to state policies on matters of national significance, that may take into account inter alia the uniqueness and significance, scale and risk of the subject of the activity, ensuring international obligations are met, or where something affects or potentially affects more than one region (RMA s.45). An independent board of inquiry is established to inquire into and report on the proposed NPS and anyone may make a submission to the board. The board makes recommendations to the Minister who may change the proposed NPS before recommending to the Governor-General in Council to approve the NPS.

Regional councils are the primary resource management agencies, with regulatory and implementation functions. Each regional council is required to prepare a regional policy statement (RPS) 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 (RMA s.59). Regional councils may also prepare regional plans, which can contain regional rules that have the power of regulation.

Regional councils must ensure their own regional policy statements and plans give effect to a national policy statement and make public their decisions on the actions they propose to take. District plans must also give effect to any national policy statement including the New Zealand Coastal Policy Statement, and give effect to regional policy statements. District plans must not be inconsistent with any regional plans. District and city councils (territorial authorities) are responsible for regulating land-use activities, such as the built environment, through the preparation of district or city plans.

Councils are also responsible for granting resource consents for activities that are not ruled as of right in a regional or district plan. Depending on the rules, resource use activities may require a resource consent ranging from permitted (low risk) to discretionary (unknown, but possibly high risk), or even prohibited where the risk of environmental impact is high. Low risk applications are usually processed by council staff, while discretionary activities usually, (but not always) require public notification and public hearing before a hearing committee consisting of councillors and/or delegated independent hearing commissioners. In making decisions, councils are expected to consider the integrated and cumulative impacts of activities.

Preparation of regional policy statements and regional and district plans require extensive consultation and consideration of public submissions on draft documents before a delegated hearing committee of councillors and sometimes independent commissioners, or even the full council. Council decisions can be appealed to the Environment Court and submissions heard *de novo*.

The Minister for the Environment may also 'call-in' proposals of national significance and establish a board of inquiry to consider evidence and hear submissions. The board then recommends a decision to the Minister who has the powers of a consenting authority.

Despite best efforts at the time through the resource management law reform that formulated the RMA, it does not cover all aspects of natural and resource management as total reform proved indigestible. The original intention was to incorporate a Third Part into the Environment Act 1986 which would formalise the EIA provisions of the CfE's Environmental Protection and Enhancement Procedures. Work was undertaken in developing this, but was subsumed by the RMLR, finally appearing in a reduced form as the Fourth Schedule Assessment of Effects on the Environment to the RMA 1991. Management of Crown minerals and coal proved politically intractable and was hived off from the environmental law reform to be dealt with under separate legislation administered under a different agency (Crown Minerals Act 1991). Hazardous substances and new organisms management, originally slated for Part XIII of the RMA, had to wait until 1995 to be addressed through HASNO and the creation of ERMA to implement it. Similarly, energy efficiency was separately addressed under a new agency, the Energy Efficiency and Conservation Authority (EECA), which only got its own legislation in 2000.

Cohesiveness has also been reduced with amendments to the RMA to take into account evolving international law that have a different regulatory philosophy from national law, for example, the International Convention for the Prevention of Pollution From Ships and the London Convention on Dumping at Sea (Resource Management Amendment Act 1994). A whole new regime has been and continues to be established to deal with global environmental issues, for example the New Zealand Climate Change Office, with legislation to incorporate the Kyoto Protocols into national law still waiting and wanting.

A significant feature of the RMA is that it expressly sought to operationalise international environmental policy, introducing a multi-level governance element. The RMA, however, does not mandate sustainable development. Officials, especially the then Secretary for the Environment, Roger Blakeley, were very influenced by the recent publication of the United Nations' World Commission on Environment and Development's report, *Our Common Future* (WCED, 1987), which promoted the concept of sustainable development. This paradigm gained considerable traction, and the Resource Management Bill 1988 as introduced to Parliament specifically identifies sustainable development as the purpose of

the legislation. However, as Environment Minister Palmer noted, this was a “formidable undertaking” requiring reworking the general axioms in order to develop a workable system. It also proved a step too far, and the final Act promoted ‘sustainable management’ rather than sustainable development, essentially decoupling environmental issues from social well-being. Nevertheless, the New Zealand Government was able to attend the United Nations Conference on Environment and Development at Rio de Janeiro in 1992 confident its law was consistent with the sustainable development paradigm embraced there (Palmer, 1995: 147).

5.2.4 Ad hoc resource management legislation

In addition to the main legislation, several ad hoc laws have established special jurisdictions to manage particular resources, particularly when the principal legislation was seen to be cumbersome. They introduce a range of different governance structures and serve to remind that the regional council structure is not necessarily seen as the most appropriate way of managing some environmental resources.

The Resource Management (Waitaki Catchment) Amendment Act 2004 is a remarkable anomaly. It enabled the creation of an independent Waitaki Water Allocation Board to develop and approve a Waitaki catchment water allocation plan, which was then passed on to the Canterbury Regional Council to manage. It was a nationally imposed mechanism for developing a regional plan under the RMA for the Canterbury Regional Council. It resulted from a culmination of events; a boundary dispute between the Otago and Canterbury Regional Councils that resulted in the Waitaki River catchment being split between them, the recognition of increased water abstraction demand, especially for nationally significant hydro-electricity generation and government’s frustration of the Canterbury Regional Council’s ongoing inability to develop a regional plan to address these issues.

The Hauraki Gulf Marine Park Act 2000 recognises the national significance of the Hauraki Gulf and establishes a framework for its integrated management under the RMA and other legislation. Perhaps most significantly, it reflects the cross-territory area of the maritime park. The Act establishes the Hauraki Gulf Forum, consisting of a representative each appointed by the Ministers of Fishers, Maori Affairs, and Environment; and a representative each from the Auckland and Waikato Regional Councils and ten city and district councils from both regions with territory covered by the park, six representatives of the tangata whenua of the Hauraki Gulf and its islands. Essentially, a set of management goals (sections 7 & 8) are given the status of a National Policy Statement and New Zealand Coastal Policy Statement. These goals are also given the same status as a statement of general policy under the Conservation Act 1987 and other conservation legislation administered by DoC as conservation management plans or strategies.

A recent development has been the creation of ad hoc legislative solutions that reallocate both ownership and some management responsibilities from the Crown to individual iwi (Maori tribes) as part of negotiated settlements to redress historic grievances upheld by the Treaty of Waitangi Commission. For example, the Ngai Tahu (Pounamu Vesting) Act 1997 vests the Ngai Tahu iwi with possession of New Zealand’s pounamu (jade). Co-management of major rivers such as the Waikato and Whanganui Rivers is being proposed or sought as part of other settlements, that if agreed to will impact on how regional councils can manage those rivers.

However, government initiatives have not always mollified Maori. The most controversial resource management legislation has been the Foreshore and Seabed Act 2004.

(Consequential amendments were also made to the RMA under the Resource Management (Foreshore and Seabed) Act 2004). The stated object of this Act is:

to preserve the public foreshore and seabed in perpetuity as the common heritage of all New Zealanders in a way that enables the protection by the Crown of the public foreshore and seabed on behalf of all the people of New Zealand, including the protection of the association of whanau, hapu, and iwi with areas of the public foreshore and seabed (S.3).

This is achieved by vesting full property rights to the foreshore and seabed in the Crown, while providing for ongoing customary rights to undertake, or engage in activities, uses, or practices of the public foreshore and seabed and providing general public access to this resource.

The Act was widely seen as a knee-jerk reaction by the government to an impending court case brought by eight Marlborough iwi seeking access to coastal water to undertake mussel farming. While the right under law of the iwi concerned was never tested as the case did not reach the court before the legislation was enacted, the case and subsequent legislation polarised popular public opinion as a resource grab, either by iwi or the Crown.

The consequences have had much wider political significance. It galvanised considerable reaction and protest by Maori throughout New Zealand, who saw it as resource appropriation and contrary to the Treaty of Waitangi. This in turn precipitated the formation of the Maori Party that then went on to win four of the seven Maori constituency seats in parliament, all of which had traditionally been held by the Labour Party since the 1930s, in the next general election, reconfiguring the political landscape. As well, the high political cost has effectively placed the draft Oceans Policy initiated in 2002 that sought to reform marine management in limbo. The Act and its aftermath have thrown underlying issues of resource ownership into abeyance.

5.2.5 2002 local government reform

Following the 1980s, institutional arrangements remained largely unchanged until 2002, although the RMA has been amended several times, largely to facilitate administrative efficiency. The most significant recent changes were through the Resource Management (Amendment) Act 2005 that sought among other things to facilitate national-level policy direction-setting.

Potentially the most significant change for regional government has been the LGA 2002 that replaces the previous LGA 1974 (see chapter 3). The LGA 2002 continues to treat regional councils as a single local government entity. Under this Act, the purpose of councils is to represent their communities and to promote the social, economic, environmental and cultural well-being of their communities. They also have the power of general competence and are able to take on new functions provided they are for the benefit of their communities. The legislation thus provides the means for councils to expand their environmental functions that would enable them to address environmental management as within a wider social, economic and cultural context. The LGA 2002 then, gives regional councils the ability to become more regional government than remain ad hoc special purpose authorities.

5.2.6 Environmental governance models

Although initial reliance has been on regulation, there has been increasing interest in wider governance approaches to resource management. The most obvious example is the Dairying and Clean Streams Accord (Fonterra, 2002), an agreement between the Fonterra Cooperative Group, regional councils and central government to address the environmental impacts of dairying.

The dairying industry, firstly under the Dairy Research Institute, and then, following industry rationalisation, the Fonterra Co-operative Group, developed its own guidelines for farmers addressing environmental and animal welfare issues at the farm level. This was driven as much by concern to protect its European market, upholding the 'clean, green' environment perception there. However, the combination of farming expansion and intensification, combined with the Dirty Dairying campaign and several television documentaries on the subject, prompted a joint national and regional government and Fonterra initiative to manage the dairying environmental impacts. These resulted in the Accord in 2002. The Accord sets out an agreement that these agencies:

...will work together to achieve clean healthy water, including streams, rivers, lakes, ground water and wetlands within dairying areas (Fonterra, 2002: 2).

Initial support varied regionally although it now appears largely accepted. While the mixed response to the Accord has immediate ramifications to the dairying industry and New Zealand local government, it potentially has wider ranging implications for environmental management and the devolution of power generally. It suggests the institutional arrangements in place, namely devolving power to regional councils that operate under an enabling framework, may be flawed. The Fonterra Accord may be symptomatic of wider institutional issues where policy development and implementation are spread across levels of government.

The Accord has a private sector involvement that parallels government initiatives, raising questions about the appropriate role and demarcation between the two sectors in achieving wider public benefits. At the same time, the wider community has been seeking internalisation of the environmental costs of dairying. This raises equity issues, especially when at least in some cases water quality is already degraded before streams reach the dairying country.

The Accord's development was in many ways contrary to the open, consultative process of the RMA. Despite this, some observers have noted that the ambition and speed of the Accord's development, inside a year, makes it a far more effective and efficient means for improving environmental quality than the previous thirteen years application of the RMA. Non government organisations have also played and continue to influence public policy debate on the environment, promoting both greater and lesser restrictions on resource use and protection.

There has been an ongoing awareness and concern for the environment and recognition for its preservation and protection, stemming in part from an early awareness by early Europeans of its biological uniqueness and in reaction to what was seen as widespread destruction of native environment. The Royal Forest and Bird Protection Society ('Forest and Bird'), New Zealand's largest environmental organisation, was formed in 1923, which tended to take a conservative approach preferring to work with government where possible (McEwen, 2005; Young, 2004). It has over 50 branches throughout New Zealand. Public

consciousness was galvanised as a result of proposals to drown Lake Manapouri for hydroelectricity generation, and ongoing clearance of West Coast and central North Island forests in the 1960s and 1970s resulted in more radical protest against the government of the day and formation of the Maruia Society and the Native Forest Action Council, which later combined to form Ecologic. These have had far more limited membership and little provincial presence. The international environmental organisation, Greenpeace, although having a national presence, largely limits its activities to national manifestations of international environmental issues. Lobbying has refocused over time; initial concerns with protecting indigenous terrestrial species have broadened to cover ecosystems, with the realisation that wider ecosystems are necessary for individual species to survive. More recently again, the organisations have focused on marine ecosystems, which they regard have been largely neglected.

Resource users, too, have formed their own stakeholder organisations. New Zealand has few large firms within any particular sector, and limited regional presence. At the national level umbrella organisations such as the New Zealand Business Roundtable comprising primarily chief executives of major business firms 'committed to contributing to the development of sound policies that reflect overall national interests' (NZ Business Roundtable, 2007) lobby on a neoliberal platform. The Business Roundtable seeks a 'more market' approach to public policy and has been particularly vigorous in critiquing the RMA, which it regards as unduly restrictive and inefficiently implemented by local government.

Perhaps the most notable organisation with widespread and regional membership is Federated Farmers New Zealand ('Federated Farmers') with a history dating back to 1902. Federated Farmers styles itself as 'New Zealand's leading rural sector organisation' (Federated Farmers, 2007). It has a network of 24 provinces and seven industry groups, including Dairy Farmers of New Zealand providing a locally based, democratic organisation. Federated Farmers has historically held conservative values. It too, has been critical of the RMA, objecting to what it sees as loss of farmers' property rights and high compliance costs.

6. Summary

The environment has emerged as a mainstream public policy topic in recent years, with widespread awareness about environmental quality and creation of environmental management institutions. The distinction between environmental problems and issues is important when considering the legitimacy and design of institutional arrangements for managing the environment. Although both are anthropogenic categorisations of environmental conditions, problems are not contested and are amendable to technocratic processes to resolve them. Issues, on the other hand, indicate contested values about the nature of the problem and solutions for addressing them and suggest the need for public input in their resolution.

Design of environmental institutions are challenged both by the characteristics of the problems they are asked to address and the evolving nature of the issues themselves. Environmental issues play out simultaneously at a range of temporal and spatial scales suggesting a multi-level institutional response is needed, while their complexity and equity implications juxtapose technocratic and democratic demands. As well, environmental issues have become more sophisticated as interrelationships between different parts of the environment were recognised and the importance of second-order effects resulting from their management. More recently, there has been recognition of the interrelationships

between natural and socio-economic environments with the sustainable development paradigm.

New Zealand has also had an evolving awareness and institutional response to environmental issues. In the past, concerns have focused largely on protecting native biodiversity, reflecting awareness about New Zealand's high endemic and indigenous flora and fauna. Biodiversity loss from changing land-uses has reduced as a combination, so that now concern has focused on agricultural impacts on the environment, especially from dairying as a consequence of intensification over the last twenty years.

New Zealand has a range of different administrative models for managing different aspects of the environment, employing centralised agencies, decentralised government departments and devolved power to regional councils. Consequently, management is somewhat fragmented, with parallel politicised and depoliticised decision-making institutions. It is perhaps unique among western countries in not using a decentralised model for managing the environment; rather most policy and implementation is situated at the devolved regional level of government.

The key legislation for managing the use of natural and physical resources in New Zealand is the RMA, an innovative integrated environmental management structure based on a hierarchical policy model integrated into the local and regional government institutions. The RMA enables democratic regional councils to set and implement most environmental management policy, allowing regional councils to tailor their responses to individual regions' requirements. Regional council boundaries are largely defined by river catchments that provide for catchment-based environmental management. The location of wide-ranging environmental functions suggests that the regional councils are democratic institutions undertaking environmental protection agency functions at the regional scale.

At the start of the environmental movement in New Zealand, Tim O'Riordan provided an outsider's perspective on New Zealand's environmental management:

New Zealand is in an extremely favourable position to innovate in the field of environmental management, for this is a small country with a relatively small population, with low levels of environmental misuse and yet all the experience of the rest of the world to draw upon... there are thus unparalleled opportunities to introduce novel legislation in New Zealand in this field. ...Should the government grasp these opportunities, it is conceivable that New Zealand might become a forerunner in the world in the field of environmental management (O'Riordan, 1971: 208)

Nearly forty years later, New Zealand can show that it indeed did introduce novel legislation in the RMA that, together with a highly devolved policy-making and implementation, provides institutional arrangements that differs from those of other western countries. The questions are whether the regional level of government is the appropriate locus for these functions in order to achieve environmental outcomes and whether democratic institutions provide necessary authorisation for achieving those outcomes. These questions form the basis of the research outlined in the next chapter.

Chapter 5: Research Design

1. Introduction

It was suggested in previous chapters that arguments for regional government are underpinned by a range of contestable assumptions, some of which may be more normative than empirically based (chapter 2). In order to examine the role and value of regional government in New Zealand, research was undertaken to assess the regional councils' ability to generate public value within a multi-layered institutional framework a surrogate for regional government generally. The following discussion outlines the research design and method employed to assess the councils' public value, using their environmental resource management function as a case study. A framework for assessing public value is identified, together with the indicators that could be used for assessing the public value of regional councils' environmental resource management. Finally, a research strategy, drawing on publicly available data and a survey of environmental resource management practitioners and stakeholders perceptions, used for collecting and analysing data to populate the framework is provided.

2. Research Strategy Choice

Assessing the value of regional government suggests a range of different strategies to measure them. Yin (2003) identifies a suite of research strategies for undertaking research, each with its own strengths and limitations (Table 5-1). They can be used to undertake exploratory, descriptive or explanatory research. Each is conditioned by the type of research question posed, the extent of control the investigator has over actual behavioural events and the degree of focus on contemporary as opposed to historical events (Yin, 2003: 5).

Table 5-1: Relevant situations for different research strategies

Strategy	Form of Research Question	Requires Control of Behavioural Events?	Focuses on Contemporary Events?
Experiment	How, why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes
Archival analysis	Who, what, where, how many, how much?	No	Yes/No
History	How, why?	No	No
Case study	How, why?	No	Yes

Source: Yin, 2003: 5.

The interest of this research is very much on contemporary events, but, as with much of social sciences research, experimental strategy is not possible as the ability to control behavioural events is beyond the reach of researchers. This leaves surveys, archival analysis and case studies as possible choices for research strategies. Each has advantages and limitations, but they are not mutually exclusive; rather, a suite of research strategies to provide a range of qualitative and quantitative data so triangulated observations can be employed that can be used to assess the public value of regional government. The strategies can also be, to some extent, nested as surveys and archival analysis can be used to inform a case study. Given the scope of the subject of enquiry, it was decided to utilise all three strategies; employing a case study approach to regional government in New Zealand to keep the research practicable, while employing archival (or documentary) analysis and a survey to inform the case study.

2.1 Case study

The case study is a recognised way of undertaking social science research where in-depth examination of a single event or subject is used instead of the use of large samples and rigorous assessment of a small set of variables (Yin, 2003). The use of a case study also allows selection of a case that can provide richer information as they 'activate more basic mechanisms and more actors in the situation studied, compared to a random or average case where the emphasis is on representativeness' (Flyvbjerg, 2006). The case study method has been criticised on a range of grounds, particularly on its inability to falsify findings. Such criticisms have been addressed by a several researchers (e.g. Yin, 2003; Flyvbjerg, 2006). These criticisms have less relevance for exploratory research where the purpose is to provide a base for constructing hypotheses rather than falsifying them. Nevertheless care must be taken when extrapolating from a specific case to make generalisation for the wider population from which the case is drawn. In practical terms, the case study research strategy is useful in designing a research programme, such as the one reported here, that is feasible.

As described in chapter 3, New Zealand has a range of regional-level institutions, including democratically elected regional government as well as decentralised national government department and Crown entities with a regional presence. Ideally, research on regional level government would examine the whole range of sub-national entities to obtain a comprehensive picture and understanding. However, such an undertaking is beyond the scope of the research here. Instead, the research was undertaken within a case-study framework, examining only a particular part of contemporary regional government in New Zealand. Chosen with care, the case study can be used as an exemplar in considering other forms of regional government and administration, such as public health and economic development. Accordingly, a subsection of this wider regional government and administration was examined in detail, acting as a surrogate for the others. The criteria used for selection were devolved authority and representation across regions.

The present study focuses on devolved government; that is sub-national government with democratically elected office-holders, rather than devolved administration. As discussed in chapter 3, regional councils are the only regional-level organisations that meet both requirements. District health boards have elected and appointed representatives, while most (95%) of their finance comes from central government. A challenge is that regional councils are in practice still largely ad hoc multiple special-purpose authorities reflecting their recent antecedent history. They have a range of functions, including environmental management, biosecurity, public transport, flood protection and river management. The intensity of these functions varies between councils (chapter 3). For example, the Southland Regional Council has delegated public transport provision to Invercargill City Council, while it is a major function (over 40% of annual expenditure) of Auckland Regional Council. This variation makes direct comparison between councils difficult. Comparison between regional councils and unitary authorities, which also have added territorial authority functions, is even more difficult.

All regional councils and unitary authorities have significant mandatory regulatory functions under the Resource Management Act 1991, providing a common base for comparison. Environmental resource management also demonstrates a multi-layered government dimension, as the regional function situates within a larger hierarchical planning framework from the national level, which in turn is situated within an international policy context. As well, environmental issues also have an ongoing public interest and topical salience, making

this choice both relevant and facilitating data gathering. On this basis environmental management was used as a surrogate for other regional council functions. However, any wider application of the findings to other functions and policy domains needs to be tempered with awareness that these other functions and policies may have different spatial and political characteristics.

2.2 Data collection strategy

The research strategy to implement the case study had two parts. The literature on sub-national government, discussed in chapter 2, and regional environmental management in New Zealand in chapters 3 and 4 provides a basis for determining expected performance of regional councils' management of environmental resources. Published data on regional and national government performance were examined to ascertain whether this performance was being achieved. These data were corroborated with findings from a survey of the perceptions of environmental resource management practitioners and stakeholders to provide a qualitative assessment of this performance.

A combination of research instruments that allowed for triangulation of findings was favoured, as a single method or technique is unlikely to deliver unequivocal and robust data. For example, although environmental management is an important regional council function, there is no standard metric or comprehensive data on New Zealand's environmental management performance at either national or regional level. Indeed this lacuna has been a long-standing criticism of New Zealand management. While individual councils have undertaken their own state of the environment reports, there is no standardised measurement, data collection, analysis or presentation (see OECD, 1996, 2007; Sumits & Morrison, 2001). Accordingly, direct quantitative analysis of environmental policy outcomes is not possible.

The public sector collects and reports on data from a wide range of sources for a variety of reasons, including institutional performance monitoring and to inform public sector decision-making, as well as for the wider public good. Many data are published in national and local government reports and planning documents. Baseline data on local government and the wider population both nationally and by region are collected by Statistics New Zealand. The Department of Internal Affairs collates triennial local government elections data. As well, specialist data sets have been assembled by the Ministry for the Environment to assist environmental managers were used to provide regional level information. These datasets and documents can provide quantitative data for assessing council performance.

Perceptions of environmental resource management practitioners and stakeholders was obtained using a structured questionnaire, while specific information to elaborate on or corroborate some of the survey data can be obtained from open interviews of selected key respondents. The survey allowed people with particular skills, knowledge and experience to inform the assessment, particularly where public data are not available. A survey was particularly important for this research given the lack of published information with which to compare performance of the different councils and the relationships between different layers of government and stakeholders. It was also useful for exploring respondents' views on alternative government models. The details of each research strategy are given below.

3. Assessing public value

There are various ways the efficacy of regional institutions can be assessed, each with its own lens and theory that shapes and informs research direction. The classic assessment of

regional level institutional performance is Putnam's (1993) longitudinal study of Italian regional government. He used twelve measures for measuring performance. He notes that no single metric taken in isolation would suffice to rate regions fairly, but collectively they can provide a broad-based assessment of institutional success and failure (p66). The use of his metrics was initially appealing as they would provide some uniformity and allow a comparison with the Italian experience.

However, Putnam does not examine relationships between levels of government, but focuses on horizontal performance only. His choice of indicators of regional councils' policy implementation measures, such as provision of family clinics and regional agricultural expenditure, are measures of the councils' ability to extract funds from central government to implement these policies. The metrics are procedural and conflate achieving administrative outputs with outcomes; for example, obtaining national government funding for regional health care does not equate necessarily with better regional health outcomes. Although some improvement could be anticipated with increased expenditure, the relative efficacy of that expenditure cannot be known.

On the other hand, multi-layered government concerns have focused on legitimacy of supra-national government (primarily the European Union institutions) and address the so-called implementation gap (e.g. Brown, 2002; Börzel and Hofman, 2003). Brown and others take a rational, hierarchical planning perspective, assessing the gap or 'deficit' between policy as enunciated at the EU level and as implemented at the national or regional level. The frameworks are hierarchical and any identifiable gap is seen as an implementation failure by subordinate levels of government. Reporting by the EU on such gaps overlooks possibilities that such failure may be 'technical' rather than material (Glachant, 2000) or, more seriously, the result of subordinate government seeking to correct or adapt higher level policy to meet local conditions.

A broad context has already been identified in chapter 3 drawing on the literatures of public policy, multi-level governance and political legitimacy. The role of regional government can be examined through different research lenses within the broader political science, including public administration and management, public policy, and legitimacy. The focus of this study is on the efficacy of regional government. It is not primarily concerned with the functioning and management within individual organisations, which is the concern of public administration, nor the influence of the wider society on institutional performance, as promulgated by, for example, social capital theorists.

Both Moore's (1995) public value and Scharpf's (1997) input-output legitimacy models, discussed in chapter 2, present criteria that can be used to evaluate the efficacy of regional council institutional arrangements. These models emphasise the need for interventions to achieve outcomes identified by citizens in an efficacious manner, thus providing legitimacy for the institutions and creating public value. Although developed for organisations, it is suggested that the public value model can be used to structure an assessment of New Zealand's institutional arrangements.

The public value framework proposes three conditions that must be met to generate public value: (i) the achievement of substantive value from any intervention, (ii) authorising agency to mandate the intervention, and (iii) the operational feasibility of undertaking the intervention successfully (chapter 4). These were used to identify a set of indicators to guide the research strategy. Importantly, the public value framework needed to be embedded within a multi-layered government institutional structure. While many

indicators of the three public value dimensions can be considered generic, some needed to be tailored to address the regional councils' environmental resource management function. Definition of substantive value is particularly function sensitive.

3.1 Substantive value

The ability to create substantive value, that is, increasing social welfare in some way, is fundamental to legitimising government intervention. Ultimately, substantive value is reflected in the achievement of desired policy outcomes. However, assessment of the substantive value generated by government intervention is challenging. The long time periods between intervention (policy outputs) and noticeable effect (policy outcomes), complex networks and multiple policy actors can make it difficult to establish whether an initiative can be deemed successful. This is particularly noticeable as political ideologies, each with their own success criteria, replace each other over time. Assessment of institutional performance is necessarily normative, dependent upon the perspectives and value of those undertaking assessment.

Instead, practitioners and researchers have tended to focus on the intervention processes, assuming that good practice will deliver good outcomes. This has underpinned earlier assessments of New Zealand's environmental planning, for example, Ericksen *et al.* (2003) and local government strategic planning under the Local Government Act 2002 (Reid *et al.*, 2006). However, good process may not necessarily be either appropriate or sufficient by itself to deliver desired outcomes. More fundamentally, assessing process does not address the wider issue of appropriateness of government intervention and its coercive demands on citizens.

Tests for substantive value generated by the regional council institution include achievement of stated desired environmental outcomes both regionally and nationally. Where desired outcomes are not stated, a default outcome of no worsening of environmental conditions should apply, reflecting the purpose of the RMA to promote the sustainable management of natural and physical resources (chapter 4). The benchmark used would be 1991, when the RMA was enacted.

Recognising that environmental outcomes may take considerable time to manifest themselves, councils and national government should also have produced policy outputs specifying how they address environmental problems. At the least, councils and national government could be expected to have addressed surface and groundwater quality and quantity through regional plans, given the widely recognised significant pressures on these resources (chapter 4).

3.2 Authorising agency

Authorising agency concerns democratic legitimacy of decision-making through citizen and interest group participation, ensuring different values are recognised in the decision-making process so that collective rather than individual good is achieved. Input-legitimacy requires opportunity for public and stakeholder input into the policy-making process, as well as being undertaken by democratically arrived decision-makers. Within a multi-level system, the inputs from other levels of government also need to be recognised within the decision-making process.

Councils as democratically elected institutions also need to be responsive to citizens. This is also consistent with Scharpf's input-legitimacy requirement. Data are available to assess

public participation in the democratic process and the representativeness of the councils. Measures of authorising agency would include representativeness, public participation in political and decision-making processes, strategic direction at the regional level, and national strategies and policy alignment between levels of government. The section below discusses each of these measures.

3.2.1 Representation

The number of candidates contesting seats in elections provides a measure of the relevance of councils to the public. It is supposed that a perception of irrelevance will result in little interest in individuals putting their names forward. This metric needs to be treated with some caution, as in some provincial councils at least, highly regarded local body politicians are simply not challenged. Low turnout and uncontested seats in these cases can remain the norm until death or retirement of the incumbent creates opportunity for new entrants.

As well, council composition can be examined to see if particular sectors are over or under-represented. Olsen (1965) suggests that distortions are likely where significant benefits accrue to a few people. Simple comparisons can be made on the basis of council composition by gender and profession against the regional proportions. These data are often available in council documents such as annual plans and in promotional material.

3.2.2 Participation

Public participation can be assessed using voter turnout and public participation in consultation exercises, such as making submissions on draft plans. This supposes that the public will participate in the processes where they think that their contributions will be taken account of, and that the outcome is important.

Local body election turnout can be compared for each council. This metric needs to be treated with some care: anecdotal evidence suggests that voter turnout can be low because the candidates are well-known and respected and are therefore not seriously challenged. In some cases this results in uncontested seats.

Apart from participation in voting (electoral participation), citizens are able to participate in council decision-making processes through submissions on and other responses to council draft policy documents. Under the LGA 2002, councils must prepare LTCCPs, part of which is the inclusion of Community Outcomes (chapter 3). These outcomes are supposed to be identified through community consultation. The range of community organisations and interests engaged in the process can be expected to provide an indication of engagement and so perceived value.

3.2.3 Coordination and alignment

Within multi-layered government systems, the government levels need to coordinate and align with each other, as well as coordinate horizontally at the regional level. National strategies and directives can be a means of achieving alignment and can provide national leadership.

3.2.4 Issue mobilisation

Regional and national politicians need to have some sort of mandate for the issues they are addressing. If an issue has low political salience, it can be assumed the public do not regard it as particularly important and has low priority, conversely high salience suggests the issue needs to be addressed. A variety of public surveys and opinion polls are conducted

covering a range of policy issues. Additionally, there are several international longitudinal values surveys, such as the International Social Survey Programme¹², enabling calibration at the national level.

3.3 Operational feasibility

Institutions need to have the wherewithal to undertake their functions to deliver substantive value. They require internal, organisational capability to undertake functions successfully. The institutional structures also need to be designed to ensure coordination and alignment between organisations at different levels, and to ensure that there are no functional gaps or overlaps. It can be argued that the wider communities need to have the capacity to resource the institutions through rates and taxes. The correspondence principle also suggests that geographic size of institutions and the issues they are addressing match to avoid rent-seeking.

3.3.1 Organisational capability

The following attributes are considered necessary to enable organisations to achieve their intermediate outcomes: knowledge and expertise about the environment and scanning for future threats and opportunities to guide effective policy development, financial resources, and leadership to guide policy formation and to engage with the community to achieve environmental outcomes. These attributes are qualitative and were gauged through survey questions.

3.3.2 Information

Information about constituents and their problems allows councils to respond more effectively, all things equal. Regional councils are essentially regulatory agencies, making and implementing policy. Commitment and capacity of a council can be measured by the size of the budget spent on these activities and also the number of staff employed undertaking them. Using financial information published in councils' LTCCPs, operational expenditure was used to compare regional council annual operational expenditure on environmental policy, monitoring; and policy implementation. Councils' operational expenditure normalised as per head ratios were used, primarily because environmental management is regulatory and not redistributive.

3.3.3 Community capability

The capability of the regional community to be able to support the regional government's activities is also important, especially where sub-national government are expected to be largely self-supporting through regionally raised taxes, such as in New Zealand (chapter 3). It is suggested that capability is a function of the region's wealth and the population of region that together determine the breadth of the taxation base and ability to raise taxes. Larger populations and regional wealth can be expected to support regional policies.

3.3.4 Institutional structure

Within a multi-level structure policy is formulated at different levels of government. These range from supranational conventions and treaties, down to local government regulations, reflecting the different scales of policy issues and their causes. While notions and theory of strategic planning are contested (Local Futures, 2007), there is a general expectation that policies at lower government levels should not be inconsistent with those of higher levels,

¹² www.issp.org

while a hierarchical top-down mode of planning forms most conceptions of multi-level environmental management (e.g. Lee & Walsh, 1992). This suggests a coherent and comprehensive hierarchy of policies is needed to guide policy managers and users so that the sum of the parts at least approximates the whole. Under the RMA structure, evidence for alignment would consist of a suite of national policy documents, reflecting, where appropriate, international agreements and protocols that are, in turn, transposed into regional policy statement and plans.

3.3.5 Geographic span

While some issues may be 'regional' in scale, efficacious intervention requires appropriate scale of intervention. The appropriate scale of jurisdiction to provide such intervention is potentially fraught with recognition by some that there is no single optimum size for local government (Helm, 1987; Dollery & Wallis, 2001); fire brigades and sewerage schemes have quite different optimum sizes for example. From a normative position, the theory of fiscal federalism can inform investigations. A tenet of fiscal federalism is the principle of 'perfect correspondence' (Oates, 1972), whereby:

a government body must be sufficiently large to capture all decreasing costs from a particular decreasing cost service, or to include all citizens affected by a particular externality generating activity, but it need not be any larger (Tresch, 1981, p.567).

Regional council boundaries are statutorily defined; the objective is to see whether, and, if so, to what degree, environmental problems councils are responsible for managing are unique to individual regions. Problems are identified within individual council and government departmental documents, allowing comparisons to be made. Additionally, national databases relevant to particular problems are often available to allow interrogation using geographic information systems (GIS) to identify regional fit between the jurisdictional area and the focus of responsibilities. Correspondence would occur where an environmental issue was fully encompassed by a single regional council.

3.4 A framework for assessing public value

Collectively, the indicators outlined above provide a framework that can be used for structuring a research programme for assessing the overall public value of the regional council institution for managing the environment (see Table 5-2 below). The framework is made more complicated than would be needed for evaluating a single organisation by the need to assess performance of both national and regional levels of government.

Table 5-2: Public value indicators framework (Source: Author)

Dimension	Indicator	Criterion
Substantive Value		
Policy outcomes	National environmental quality	<ul style="list-style-type: none"> • Maintenance or improvement in environmental quality since 1991
	Regional environmental quality	<ul style="list-style-type: none"> • Maintenance or improvement in environmental quality since 1991
	Regional water quality and quantity	<ul style="list-style-type: none"> • Maintained or improved water quality and quantity since 1991
Policy outputs	National plans and policies	<ul style="list-style-type: none"> • Plans and policies address all significant environmental issues
	Regional plans and policies	<ul style="list-style-type: none"> • Plans and policies address all significant environmental issues
Operational Feasibility		
Organisational Capability	Issue knowledge and expertise	<ul style="list-style-type: none"> • Information on regional environment and environmental processes • Awareness of regional environmental pressures
	Financial resources	<ul style="list-style-type: none"> • Sufficient funding for organisation to develop and implement environmental management policies
	Leadership	<ul style="list-style-type: none"> • Regional leadership by councils
Community Capability	Ability for regional community to finance council activities	<ul style="list-style-type: none"> • Sufficient regional population base to fund activities • Sufficient regional economic wealth to support activities
Institutional Structure	Hierarchy coordinating mechanisms	<ul style="list-style-type: none"> • Legislation to coordinate policy between levels
	Council functions	<ul style="list-style-type: none"> • Council addresses environmental problems and issues
	Council budget	<ul style="list-style-type: none"> • Allocation of resources to environmental functions
Geographic Span	Jurisdictional fit with function	<ul style="list-style-type: none"> • Environmental problems and issues correspond with regional jurisdictions • Environmental attributes correspond with regional jurisdictions
Authorising Agency		
Representation	Council makeup	<ul style="list-style-type: none"> • Council membership reflects community demographics
	Councillor visibility	<ul style="list-style-type: none"> • Councillors are seen to be representative of their communities
Public mobilisation	Citizen values	<ul style="list-style-type: none"> • Strong public interest in environment
Public participation	Voter turnout at elections	<ul style="list-style-type: none"> • High voter turnout at elections
	Number of submissions on draft plans and policies	<ul style="list-style-type: none"> • Citizen participation and consultation in policy development
Leadership	National strategy statements	<ul style="list-style-type: none"> • National politicians provide clear vision for environmental management
	Regional strategy statements	<ul style="list-style-type: none"> • Councillors provide clear vision for environmental management
Multi-layer institutional alignment	National strategies and coordinating mechanisms	<ul style="list-style-type: none"> • Comprehensive national policies and strategies providing guidance to regional level for managing nationally significant environmental problems

The ability to quantify the different indicators and so attribute a cumulative score to the institution is appealing. It is also very difficult and beyond the requirements of this research, which only seeks to establish whether there is public value resulting from the regional councils' management of the environment. Difficulties arise firstly in being able to compare the qualitative and quantitative data and then in developing an appropriate weighting for the different indicators, each a major research project in its own right.

Nevertheless, an indication of public value should be able to be determined using this framework. Moore (1995) is clear that an organisation requires all three dimensions, of substantive value, authorising agency and operational feasibility, for public value to be achieved. The absence of any one could be expected to result in desired outcomes not being identified or achieved. Accordingly, as a preliminary assessment, research needs to identify only whether each of the indicators for each dimension meets the benchmarks suggested above. As well, failure to meet particular benchmarks provides a starting point for further examination.

4. Published data analysis

The analysis of published data had two parts. The first part used a variety of published data to assess regional council performance and attributes. The second part sought to determine the level of correspondence between environmental conditions and problem, and jurisdictional area of the regional councils. This required a different type of analysis and is explained separately below.

Various reports on different aspects of regional council performance are available. At the national level, for example, the Ministry for the Environment reports two-yearly on resource consents administration under the RMA, while the Department of Internal Affairs reports on voter turnout and candidate composition after every local government elections. Statistics New Zealand collects and reports census data at national, regional and local levels. As well, various specialised reports and databases have been prepared for various reasons, such as informing policy development, supporting research and for administrative purposes. Examples include national water quality and quantity reports, land and waterway environmental typing, and grants allocations. Each data set has its strengths and weaknesses, but collectively, these data were aggregated and analysed to provide a data set to populate the public value framework of regional and national level environmental management performance.

4.1 Correspondence of issues with jurisdiction

A critical component of this research is the validation of the correspondence principle (discussed in chapter 2). This principle requires matching between the geographic span of issues with the jurisdiction of the institution responsible for managing it. If the same issues are found across a number of regions, the principle suggests that the level of devolution is too low, and that it should be addressed primarily at a higher level that singularly encompasses it. A wealth of environmental planning documents exists within New Zealand, and internationally, that identify environmental issues needing to be addressed. The documents differ in scope and implementation methods, but nevertheless provide a means for measuring consistency and convergence within levels of government.

4.1.1 National level issues

Ideally, national level issues and performance would draw on data collected nationally as part of a comprehensive environmental performance monitoring strategy. However,

identifying changes in environmental quality since regional councils were established in 1989 is difficult. Sumits and Morrison, searching for models to reform California's environmental management, summarised the difficulty in evaluating the effectiveness of New Zealand's environmental management institutions:

baseline environmental quality information was not collected and adequate monitoring programs were not established at the outset, thereby limiting empirical assessments of whether the new system has in fact resulted in improvements (Sumits and Morrison, 2001: ii).

Substantive documentation for the overall quality of New Zealand's environment is patchy at best, while at the regional level, different environmental monitoring priorities and methods mean that direct and comprehensive comparisons are difficult. The OECD criticised New Zealand's poor environmental monitoring record in 1996 and again in 2007 in its country environmental performance reviews (OECD, 1997, 2007). The Ministry for the Environment prepared a state of the environment report in 1997 (MfE, 1997) that is notable for being a compendium of information, rather than a basis for establishing changes in environmental quality. The 2002 country statement on the environment prepared for the Johannesburg World Summit (MfE and MFAT, 2002) is notable for its generality. The Ministry for the Environment released its 2007 state of the environment report in February 2008 (MfE, 2007). This, too, is largely a compendium of general data, reflecting the earlier failure by the MfE to complete development and implement its national environmental indicators programme. Essentially the data for substantiating overall institutional performance largely do not exist. Instead, most assessments of New Zealand's environmental state rely on specific studies that cover a few regions and aggregating individual regional councils' monitoring data. The National Institute of Water and Atmospheric Science (NIWA) has been able to identify trends between 1989 and 2005 using its own national monitoring network, (e.g. Scarsbrook, 2006) and these specialist reports are drawn on in the absence of other data.

4.1.2 Regional level issues

Regional councils' Regional Policy Statements (RPS) were initially considered as a source of differentiating regional issues as councils are required to identify in them significant resource management issues in their regions. This source was rejected on a variety of grounds. The first generation RPS documents were prepared some thirteen or more years ago, although they may only recently have been adopted by some councils after undergoing legal appeals; hence they are dated. The documents are required to be reviewed at least 10 years after adoption and some councils have already embarked on their review and are at different stages of this exercise. As a result, there is no temporal consistency in plans to allow comparison between documents. In any case, a common criticism levelled at them even at the time they were written was that they were too general in nature. Lindsay Gow, Deputy Secretary for the Ministry for the Environment, expressed the criticism that:

to date, and from MfE's perspective, the results evident in notified regional policy statements have been generally disappointing. Many but not all, policy statements do not seem to us yet be able to fulfil the functions intended for them. Problems that concern us are:

1. there is too much very general material in many statements...
2. a number of natural resource users... consider that the generality of many statements provides them with uncertainty... (Gow, 1994: 2).

Instead, more contemporary planning documents, regional councils' 2006-16 LTCCPs were used as a source of information about communities' aspirations in relationship to

environmental well-being. These data take the form of text and are qualitative, presenting a different challenge to analyse. Source material is likely to be rich in content but unwieldy and intertwined in context, which can be daunting to researchers and challenging to analyse (Ritchie & Lewis, 2003). There are no clearly agreed rules or procedures for analysing qualitative data, varying by epistemological assumptions and traditions of research, so that a range of analytical processes have developed, including narrative analysis, discourse analysis and grounded theory (Spencer *et al.*, 2003: 200). Some of these processes such as discourse analysis of regional council documents could be very revealing about the regional council policy-making process.

To analyse the documents, a simple framework analysis was undertaken (Ritchie & Spencer, 1994). This is a matrix based method for classifying, ordering and synthesising qualitative data using an analytic hierarchy and is now widely used by qualitative researchers (Ritchie *et al.*, 2003). This requires organising data according to key themes, concepts and emergent categories. Data sets (or respondents) are then ascribed to the identified themes' within a matrix structure. The matrix forms thematic charts that allow development of descriptive categories. It does, however, rely on the researcher's ability to identify groups and patterns within the text.

4.2 Regional environmental classifications

Secondary data were also used for determining regional similarities. Geographic information system (GIS) interrogation of existing datasets was used to measure similarity within and between regional council jurisdictions using river and terrestrial environmental parameters. The two primary datasets were the Land Environment New Zealand database (LENZ) (MfE, 2002) and the River Ecosystems Classification (REC) (MfE, 2002), which were developed to assist environmental managers. (See Appendix 2 for a detailed description of these databases and interrogation methods used.)¹³

The LENZ uses numerical data layers describing various aspects of New Zealand's climate, landforms and soils, drawing on long-term meteorological data and the New Zealand Land Resource Inventory. It is the most comprehensive synthesis yet undertaken in New Zealand and its data layers are well documented and substantiated (MfE, 2002a). LENZ is scalable, but provides as a default four levels of aggregation. This research used comparisons between jurisdictions at Level I, containing twenty different environments.

The REC is an ecosystem-based spatial framework for river management purposes and provides a context for inventories of river resources, and a spatial framework for effects assessment, policy development, developing monitoring programmes and interpretation of monitoring data and state-of-environment reporting. The REC has been used to classify all the rivers of New Zealand at a 1:50,000 mapping scale. The area classified comprises 267,000 km² and 426,000 km of river network.

¹³ Rachel Summers, Senior Lecturer GIS, Massey University, undertook the GIS interrogation of the LENZ and REC database to produce the initial data tables from which comparisons between regions were subsequently made.

5. Survey of environmental resource managers and users

Two approaches were undertaken to establish environmental resource practitioners and stakeholders' perceptions of regional councils' performance. The first was to survey practitioners and stakeholders' perceptions using a structured questionnaire to establish the regional scope and variation. As well, a small group of key informants were interviewed to provide deeper information and context to both the survey and the analysis of published data.

5.1 Questionnaire

It was assumed that although environmental policy impacts on everyone, practitioners are more aware of the context and institutional arrangements than members of the general public. It was decided to limit application of questionnaire and interviews to people who could be expected to have a direct interest and experience in environmental management. The resulting stratified sample sought responses from 'experts', i.e. people who had personal experience of the environmental policy-making process, either in the formulation of policy or participating in it at some stage, or were directly impacted by the policies.

The decision to use a stratified sample had a direct result on analysis and ability to generalise from the results. The sample was clearly not random so that views expressed are not necessarily representative of the views of the average citizen. In designing questionnaires, researchers face tradeoffs between breadth and representativeness on the one hand, and detail and depth of content on the other. While both representativeness and depth are desirable, these are often not able to be combined due to the high level of resources needed to administer the survey. Short questionnaires are typically more wide-ranging and can be administered broadly to identify any consensus within and across sectors and territories. The long questionnaire is typically more targeted, selective of a few 'key' representatives of actors. This questionnaire type reflects the more resource intensive nature of this form of investigation and assumes that these individuals are either pivotal to understanding of events, and/or able to speak on behalf of others, encapsulating the sectors' views, and so make further interviews redundant. While providing greater depth, it requires careful choice of respondent and assumes that some sort of consistent response can be extrapolated from the small number of key respondents surveyed (Mitchell and Carson, 1989). This study utilised a relatively long questionnaire (see Appendix 4).

5.1.1 Questionnaire design

Instrument effects and respondent misperceptions or gaming behaviour are widely recognised as common problems in survey research that unaddressed can reduce research value or even validity. Accordingly, researchers need to be aware of range of biases, distortions and omissions in the research instruments, and seek to eliminate or minimise their effects. To be meaningful, questionnaire responses need to reflect respondents' true values and not be distorted by respondents' ulterior motive or by instrument design resulting in misspecification. Mitchell and Carson (1989) identify a typology of potential effect biases that distinguishes between bias and misspecification. While this is prepared in the context of contingent valuation studies¹⁴, its scope and ambit is valid for any social

¹⁴ Contingent valuation is a survey instrument economists use to ascertain how much respondents value a resource or intangible in the absence of a market by asking them how much they would be prepared to pay for it (Tietenberg, 1988).

science investigation – and is appropriate here as the questionnaire seeks to elucidate respondents' values. This typology of potential response effects biases in contingent valuation studies by Mitchell and Carson (236-7) modified to apply to policy research is proposed as a basis for checking the robustness of the questionnaire. Three categories of bias are identified:

- Misrepresentation, where conscious or unconscious responses designed to influence the research outcome by misrepresenting the respondents' true preferences are provided.
- Implied value cues, where the research tool is seen by respondents to imply particular responses are more highly valued than respondents' actual preferences
- Scenario misspecification, where respondents incorrectly understand the scope of the survey. This results either from methodological failure, where the researcher describes a scenario that is incorrect from the theory or the known facts about the situation, or from methodological misspecification where one or more elements are incorrectly communicated.

Policy research is inherently political by nature of its subject and by the consequence of how findings are subsequently applied either by the researcher or third parties. The consequences of research such as that carried out here are potentially fraught, impacting directly in the realm of Lasswell's (1935) definition of politics; 'who gets what, when'. In this case, assuming a political economy model, bureaucrats and politicians may perceive opportunities to expand their functions, possibly at the expense of others, while non-government organisation representatives may seek to either strengthen or diminish institutional powers. Additionally, given the non-attributable nature of the resulting conclusion, misrepresenting true preferences in order to skew the results, either to enhance or shield a position, has a very low cost to respondents, but with potentially beneficial returns should their strategies be realised.

These factors make intentional respondent misrepresentation a real possibility. Accordingly, respondents were asked to provide their first, immediate responses to questions and to work through the questions at a steady pace to minimise possibility of answering questions strategically. As well, responses within classes of respondents were vetted for outliers that suggest possible misrepresentation.

The possibility that the questionnaire statements were seen to favour a particular response was seen to be a lesser risk in this questionnaire. Questions were checked and tested in order to minimise any inadvertent cues being provided from the wording. As well, questions were mixed in order of presentation so that respondents would not feel they were being led.

Geographical part-whole misspecification was a particularly significant possibility in this research. Much of the questionnaire focus was on the performance of place-based regional councils. However, many regional council boundaries, while largely conforming to river catchments, do not reflect social and other administrative territories. Many administrations lie with parts of several regions, while territorial authorities and many local branches of non-governmental organisations lie within only one part of a region.

While the responses are confidential and individual respondents are not identified, the questionnaire was coded to enable matching and in some cases a reassignment of focus region made. In several cases, particularly because of the small size of some of the unitary authorities, stakeholder administrative boundaries did not even closely match the unitary

authority boundaries. Accordingly, the decision was made not to include the unitary authorities in any regional level analysis.

5.1.2 Survey type

Respondent attitudes were sought using a multiple-choice, single-response scale. A five-point Likert scale (Likert, 1932) was used and respondents were asked to circle the number that best describes the extent to which they agreed or disagreed with each of the statements:

1	2	3	4	5
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

Respondents were also able to indicate that they did not have a response, by indicating they did not know.

The advantage of the Likert scale is that is easy to construct and administer, and is considered more reliable and provide a greater volume of data than many other scales (Cooper & Schindler, 2006: 339). The Likert scale is a bipolar scaling method, but the five-point scale allows for an indifference score (3) which was considered a possible attitude held by some respondents on some statements. The data are ordinal, allowing statistical analysis, across the five-point scale, but can also be treated more simply as a two-point (agree-disagree) scale by collapsing levels of agreement and disagreement. An indifference score cannot be collapsed, but in some cases this choice highlights matters of interest, where the hypothesis would suggest a strongly polarised position. The level of statistical analysis is, however, dependent upon the response rates and whether the responses are normally distributed to allow for parametric statistical testing. The Likert scale runs the risk of subject of distortion where respondents avoid using extreme response categories (central tendency bias) or agreeing with statements as presented (acquiescence bias), in addition to other forms of bias identified below.

A set of draft questions was developed that addressed all aspects of the public value triangle, current and alternative institutional configurations. A subset of questions focused on dairying impacts on the environment to be used as a case- example. Questions sought to elucidate respondents' views on:

- Environmental values
- Institutional arrangements for managing the environment

The draft questions were work-shopped and refined with academic and policy colleagues and the draft questionnaire was sent to five respondents to be completed. The draft questionnaire was then trialled on five respondents and the results coded to identify any processing difficulties. Comments on the questionnaire were also sought from these respondents on usability and interpretation, and minor modifications were consequently made to remove identified ambiguities.

5.1.3 Survey population

While many people in New Zealand are interested in environmental matters, far fewer understand or work in any policy-related capacity with environmental institutions, suggesting a nation-wide randomised survey would have a very low success rate. At the same time, this minority is quite significant; nearly 2,400 people attended MfE's 2005

national Talk Environment Roadshow¹⁵. While the MfE database could be used to contact these people, it was considered the numbers were too large for all to be surveyed within the constraints of this study, while also not necessarily capturing views of all the significant regional-level players. As well, participant observations suggest that many of these attendees do not necessarily understand the wider environmental management institutional arrangements, the focus of this study. Accordingly, a stratified survey was used, targeting national, regional and local level organisations with an interest in environmental management – either as administrators, conservationists or environmental users.

This approach means that wider public opinion cannot be deduced from the responses; rather any results can only be couched within constraints of the sample population characteristics. Any aggregation of responses also needs to be made with care, as this implied weighting of sub-samples; however, where a clear majority of responses are similar, a broad consensus can be assumed. The need for caution is underlined by the difference in the respondents' composition of and responses from different groups – defined both geographically and by affiliation. Nevertheless, for most questions, there is a need to explore regional or local, and membership variation within an apparent homogenous total response.

5.1.4 Respondent composition

Perceptions of actors at national, regional and local levels on New Zealand environment management were sought. Representatives from agencies with a clear environmental management mandate, and organisations with national coverage with an interest in environmental management were identified (Table 5-3).

Table 5-3: Target respondents

National level
<ul style="list-style-type: none"> • Core central government policy agencies with an interest in the environment: Ministry for the Environment, Department of Conservation, Ministry of Economic Development, The Treasury, Ministry of Agriculture and Forestry • Office of the Parliamentary Commissioner for the Environment • National offices conservation groups: Environment and Conservation Organisations of Aotearoa New Zealand, Royal Forest and Bird Protection Society, Greenpeace • National offices resource user group: Federated Farmers • National level businesses: Fonterra Cooperative, energy companies • Independent experts: individuals with experience and expertise allowing a national-level overview, drawn from universities, consultants, legal firms, and commentators.
Regional level
<ul style="list-style-type: none"> • Regional council politicians and second-tier environmental policy managers • Department of Conservation regional conservators • Fish and Game Council managers
Local level
<ul style="list-style-type: none"> • Royal Forest and Bird Protection Society branch chairpersons or secretaries • Federated Farmer regional presidents • Dairy Farmers of New Zealand presidents • District and City council planning managers

Source: Author

¹⁵ The Ministry for the Environment has annually held a series of public breakfast seminars in all the regions, where members of the public are updated on the MfE's work and are in turn provide structured comment to the Ministry on a range of topics.

Maori, as iwi representatives or otherwise, are a notable and significant omission from the survey. Iwi are significant in several ways regarding environmental management: in constitutional terms the 1840 Treaty of Waitangi specifically gives Maori rangatiratanga of New Zealand's natural resources, while more specifically current legislation, including the RMA and Conservation Act, explicitly require local authority engagement with Maori in environmental decision-making.

The decision to omit iwi perceptions was taken for several reasons. Evidence indicates a postal survey is not an effective data collection instrument, as Maori have some antipathy to giving information to an unknown person of another culture and indirectly and prefer personal interaction. Personal administration of questionnaires was not practicable, given the number of iwi. As well, resource management issues are in some cases less about environmental quality than assertion of rangatiratanga (governorship) and property rights. A key informant noted several iwi, such as those of the Whanganui River, are seen to view resource management as essentially part of wider constitutional issues with the Crown and recognition for past injustices, and redress of grievances under consideration by the Treaty of Waitangi Tribunal.

5.1.5 Survey administration and response rate

Emails were sent to 204 individuals identified through their position in environmental management organisations as having an interest in environmental management in New Zealand on Monday 7 August 2006 to advise them they would be receiving questionnaires. The questionnaires were sent out on Friday 11 August 2006 with a request for them to be returned by Monday 21 August. Just under 50% (47.5%) of questionnaires were returned by Monday 28 August, when a reminder letter was posted to outstanding respondents. At the same time, a further 51 questionnaires addressed to 'The Planning Manager' were posted to city and district councils not included in the first tranche of questionnaires, with a request that the questionnaires be returned by Wednesday 6 September. This gave a total of 255 questionnaires distributed.

A total of 144 responses were received by the cut-off date (18 September 2006), a combined response rate of 56.5%. This compares favourably with responses to randomly selected public perception surveys of New Zealanders' environmental values undertaken by Hughey *et al.* (2004) of between 43-48%.

5.2 Interviews

The final component of the research strategy sought to gain understanding of context and corroboration of the results of the perceptions survey. It was decided that this could best be achieved through interviewing a set of key informants recognised as having experience in designing, implementing and operating within the environmental resource management institution. Their views could be expected to yield information to provide understanding of circumstances surrounding particular events and processes within the institution, which have not always been documented. Additionally, while questionnaires provide a quantifiable dataset of aggregated perceptions, they do not provide context for why respondents have those perceptions. Interviews on the other hand allow researchers to probe for answers, use follow-up questions and also gather information by observation. As well, pre-screening allows selection of participants to match the population profile required for the research. Their disadvantages include their high costs to administer, the need for highly trained interviewers, follow-up is labour intensive and participants may be reluctant

to speak to strangers, and questions may be altered or participants coached by interviewers (Cooper & Schindler, 2006: 253).

Interviews as a research tool provide a series of challenges; around sample population, questionnaire design and data validation. The interview data were intended to supplement the secondary data analysis and questionnaire. Accordingly, the decision was made to limit the size and extent of interviews to selected key informants to keep the research practicable. The key informants had different experiences and expertise. As a result, it was decided that a structured interview format was not appropriate, but that an open question format tailored to each person was the best way to utilise interview time and opportunity.

Key informants included two regional council science managers, two regional council policy managers, two senior national government officials, a former united council chief executive, two regional council committee chairs, four senior environmental management consultants and an environmental manager from a large industry. Less formal discussions were also held with several local government policy managers and scientists.

Many of the possibilities for bias in questionnaire design are also applicable in long interviews and may be more at risk of occurring given the interaction between interviewer and interviewee. Bias can arise from the failure of the interviewer to recognise cues from subject to guide whether to lead discussion further, or to halt probing before early termination of the interview, distillation of comments and risk of editorialising, rambling or obfuscation by subject, either intentionally or unintentionally, misallocation or lack of time; subjects have limited time for interview, so that not all questions can be put or answered, and/or follow-up questions to elucidate in-depth responses are not possible, and avoidance.

The risk of bias can be reduced by implementing various validation strategies. However, in many instances the ability of the interviewer to reduce bias is compromised by social norms and mores, especially as the researcher is relying on goodwill of the subject. Regardless of validation method, veracity ultimately comes down to interviewer experience and practice. The interviewer in this research has considerable experience in undertaking both structured and unstructured interviews with local, national and international level bureaucrats and politicians.

There was a trade-off between attribution and depth of information provided; most of the key informants hold senior positions in their organisations, which meant that their views have high value, but that they were potentially exposed professionally if their views were attributable. Several key informants were happy to speak on a non-attributable basis and were quite frank in giving their opinions accordingly. Others were quite happy to have their views attributed, but this then meant that the potential exists for identifying anonymous sources by omission, given the reasonably small size of the environmental management profession in New Zealand. Accordingly, the decision was made not to attribute any comments and to ensure the content could not be associated with particular individuals. This meant some information could not be reported, but this loss was considered an acceptable and responsible trade-off, while respecting the informants' trust in the research programme.

Data analysis can also be compromised. Interviews can be audio-taped and transcribed and transcriptions and/or written summaries can be sent to the interviewees for confirmation. These validation methods are resource intensive and make extra demands on the subjects. Validation is particularly important where individuals are publicly associated

with comments and where the interviews form a major component of the data gathering and analysis. It was decided in this case that the interviews would not be audio-taped and only summaries were held. This decision was made on the basis that the interviews were providing contextual information, were not ascribed to individuals and did not form a major part of the investigation to warrant the resources needed for more thorough validation.

Interviews were undertaken over two years during the phase when empirical work was being undertaken. Questions were open-ended and tailored to the different skills, expertise and experience of the subjects so they were not necessarily being interviewed about the same subject matter. For example, some subjects were scientists with an interest and expertise in technical matters and science policy, others were policy managers and were more concerned with the political implications of their work.

The interview data were intended primarily as corroborating or adding richness to results of the secondary data analysis and survey. The results are accordingly reported in chapter 6 and chapter 8 along with the results of the other research strategies.

6. Summary

This chapter sets out a research design for implementing a case study to assess the public value of regional government. The case study design focused on regional councils' environmental management functions. The research aim of determining whether environmental management role of regional councils is appropriate was structured on a public value framework that breaks institutions into three dimensions: authorising agency, operational feasibility and substantive value. The research was undertaken using published data and surveys of environmental resource management practitioners and stakeholders' perceptions. Interviews with key informants were also undertaken to corroborate and provide context for the analysis of existing data and results from the surveys. Table 5-4 shows the relationship between the elements of the research design and the key dimensions of public value.

Table 5-4: Data sources for assessing public value

Dimension	Indicator	Published Data	Survey
Substantive Value			
Policy outcomes	National environmental quality	X	X
	Regional environmental quality	X	X
	Regional water quality and quantity	X	X
Policy outputs	National plans and policies	X	
	Regional plans and policies	X	
Operational Feasibility			
Organisational Capability	Issue knowledge and expertise		X
	Financial resources	X	
	Leadership		X
Community Capability	Ability for regional community to finance council activities	X	
Institutional Structure	Hierarchy coordinating mechanisms	X	X
	Council functions	X	
	Council budget	X	
Geographic Span	Jurisdictional fit with function	X	X
Authorising Agency			
Representation	Council makeup	X	
	Councillor visibility		X
Public mobilisation	Citizen values	X	
Public participation	Voter turnout at elections	X	
	Number of submissions on draft plans and policies	X	
Leadership	National strategy statements	X	X
	Regional strategy statements	X	X
Multi-layer institutional alignment	National strategies and coordinating mechanisms	X	X

Source: Author

The results obtained using these research strategies are provided in the following two chapters. The results from the official data analysis are reported in chapter 6 and the results from the survey of environmental resource users and managers are reported in chapter 7.

Chapter 6: Evidence of public value of regional management of the environment

1. Introduction

Regional councils supplemented by unitary authorities are New Zealand's major form of democratic regional level institution. As identified in Chapter 3, regional councils have a dominant environmental management role. This chapter overviews the public value of the environmental management undertaken by New Zealand's 16 regional and unitary councils. It is structured in three parts, following the public value framework of authorising agency, outcomes and operational ability. The investigation draws on a range of published data and is supplemented by material yielded from interviews with key informants who have experience of regional level government and environmental management.

2. Authorising agency

Authorising agency refers to the source of an organisation's policy direction and their input legitimacy. This section considers the democratic aspect of regional councils that provides the legitimacy for their policy-making by examining public environmental values, representation and public participation, and their decision-making for environmental management.

2.1 Environmental values

An attempt was made to identify regional differences in public attitudes towards the environment to establish whether councils had different public mandates for environmental management of their regions. All territorial and regional councils are required to facilitate the identification of 'community outcomes' as part of their ten-year strategic planning in their LTCCPs. Several national surveys have also been undertaken (Gendall and Healey, 2001; Hughey, 2004).

Gendall and Healey found that:

New Zealanders are concerned about the environment and believe that it is endangered by pollution of waterways, air pollution from cars and industry, waste produced by households and businesses, and by the 'greenhouse' effect. However, there is a fairly widespread belief that New Zealand's 'clean, green' image is a myth and that our small population is the only reason we are cleaner than other countries (Gendall and Healey, 2001: 4).

They found that about two-thirds of respondents thought the environment was seriously endangered by pollution of rivers, lakes and streams (68%) although only 46% of respondents considered pesticides and chemicals used in farming were a serious threat to the environment¹⁶. Most respondents (82%) agreed that households and businesses produced too much waste. Many New Zealanders (42%) believed that New Zealand's

¹⁶ This survey was part of an ongoing international survey of values, and it appears New Zealand respondents were at least for some questions taking a global view as two thirds of respondents thought the environment was endangered by industrial air pollution (66%) and nuclear power stations (64%), the first does not have a significant presence in New Zealand, while there are no nuclear power stations in New Zealand.

clean, green image is a myth, and most (67%) agreed that New Zealand is cleaner than other countries only because of our small population.

Hughey *et al.* (2004) found in their survey of two thousand New Zealanders (43% response rate) found New Zealanders considered the state and management of the environment to be good and better than in other developed countries and that native forest and bush was rated to be in the best state of the 11 components of the environment studied. Rivers and lakes, wetlands and marine fisheries were perceived to be in the worst state, but were still rated highly. Rivers and lakes, marine fisheries, and air quality were judged to be the least well managed of the 11 components of the environment studied, while management of farm effluent and runoff was perceived to be the least well managed of the environmental problems investigated. They found a 96% increase from 2002, in the percentage of respondents who judged that water pollution was the most important issue; however, they found regional variation was a key factor in responses, especially regarding perceptions of freshwater quality and management¹⁷.

The regional councils' community outcomes were examined to identify environmental outcomes. Reflecting on experiences of territorial authorities, Victoria University researchers (Local Futures, 2006) noted most community outcomes are generic, seeking to touch base on all four (social, economic, environmental and cultural) community well-beings as outlined in the Act and affirming:

a Maslowian goal along the lines of "safe and healthy communities experiencing economic growth and prosperity in a clean and pleasant environment" (p.78).

The regional councils' 2006-16 LTCCPs largely show a similar generic public desire for a 'clean and pleasant environment', with anodyne statements such as:

A Clean and Healthy Environment: an environment that is appreciated, protected and sustained for future generations (Hawke's Bay Regional Council),

without further elaboration. For example, Northland region's community outcomes were identified as:

1. Northland residents are safe and healthy
2. Northland's infrastructure is developed in a sustainable way
3. Northland's natural environment is sustainably managed
4. Northland is prosperous
5. Northland residents are educated and skilled
6. Northland has cohesive communities
7. Northland retains and enhances its regional identity
8. Northland residents have access to recreational and leisure opportunities (NRC, 2006).

Its environmental community outcome (number 3) is further elaborated on, but still remains generic and applicable to most parts of New Zealand:

- Protect the natural character of the region's coastline and beaches.
- Northland communities have access to the natural environment in a sustainable way.

¹⁷ Note that this survey was undertaken soon after the Fish and Game Council launched its national 'Dirty Dairying' Campaign.

- Effective pollution control and recycling are endorsed and promoted.
- Communities, in partnership with local / central government, take responsibility for ensuring that the natural biodiversity, land, soil, water, air, coast, features and landscape are sustainably managed and enhanced for future generations.
- There is sustainable use, development and protection where appropriate of natural resources.
- Development is sustainably managed, considering impacts on the natural environment.

Within that, some priorities are identified, based on a public opinion survey:

- Protect the natural character of the region's coastline 84%
- Promote effective recycling and pollution control 79%
- Control pests and weeds 79%
- Protect our native bush and wildlife 77%

The councils identified their outcomes by environmental media, including air, land, water, the coast, biodiversity and waste, indicating a commonality across regions (Table 6-1).

Table 6-1: Environmental Community Outcomes identified in 2006 LTCCPs

	Maori	Coast	Land	Water	Air	Bio-diversity	Pests	Waste	Energy	Built environment	Access to natural environment	Natural features	Sustainable Development
Northland		X	X	X	X	X					X	X	X
Auckland	X					X			X	X			
Waikato	X	X	X	X	X	X		X	X			X	X
Bay of Plenty	X	X		X		X		X		X		X	X
Hawke's Bay													X
Taranaki		X	X	X	X	X	X			X			X
Manawatu-Wanganui													
Wellington			X	X	X	X		X				X	
Canterbury		X	X	X	X	X							X
West Coast													
Otago													X
Southland													

Note: Manawatu-Wanganui did not identify outcomes for its region. West Coast and Hawke's Bay outcomes remained generic, while Otago restated the RMA: 'providing access to resources while protecting their potential and mitigating the effects of their use.'

Source: Individual council LTCCPs.

Councils positioned themselves differently regarding their scope of their outcomes. Many councils restricted community outcomes to existing regional council functions, indicating they (and their communities) position the councils as specialist ad-hoc local authorities, rather than more widely scoped regional government.

Regional councils, with a few exceptions, were unwilling to identify explicitly agriculture as a major environmental pressure on the environment. Perhaps the most incisive observation was by the Waikato Regional Council:

Of all the environmental challenges facing New Zealand, the greatest is developing an environmentally, economically and socially sustainable agriculture industry. Agriculture is the main driving force behind our regional economy, and a key factor in the strong regional growth we have enjoyed in recent years. However, with the

intensification of agriculture and the pressure for higher productivity, it is increasingly important that agriculture is undertaken in a sustainable way. Unless this happens, we run the risk of destroying the natural capital that creates our region's prosperity (Environment Waikato, 2006: 24).

Southland Regional Council identified in the context of farming that:

the apparently limitless availability of clean water has been taken for granted for so long, that some sections of the community are having difficulty accepting that neither quantity nor quality can be assured any more. Even more challenging is the concept that some long-standing practices, such as permitting livestock to have unrestricted access to waterways, can no longer be sustained (Southland Regional Council, 2006).

2.2 Representation

Although regional councillors are elected, disparities in representation can be seen to occur in councillor composition between and within councils. Regional councils range from 6 elected councillors (West Coast) to 14, with a median of 12 councillors, while unitary councils have 11-13 councillors. This results in widely different ratios of councillors to population in the different councils (Table 6-2).

Table 6-2: Electors per member, 1989-2004

	1989	1992	1995	1998	2001	2004
Regional councils	10,852	16,536	17,536	18,097	18,543	18,933
City councils	4,809	5,136	5,601	6,315	6,622	7,570
District councils	1,304	1,481	1,577	1,664	1,745	1,831
District health boards	-	-	-	-	17,433	18,674

Source: DIA, 2004: 22.

Unitary authority councillors each represent on average 3,500 people (median: 3,380); regional councillors represent on average 26,000 people (median: 18,300), but range from 5,100 (West Coast) to 101,300 (Auckland) – a difference of nearly twenty times depending on council. The unitary authority ratios suggest that councillors have much closer proximity to their citizens than their regional counterparts.

Electoral imbalance also occurs, which results in skewing in favour of rural parts of some regions. For example, after the 2004 local body elections, the MWRC should have had a fourth urban seat, Palmerston North, to reflect population distribution. In the Waikato, Hamilton City was half a seat short, while rural Wairarapa sub-region was over-represented. These discrepancies however were redressed in 2007 by the Local Government Commission for the 2007 local government elections. On the other hand, urban members dominate in regions with large cities and relatively sparse rural populations. For example, 11 of the 14 Canterbury regional councillors represent people living within the boundaries of Christchurch City, despite the region covering ten territorial authorities.

One respondent advised of differences in citizen contact with their councillors; an urban councillor on one of the city-region councils claimed she had not been telephoned by constituents in two and a half years, while her colleagues representing rural constituencies claimed they were contacted ten to twelve times a week.

2.2.1 Council composition

An analysis of councillor biographies published in council 2006-16 LTCCPs and websites, supplemented by telephone calls to senior staff in the different councils where data were not published, indicate a rural dominance on councils (Table 6-3).

Table 6-3: Councillors' backgrounds, March, 2006

Region	No. Councillors	Farmers (%)	Primary sector / workforce (%)	TA Councillors (%)	Women councillors (%)	significant previous positions*
Northland	8	63	15.8	63	12.5	2 mayors
Auckland	13	0	2.4	23	46.2	2 mayors; Dep. mayor
Waikato	13	69	14.1	38	23.0	3 mayors
Bay of Plenty	14	14	10.4	21	7.1	-
Taranaki	10	50	16.6	20	10.0	2 Mayors; 1 MP
Hawke's Bay	9	67	14.2	11	33.3	-
Manawatu-Wanganui	11	45	11.9	55	27.3	4 mayors
Wellington	13	8	2.7	30	38.5	3 MPs; 2 senior public servants
West Coast	6	50	14.3	17	0	
Canterbury	14	38	7.6	7	35.7	3 MPs
Otago	12	45	9.5	25	16.6	1 Mayor; 1 Dep. Mayor
Southland	11	46	17.9	27	18.2	
Total	134	38	7.9	26.8	23.1	
Gisborne	14	36	17.6	100	28.6	
Tasman	14	50	23.0	100	21.4	
Nelson	13	0	5.9	100	23.1	
Marlborough	14	21	16.9	100	21.4	

* Councillors may not sit on both a regional and territorial authority at the same time.

Source: various.

Some 51 (38%) of the 134 regional councillors excluding the unitary authorities, in 2007 are farmers. This is nearly double the 20% of all local government elected members (Shi, 2005). Thirty-six (27%) were previously elected members of territorial authorities including 18 former mayors. Agricultural and fisheries workers made up only 7.9% of the national workforce (2001 Census) by comparison. As a consequence farmers make up at least half the total number of elected representatives on five of the twelve regional councils.

Thirty-one (23%) regional councillors are women compared to 27% of all local government councillors. However, this average hides the difference between provincial and urban regional councils. A third of regional councils have a single or no woman elected. Only the biggest urban councils (Auckland, Wellington, and Canterbury) and Hawke's Bay have a third or more women on council.

Councillors also have a strong district council background. Although legislation prevents councillors sitting simultaneously on territorial and regional councils, many have transferred (or colloquially, 'retired') from territorial to regional councils. Former mayors and deputy mayors sit on half of regional councils. This may indicate connections and allegiances with territorial authorities that in provincial regions at least are responsible for many of the environmental impacts other than farming, such as discharges from landfills, storm and waste water treatment facilities.

Provincial councils thus have an obvious rural dominance and focus. One respondent advised that their council had a 'regional round-robin' at the start of its monthly meetings where councillors spoke on their activities and of issues in their constituencies in the previous month. For most councillors this was a summary of local farming news and was known by the staff at the time as the 'regional Federated Farmers'. Manawatu-Wanganui Regional Council clearly made a conscious effort to appeal to the rural sector in its 2006-16 LTCCP by including photographs of both the chairman and chief executive dressed in farming attire, leaning against a farm paddock gate.

2.2.2 Decision-making

Councillors are required to make resource management and strategic policy decisions when formulating and approving their council annual plans and 10-year Long Term Community Council Plans under the Local Government Act 2002. The value of these decisions is still being evaluated by the Local Futures Research Project¹⁸, though preliminary results have not shown them to be particularly strategic (Reid, *et al.*, 2006).

With regard to environmental management, one of the arguments for devolved decision-making under the RMA was to provide for local knowledge and input into and accountability for resource management decisions. Councillors are responsible for decisions adopting regional plans and policy statements and for resource consents. Data are not available for hearings committees for regional plans, though practice is known to vary considerably. However, a mixed composition of councillors and independent commissioners was the norm according to respondents. Resource consent application decisions form the mainstay of council decisions and these are seen as politically important given public concerns about holding up development due to slow processing of applications.

The vast majority of regional council resource consent decisions (on average 91%) are made by council officers under delegated authority (Table 6-4). This is higher than for territorial and considerably higher than unitary authorities (53%) which have opted to use councillors as commissioners. Of the remainder, most (5%) utilise independent commissioners to some extent, either sitting alone, or in conjunction with councillors.

Key informants who have served as independent commissioners on mixed panels advised that councillor contribution to hearings and deliberations is very mixed. Typically one or two councillors were seen to have professional or other expertise, but most were seen to be "out of their depth" and relied heavily on the independent commissioners and supporting council staff for guidance. The limited ability of most councillors to understand and respond to the technical complexities of environmental management was marked. This is apparent at one level through the very high level of resource management consents hearings heard by commissioners or processed by staff. Often on joint hearings the councillors defer to appointed hearing commissioner on all technical matters. A minority of councillors through professional or academic careers do bring technical expertise and are able to contribute. As one informant who acts as a hearing commissioner commented, "if Councillor [name] falls over... resource management in this region is truly stuffed." Rather, informed decision-making by people able to comprehend the technical issues was seen to be limited.

¹⁸ www.localfutures.ac.nz

Table 6-4: Percentage of resource consent decisions made by decision-maker and authority type, 1999-2006

Local authority type	Year	Regional (%)	Territorial (%)	Unitary (%)	All (%)
Local authority officers	99/00 (n=86)	90	84	54	83
	01/02 (n=86)	91	85	53	84
	03/04 (n=85)	90	90	54	87
	05/06 (n=84)	93	89	50	87
Independent commissioners	99/00 (n=86)	1	8	1	1
	01/02 (n=86)	2	8	1	1
	03/04 (n=85)	1	5	1	1
	05/06 (n=84)	1	3	1	3
Councillors acting as commissioners	99/00 (n=86)	1	8	39	10
	01/02 (n=86)	1	8	29	8
	03/04 (n=85)	1	5	41	7
	05/06 (n=84)	<0.5	3	45	5
Councillors as part of a hearings panel	99/00 (n=86)	6	6	6	6
	01/02 (n=86)	4	5	5	5
	03/04 (n=85)	6	4	4	4
	05/06 (n=84)	4	3	5	3
Other (e.g. mixed panel of councillors)	99/00 (n=86)	2	1	1	1
	01/02 (n=86)	2	<0.5	12	2
	03/04 (n=85)	2	<0.5	0	<1
	05/06 (n=84)	2	1	0	1

Source: MfE, 2007: 14.

While the proportion of decisions made by councillor-only panels that are appealed compared to other panels would appear to provide a measure of their relative competence, informants advised that such a comparison would not be meaningful as councillors with less capability but for whatever reason are put on panels are often put on simple hearings where decisions are largely *pro forma* and have little chance of bad decisions being made.

In any case, the ability for councillors to make decisions has been widely recognised to be compromised in any case, by appeal provisions under the RMA, resulting in contentious decisions being invariably referred to the Environment Court and thus out of local control (Salmon, 2007). The courts have refused to rule on policy matters, referring them back to the councils, but the cumulative effect of individual resource use consents has been seen to dictate macro-policy by attrition. The result has been a depoliticised decision-making process, where political values are nullified by legal arguments. The value of democratically elected representatives sitting on hearings is therefore questionable, given they are perceived generally to have limited technical knowledge, and that the Environment Court provides an accountability mechanism for bureaucratic decision-making in any case.

2.3 Public support and participation

Electoral turnout and submissions on council documents were used as two measures of public support for the democratic institution. Generally there is a public apathy in local government elections, raising questions about local government legitimacy. Regional councils' voter turnout has averaged 50.5% to date, in contrast to national elections which typically range from 80 – 90% or more (Tables 6-5 and 6-6). This is a lower turnout compared to district councils, but higher than city councils and district health boards. Low local government election turnout is not new, identified in Polaschek in the 1950s (1956:

108). Interestingly, similar voter turnouts are recorded for Scandinavian regional governments (Gidlund and Jerneck, 2000), and also for the European Parliament (EP, 2004).

Table 6-5: Local government voter turnout, 1989-2004

Turnout	1989	1992	1995	1998	2001	2004	Average
Regional Councils	56%	52%	48%	53%	49%	45%	50.5%
District Council	67%	61%	59%	61%	57%	51%	59.3%
City Councils	52%	48%	49%	51%	45%	43%	48.0%
District Health Boards	-	-	-	-	50%	46%	48.0%

Source: DIA, 2004: 23.

This apparent apathy is reflected in regional electoral turnout, though some variation exists, with provincial regions having a higher turnout (Table 6-6). This is consistent with turnout for district compared to city councils.

Table 6-6: Residential voter turnout, 2004 elections, by region

Regional Council	Residential turnout
Auckland	42%
Bay of Plenty	45%
Canterbury	43%
Hawke's Bay	47%
Manawatu	54%
Northland	49%
Otago	56%
Southland	56%
Taranaki	55%
Waikato	45%
Wellington	43%
West Coast	68%
Total	45%

Source: (DIA, 2004: 24).

Submissions were found to be very low for local government overall, and at the regional level at least, contingent upon specific issues. Indeed, in its submission to the recent Local Government Rates Inquiry, Northland Regional Council showed the disproportionate effect a single mobilising issue can have on annual plan/LTCCP submissions – in this case a controversial proposal for a regional multi-events stadium increased submissions by a factor of a hundred (Table 6-7) (NRC, 2007). Accordingly, this measure is not explored further, other than to note that there appears generally a very low level of public interest in local government administration, except when specific issues arise.

Table 6-7: Submissions on Northland Regional Council's LTCCPs and Annual Plans

Year	Number of Submitters	Heard in Person
2001/2002	56	0
2002/2003	45	12
2003/2004	66	34
2004/2014 LTCCP ^[1]	250	41
2005/2006 ^[2]	5,091	225
2006/2016 LTCCP ^[3]	535	127

Source: NRC, 2007.

[1] Introduction of LTCCP

[2] This is the year council floated a controversial proposal to fund a regional multi-events stadium. This was a high profile proposal that attracted considerable media attention. Most of the submitters dealt with this issue.

[3] Residual stadium issues.

2.4 Multi-level leadership

Whereas capability identified the mechanisms to align and coordinate institutions vertically through legislation, strategies and policies, multi-level leadership explores the preparedness of national government to apply those mechanisms.

As identified in the review of information on environmental outcomes, there is a dearth of comprehensive data on environmental management performance or environmental quality. This suggests a failure at the national level of leadership. There is also a widespread criticism of a lack of national policy and guidance to regional councils by central government. This has become a recurrent theme raised by speakers and comments from participants at recent conferences on environmental management¹⁹ and has been noted by various researchers and commentators (e.g. Parliamentary Commissioner for the Environment and the Office of the Auditor-General, 1999; Ericksen *et al.*, 2003; Young, 2001, 2007; Sumits and Morrison, 2001; Oram, 2007). Critics point out that the only National Policy Statement prepared under the Resource Management Act was the National Coastal Management Policy Statement, the preparation of which was mandatory under the legislation. The proposed National Biodiversity Policy Statement has been under preparation since the mid 1990s, while the proposed Oceans policy initiated in 2001 has also stalled. The National Sustainable Water Programme of Action has made little headway since it was initiated in 2004, despite results promised for late 2007. Indeed, questions were asked in Parliament after a high-ranking MAF official publicly described it as a "Programme of Inaction" (New Zealand Parliament, 2007). Although the Minister of Agriculture described the comment as a consequence of the official's "bad day at the office", key informants supported the officials' statement. The OECD (2007) recommended that the New Zealand government accelerate the establishment of national environmental standards and national policy statements.

The commitment of successive governments to sustainable development had been found wanting (Knight, 2000, 2001; PCE, 2002). Various governments have produced strategies to provide national direction, including the comprehensive *Environment 2010 Strategy* in

¹⁹ *PCE20 Forum: Advancing environmental sustainability*, Parliamentary Commissioner for the Environment, Wellington, 1-2 March 2007 (www.pce.govt.nz.anniversary/forum.shtml); *Beyond the Resource Management Act 1991*, Environmental Defence Society, Auckland, 30-31 May 2007 (www.eds.org.nz); *Northern Lights Conference*, Wellington 21 August, 2007 (www.ecologic.org.nz).

1995 (MfE, 1995), but this was discarded with a change of government in 1999. The Labour-led government's *Sustainable Development for New Zealand Programme of Action* (DPMC, 2003), which concluded in mid-2007, was its response to the 2002 World Summit on Sustainable Development in Johannesburg. However the review report on this programme of action was not made available publicly and the Office of the Auditor General's performance audit report on the implementation of the action plan is noticeably constrained (OAG, 2007).

The OECD country review was very critical of the government's lack of leadership, though couched in more diplomatic terms:

...there remains *room for improvement* in New Zealand's environmental management. The central government has so far provided little statutory guidance in the form of *national standards and policy statements* to local authorities regarding the implementation of the RMA and monitoring of environmental conditions. Recent success in issuing national strategies... is tempered by their non-binding nature, which makes their implementation vulnerable to changes in government. The *Environment 2010 Strategy*, adopted in 1995, was set aside a few years later (OECD, 2007:17) (italics in original).

Several participants at recent academic and practitioner conferences on environmental management have strongly suggested that the reluctance on the part of successive governments to resolve some of the important environmental issues, notably the oceans policy work and much of the water allocation policy, stems from a strong political reluctance to address underlying resource ownership of the resources, necessary to develop policy. They suggested that ownership would likely be contested under the Treaty of Waitangi by Maori, resulting in high political fallout and hence to be avoided. One key informant, in defence of national government, made the point that the outstanding environmental issues are difficult to resolve. Several interviewees noted central government does not have a single view on issues, as the different sector-focused ministries (e.g. agriculture, economic development, environment and conservation) have differences of opinion between goals and objectives leading to conflicting views on policy issues such as water management. It is hard to escape the conclusion that despite the rhetoric, central government has shown little leadership and national direction to align and coordinate sub-national environmental policy.

However, this view overlooks the development and adoption of guidelines and technical advice, both by the MfE and the industry, many of which have been adopted by regional councils in their preparation of regional plans, or required as resource consent conditions, resulting in *de facto* standards. The MfE website (www.mfe.govt.nz/publications) lists 139 best practice guides, guidelines and technical reports, as well as several non-statutory strategies covering waste, hazardous substances, water quality, air quality, biodiversity, energy, urban design, Treaty of Waitangi and iwi issues. Most are commissioned from experts and are beyond the capability of individual councils to develop.

Additionally, the private sector has developed sector-specific guidelines and codes of practice intended to provide a measure of self-regulation to avoid government-imposed regulation, and to distance them from cowboy operators. Examples include the Logging Industry Research Organisation's forestry guidelines (Visser and Smith, 1993) and the New Zealand Fertiliser Manufacturers Research Association's code of practice for fertiliser use (1992). These, too, have been adopted in regional council regional plans and resource consent conditions.

Perhaps the most significant multi-level initiative has been the Clean Streams and Dairying Accord (Fonterra, 2003), a national strategy setting out five targets for farmers to meet. This was developed in consultation between national government, regional councils and Fonterra Co-operative. The targets include 100% immediate complete compliance with regional council regional rules and resource consent conditions.

3. Operational feasibility

Operational feasibility is the institutional arrangements, together with the necessary resources to undertake activities determined by the authorising agency to deliver outputs. Community and organisation capability were examined, together with institutional structure and geographic span of environmental issues compared to regional jurisdictions. It does not include organisational administration arrangements.

3.1 Community capability

Regional characteristics are important in determining both demands made on councils for services and on the ability of councils to resource those services. All things equal, higher populations and population densities provide a greater rating base for financing activities, while the wealth of the inhabitants can be expected to influence the willingness to pay for services and the scope of services provided.

At first glance, New Zealand's 16 regions are difficult to summarise; diversity rather than similarity appears the common feature. This diversity is most obvious for council populations and land areas, but is also apparent in socioeconomic and demographic conditions.

3.1.1 Demographic character

Demographic variation is extreme between regions; their populations range from 30,600 to 1.3 million in population, while population density also varies, from the densely populated conurbation of Auckland to large and sparsely populated regions such as Southland. This difference is significant; Auckland alone accounts for a third of the country's population, while over a half (57%) of New Zealanders live in only three regions. Although these three regions represent a fifth of the country's land area, this statistic is misleading as most people live only in the three cities, Auckland, Wellington and Christchurch, within those regions (Figure 6-1). The metropolitan and city regions of Auckland, Nelson and Wellington are distinguished from a set of core provincial regions. Southland, with 54% of its land in National Park, is within its populated part more properly compared to Otago. West Coast with its low population and large area, much of which consists of wilderness National Park, is clearly anomalous (1.3 people/km²) (Figures 6-2 and 6-3).

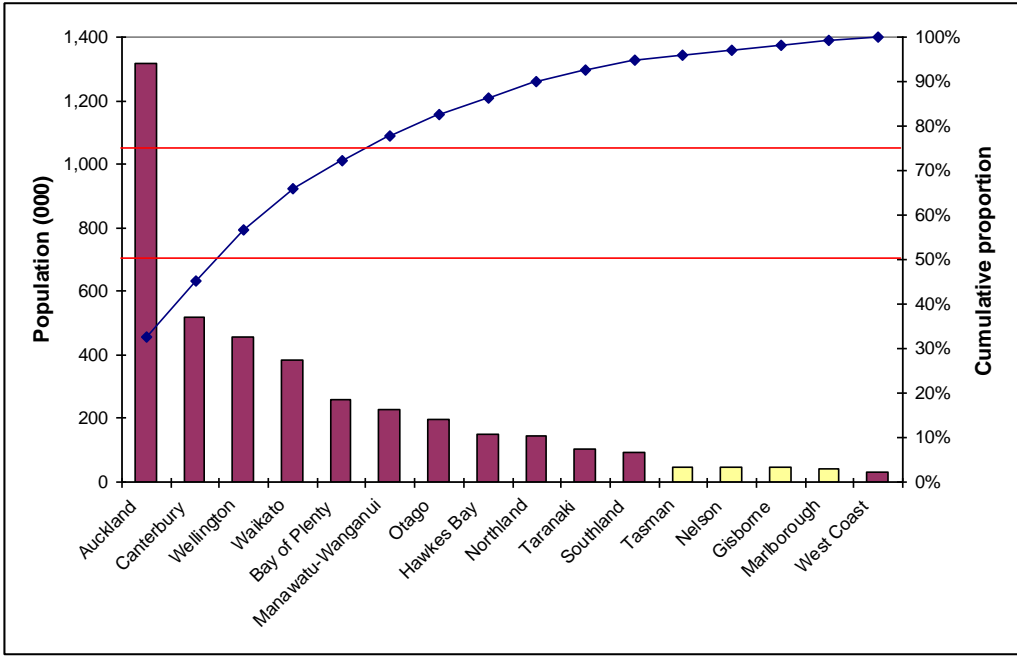


Figure 6-1: Regional authority rank by population (Data: Statistics New Zealand, 2001).

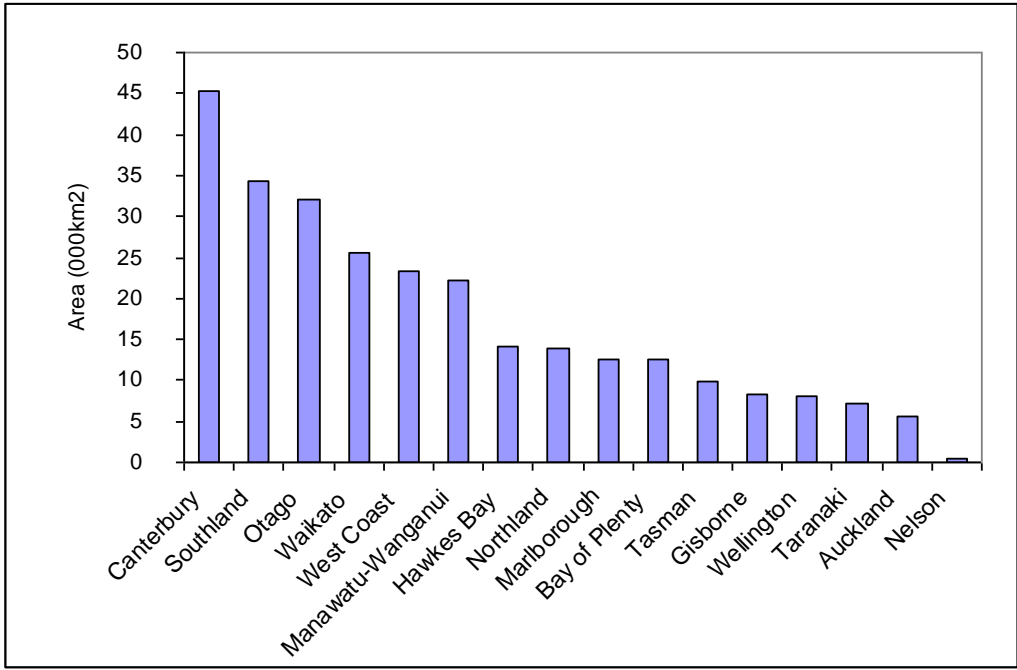


Figure 6-2: Regional authority area (Data: Statistics New Zealand, 2001).

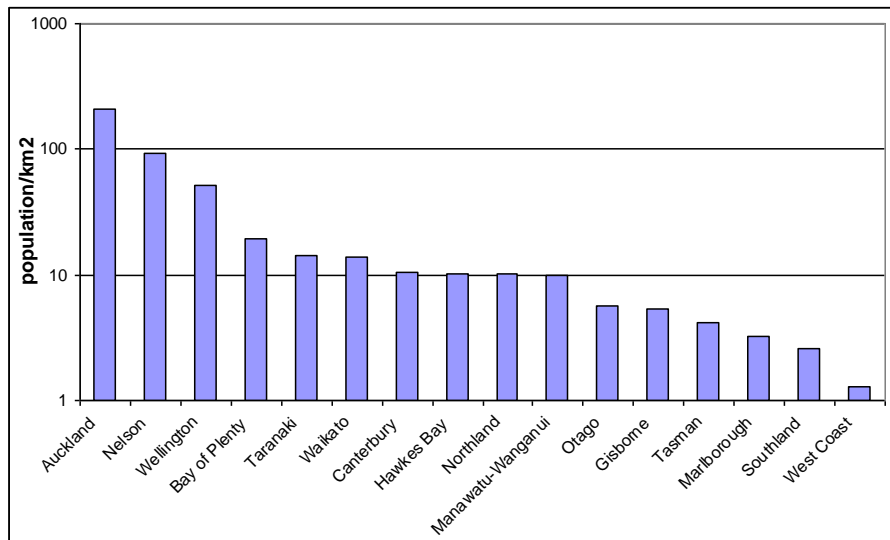


Figure 6-3: Population density of regional authorities (logarithmic axis) (Data: Statistics New Zealand, 2001).

Regions also face different demographic pressures. Tasman, Auckland and Bay of Plenty regions have had, and continue to experience, high growth rates, while another six regions experience lower levels of growth (Figure 6-4). Another six provincial regions face ongoing decline, although preliminary 2007 census data suggest some arrest in the rate compared to previous years. This suggests reduced ability to pay – or a higher burden for the remaining citizens – for services. Growth on the other hand is an environmental pressure driver degrading environmental quality, suggesting additional environmental costs in the growth regions. Further, growth is occurring at a smaller, territorial rather than regional scale, focusing pressures even further.

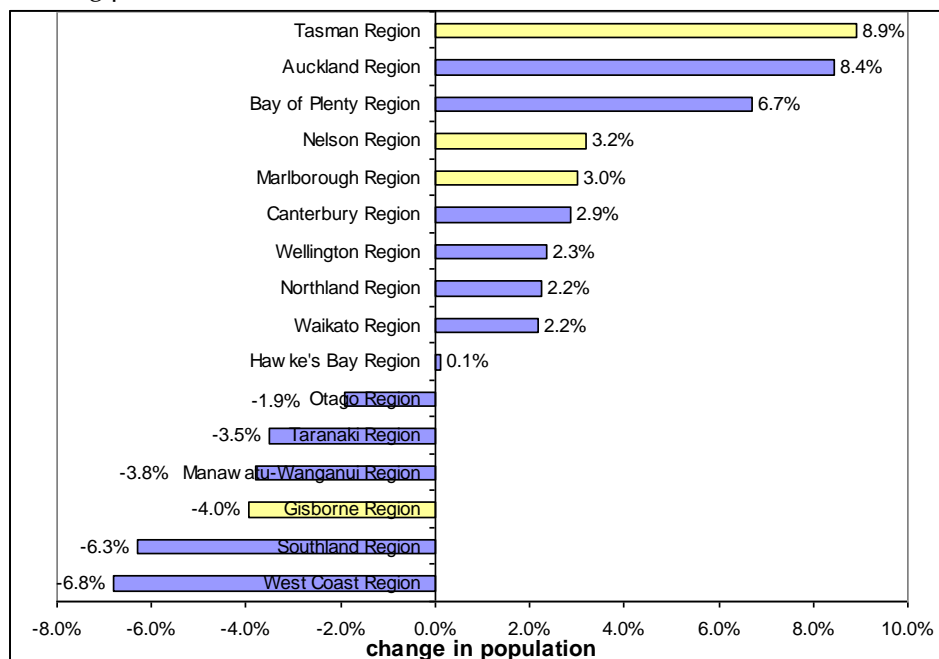


Figure 6-4: Population change by region 1996-2001 (Data: Statistics New Zealand, 2001).

3.1.2 Regional Wealth

The average median income in New Zealand in 2004 was \$18,500. Auckland and Wellington regions are notably better off than the others, while Northland, Gisborne and

the West Coast are least well-off (Figure 6-5), suggesting differences in willingness to pay for council services.

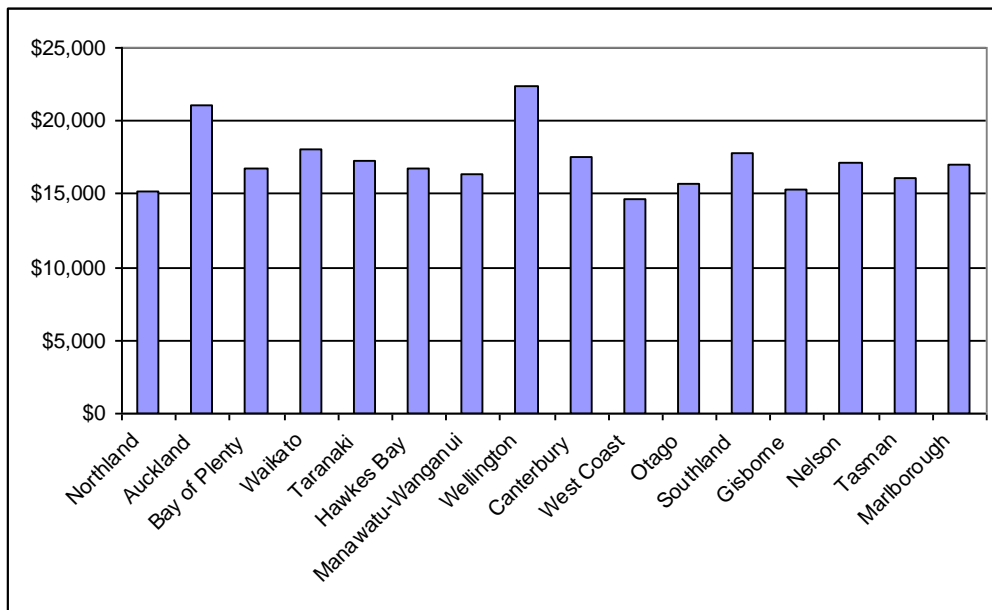


Figure 6-5: Median income 2004 (Data: DIA, 2005).

Economic conditions also vary, though with the demise of the inter-regional input-output economic statistics generated by the former Department of Trade and Industry in the 1980s, comparisons are less easy to make. Gross Domestic Product is a recognised baseline indicator for economic activity, but comprehensive data tracking regional economic activity are not available.

There are no official data on regional production, other than those that appear in Statistics New Zealand's inter-industry tables (last updated 1997). Regional GDP figures are always estimates, derived in one of two ways. One approach is to estimate a region's share of national GDP by apportioning according to current figures on employment in different industries and regions. This makes the simplifying assumption that productivity is the same in all regions, but still sensitive to changes in sectoral regional activity. The figures provided use NZIER's regional estimates (March 2005), which show income variability between regions (Figure 6-6).

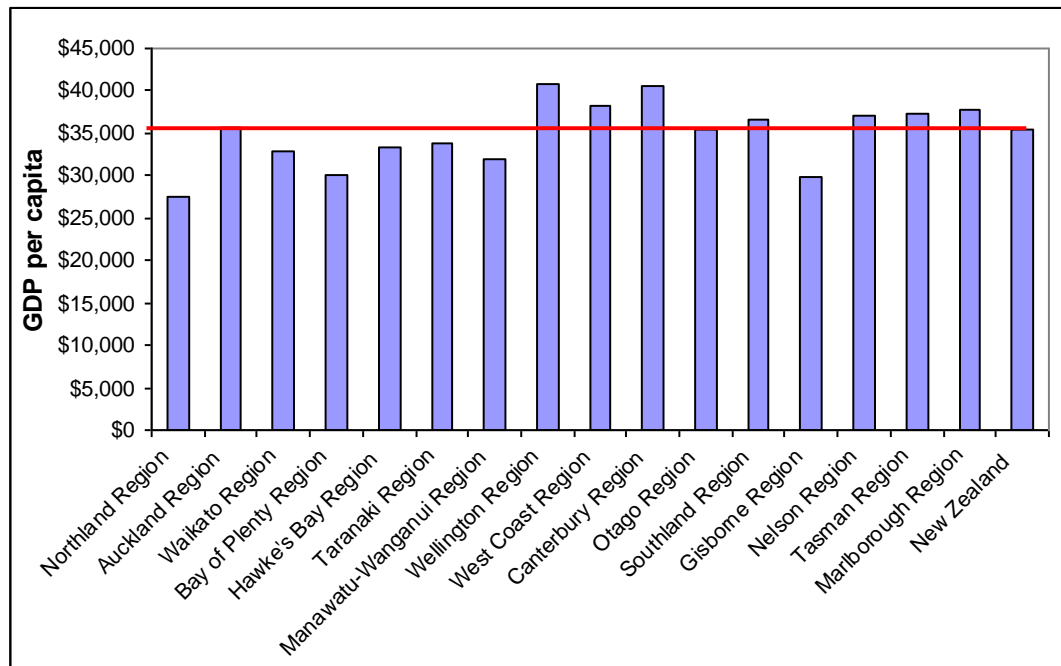


Figure 6-6: Nominal per capita GDP by region, 2004 (Data: NZIER, 2005).

3.1.3 Regional comparisons

Initial observations suggest there is no 'typical' region. A multidimensional analysis (Figure 6-7) shows Auckland, Wellington and Canterbury Regional Councils as quite different from the remaining regions. These statistics raise questions about assumptions for sub-national government. The concentration of people in Auckland with a third of the population, three regions generating two-thirds of national GDP and with some three-quarters of all population living within five regions suggests a conflation of metro-region and national interest. The political adage 'Auckland decides [national] elections' merely reflects the reality that a third of all electorates (20 of 60) are in the Auckland region and that the highest concentration of voters resides there, determining the party vote as well. Canterbury, the next most politically dense region has only seven electorates and two part electorates, while most other regions have three or less; politically, Auckland is New Zealand.

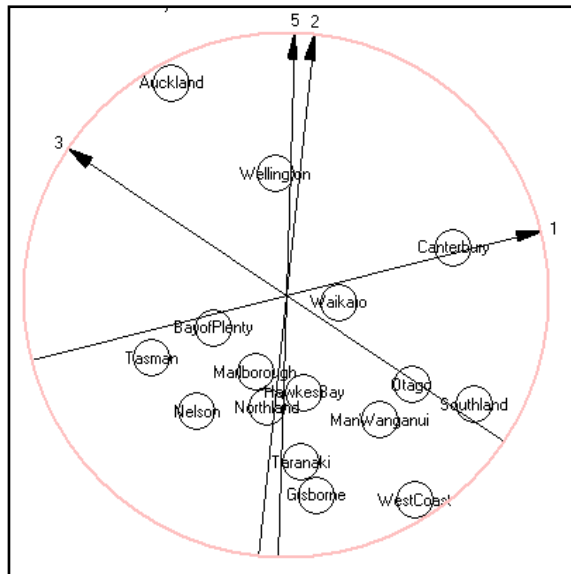


Figure 6-7: Similarity between regions

Note: Multidimensional-scaling representation in two dimensions of similarity between regions using standardised data for variables: land area (1), population (2), population growth (3), and median income (5). (Ethnicity was not significant.) The closer the data points are to each other, the more similar they are.

It can be argued that rather than 16 regions, New Zealand could be better typed as three: metro (Auckland), city-regions, and the remaining provincial regions, each with its own identity, constituency and issues. First and foremost New Zealand is a single-pole economy, dominated by Auckland. This City dominates the economy and has a character and issues very unlike the rest of the country. The second regional group are the large city-regions of Wellington, Christchurch-Canterbury and Hamilton-Waikato. The third regional group is heartland provincial New Zealand. Provincial New Zealand can be characterised as rurally focused, relatively sparsely populated and less well-off than the other two Region groups.

3.2 Organisational capability

Regional councils' organisational capability was also reviewed, examining their functional span, as well as their resourcing. These data were derived largely from the councils' 2006-16 LTCCPs.

3.2.1 Council activities

Regional councils were established with a limited task-span in 1989, with a strong environmental focus, reflecting existing catchment management and pest control functions they inherited from the catchment boards and noxious plants and animal pests boards, and in anticipation of the Resource Management Act that was predicated on regional administration. They had also inherited public transport and civil defence management functions from united councils. Individual regional councils had other functions reflecting existing regional functions; Wellington was responsible for water supply while Auckland inherited a network of regional parks and reserves. Councils remained constrained in the functions they could undertake by the 1991 Cooper review that underscored the *ultra vires* principle (see Chapter 3). Taranaki Regional Council's effort to rate for and build a regional sports stadium required special legislation and was atypical. The LGA 2002 largely removed the *vires* constraint and gave, subject to conditions, powers of general competence to regional councils.

So far regional councils have largely sought to confirm their environmental management functional primacy. Wellington Regional Council's regional economic initiative in 2006 can be seen as unusual, rather it appears that many councils have determined to 'stick to the knitting'. Hawke's Bay Regional Council, for example, distinguishes the differences between regional and territorial authorities:

the Regional Council concentrates on the 'natural environment' - water, air, land, coastal - with a long-term view to make sure these are used sustainably, and are just as available and just as good (if not better) in the future as they are today. City and district councils concentrate on the 'built environment' and deliver services – such as drinking water, sewage disposal, rubbish disposal, roading networks, swimming pools, libraries and parks - to their local communities (HBRC, 2007).

This environmental focus is evidenced both in their organisational mission statements and also in the brand-names many have adopted. A survey of all the 16 councils' mission statements shows that four explicitly identify environmental management and improvement, while another four identify natural resource management as their organisations' missions. Another two emphasise sustainable management (Table 6-8). These reflect a focus given by the RMA that promotes sustainable natural and physical resource management. Only four take a broader 'local government' stance, recognising a wider social cultural and economic wellbeing under the LGA 2002. Three of these are unitary authorities, which, as territorial authorities have always had a wider focus (chapter 3). The other, Auckland Regional Council, is alone in making well-being explicit, though the other urban councils, with their sustainable development missions are also consistent with the LGA 2002.

Table 6-8: Council mission statements

Theme	Council	Mission Statement (core element)
Environment	Northland	to manage and enhance its environment in a sustainable manner
	Bay of Plenty	working with our communities for a better environment
	Manawatu-Wanganui	enhance environmental heritage while fostering economic opportunities and meeting social and cultural aspirations
	West Coast	sustainably manage the environment
Natural resource management	Waikato	manage the sustainable use of our region's resources
	Taranaki	natural resources are sustainably managed
	Otago	sustainable development and enhancement of Otago's resources
	Southland	managing our natural resources
Community wellbeing	Auckland	to achieve social, economic, cultural and environmental well-being
	Gisborne	manage and enhance the district's physical, social, cultural and economic wellbeing
	Tasman	To enhance community wellbeing and quality of life
	Marlborough	Enabling social and economic development in balance with environmental and community needs
Sustainable Development	Wellington	a sustainable region
	Canterbury	sustainable environment and sustainable communities
No statement	Nelson	
	Hawke's Bay	vision is for a region that develops and prospers within a clean and healthy environment

Source: Councils' 2006 LTCCPs and websites.

Half of the regional councils have chosen to adopt brand-names (Table 6-9), led by the Waikato Regional Council in 1993. Their adoption was largely intended to distance themselves from the negative connotations associated with 'council' that they had identified in their public opinion surveys and to reduce confusion with the district councils. Also, the council saw the need to 'explain the regional council's role to its customers, the ratepayers'

(horizons.mw, 1999:39). Wellington Regional Council's brand-name, like Manawatu-Wanganui Regional Council's, was to widen the otherwise specific geographic connotations of the names in order to appeal to its wider regional community.

Table 6-9: Regional council trading names

Trading Name	Official Name
Environment Canterbury (ECAN)	Canterbury Regional Council
Environment Waikato	Waikato Regional Council
Environment Bay of Plenty	Bay of Plenty Regional Council
Environment Southland	Southland Regional Council
Horizons Regional Council	Manawatu-Wanganui Regional Council
Greater Wellington Regional Council	Wellington Regional Council

Note: The Manawatu-Wanganui Regional Council adopted the brand-name *horizons.mw* in 1999 and replaced it with *Horizons Regional Council* in 2004.

This has been seen as a successful move by some councils; the departing chief executive of Southland Regional Council, Lindsay McKenzie, said the decision to rebrand the Southland Regional Council as "Environment Southland" had been a critical step in winning public support for the council's activities:

It helped us set a new, clear vision of what we should be achieving, and that in turn has enabled us to define our current strategic goal, which is to improve water quality significantly by reducing non-point source pollution by 2015 (McKenzie, 2007).

This move has clearly situated the four "Environment" councils as environmental management agencies, despite all regional councils having other functions, such as emergency management and public transport (chapter 3). It has arguably also boxed them in, should they want to expand their range of functions under the LGA 2002.

Perhaps the best way to determine what regional councils do, as opposed to what they say, is to examine what they spend their money on, distinguishing between capital expenditure (Capex) and operational expenditure (Opex). Although local authorities are required to publish both annual plans and annual reports detailing their financial commitments, they are not required to follow any specific format. This makes direct comparisons difficult. Councils also differed in how they accounted for overheads and depreciation; some spread some or all of these costs across outputs, others relate them to specific outputs, while others treat them as line items. These costs however, form a relatively small component of the total budget and do not affect overall magnitudes of expenditure.

Capex is a lumpy expense and forms a very small part of regional council annual budgets, underlining their regulatory focus. This is very apparent when the budgeted Capex of regional and unitary authorities, which have territorial authority functions to provide community infrastructure, are compared (Figure 6-8). On average, regional councils budgeted \$6million (\$19 per person), while unitary authorities budgeted \$31million (\$695 per person). This reflects unitary authorities' territorial authority functions for providing community infrastructure, notably roading, sewerage and water supplies, and facilities such as libraries, parks and reserves.

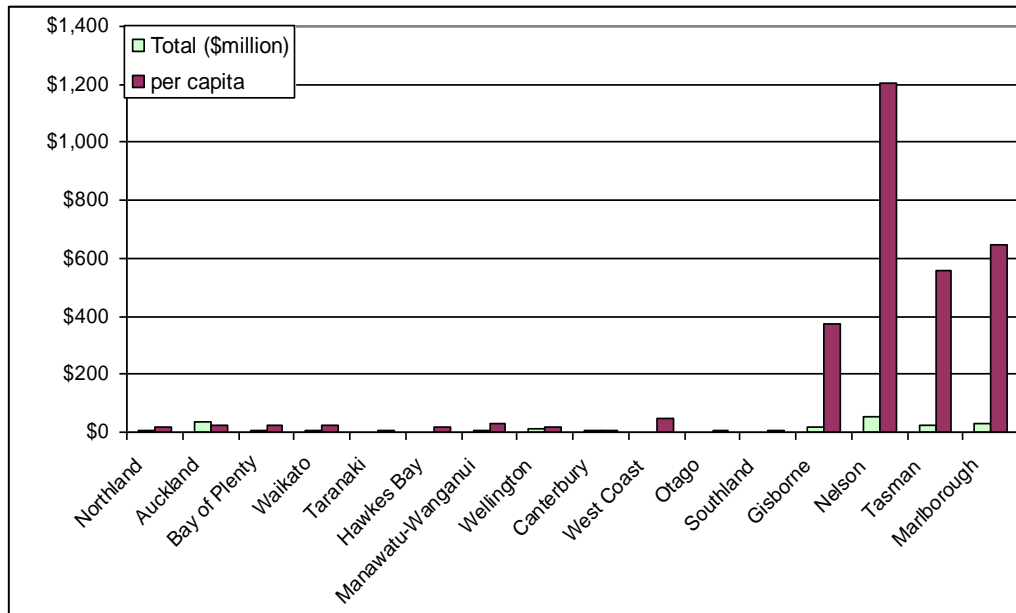


Figure 6-8: Budgeted Capital expenditure by Region 2004-2005 (Data: DIA, 2005).

A similar pattern emerges for operational expenditure (Opex) (Figure 6-9).

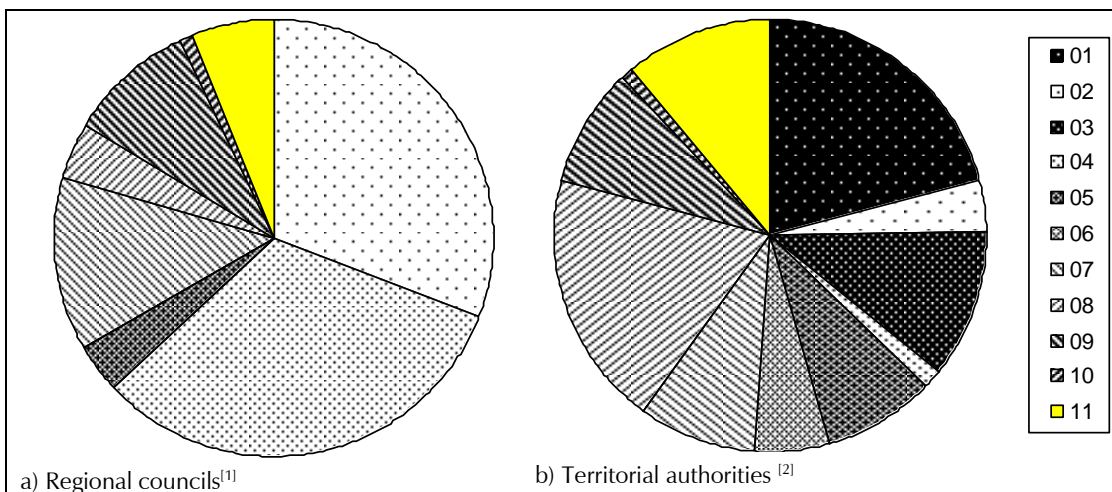


Figure 6-9: Proportion of Regional and Territorial authority operational expenditure by activity 2005-06 (Data: Statistics New Zealand). Activity codes: 01 Roothing, 02 Transport, 03 Waste Water, 04 Environmental Protection, 05 Water Supply, 06 Solid Waste; 07 Regulation planning, 08 Culture, recreation and sport, 09 Governance, 10 Emergency management, 11 Property forestry, agriculture, and other^[3].

Notes:

[1] Corrected regional council data: Statistics New Zealand erroneously ascribes transport expenditure to roading for one council, confirmed by email from council financial manager 1 September, 2007.

[2] Includes the four unitary authorities.

[3] Does not include Auckland Regional Transport Authority (01 Roothing): \$335,960,000.

Regional councils accounted for \$652 million (11.9%) of the total local government sector operational expenditure budget of \$5.4 billion in 2005-6. Nearly two thirds (63%) of regional council Opex is spent on public transport and environmental protection. By

comparison, territorial authorities' Opex is largely spent on roading (20.7), culture, recreation and sport (19.2%) and property, forestry and other (11.2%). While culture, recreation and sport (activity 08) is a major territorial authority activity, only four regional councils committed Opex to this activity; and the major expenditure is by Auckland Regional Council which alone has an extensive regional parks portfolio, inherited from its predecessor. There is also a significant difference between the capital expenditure of the two types of council. Governance costs are however similar at 9.3% of total Opex for regional councils and 9.1% for territorial authorities.

These data show regional and territorial authorities (including unitary authorities) are markedly different in function and character.

3.2.2 Council resources

Regional council financial and resource capability was examined. Although individual councils detail their financial and activity commitments in their annual plans and LTCCPs, no consistent reporting template exists so that the data are not comparable. As well as having different outputs, individual outputs vary by council depending on how overheads and activities are accounted for. Instead, data under a broad set of financial categories published by the Department of Internal Affairs were used.

A wide range of capability exists within the regional authority sector. For example, the number of regional council employees ranges from 50 (West Coast) to 519 (Auckland), with a median of 169 employees. These compare to the unitary authorities, which have 180-234 employees. In order to compare regions, data were normalised by converting them to per head ratios. Preliminary analysis showed that the West Coast and Auckland regional councils are extremes that distort overall comparisons and were removed, as were the unitary authorities which showed strong similarities to each other, but were different to the regional councils. Z-scores for the remaining 10 councils were then calculated (Table 6-10).

Table 6-10: Regional council administration 2004-5 z-scores normalised by per head population

	Density	Employee	Public equity	Op revenue	Opex	Capex	Rate Revenue	Other Revenue
Northland	-0.34	-0.66	-1.03	-0.72	-0.98	0.55	-1.21	0.13
Waikato	-0.06	-0.62	-0.66	-0.18	0.09	0.66	1.08	-1.38
Bay of Plenty	0.31	0.32	-0.39	-0.45	-0.21	1.13	-0.60	-0.07
Hawke's Bay	-0.34	0.41	2.34	0.38	0.23	-0.02	-0.37	0.96
Taranaki	-0.05	0.47	-0.81	-0.85	-0.85	-1.16	-0.82	-0.46
Man-Wanganui	-0.36	1.28	0.25	-0.35	-0.17	1.42	0.46	-1.01
Wellington	2.69	0.88	0.76	2.42	2.29	0.53	1.87	1.78
Canterbury	-0.31	-0.74	-0.45	-0.10	-0.08	-0.87	0.57	-0.74
Otago	-0.66	-2.05	0.43	-0.90	-1.13	-0.92	-1.08	-0.27
Southland	-0.88	0.71	-0.43	0.75	0.81	-1.32	0.10	1.05

Notes: 1. Data: DIA, 20051.

2. Auckland and West Coast regions were excluded to remove bias. See text for explanation.

3. Values greater than 1 standard deviation (i.e., ± 1.00) are in bold.

Of the 10 regional councils, Wellington stands out as an anomaly with its high population density, expenditure and revenue. Some differences exist between the other councils, but

they are essentially similar, mostly within one standard deviation of the council mean. Differences can be explained by specific activities, for example the Manawatu-Wanganui Regional Council's high staff ratio is explained by its ongoing commitment to employing soil conservators and pest control officers.

A correlation between operational expenditure and rate revenue exists (Figure 6-10). This is not surprising, in that councils tend to strike their rates on the basis of operational expenditure, which in any case forms the large part of their budgets. The relationship for individual councils can be expected to differ depending on interest on their investments and reserves used to offset expenditure. The graph however is perhaps more informative in showing a spread along the correlation line.

Perhaps more importantly, the relative clustering of per head expenditure and revenue, while suggesting equitable rating burdens and benefits across the country hides the difference in absolute size of councils. This is significant where particular activities show step-function characteristics where there is the real risk that critical mass will not be achieved. This may be more than hypothetical; two key informants, one a former science manager in one of the smaller councils and the other a current science manager in a larger council, both identified that the scientific functions were below critical mass to be effective. This was also raised by other key informants.

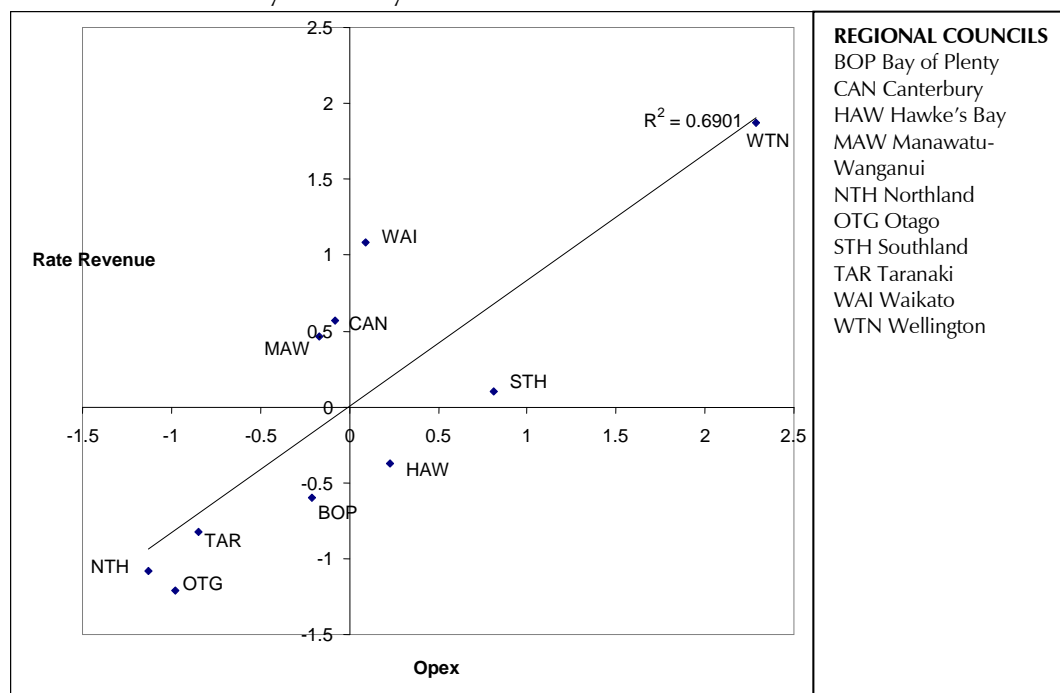


Figure 6-10: Correlation between regional council rate revenue and Opex 2004-5 (Data: DIA, 2005).

Only the larger councils, such as Canterbury, Auckland and Waikato were perceived by informants as having good environmental research capabilities necessary to support fully informed resource management decisions. The lack of research capability is apparently exacerbated by recent growing skills shortages and labour trends. A key informant noted:

the problem of science recruitment and retention in the regions. It [i.e. the distribution of scientists within the regional councils] dilutes science capacity and individual regions' specialists are below critical mass. This is exacerbated by the competitive CRI [Crown Research Institute] model. We see musical chairs as scientists revolve around the regions and individual councils try to build up capacity.

It is not assisted in that New Zealand scientists are not ambitious, and many are not portable.

This skills shortage at staff level is an issue across local and central government, and is the subject of ongoing discussion and workshops by the New Zealand Planning Institute, Society of Local Government Managers and the MfE.

3.3 Institutional arrangements

Regional council management of the environment is mandated by a range of legislation (see Chapter 5). The significant laws are the LGA 2002 which provides for the establishment and administration of the councils and the RMA which gives councils many of their environmental management functions. These laws determine regional councils' task span and shape linkages between different levels of government.

3.3.1 Task span

As discussed in Chapter 5, the regional councils have a wide integrated management functional span, setting and implementing policy for the natural and physical environment under mandates from a variety of legislation. Unlike the previous united councils, they do not have explicit planning functions for wider social, economic or cultural outcomes, although the LGA 2002 provides for involvement in these policy arenas.

Importantly, regional councils do not have many service delivery functions (largely limited to public transport, drainage and flood control), unlike territorial and unitary authorities, nor the control of the use of land except for managing flooding and water quality. This has been seen as a weakness by several key informants, who point to the ability of unitary authorities to have integrated land and water use when considering subdivisions and water harvesting. This point was also made by the PCE and OAG (1999).

The RMA is critical (though not the only environmental legislation regional councils use) in determining what councils can do to achieve environmental outcomes and so impacts on their performance. It is beyond the scope of this research to assess the efficacy of the RMA, but this has been summarised by a well-known journalist and economic commentator:

The effectiveness of the RMA is patchy. In rural areas it can cope with allocation and management of relatively abundant resources. But it cannot cope well when resources, particularly water, are fully allocated. Nor can it cope with cumulative effects. So, for example, the first few consents in an area for subdivisions or water abstraction have minimal effect on the environment. But multiple consents over time can eventually have a cumulative impact. Yet, under the RMA it is not easy for councils to declare a halt to further consents. And in urban areas, the RMA works well for small, local consents. But it is inadequate for dealing with wide area, long-term and strategic issues of urban development (Oram, 2007: 2).

Oram considered that the Act's efficiency has increased through amending legislation and up-skilling staff, but that:

almost all the development effort that has gone into it [the RMA] has focused on improving process rather than refining purpose. Thus, administration of the Act might have become more efficient but the legislation has failed to respond to greater pressures on the environment from, for example, the intensification of some economic activities or greater demands from the public for higher standards and more certain sustainability (p3).

These views were supported by several key informants who saw them as an accurate assessment of the Act's efficacy.

3.3.2 Linkages

Linking mechanisms between central government, regional councils and territorial authorities are needed to coordinate and align policy direction. The RMA is predicated on a hierarchical policy model, with provision for national policy statements, national environmental guidelines and standards, although only the National Coastal Management Policy Statement is mandatory (chapter 4). The national level government is also able to call-in resource consent hearings from sub-national government that it considers to have national interest. Territorial authorities' district and city plans under the RMA are also required not to be inconsistent with regional policy statements and plans.

Hierarchical policy mechanisms do not exist in the LGA 2002 for coordinating and aligning councils' wider social, economic, environmental and cultural well-being policy with national government strategic policy. Rather, national government departments are expected to provide individual departmental views through the community outcomes process undertaken by each of the 75 councils as they consider appropriate. Apart from the ad hoc approach to providing policy input, councils are not required to action community outcomes. This appears to be a significant omission in any effort for the national government to implement any national sustainable development initiative.

Less formal linkages also exist; the national government can and has promulgated national strategies, such as the New Zealand Biodiversity Strategy which sets out New Zealand's response to the Convention on Biological Diversity (DoC and MfE, 1999). Such strategies are not binding and can be set aside at will by the national government, e.g. the *Environment 2010 Strategy* (MfE, 1995), a weakness criticised by the OECD.

As well, coordinating and advisory meetings are held between and within levels. For example, the Ministry for the Environment holds regular meetings with regional council chief executives. At the regional level, chief executives and second tier managers each meet regularly, while professional staff also have technical working groups and forums, such as the SWIG (Surface Water Information Group), and groundwater and waste managers' groups. These groups often invite MfE staff along to some of their meetings, allowing feedback to the national level.

3.3.3 Institutional Culture

Institutional culture was not part of the investigation. However, several key informants suggested that institutional culture, far more than configuration of formal institutions, could explain environmental management performance. One informant, with considerable experience in undertaking OECD country management of the environment reviews, suggested that national culture explained "60-70 percent" of outcomes. Several key informants with central government or consultancy experience similarly suggested regional cultures and organisational cultures played a significant role in determining individual regional council success. One senior official suggested regional differences in performance were determined "80 percent" by culture. Regions that were perceived as cohesive and having a strong identity and without a dominating city, such as Southland, Hawke's Bay and Taranaki, are generally regarded as top-performing regions. Another key informant noted that the cohesiveness of these regions meant that they were ideal candidates for unitary authorities, but there was no need to do so as the regional councils were performing so well.

4. Environmental issue correspondence

An underlying argument for environmental management at the regional level is that this allows for regulatory regimes that address local environmental conditions, rather than applying blanket conditions on resource users. Both integrated resource management and fiscal federalism theories emphasise the need for jurisdictional boundaries to match those of the issues they are responsible for. This section examines firstly whether New Zealand environment is sufficiently diverse to warrant a regional regulatory regimes. Environmental databases were used to measure the level of environmental similarity between regions using river and terrestrial environmental parameters. Secondly, regional councils' LTCCPs were compared to identify whether environmental issues they identify were shared between regions. Finally, agricultural census data (MAF, 2002) were used to examine the major shared region environmental pressure, agriculture.

Elements of New Zealand's environment have been classified previously. Most notably New Zealand was classified by river catchment, which formed the basis for defining catchment board and then regional council boundaries (see Poole, 1983). The Ministry of Works (1974) had also developed a comprehensive land resource inventory. More recently, ecological mapping and classification has been undertaken, defining ecological districts and regions (McEwan, 1987). More recently, the MfE commissioned Crown Research Institutes to prepare two environmental databases to form the basis for terrestrial and river environmental management:

- Landcare Research prepared the Land Environments of New Zealand; and
- The National Institute for Water and Atmosphere (NIWA) prepared the River Environments Classification

Both synthesise accumulated specialist technical knowledge and existing databases built up about these environmental systems in order to provide frameworks for addressing a range of conservation and resource management issues. They therefore can be regarded as state-of-the-art and were used for comparing the environmental similarities between regions here. Their use is further reinforced by the lack of any other nationally consistent and comprehensive data on New Zealand's environment (chapter 5).

4.1 Land environments

LENZ is a geographic classification of New Zealand using existing national and regional databases to generate 'environmental distance' based on climate, slope and soil parameters between geographical points across the whole of the country. These output data were then combined to generate a hierarchical classification of similarity at different scales. Level I contains twenty environments and best fits the national scale.

Of the twenty groups at Level I which have a suggested map scale of 1:2-5,000,000, suitable for national geographic extent, four environmental groups cover half of New Zealand, while eight cover 80% of the total land (Table 6-11, Figure 6-11).

Table 6-11: The eight environments making up 80% of New Zealand's land

Environment Group	Central Hill Country & Volcanic Plateau	South-eastern Hill Country Mountains	Central Mountain	Northern Hill country	Eastern South Island plains	Southern Alps	Northern lowland	Western South Island foothills
Group	F	Q	P	D	N	R	A	O
Km ²	4,252,578	3,275,778	3,252,370	2,103,568	2,053,562	1,930,806	1,859,342	1,422,548
Proportion of total NZ land cover	17%	13%	13%	8%	8%	8%	7%	6%

Data: LENZ, 2002.

Analysis of the distribution of the environments at the regional level showed distinct regional variation (Tables 6-12, 6-13, Figure 6-12). No region is unique, with each region sharing several environments with others. Two of the three largest environments F (Central Hill Country and Volcanic Plateau) and P (Central Mountains) Environments are found across 14 of the 16 regions, for example. However, the relative composition of the environments differs between most regions.

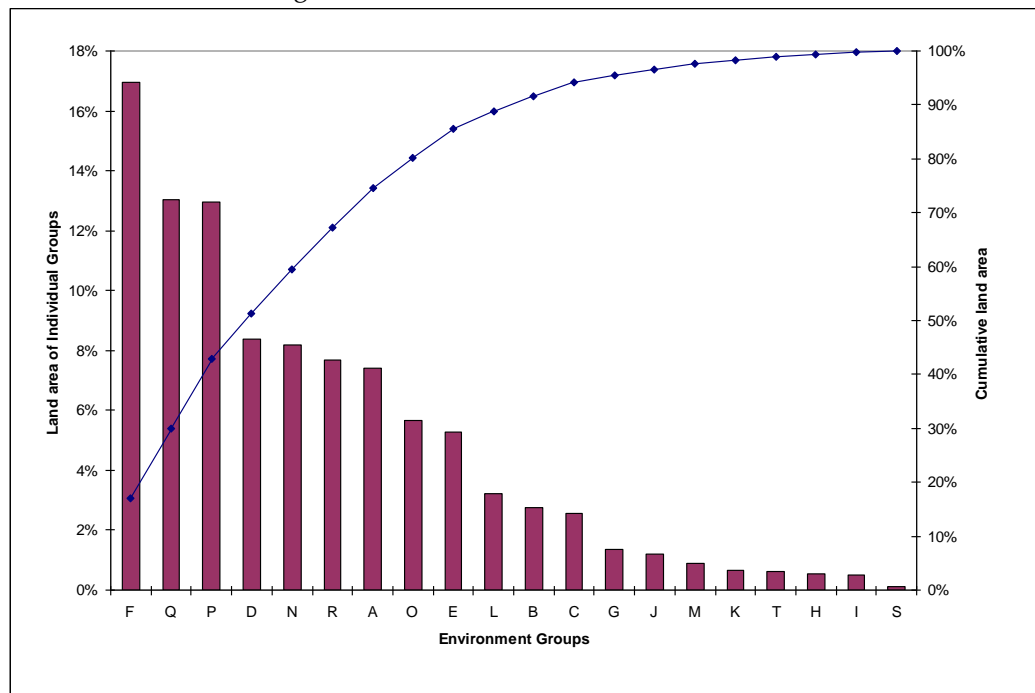


Figure 6-11: Relative importance of New Zealand land management environments (Data: LENZ, 2002). F - Central Hill Country & Volcanic Plateau; Q - South-eastern Hill Country Mountains; P - Central Mountain; D – Northern Hill country; N - Eastern South Island plains; R - Southern Alps; A - Northern lowland; O - Western South Island foothills.

The multi-dimensional scaling analysis (Figure 6-13) highlights regional groupings which tend to follow a broad North-South Island delineation, reflecting the very different geographies of the two islands: the lower North Island hill-country and the Southern Alps. The two islands are connected only by the Gisborne-Hawke’s Bay-Marlborough P-B-D ‘grape axis’ (though noting the dominant environment groups are found in both Islands, but form only small parts of individual regions).

Table 6-12: Land Environment cover by Region (ha)

Region/Group	F	Q	P	D	N	R	A	O	TOTAL
	Central Hill Country & Volcanic Plateau	South-eastern Hill Country Mountains	Central Mountain	Northern Hill country	Eastern SI plains	Southern Alps	Northern lowland	Western SI foothills	
Auckland	157			88,407			366,690		455,254
Bay Of Plenty	826,126		73,005	101,922			98,372		1,099,425
Canterbury	100,266	503,795	826,953		1,269,314	191,001		413	2,891,742
Gisborne	91,936		5,475	656,327			8,835		762,573
Hawke's Bay	341,513		220,615	384,621			15,307		962,056
Manawatu-Wanganui	1,515,828		164,412	2,422					1,682,662
Marlborough	114,885		445,049		446	59		30	560,469
Nelson	1,195		28,998						30,193
Northland				254,160			863,107		1,117,267
Otago Region	41	1,633,780	63,239		718,079	264,300		32,317	2,711,756
Southland		1,134,822	925		58,078	955,176		385,395	2,534,396
Taranaki	631,586		8,507	2,667			639		643,399
Tasman	76,267	206	650,245		37	36,755		3,586	767,096
Waikato	1,043,911		78,633	610,630			502,792		2,235,966
Wellington	495,565		119,560				15		615,140
West Coast	5,843	519	563,066			480,981		993,639	2,044,048
Grand Total	5,245,119	3,273,121	3,248,680	2,101,156	2,045,954	1,928,272	1,855,757	1,415,381	

Table 6-13: Proportion of Land Environment group cover within individual Regions (%)

Region	F	Q	P	D	N	R	A	O	TOTAL
	Central Hill Country & Volcanic Plateau	South-eastern Hill Country Mountains	Central Mountain	Northern Hill country	Eastern SI plains	Southern Alps	Northern lowland	Western SI foothills	
Auckland	0.0			17.7			73.3		91.0
Bay Of Plenty	68.8		6.1	8.5			8.2		91.5
Canterbury	2.3	11.4	18.7		28.7	4.3		0.0	65.5
Gisborne	11.0		0.7	78.7			1.1		91.4
Hawke's Bay	24.3		15.7	27.4			1.1		68.4
Manawatu-Wanganui	68.5		7.4	0.1					76.0
Marlborough	11.0		42.6		0.0	0.0		0.0	53.7
Nelson	2.8		68.5						71.4
Northland				20.4			69.2		89.6
Otago	0.0	52.7	2.0		23.2	8.5		1.0	87.5
Southland		36.8	0.0		1.9	30.9		12.5	82.1
Taranaki	87.3		1.2	0.4			0.1		88.9
Tasman	8.0	0.0	67.9		0.0	3.8		0.4	80.1
Waikato	44.1		3.3	25.8			21.3		94.5
Wellington	61.8		14.9				0.0		76.7
West Coast	0.3	0.0	24.5			20.9		43.2	88.9
Grand Total	20.0	12.5	12.4	8.0	7.8	7.3	7.1	5.4	80.5

Ten regions were found to be each dominated by a single land environment (bold letters in Figure 6-12) (Auckland, Bay of Plenty, Gisborne, Manawatu-Wanganui, Nelson, Northland, Otago, Taranaki, Tasman and Wellington). The remaining six regions (Canterbury, Hawke's Bay, Marlborough, Southland, Waikato, and West Coast) are composite regions composed of three or more environments.

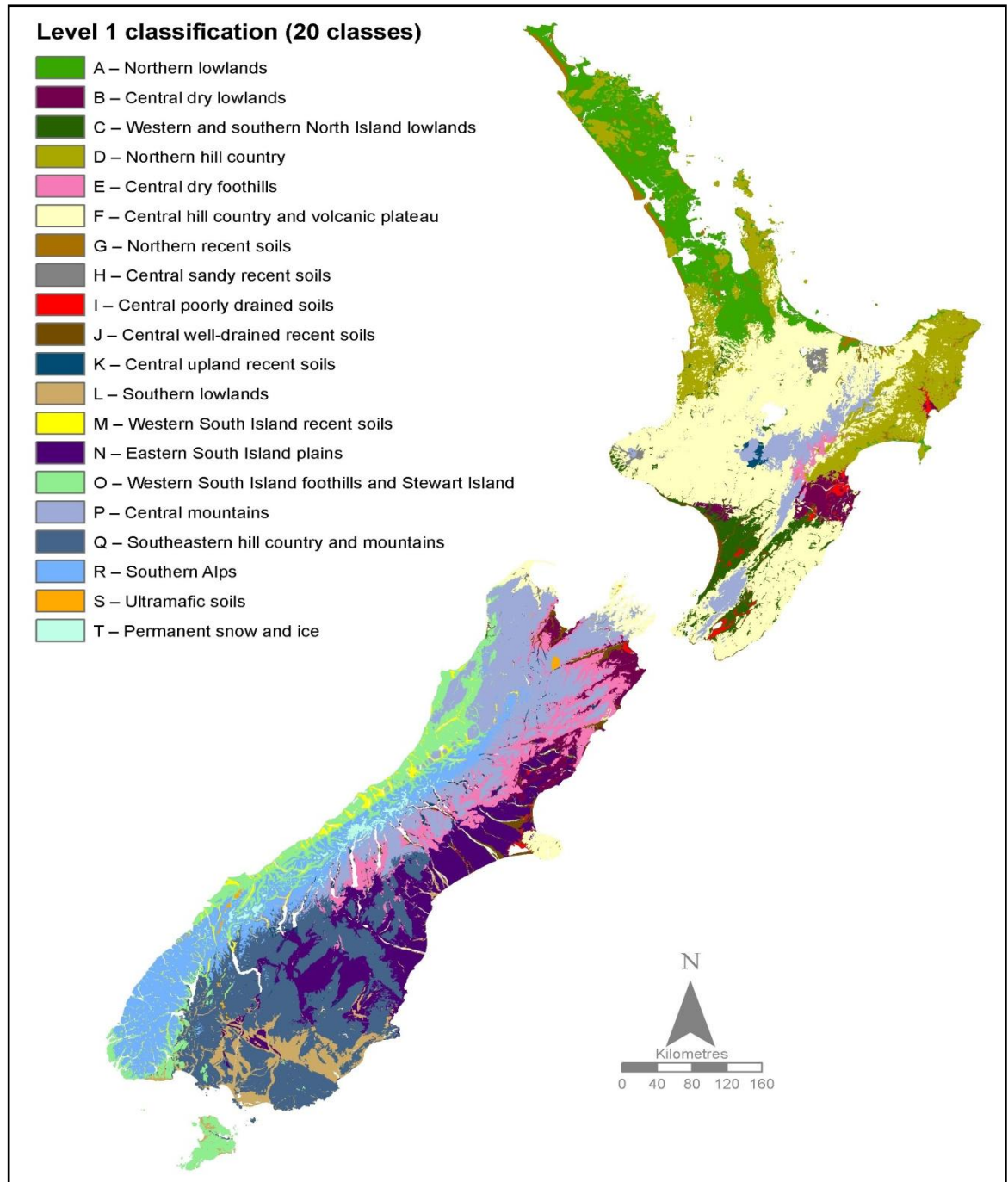


Figure 6-12: National distribution of Level 1 land environments

Seven of the nine North Island regions are each dominated by a single environment group (typically 70-80% of land cover), with four regions all dominated by the same environmental group (F). Only Hawke’s Bay and Waikato are composite regions though Waikato has nearly half (44%) of its land within a single environmental group. To achieve homogenous regions based on land environment cover, this analysis suggests that Auckland and Northland regions are the same as the Northern hill country (D), and Northern lowland (A) environments cover 90% of both regions. Gisborne forms a separate region based on Northern Hill Country, while early all the other North Island regions consist of a single shared environment group, Central Hill Country and Volcanic Plateau (F). Waikato and Hawke’s Bay are composite regions, each sharing environment groups without any clearly

dominant cover. Hawke's Bay does however share the Central Dry Lowlands (B) with Marlborough and parts of Canterbury.

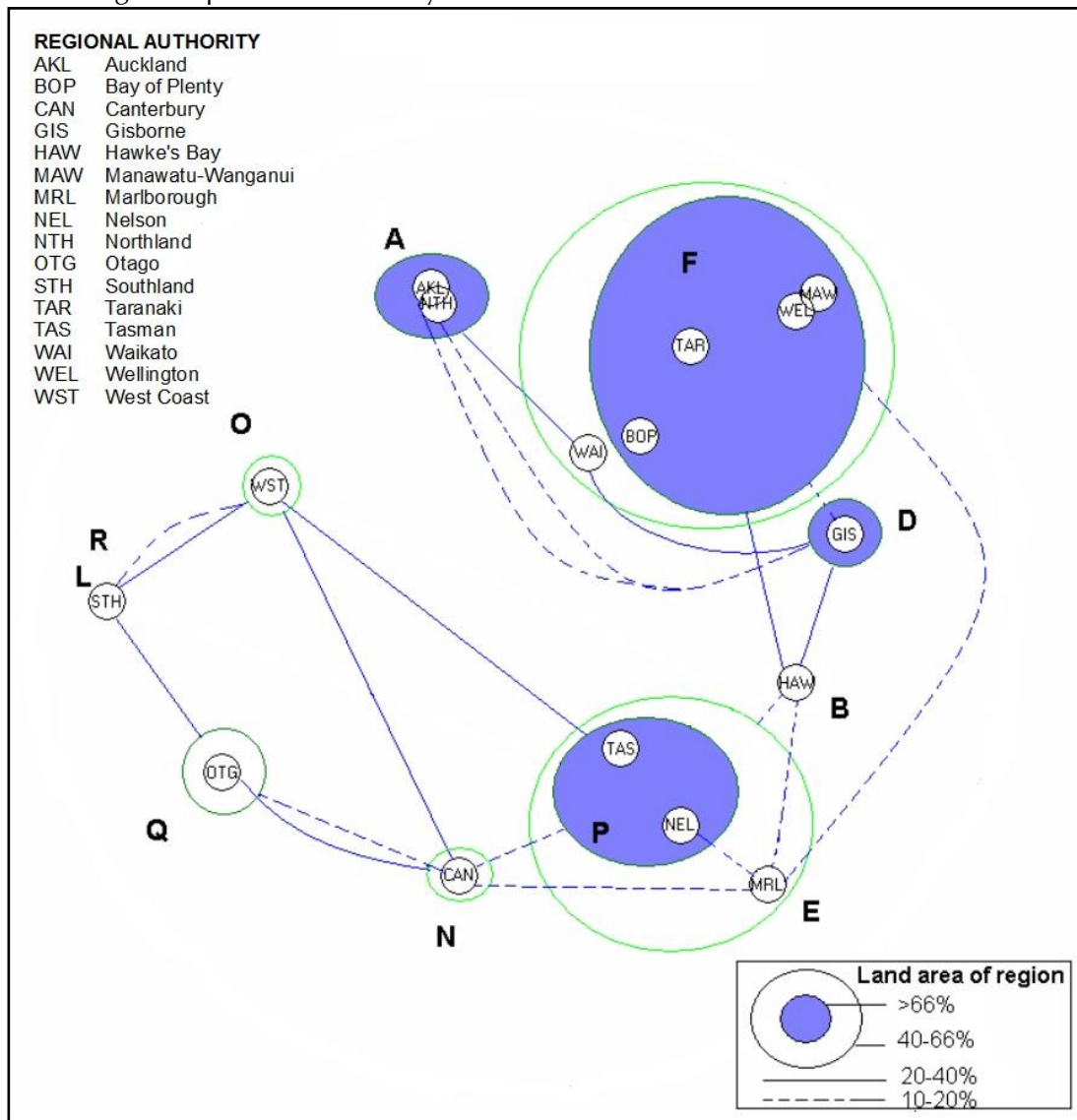


Figure 6-13: Similarities between regions by land environments

Notes: 1. Letters indicate the 'representative' region for that environment group. F - Central Hill Country & Volcanic Plateau; Q - South-eastern Hill Country Mountains; P - Central Mountain; D - Northern Hill country; N - Eastern South Island plains; R - Southern Alps; A - Northern lowland; O - Western South Island foothills.

2. This multi-dimensional scaling depiction shows clear groupings of regions based on land environment cover for 89% of New Zealand's land cover. The closer the proximity of regions to each other, the more similar they are.

Source: Author

The South Island is less homogenous, reflecting the widely different sizes of regions. Nelson City (0.3% of South Island land cover) is essentially an anomaly and needs to be considered as part of the surrounding Tasman district. A clear 'Top of the South' Nelson-Tasman-Marlborough region is evident, based on the Central Mountains (P) group. As discussed in chapter 3, this area was previously administered by the Nelson-Marlborough Regional Council, which was disestablished. On the other hand, Canterbury is so large (29.5% of South Island) that no single environment dominates; rather it tends to merge in with its

contiguous regions (West Coast, Otago, Tasman-Marlborough; it shares a core Eastern South Island Plains (E) environment group with Otago (29% and 23% respectively).

The Southern Alps (R) cover 13% of the South Island but are inaccessible and inhospitable, and are mostly under national park protection (e.g. Fiordland National Park) and have little resource management relevance.

This analysis suggests four core environmental regions: the ‘top-of the south’ region based on Tasman-Nelson-Marlborough (P), covering 17% of South Island land area; the Eastern Plains covering lowland Canterbury and Otago (N) with 14% land cover; the south-eastern hill country and mountains, covering Otago and Southland (Q) with 22% land cover; and the West Coast consisting of the Western South Island foothills and Stewart Island (O) covering 43% of the West Coast.

4.2 River environments

The River Environments Classification is an ecosystem-based spatial framework for river management purposes and provides a context for inventories of river resources. The area classified comprises 267,000 km² and 426,000 km of river network. It provides information at six different levels (see Chapter 3). The database was interrogated to provide regional level information in order to identify similarities between regions.

At the first level, the six climate classes, a half (56%) of New Zealand rivers by length can be classified as cool-wet or cool-dry climate rivers, while only one quarter (23%) are described as warm (Figure 6-14).

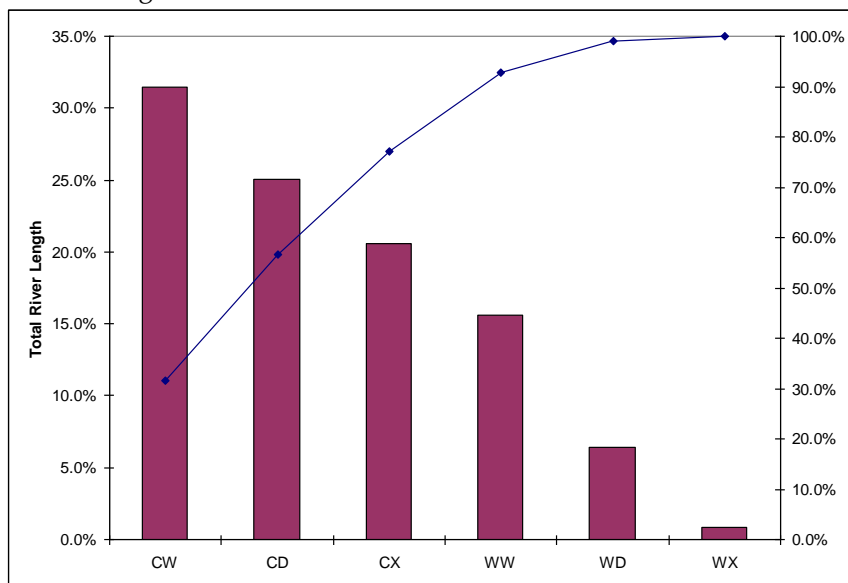


Figure 6-14: Prevalence of river types by climate factor at the national level, and cumulative cover. CD – Cool-Dry; CW – Cool-wet; CX – Cool-extremely wet; WD – warm dry; WX – Warm – extremely wet.

Most regions have rivers within most or all classes, although the proportions differ considerably between regions. However, three regions, Auckland in the north and Otago and Southland in the south, only have rivers within half the climate classes reflecting their more northern and southern locations respectively (Table 6-14).

Table 6-14: Regional council similarities by river climate factor (first level)

Region	Cool-Dry	Cool-Wet	Cool-Extremely-Wet	Warm-Dry	Warm-Wet	Warm-Extremely-Wet
	CD	CW	CX	WD	WW	WX
Auckland		0.1		22.1	77.8	
Bay of Plenty	0.0	43.1	18.0	0.5	34.5	3.8
Canterbury	57.8	29.3	12.5	0.3		
Gisborne		20.3	12.1	11.1	48.9	7.7
Hawke's Bay	4.1	44.8	7.4	20.9	22.0	0.7
Manawatu	15.4	53.2	6.2	15.4	9.9	
Marlborough	28.5	52.8	9.8	8.4	0.5	0.0
Northland		0.1	0.2	14.0	82.7	3.0
Otago	63.3	25.1	11.5			
Southland	25.3	42.3	32.4			
Taranaki	0.0	31.0	16.5	8.0	40.3	4.2
Tasman	4.6	45.6	38.4	4.1	4.9	2.4
Waikato	5.2	28.7	3.8	16.3	44.5	1.5
Wellington	13.2	46.6	12.5	16.9	10.9	
West Coast		8.8	90.8		0.1	0.3
Grand Total	25.1	31.5	20.6	6.4	15.6	0.9

At the regional level a north-south warm-cool axis is clearly observable (Figure 6-15). Only three regions are dominated by a single climate class: the West Coast (cool-extremely wet), and Auckland and Northland (warm-wet).

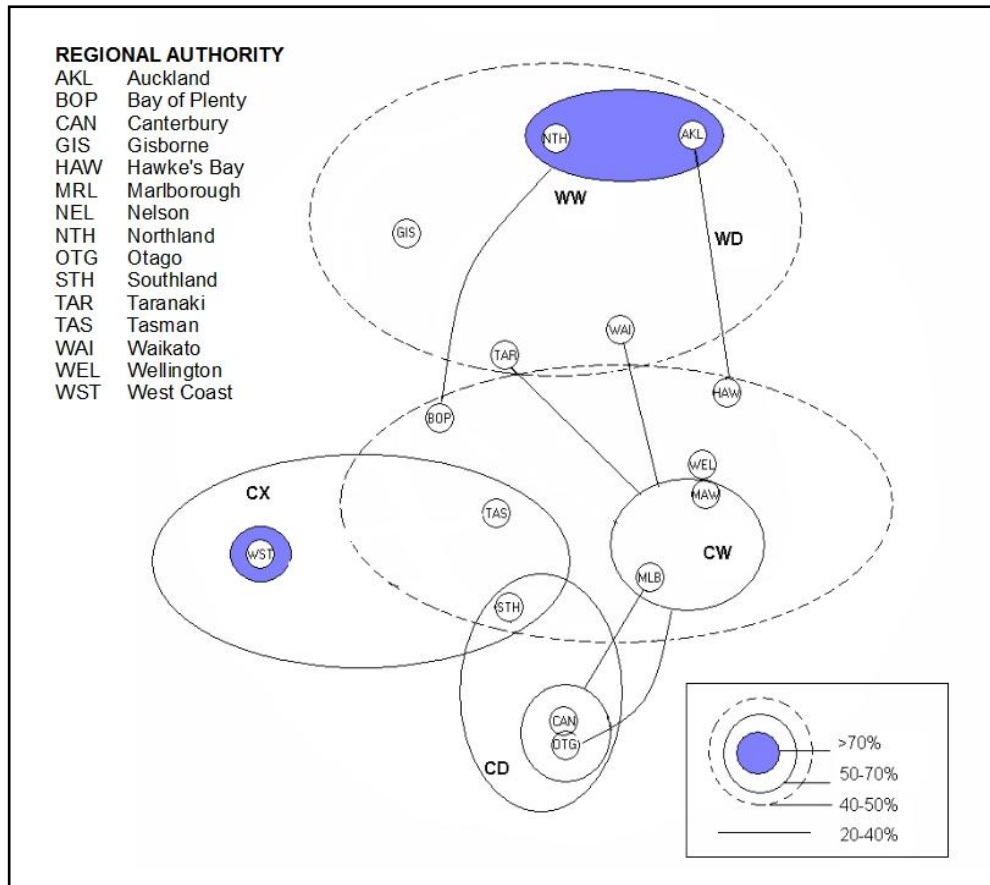


Figure 6-15: Regional similarity by river type by first level (climate) factor. (MDS: Objective function: 0.129.) CD – Cool-Dry; CW – Cool-wet; CX – Cool-extremely wet; WD – warm dry; WX – Warm – extremely wet.

The test for similarity between regions was repeated using both the first (climate) and second (source of flow factors). This generated 19 separate classifications (Table 6-15) which are much more fine-grained than climate alone. Again, data were standardised to give percentage of river length described by each classification (Table 6-16). To aid interpretation, the data were also scaled multi-dimensionally resulting in a two dimensional depiction, and regions sharing 20% or more of a classification were grouped (Figure 6-16). River lengths of the 129 third level classes for each region were also calculated. However, some data points are very small, for example a total of 60km of river length nationally was classified as CX/M/M; 17% were between 1-6% of total river length. Given the hierarchical structure of the classification, analysis at this level would not give further information at the regional scale and was not undertaken.

Table 6-15: REC Regional composition of river types by climate and source

	CD/H	CD/L	CD/Lk	CD/M	CW/GM	CW/H	CW/L	CW/Lk	CW/M	
Auckland						0.12%				
Bay of Plenty		0.02%				37.96%	3.73%	1.31%	0.04%	
Canterbury	18.72%	29.26%	7.18%	2.67%	0.12%	11.54%	0.66%	0.39%	16.63%	
Gisborne						19.80%	0.47%			
Hawke's Bay	0.21%	3.92%				34.90%	3.41%	0.10%	6.39%	
Manawatu	9.14%	6.27%		0.00%		27.02%	19.90%		6.27%	
Marlborough	12.43%	11.05%		5.05%		19.20%	12.83%	0.00%	20.73%	
Northland						0.08%				
Otago	30.90%	22.99%	6.49%	2.95%	0.01%	5.73%	3.11%	3.56%	12.74%	
Southland	2.42%	22.89%	0.01%			13.64%	16.79%	6.89%	4.95%	
Taranaki		0.03%				5.06%	25.97%			
Tasman		4.61%				26.26%	15.65%		3.64%	
Waikato	0.28%	0.60%	4.31%			21.91%	3.32%	2.93%	0.54%	
Wellington	0.15%	13.01%				10.01%	36.42%	0.15%		
West Coast						5.64%	2.52%	0.17%	0.45%	
Grand Total	8.88%	12.58%	2.61%	1.02%	0.02%	15.18%	7.61%	1.72%	6.92%	
	CX/GM	CX/H	CX/L	CX/Lk	CX/M	WW/H	WW/L	WW/Lk	WD/L	WD/Lk
Auckland						0.83%	76.41%	0.56%	21.88%	0.20%
Bay of Plenty		16.51%	0.68%	0.01%	0.85%	0.87%	32.26%	1.38%	0.53%	
Canterbury	3.76%	0.78%		0.23%	7.76%		0.00%		0.30%	0.00%
Gisborne		9.10%			3.00%	2.77%	46.15%		11.05%	
Hawke's Bay		5.71%		0.40%	1.28%	0.20%	21.69%	0.13%	20.87%	0.05%
Manawatu		3.09%	0.23%		2.84%		9.86%		15.34%	0.05%
Marlborough		4.18%	1.51%		4.07%		0.54%		8.37%	0.05%
Northland		0.23%				1.95%	80.26%	0.53%	13.68%	0.28%
Otago	2.79%	1.34%	0.04%	0.36%	6.98%					
Southland	1.26%	17.06%	2.96%	2.84%	8.30%					
Taranaki		10.79%	4.43%		1.27%		40.30%		7.96%	0.00%
Tasman		19.38%	5.27%	0.12%	13.60%		4.86%	0.03%	4.13%	
Waikato		1.63%	0.26%	0.06%	1.81%	0.87%	43.26%	0.35%	7.67%	8.66%
Wellington		10.21%	0.50%		1.81%		10.63%	0.22%	16.61%	0.28%
West Coast	8.33%	32.67%	26.36%	1.03%	22.44%		0.13%			
Grand Total	1.99%	8.27%	3.24%	0.55%	6.52%	0.29%	15.16%	0.15%	5.48%	0.93%

Table 6-16: REC Regional composition of river types by climate and source (greater than 5.00% of rivers)

	CD/H	CD/L	CD/Lk	CD/M	CW/GM	CW/H	CW/L	CW/Lk	CW/M	
Auckland										
Bay of Plenty						37.96%				
Canterbury	18.72%	29.26%	7.18%			11.54%			16.63%	
Gisborne						19.80%				
Hawke's Bay						34.90%			6.39%	
Manawatu	9.14%	6.27%				27.02%	19.90%		6.27%	
Marlborough	12.43%	11.05%		5.05%		19.20%	12.83%		20.73%	
Northland										
Otago	30.90%	22.99%	6.49%			5.73%			12.74%	
Southland		22.89%				13.64%	16.79%	6.89%		
Taranaki						5.06%	25.97%			
Tasman						26.26%	15.65%			
Waikato						21.91%				
Wellington		13.01%				10.01%	36.42%			
West Coast						5.64%				
Grand Total	8.88%	12.58%	2.61%	1.02%	0.02%	15.18%	7.61%	1.72%	6.92%	
	CX/GM	CX/H	CX/L	CX/Lk	CX/M	WW/H	WW/L	WW/Lk	WD/L	WD/Lk
Auckland							76.41%		21.88%	
Bay of Plenty		16.51%					32.26%			
Canterbury					7.76%					
Gisborne		9.10%					46.15%		11.05%	
Hawke's Bay		5.71%					21.69%		20.87%	
Manawatu							9.86%		15.34%	
Marlborough									8.37%	
Northland							80.26%		13.68%	
Otago					6.98%					
Southland		17.06%			8.30%					
Taranaki		10.79%					40.30%		7.96%	
Tasman		19.38%	5.27%		13.60%					
Waikato							43.26%		7.67%	8.66%
Wellington		10.21%					10.63%		16.61%	
West Coast	8.33%	32.67%	26.36%		22.44%					
Grand Total	1.99%	8.27%	3.24%	0.55%	6.52%	0.29%	15.16%	0.15%	5.48%	0.93%

The coarser climate single factor distinctions identified above remain, with the north-south axis still evident, but the nature of the interconnectedness of the regions become much clearer at this level of classification. The West Coast (90% cool-extremely wet), and Auckland and Northland (75% and 80% respectively warm-wet/lowland elevation) remain as two highly homogenous regions. The Southland-Otago-Canterbury cool-dry group is still apparent. At the 20% or more composition level, Marlborough separates (cool-wet/mountain) from other North Island-Top of the South cool-wet classification. The central North Island regions of Bay of Plenty, Hawke's Bay, Taranaki and Waikato each have over 20% of their river lengths consisting warm-wet/lowland source and cool-wet/high source stretches. This reflects their lowland and central plateau-central hill country geographies, sharing characteristics of both northern and southern regions. Two regions, Gisborne and Taranaki separated by about one degree of latitude, but on different coasts of the North Island, have rivers from three different level two classifications each over 20% of total length.

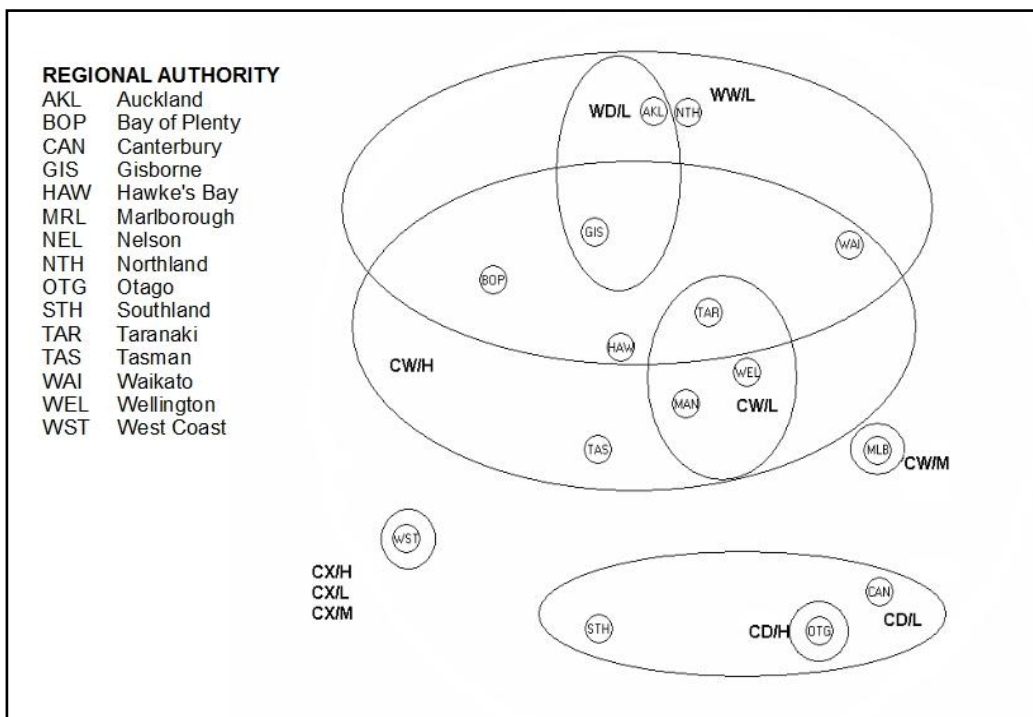


Figure 6-16: Regional similarities by river type at the two factor level (climate and source of flow). Regions with more than 20% river-length of the same classification are grouped together. All regions except two share at least 20% of their river lengths with other regions. (MDS objective function: 0.222.) CD – Cool-Dry; CW – Cool-wet; CX – Cool-extremely wet; WD – warm dry; WX – Warm – extremely wet.

A recent analysis of freshwater ecosystems with nationally important natural heritage values (Leathwick *et al.*, 2007) used an expert panel to identify seven biogeographical provinces and 29 sub-units. These provinces do not coincide with existing regional council boundaries, but amalgamated Southland and Otago, Northland and Auckland, and a wide band of mid-North Island regions (Taranaki, Waikato, the northern part of Manawatu-Wanganui, Gisborne and Hawke's Bay), for example.

4.3 Environmental issues

The regional councils' 2006-16 LTCCPs were examined to identify regional similarities and differences. These documents show a lack of issue specification by many of the councils.

Rather, most issues are generic although glimpses of regionally specific issue are discernable. Issues analysis was not always comprehensive, and community outcomes identified in the documents often hint at other environmental issues.

4.3.1 Regionally specific issues

Several resource management issues are regionally confined (Table 6-17). Geothermal resource management is a good example, with Waikato region containing nearly 80% of New Zealand’s geothermal systems, with the nearly all the remainder in adjacent Bay of Plenty. Many of these issues have had specific strategies or plans developed to address them, though the legal status varied.

Table 6-8: Regionally specific issues as identified in regional council 2006-16 LTCCPs

Council	Regionally Specific Issues	Regionally Specific Outcomes
Northland		Protect the natural character of the region’s coastline and beaches
Auckland	Built environment (storm-water, cultural heritage)	Quality built environment
Waikato	Water quality surface water “becoming worse over last few years” Population increase/town planning – land use change	Our coastal and waterway environments are restored and preserved and access to them is maintained.
BOP	Loss of natural areas from conversions and subdivision; changing land-use, overstocking Potential geothermal from energy and land-use change Rotorua Lakes - eutrophication	
Hawke’s Bay	none	none
Taranaki	Use and quality of water – deterioration in lower reaches from intensive agriculture Also hill country erosion	none
Manawatu- Wanganui	None specifically listed in community outcomes section	Water quality, hill country erosion moderately important
Wellington	None (awaiting 2007 review)	none
Canterbury	Wintertime air quality Coastal marine environment – pollution and development Flooding Land use change – development Stress on water systems – from land use intensification (Refers reader to the RPS for issues)	Distinctive character of the environment is appreciated and retained none
Otago		none
Southland	Pressure on and limitations of water quality and quantity some long-standing practices, such as permitting livestock to have unrestricted access to waterways, can no longer be sustained.	Council goal: that its major goal for the life of this LTCCP is to improve the quality of the region’s fresh water resources significantly by beating non-point source pollution by 2015.

Urban environments are recognised as having specific environmental issues and drivers. These result from a combination of population size and density and the different dominant economic sectors. As discussed in other parts of this chapter, Auckland region is unique in terms of consisting of essentially a single city-metropolis. Its sheer size dwarfs the other large cities (Christchurch and Wellington), which in any case cover only a small part of their

regions. Its problems are therefore largely unique in New Zealand, with environmental pressures largely from industry, population size, growth and density.

4.3.2 Sub-regional issues

The spatial scaling of issues is clearly shown in the Manawatu-Wanganui Regional Council's 2006-16 LTCCP, where the public was invited to rank a range of issues previously identified by the council and stakeholders²⁰. This exercise revealed national, regional and local concerns. Only a few issues were unique to the region. The highest ranking issues, water quality and biodiversity, were region-wide and are also common across New Zealand. Flooding was a region-wide issue, probably reflecting the major floods of February 2004, though the land erosion associated with that event is only identified as an issue in the hill-country districts where this was experienced (Manawatu, Wanganui and Rangitikei).

It also revealed sub-regional differences in issue rankings (Table 6-18), though again these mostly have analogues in other regions. For example, Palmerston North's identification of 'landscapes' reflected the current controversy with wind farms being built on the skyline – an emerging issue nationally. Ruapehu's identification of volcanic hazard reflected specific volcanic activity of Mt Ruapehu and a predicted lahar from the crater lake. Waste was the top issue for the only sizeable city in the region, Palmerston North, but again is a local manifestation of a national issue. The regional council had long identified Horowhenua's groundwater from shallow unconfined aquifers at risk of contamination from agriculture (Young and McNeill, 1999), which is reflected in Horowhenua as the only district ranking this issue. However, contamination of the unconfined shallow aquifers in the upper Manawatu River catchment, in the Tararua District which are also at risk (Bekesi, *pers. comm.*) is not identified as a high priority issue.

Table 6-18: Ranking of issues by district in the Manawatu-Wanganui region

Issue	District						
	Tararua (Pahiatua, Dannevirke)	Horowhenua (Foxton, Levin)	Palmerston North	Manawatu (Feilding)	Wanganui (Wanganui)	Rangitikei (Marton, Taihape)	Ruapehu (Taumarunui)
Water Quality	1, 1	3, 1	2	1	1=	1, 1	1
Flooding	2, 3	4, 4	4	2	3	2, 5	6
Biodiversity	4		3	3	4	4, 6	4
Water Quantity	2	1, 5		5		3, 3	3
Coast	4, 4	2, 3		4	6		
Air Quality	5, 6					6, 2	5
Hill Country Erosion				6	5	5, 4	
Groundwater Quality		6, 2					
Waste			1				
Landscape			5				
Whanganui River Issues					1=		
Volcanic Hazard							2
Transport	6, 4	5, 6	5				

Data: MWRC, 2006.

²⁰ Thirteen environmental issues were presented for people to vote on over the course of the road show, but only the top six issues were presented for voting in each district. The six issues were determined to be of local concern because of previous community feedback and information held at Horizons Regional Council. (MWRC, 2006: 24).

4.3.3 Multi-regional issues

An examination of regional councils' 2006-16 LTCCPs has shown them to have been somewhat generic in identifying their environmental issues. Two key informants suggested that outside Auckland, Wellington and Christchurch cities, the regions largely shared the same environmental issues. Perhaps because of this, most issues were couched in general terms. However, water quality and quantity, impacts of agriculture, built environment and growth several were common issues identified across regions.

Water quality dominated, largely as a consequence of non-point discharges, especially from agricultural land. Wellington Regional Council identified:

With few significant discharges to fresh water in the region, land uses have the most effect on the quality of water in rivers. Of the 15 sites with very good water quality, all but one have mostly indigenous vegetation in the catchment upstream. These rivers have very little human influence. Rural land uses influence seven of the sites with "poor" water quality. Many rivers and streams flowing through rural land (61 per cent) had bacterial numbers over guideline levels for stock drinking water (WRC, 2005).

Environment Waikato (2006: 10) found that:

compared with the 1998 and 2000 survey results, water issues continue to increase in importance. Water is also expected to be the most important issue in five years' time. The community perceives water quality in local streams, rivers and lakes as becoming worse in the past few years.

The Manawatu-Wanganui Regional Council (MWRC, 2006) identified that water quality was the single most important issue for the region, while Southland Regional Council stated:

The apparently limitless availability of clean water has been taken for granted for so long, that some sections of the community are having difficulty accepting that neither quantity nor quality can be assured any more. Even more challenging is the concept that some long-standing practices, such as permitting livestock to have unrestricted access to waterways, can no longer be sustained (Environment Southland, 2007).

Only Southland appears to have taken a firm decision on managing its waterways:

that its major goal for the life of this LTCCP is to improve the quality of the region's fresh water resources significantly by beating non-point source pollution by 2015.

Environment Canterbury identified that land use intensification and discharge of contaminants are 'affecting Canterbury's water quality in some areas. This has implications for ecosystems, sources of drinking water, people's health and recreation.' Bay of Plenty and Waikato identified eutrophication of some of the Rotorua lakes and Lake Taupo – national-icon waterways.

Jurisdictional boundaries have also led to a piecemeal approach to addressing common issues. A good example, is the multiple approaches to addressing hill-country erosion in the lower North Island affecting most of the Manawatu-Wanganui and Wellington regions, along with large parts of the Taranaki, Hawke's Bay, and Waikato regions and Gisborne District (the LENZ F environment). The similarities suggest a common policy approach, but this has been lacking; for example, the Manawatu-Wanganui Regional Council has developed a 'sustainable land use initiative' (SLUI) to retire erosion-prone land in response to severe flooding in 2004. Estimated by the council to cost \$80million, the Council sought

\$41million assistance from central government. The SLUI is a single region approach to a multi-region issue. When asked whether a joint initiative with the other councils was undertaken, the chairman responded ‘the other councils are right behind us’ (G. Muffitt, pers. comm., 9 November 2007).

4.3.4 Regional patterns in agriculture²¹

Agriculture is the largest pressure on New Zealand’s environment (Chapter 4) of which the dominant land use is grazing, arable and fodder. Within the grazing sector, sheep farming has been the dominant land use, reflecting hilly topography and lower carrying capacity of much of New Zealand’s agriculture land, and a scarcity of sufficient water to support more intensive agriculture such as dairying.

While all types of farming are found in all regions, regional differences are apparent (Figures 6-17, 6-18) that have historical roots (see Cumberland and Fox, 1958). Waikato and Taranaki have been the recognised dairying regions, while the hill country of the Manawatu, Hawke's Bay and Marlborough-Tasman, the dry plains of Canterbury, and Southland have long and strong sheep farming histories. These suggest regionalised resource use management issues, reflecting different farm types and their associated environmental impacts.

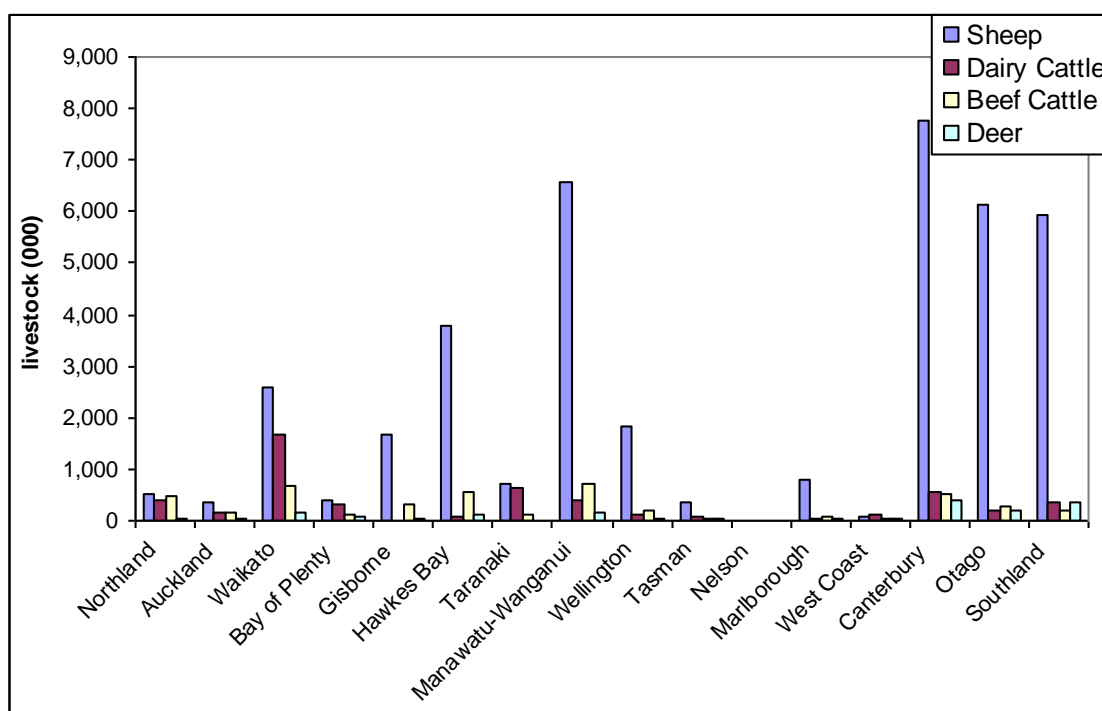


Figure 6-17: Livestock by region, 2002 (Data: MAF, 2002).

²¹ This section draws primarily on MAF Agriculture 2002 census data.

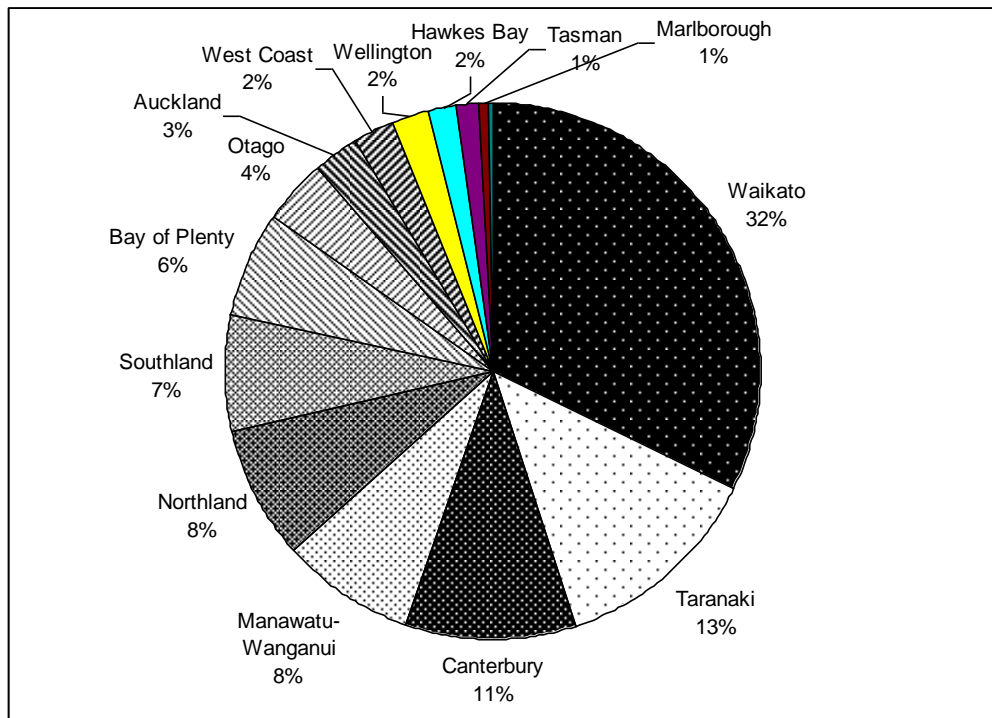


Figure 6-18: Composition of national dairy herd by region, 2002 (Data: MAF, 2002).

Over the last decade, there has been a large increase in dairying driven by an ongoing boom in milk commodity prices and lower prices for sheep products, resulting in conversions to dairying in some regions and intensification in existing dairying regions (MfE, 2008) (Figure 6-19). Increases in regional dairy herd size are much less in established dairying regions such as Waikato and Taranaki reflecting their existing near-capacity herds. In other regions the changes have been much higher with over 100% increases between 1994 and 2002.

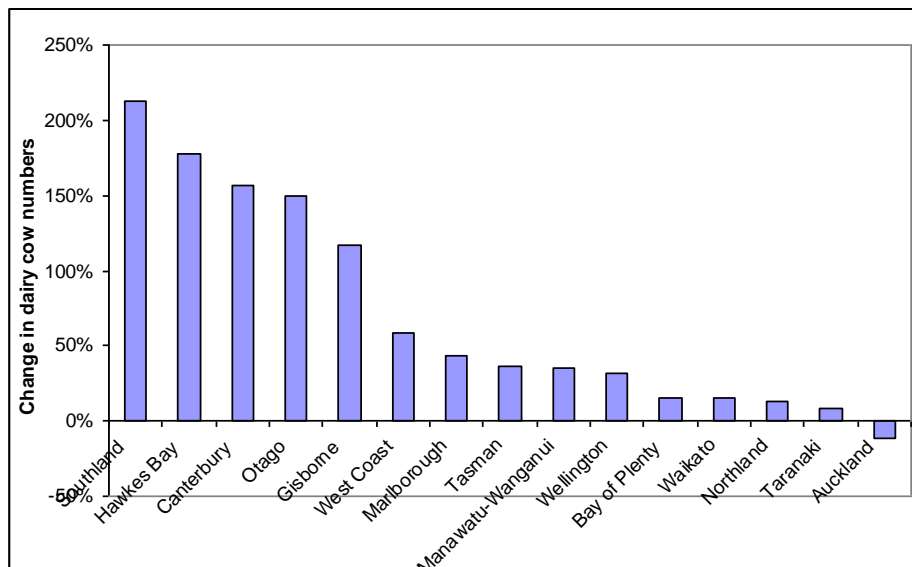


Figure 6-19: Change in dairy cow numbers by region, 1994-2002 (Data: MAF, 2002).

The greatest changes were in Southland, Hawke's Bay, Canterbury and Otago (Gisborne's small herd size makes its small change anomalous). While this changed the ranking of the

regions by herd size, Waikato, distantly followed by Taranaki, remains the dominant dairying region (Figure 6-20).

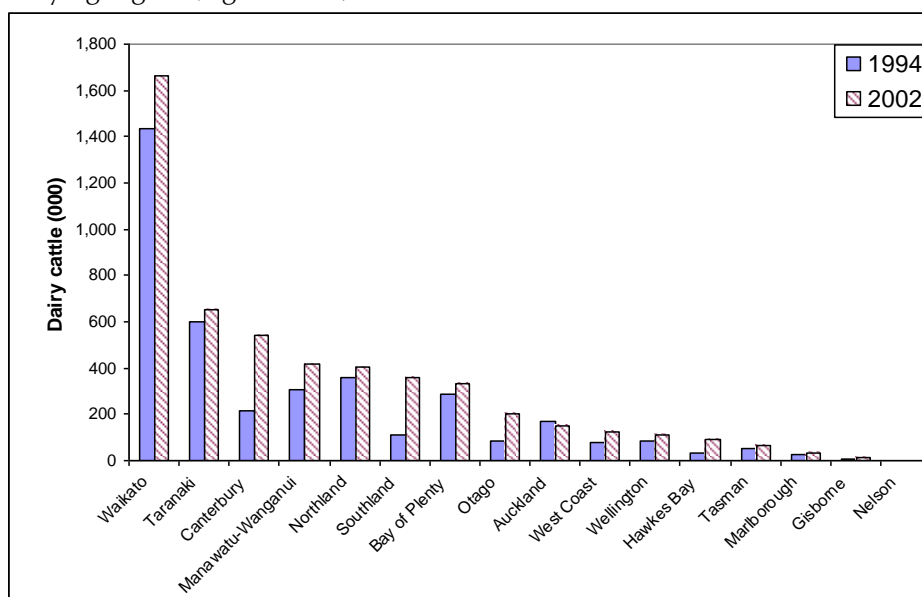


Figure 6-20: Increase in dairy herd size by region, 1994-2002 (Data: MAF, 2002).

These data suggest pressure on the environment nationally from the increase in dairying as all regions experience increasing herd size. It also indicates uneven impacts, with some regions bearing more environmental burden than others. This has been recognised by several key informants who distinguish between ‘sacrifice’ and ‘frontier’ regions. Sacrifice regions are the traditional dairying regions where environmental damage is already largely complete and efforts focus on mitigation and reduction, while frontier regions those into which dairying is expanding and which the emphasis should be on prevention of impacts occurring.

Key informants commented that impacts are modified by local and regional climate and farm practice. For example, many paddocks in wetter parts of the country, especially in Southland, have field tiles or mole drainage to stop pugging. Research (Houlbrooke *et al.*, 2003) shows that leaching losses from soils drained using these methods were well above levels necessary to prevent aquatic weed growth in fresh water bodies. The use of irrigation, together with discharge of dairy shed effluent to land on farms situated over unconfined aquifers, such as in the Wairarapa (Eastern Manawatu-Wanganui and Wellington regions) and the Canterbury plains results in groundwater contamination and more diffuse surface water contamination via the groundwater discharges. Also, the reliance on large scale irrigation on the drier lands, essentially to maintain dairy hydroponics systems, creates surface water reductions and loss of habitat.

Accordingly, agriculture, as described in more detail here, shows regional differences, with old and new dairying regions with different characteristics and impacts. The problems are more discernable in the new dairying regions because of the rapidity of change. However, environmental similarities may not be regionally defined or even contiguous (for example the dry-land conversions in the Wairarapa and Canterbury), and the driver for the increase in dairying is international. Further, the initiative to address environmental impacts of dairying, the Fonterra Dairy Accord (see Chapter 5) is a strategy nationally developed by the Fonterra Dairy Cooperative, the national government and regional councils. From an

industry and government policy perspective, dairying is a national scale issue with different regions sharing common characteristics.

4.3.5 Air quality

Air quality was only acknowledged as a serious environmental issue in two regions although other regions acknowledged localised problems. Air quality has two main pressures, motor vehicles and winter domestic heating, although single point-discharges from individual factories can be problematic, such as at Kawerau pulp and paper mill in the Bay of Plenty. Auckland is the only region facing significant pollution issues from motor vehicles, which:

... are the largest source of air pollution. Auckland air pollution levels regularly exceed guidelines set. Auckland's air quality problem is primarily related to the transport sector (between 50 to 80 per cent depending on the pollutant). There is a significant seasonal contribution from domestic fires. In winter, daily emissions can be three times summer levels (ARC, 2006).

Christchurch on the other hand faces a significant pollution from domestic heating:

Air quality is an issue of widespread concern in Canterbury, largely associated with poor wintertime air quality in Christchurch and other urban areas. Wintertime air quality: Emissions from home heating are the major cause of wintertime air pollution in Canterbury (in Christchurch home heating contributes approximately 80% of particulate matter (PM10, motor vehicle and industrial emissions contribute approximately 10% each). Health guidelines are exceeded 30-40 times a year (ECAN, 2006).

Other councils identified individual townships facing wintertime air pollution from domestic heating, but maintained that overall their regions had high air quality standards:

Rotorua's urban area has been identified as an area of poor ambient air quality for particulate matter (EBOP, 2006);

and:

Regular exceedances of the National Environmental Standard value at Alexandra during the winter of 2005, while fewer exceedances were monitored at Mosgiel (ORC, 2006).

Air quality issues are localised within parts of individual regions, reflecting topography that increases the likelihood of winter-time air inversions that capture smoke. Monitoring is largely confined to these known areas.

5. Substantive value

Substantive value results from achievement of outcomes, in this case maintained or improved environmental conditions. The contribution of individual organisations and institutional arrangements to environmental outcomes is not easily attributable, given the lags in environmental systems and multiple actors. Outputs provide interim measures of institutional performance, though, as discussed earlier, are not necessarily appropriate or sufficient to ensure desired outcomes.

5.1 Outputs

Regional councils and the Ministry for the Environment are able to point to a considerable range of achievements in terms of environmental management outputs since 1989 when the councils were created. All the councils have firmly embedded the RMA into their policy-making and implementation processes through regional policy statements and

regional plans and the resource consent processes. Councils and the MfE are also able to point to improved management of some environmental exacerbators, which in some areas are quite substantial, especially in the control of point-discharges.

Twenty years ago most of New Zealand's solid waste was disposed of in uncontrolled rubbish dumps, characterised by fires, odour, wind-blown debris, scavenging and populated by 'dump chooks' (seagulls) and rats. Between 1995 and 2006, the number of sites reduced from 327 to 60 and the proportion with leachate management systems rose from 13% to 77%. While waste was burnt at over half of landfills in 1995, now the practice is banned. In short, waste management has been a success (MfE, 2007c).

As well, councils, with more recently support from national government have largely disposed of intractable agrichemicals. A consortium of seven councils collected and arranged offshore disposal of 120 tonnes of environmentally persistent organochlorine herbicides and pesticides (mainly DDT, Dieldrin, Aldrin and 2,4,5-T) in the 1990s. A more recent initiative undertaken between 2003-6, supported by the MfE, resulted in collection and disposal of a further 225 tonnes of intractable chemicals. The first collection was a regional council staff-level initiative, while the second initiative was to address New Zealand's commitments to the United Nations Stockholm Convention on Persistent Organic Pollutants (POPs), which aims to protect human health and the environment by banning the production and use of these chemicals. The Convention came into force for New Zealand in 2004. The Hazardous Substances and New Organisms (Stockholm Convention) Amendment 2003, introduced to bring New Zealand's legislation into line with the legal requirements of the Stockholm Convention, requires that POPs are banned from importation, production and use in New Zealand, and in particular, Article 6 requires measures to reduce or eliminate releases of POPs from stockpiles and wastes (MfE, 2006).

Nationally, petrol service stations have now almost all replaced their metal underground storage tanks with leak-proof fibre-glass fuel tanks. The metal tanks were prone to corrosion, with an unknown number causing soil and groundwater contamination. Contaminated sites were remediated. The efforts for a clean-up of the sector was begun by regional councils, but largely taken over by the large petrol companies, who promoted high national standards among regional councils. These companies portrayed this initiative as demonstrating environmental corporate responsibility, though suspicions were also voiced that it was an effective trade move to close down competing private service stations, which were less able to afford to replace the new tanks.

As a result of public concerns over the environmental impacts of dairying, a public-private sector initiative between central government, regional councils and dairy products processor, the Fonterra Co-operative Group was developed to reduce these impacts (see chapter 4). The 2005/06 annual performance survey (MfE, 2007d) found that although steady progress was being made, levels of non-compliance with resource consent conditions or regional plan rules for dairy effluent management were unacceptable, with only 67% compliance achieved nationally compared to 100% target set to be achieved immediately. Regional variation occurred with some regions reporting almost no significant non-compliance, while others had nearly a quarter (Figure 6-21). Good progress was made on other targets that reduce likelihood of pollution, such as excluding cattle from waterways and developing nutrient budgets.

This assessment of council performance outputs does not examine individual planning and policy documents. These are a means to an end and are not in themselves sufficient to

deliver outcomes. The Office of Controller and Auditor-General (2005), for example found that two representative regional councils (Horizons and Otago), had made good progress in identifying values, establishing management frameworks and defining policy instruments for managing water quality and quantity, but were lacking in measurable objectives or setting direction that would indicate the value of intervention. Essentially, administrative processes may be in place and are being applied, but this does not necessarily ensure improved or maintained environmental outcomes.

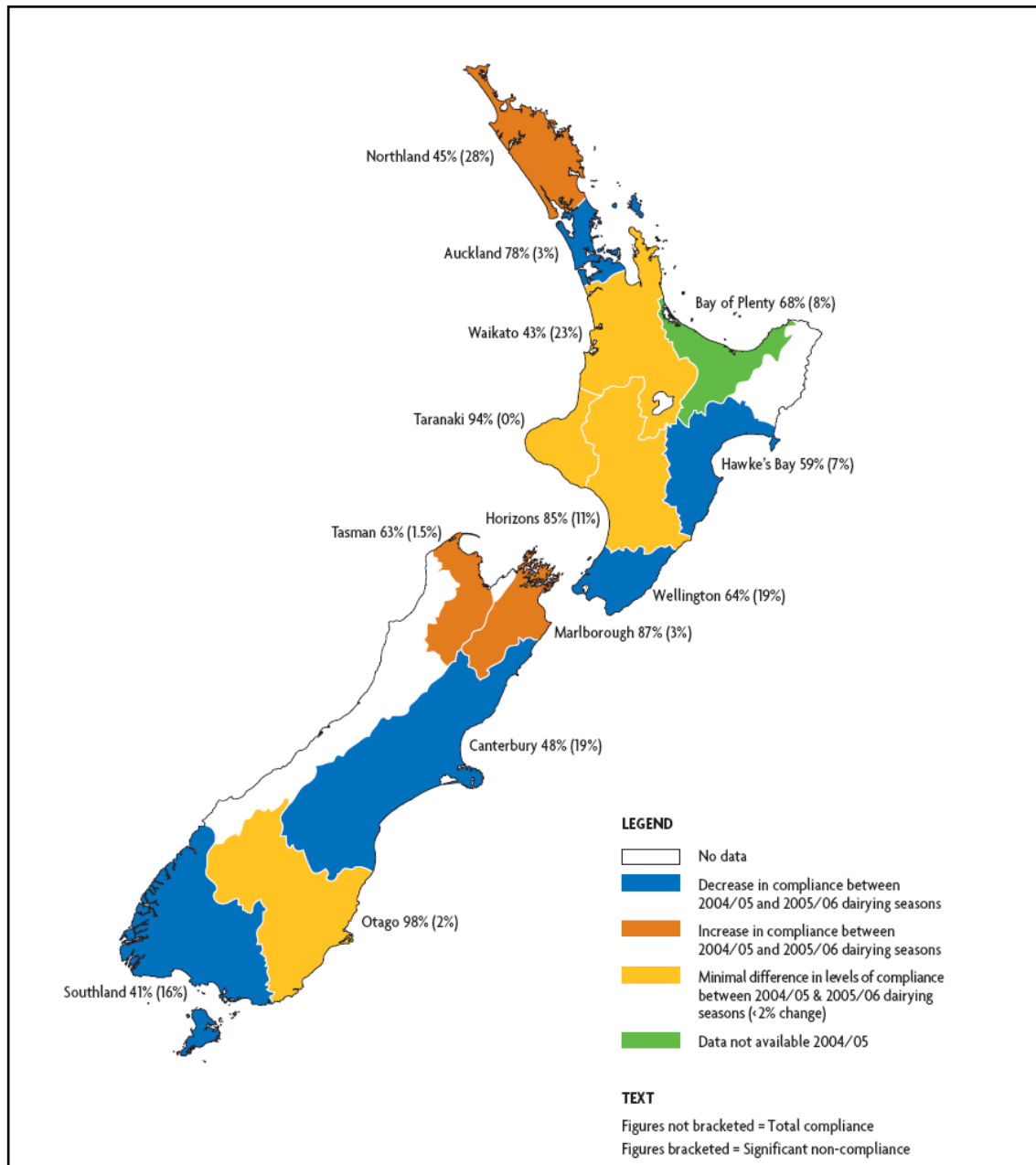


Figure 6-21: Dairy farmer compliance with resource consent and regional plan requirements during 2005/06 season (Source: MfE, 2007d).

5.2 Outcomes

Improved or at least maintained environmental quality must be the ultimate performance measure of the regional council institution, that is, outcomes achieved rather than outputs. Such an assessment is less easy to quantify. As discussed in Chapter 3, there is a remarkable

absence of national level environmental monitoring, or coordinated monitoring by regional councils to provide any comprehensive picture. Instead, most assessments of New Zealand's environmental state rely on specific studies that cover a few regions and aggregating individual regional councils' monitoring data. While a start, they do not necessarily allow comparisons between regions, let alone provide a national picture. For example, Canterbury Regional Council has claimed (Environment Canterbury, 2007) that a combination of favourable weather conditions and its clean heat project were credited for the smallest number of high air pollution nights in 20 years. However, most regional councils are only now starting to establish air quality monitoring stations, so that data are not available.

The 1994-2004 OECD (2007) country review provides an independent overview of the current state of the environment, although its primary purpose is to report on policy. The report was critical of the lack of national level monitoring. It found that the major sources of environmental pressure expanded in the review period, while the intensity of water, fertiliser and pesticide use remains low in comparison with other OECD countries, they have increased with consequent growth on the environment. Overall, in qualitative terms, New Zealand was seen largely to be slipping in its performance, and in environmental condition (Table 6-19).

Table 6-19: Change in Environmental conditions 1994-2004

Parameter	Change: 1994-2004
Public water supply quality	better
Surface water point source	better
Surface water non-point	worse
Groundwater quality	worse
Landfill leachate collection	better
Kerbside recycling	better
Waste generation	worse
Biodiversity: land	worse
Sustainable development	no improvement
Air emissions from power plants and mobile sources	worse

Source: OECD, 2007.

Water quality is one of the few environmental parameters which have something like a long term and comprehensive national coverage monitoring. The National Institute of Water and Atmospheric Science has been able to identify water quality trends between 1989 and 2005 using its own national monitoring network. Scarsbrook (2006) in reviewing these data identifies a national trend of decreasing concentrations of ammoniacal nitrogen and biochemical oxygen, patterns consistent with reductions in point-source discharges to waterways. At the same time, he identified increasing trends in dissolved and total phosphorus and total nitrogen, with a correlation between trend magnitude and extent of pastoral land in the catchments, indicating an increase in non-point discharges from agriculture.

Environment Waikato is one of the few regional councils with long-term monitoring systems. It found that for most streams of the Waikato region's streams and rivers that the majority of trends indicate a decline in water quality (increase in total nitrogen, total phosphorus and conductivity, decreased dissolved oxygen and pH). Some trends indicated improvement, for example, increased visual clarity, and decreased turbidity and ammonia levels at 20 monitoring sites. The council suggests these improvements may be the result of

the move to land disposal of dairy shed effluent, but the significant increase in total nitrogen at another 46 sites may be due to increased stock numbers and farming intensity.

Opus International (2006) reviewed existing data to identify trends since 1996 on water quality of New Zealand's fresh-water lakes. The evidence is partial, drawing on regional councils' data of monitoring about 3% of lakes covering over one hectare, but shows overall eutrophication in most lakes. A MfE study (2007b) building on this study, found about 30% of lakes are likely to have very poor to extremely poor water quality, with lowland lakes (i.e. those most likely to be impacted by agriculture) especially likely to have poor water quality.

A review of national data for groundwater quality monitoring sites (MfE, 2007a) found that a third of the monitoring sites show some level of human influence with nitrate and/or sulphate concentrations above natural background levels. Health and indicator bacteria levels are exceeded at 5% and 20% of the monitoring sites where these data were available. These elevated levels result almost certainly from human activities on land, especially as they are more often observed in shallow, unconfined aquifers rather than deep, confined aquifers, but data were not sufficient to establish relationship with particular land uses. The study also notes that there are often quite long lag periods between surface contamination in recharge zones and aquifer pollution and detection, a point also made by an informant. Consequently, it is suggested that aquifer contamination can be expected to worsen over the next thirty years as a result of recent agricultural intensification.

The consensus of opinion among key informants interviewed is that while regional councils have been successful in managing point-discharges to water, especially from dairy sheds and factories as well as municipal sewage facilities, they have not been successful in managing the increasing non-point discharges from agriculture to surface water. Informants were also critical of water quantity issues, especially in Canterbury, where large scale irrigation was seen to have severely depleted lowland streams and waterways.

The overall assessment is that while some gains have been made, they have been more than offset by significant rise in degradation from intensified agriculture. Lack of base or trend data does not allow these changes to be better quantified.

6. Summary

This chapter outlines public value characteristics of regions and their governing councils, using the public value framework to structure investigations drawing on publicly available data and information. The data indicate significant diversity among regions, in size, population and population density, wealth and economic structure. While regional environments and some environmental issues have sub-national variation, these do not generally match existing regional council jurisdictions. Many issues are shared between councils and many have a national component. Authorising agency can be questioned. Similarly, a patchy achievement of environmental outcomes is apparent. These results are compared in chapter 8 with resource users and managers' perceptions of public value presented in the next chapter.

Chapter 7: Perceptions of public value of regional management of the environment

1. Introduction

This part of the investigation sought to identify perceptions held by environmental managers, stakeholders and experts on environmental management to triangulate other quantitative assessments undertaken as part of this research. A survey questionnaire (see Appendix 4) was developed, as outlined in Chapter 5, seeking New Zealand environmental resource management practitioners' and stakeholders' perceptions on environmental management in New Zealand. The questions sought respondents' perceptions about existing institutional arrangements for managing the environment. Following from the framework described in Chapter 5, questions addressed substantive value, operational feasibility and authorising agency. This chapter reports on the results of this survey.

2. Survey response

A total of 255 questionnaires were posted to respondents in August 2007. A total of 144 responses were received by the cut-off date (18 September 2006), a combined response rate of 56.5%. This section reports on the make-up of these responses and assesses the robustness of the results.

2.1 Response rate and respondent characterisation

They consisted of 26 national level responses and 118 regional level responses. Many of the individual sectors had higher response rates (Table 7-1). The overall rate was lowered by the smaller proportion of replies received from the second tranche of questionnaires to territorial authorities, of which a third (17) responded. The overall response rate compares favourably with other social science mail surveys.

The regional and unitary council managers groups had the highest response rates (100%); the lowest was the territorial authority planning managers (39%), with most of the remainder having around two thirds response rates.

Table 7-1: Response rate by stakeholders and organisations

Sector	Population N	Respondents n	Response rate (%)
National level			
Head Office (MfE, DoC, Treasury, MAF, MED, DPMC)	10	6	64
PCE	1	1	100
National offices stakeholder groups (Federated Farmers, environmental groups, Fish & Game)	6	3	50
Sub-national level			
Regional Office (DoC Conservancies)	13	9	69
Regional Council			
Manager	12	12	100
Councillor	12	7	50
Unitary Authority			
Manager	4	4	100
Councillor	4	3	75
Territorial Authority (City and District Councils excluding unitary authorities)	66	27	39
Membership based Organisation (sub-national)			
Fish & Game Region (Manager)	10	6	60
Royal Forest & Bird Protection Society (Elected Representative)	52	28	54
Federated Farmers Regions (Elected Representative)	24	15	63
Dairy Farmers of New Zealand (Elected Representative)	10	6	60
Other (National level)			
Resource industry (forestry, energy) staff and national organisations	15	6	55
Experts (consultants, university staff and independent thinkers)	16	11	66
TOTAL	255	144	56.5

At the regional level, there is some comparability in numbers between sectors if some stakeholder groups are aggregated; although the conservation manager grouping is perhaps a little tenuous and disproportionately small (Table 7-2). This suggests robustness of analysis at the regional level, though with a possible bias towards environmental values.

Table 7-2: Regional respondent composition by sector

Sector	Number	Proportion of regional respondents (%)
Farming Sector	21	17.8
• Federated Farmers		
• Dairy Farmers of NZ		
Forest & Bird	28	23.7
Conservation Managers	15	12.7
• DoC Conservators		
• Fish & Game Managers		
Regional Councils	27	22.8
Territorial Authorities	27	22.8

A stratified sample was used to draw upon individuals' expertise, seeking to exploit their knowledge and experience and observations. Its success required respondents to have a

good understanding of the environmental management system in New Zealand. It was considered that office holders of stakeholder organisations and senior managers in management agencies would be well-qualified to comment on the wider institutional arrangements.

All the stakeholder group respondents were locally elected branch representatives for their organisations, holding positions of either the branch president or secretary. Almost all the staff respondents from the agencies identified themselves as senior managers (Fish and Game (100%), DoC conservancies (78%), regional councils (88%)), and 10 regional council respondents were elected held position of environment committee chairperson. Three quarters of territorial authority respondents identified themselves as managers (45% as senior managers, and 31% as holding other management positions).

At the national level, just over half (54%) of respondents identified themselves as managers (senior managers (46%) and 8% other management), while 15% were researchers and 19% held independent positions. The relative seniority of respondents indicates they should be well placed to comment on environmental management practices in New Zealand and that responses should be authoritative.

2.2 Geographical and hierarchical spread

The challenge is to get a representative spread geographically and by levels of administration. There was close to doubling of the number of respondents at each lower level of governance (Table 7-3).

Table 7-3: Hierarchical representation of respondents

Level	Environment	Resource User	Govt	Other	TOTAL
National	2	7	7	10	26
Regional	15		27		42
Local	28	21	27		76
TOTAL	45	28	61	10	144

National level response questionnaires were worded with a subtle difference to capture a national overview rather than a specific regional response. The common wording change to achieve this was to replace “*My region...*” used in the sub-national questionnaires with “*Regions generally...*” The questionnaire remained unchanged in all other respects.

Many national level respondents, including those from government department head offices responsible for a national purview, typically answered question 3 (*‘which regional or unitary council(s) do you deal with most frequently?’*) by identifying several regional councils, as opposed to indicating ‘*All of them*’. Eleven did not indicate a particular region, or indicated all regions; nine respondents indicated 1-3 regions, with another six respondents indicating 5-7 regions. This last group of respondents were typically involved in primary industries that had partial coverage (forestry and dairying).

This response suggests very few people have a complete picture of national level environmental management; rather, perceptions for many at the national level are constructed on the basis of a subset of individual councils that they deal with.

2.2.1 Regional level responses

Responses were obtained from all regions, though the proportion of responses for each region differed considerably (Table 7-4). Some challenges were faced in attributing responses from respondents in organisations whose administrative boundaries regions did not match regional council boundaries. For example several DoC conservancies overlap more than one region (Tongariro/Taupo Conservancy covers land in Manawatu-Wanganui, Waikato and Bay of Plenty regions), while some Fish and Game Regional Managers cover several regions each. Several of these respondents indicated different scores for the different councils and these were attributed accordingly, while taking account also of the location of the regional office.

Table 7-4: Stakeholder and agency responses by region

Region	RC		TA		DoC		Fish & Game		Forest & Bird		Fed. Farmers		NZ Dairy		TOTAL	
	N	n	N	n	N	n	N	n	N	n	N	n	N	n	N	n
Northland	2	2	3	1	1	1	1	0	2	2	1	0			10	6
Auckland	2	1	7	2	1	0	1	0	10	6	1	0			21	9
Waikato	2	1	10	3	2	1			7	3	1	2			23	9
Bay of Plenty	2	2	7	1	1	0	1	1	4	2	2	2	1	1	18	8
Gisborne	2	2			1	1			1	0	1	0			4	2
Hawkes Bay	2	2	4	2					4	3	1		1		13	6
Taranaki	2	2	3	3			1	1	2	0	1	1	1		9	7
Manawatu-Wanganui	2	2	7	4	1	1			5	1	4	3	3	2	23	12
Wellington	2	1	8	2	1	1			5	3	2	1	1	0	19	7
Tasman	2	2							1	1	1	1	1	1	5	6
Nelson	2	2							1	0	1	0	1	0	7	2
Marlborough	2	1							1	0	1	0	1	0	5	1
Tasman-Nelson-Marlborough					1	1	1	1	1		1				4	
Canterbury	2	1	10	3	1	1	2	1	4	4	3	2	1	1	22	12
West Coast	2	1	3	2	1	0	1	1	1	1	1	1			9	7
Otago	2	1	4	2	1	1	1	1	4	1	2	1			14	7
Southland	2	1	3	1	1	1	1	1	1	0	1	1			9	5
TOTAL	32	24	69	26	5	4	6	6	53	28	24	12	11	5	211	110

Note: N is the number of people to whom questionnaires were sent to and n is the number of responses.

Bias was also introduced by the different ways organisations are spatially organised. Most of the stakeholder organisations are organised to give a spread across regions. However, the size of their regions differs, markedly so for the unitary authorities, so that the larger regions have at least twice the number of potential respondents than small ones. Forest and Bird, however, is essentially community-structured, so that its branches are determined by population size, leading to different spatial bias. Thus nearly a fifth (19%) of its branches are in the Auckland region, while only a quarter of its branches cover the whole of the South Island (7 regions covering approximately half of New Zealand's landmass).

The problem of small numbers arose from the small number of respondents from each of the unitary authorities (Gisborne, Nelson, Tasman and, to a lesser extent, Marlborough Districts). The small number of respondents from these councils, resulting from overlapping organisation boundaries and low populations, can lead to distortion when compared to those of the regional councils, and possibly compromise respondent confidentiality. For

these reasons, and also because of the special institutional arrangements under which unitary councils operate (as both territorial and regional councils), these councils' performances are not reported on separately, and are not included in regional comparisons.

2.2.2 Environmental values of respondents

The first set of questions seeks to position respondents' attitudes towards the environment with those of the wider public.

Overall, most respondents (63%) agreed that New Zealand is cleaner than other countries only because of its small population (Q4), while nearly two-thirds of respondents thought the environment was seriously endangered by pollution of rivers, lakes and streams (Q.10: 62% agree) (Figure 7-1). A half (51%) of respondents agreed that New Zealand's environment is seriously endangered by pollution from farming (Q.88), while two fifths (44%) agreed New Zealand's environment is seriously endangered by pollution from industry (Q.17).

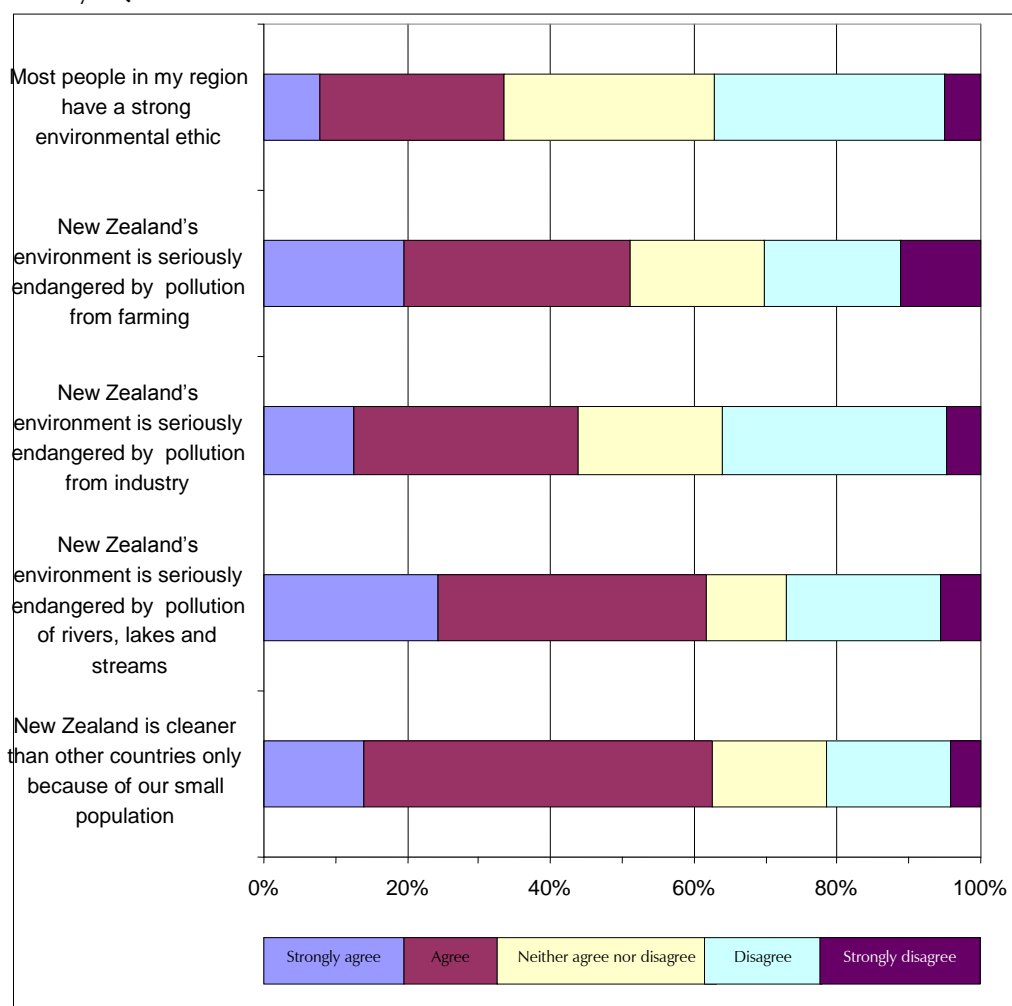


Figure 7-1: Stakeholder values

These questions had been earlier asked in 2000 in a national survey on New Zealanders' attitudes to the environment as part of the International Social Survey Programme (Gendall *et al.*, 2001). That survey found that:

- Most respondents (67%) agree that New Zealand is cleaner than other countries only because of its small population.

- About two-thirds of respondents thought the environment was seriously endangered by pollution of rivers, lakes and streams (68%), while 46% of respondents considered pesticides and chemicals used in farming were a serious threat to the environment.

The similarities in responses with the 2000 survey suggest that the respondents to the present survey reflect attitudes towards the environment held by the wider population.

More broadly, only a third (34%) of respondents agreed and slightly more (37%) disagreed that most people have a strong environmental ethic (Q. 95). Strong regional and stakeholder differences in respondents' perceptions regarding people's environmental ethic are, however, apparent.

Differences in stakeholder perceptions are pronounced; the farming sector clearly takes an optimistic view of their wider regional communities' environmental ethics compared with the other sectors. This contrasts with a uniformly pessimistic view held by Fish and Game, with other environmental and regulatory agencies also taking a more pessimistic view (Table 7-5). These data suggest a bi-modal distribution and polar positions may be held by the different stakeholders on some questions.

Table 7-5: Levels of agreement that people in respondents' regions have a strong environmental ethic, by region and by stakeholder (Q.95)

Region	Proportion (%)	Sector	Proportion (%)
Northland	33	Dairy Farmers	66.6
Auckland	13	Federated Farmers	66.6
Waikato	50	Forest & Bird	20.0
BOP	44	Fish & Game	0.0
Hawke's Bay	29	Regional Councils	26.0
Taranaki	57	Territorial Authorities	33.3
Man-Wang	13	DoC Conservators	22.2
Wellington	50		
Canterbury	31		
West Coast	14		
Otago	57		
Southland	20		
Tasman	78		

Regional variation is also apparent. Half or more of respondents in Waikato, Taranaki, Otago and Tasman regions agree, while less than 13% agree in Auckland, Manawatu-Wanganui and West Coast regions that their regions have a strong environmental ethic. The West Coast is popularly viewed as having anti-environmental sympathies as a consequence of historical dependence on extractive industries and relative isolation. However, the low scores for the other regions is less easily explained.

2.3 Robustness of results

The high response rate, geographic range and calibre of respondents suggest an authoritative response upon which analysis can be based but caution is required in interpreting the survey data. Despite the similarity in environmental values with the wider New Zealand population, the stratified selection of the sample population means generalisations to a national level cannot be made with confidence. The response rate and respondent calibre does suggest confidence in generalising results as representative of

environmental managers and stakeholders with regard to environmental management institutional performance.

As a general rule of thumb, statistical analysis requires about 30 respondents to be valid (Freedman et al., 1991). The similar size of aggregated sectors suggests sectoral comparisons can be made at a national level. However, the small numbers of responses from individual regions excluding territorial authorities, ranging from 5–12, with a median of 8 responses, precludes meaningful statistical analysis by sector at the regional level. The very small numbers of respondents in three of the four unitary councils precludes their inclusion within regional comparisons.

Aggregation is also questionable: members of the different sectors are aligned over different values and perceptions of the environment. Indeed the range of responses (excluding 'don't know') largely consisted of 4 – indicating a range of responses from strongly agree to strongly disagree for each question, with only a limited number of questions with a range of 3 – still indicating both agreement and disagreement. These results suggest the likelihood of bi-modal distributions, consistent with the environmentalist-resource user polarity. A bimodal distribution on some questions is evident (e.g. Q.95), largely reflecting opposing views on the use and protection of the environment. Accordingly, at the sub-national level, the data suggest some caution is required when comparing regions given the different stakeholder composition of respondents in each region.

One way to remove respondent composition bias is to weight individual regions' scores to provide a more uniform stakeholder balanced response. However, the number of responses from each region is quite small, and the assumption that perceptions on regional council performance and institutional arrangements are influenced by stakeholder membership cannot be tested. Indeed, the bi-modal distribution is not always present – for example, some questions show uniformity of agreement by respondents. Rather, the data suggests caution in generalising from the data and need for a question by question assessment. These caveats aside, imbalances between stakeholder compositions in regions are apparent as a result of the larger number of environmentalist stakeholder numbers and lack of responses from farming stakeholders in some regions.

A simple table identifying possible bias, calculated by dividing the difference in the number of farming and environmental stakeholders responding by the total region response, can be used when assessing regional comparisons (Table 7-6). Some of this potential bias can be explained by the large number of Forest and Bird branches in the Auckland region and Federated Farmers branches in the Manawatu-Wanganui Region. Otherwise, the distribution is not easily explained.

Table 7-6: Relative possible regional level respondent bias

Potential farming stakeholder bias		Potential environmental stakeholder bias			
++	+	+	++	+++	++++
Manawatu- Wanganui	Bay of Plenty Taranaki	West Coast	Waikato Wellington Canterbury Otago Southland	Northland	Auckland Hawke's Bay

In any case, rather than seeking an aggregated national picture for all questions, the interest is often in the variability between sectors and between regions in order to help identify unique situations at the sub-national level. Accordingly, separate observations are made by sector and by region, as well as viewing the national response.

3. Substantive value

Several questions address the substantive public value the institutional arrangements create through the achievement of environmental outcomes and outputs. Achieving an outcome generates the public value of an intervention, but is long-term and is influenced by a range of factors, some beyond the control of the organisations, so that direct cause and effect relationships are often not able to be clearly ascribed. Intermediate outcomes are more closely related to outputs, and make the assumption that good process leads to good outcomes, or at least will help promote achievement of good outcomes. Their achievement is able to be more easily ascribed to institutions, but their achievement alone is not necessarily sufficient to guarantee generating public value.

3.1 Environmental outcomes

The questionnaire sought to ascertain whether or not the existing environmental management regime has actually made any difference to environmental outcomes. The existing institutional arrangements were put in place in the late 1980s and early 1990s, culminating in the Resource Management Act 1991. Respondents were asked to assess environmental quality of their regions in general, and with regard to water management in particular, to provide a specific example (Figure 7-2).

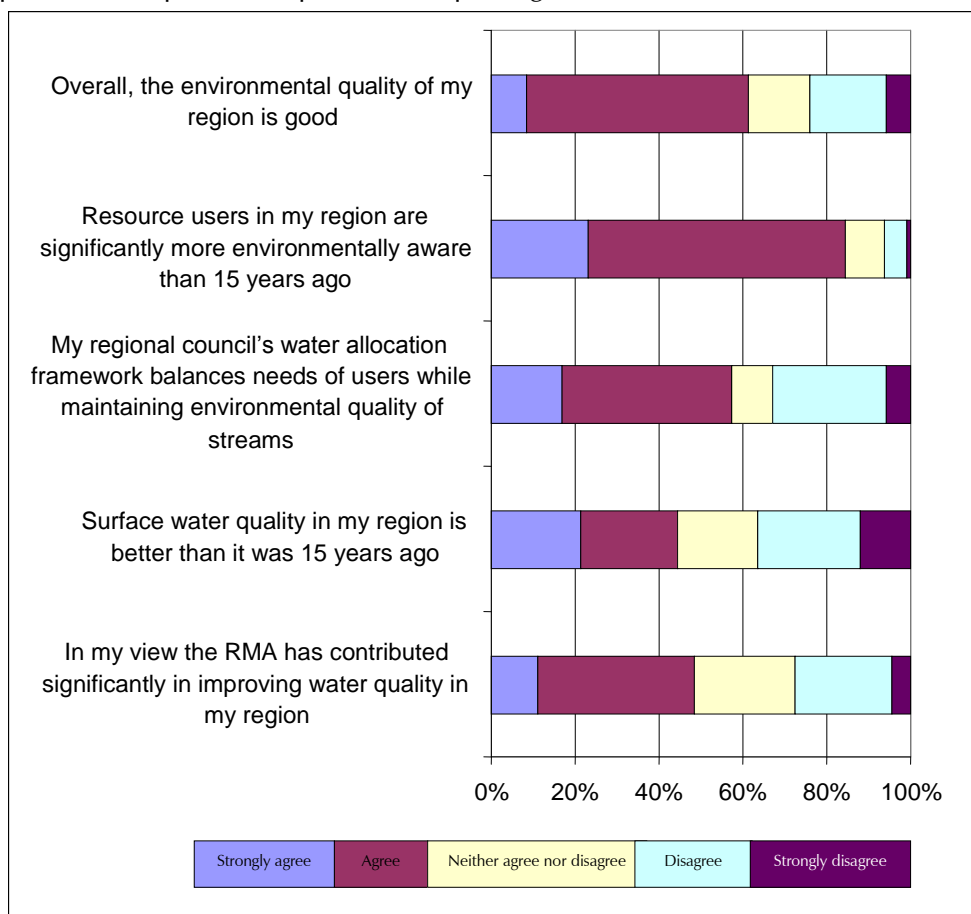


Figure 7-2: Environmental outcomes

A little less than two-thirds of respondents agreed that overall, the environmental quality of their regions was good (Q.69: 61% agree). Less than half of the respondents were as positive when asked about water as a specific example: 44% thought surface water quality in their region is better than it was 15 years ago (Q.67). However, 57% thought that their council's water allocation framework balances needs of users while maintaining environmental quality of streams (Q.83). Just under half of the respondents viewed the RMA as having contributed significantly in improving water quality in their regions (Q.63: 49%)

Significant differences were apparent between sectors. About a third of environmental stakeholders agreed that the overall environmental quality of their region is good as opposed to some three-quarters of resources users and managers (Table 7-7). The national level respondents were split in their opinions.

Table 7-7: Proportion of respondents agreeing that the overall environmental quality of their region is good by sector (Q.69)

Sector	Proportion agreeing (%)
Dairy Farmers	80
Federated Farmers	73
Fish & Game	30
Forest & Bird	37
DoC	33
Regional Councils	81
Territorial Authorities	67
National level	53

Responses also varied by region. Well under half of Auckland (38%), Canterbury (38%) and the West Coast (29%) respondents agreed environmental quality in their region was good. Only Waikato and Taranaki were seen as consistently good, with Bay of Plenty and Wellington at the median. Canterbury and the West Coast were seen as consistently poor. Some variation in council rating was apparent when comparing performance between issues: water quality improvement and water allocation, with Southland and Otago switching places, for example (Figure 7-3).

While council rankings may be open to some debate, the range in regional responses to the statement that environmental quality is good (28% to 90%) nevertheless indicate regional differences that need further investigation. At the same time, respondents in all regions agreed that resources users in their regions are significantly more environmentally aware than 15 years ago (Q.85: 9 of 12 councils had over 80% of the respondents agree). This is a positive environmental management outcome: environmental management is ultimately modifying resource users' behaviour – whilst awareness does not automatically translate into behaviour, it is an important precursor. However, increased environmental awareness does not necessarily result in part or total from management agencies, noting the actions by environmental groups and stakeholders nationally and worldwide over the last thirty years that have given it a high prominence. Accordingly, although this is a useful surrogate, it is not sufficient on its own to indicate improvement in environmental quality.

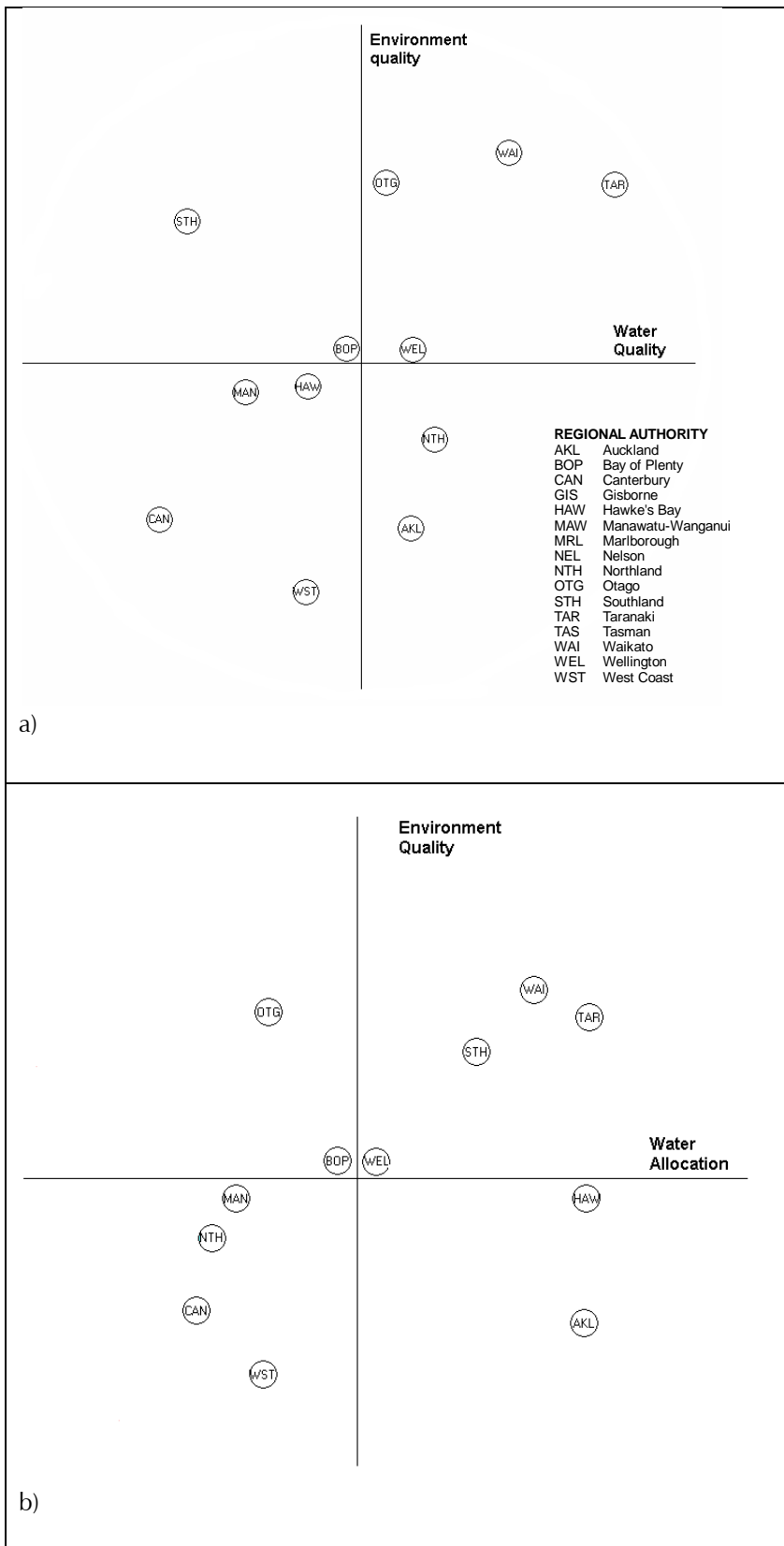


Figure 7-3 Figure Relative regional environmental quality by region: overall environmental quality and a) water quality; and b) water allocation (quantity). Gridlines indicate median scores. Note consistent position of 7 of the 12 councils.

3.2 Intermediate outcomes

A set of questions sought to elucidate how well the environment is managed – intermediate outcomes that help to produce environmental quality outcomes that the institutions are responsible for achieving. Intermediate outcomes considered here are:

- Environmental management; and
- Appropriate environmental policy in place.

3.2.1 Environmental management

The responses indicated ambivalence, or at least uncertainty, regarding environmental management in New Zealand. Only 36% of all respondents agreed that the environment is well managed in New Zealand (Q.26), with over a quarter of respondents expressing a neutral position. A majority of respondents agreed in only three regions (Auckland, Taranaki, and Manawatu-Wanganui).

This variation may be explained by different sectoral responses. The majority (60%) of farming sector respondents agreed New Zealand’s environment is well managed, a sharp contrast to environmental stakeholder responses, where less than a seventh of respondents agreed. Nearly half of regional council (48.1%), and just over a third (38.4%) of territorial authority respondents agreed (Table 7-8).

Table 7-8: Proportion of respondents agreeing that the environment is well managed in New Zealand by sector (Q.26)

Respondent Sectors	Proportion (%)
Dairy Farmers	60.0
Federated Farmers	60.0
Forest & Bird	14.2
Fish & Game	0.0
DoC Conservators	11.1
Regional Councils	48.1
Territorial Authorities	38.4
National level	41.5

Environmental management at the regional level fares somewhat better with 42% of regional respondents agreeing that the environment is well managed in their own regions (Q.7). Clear differences appeared between regions (Table 7-9), though there was no correlation between regional (Q.7) and national (Q.26) level responses ($r=0.02$), suggesting respondents were not conflating regional with national management performance. They suggest a geographic patchiness in overall management.

Table 7-9: Proportion of respondents agreeing that regional level environmental management is well managed

	My regional council's strategies, plans and policies address all the significant environmental issues for this region (Q.22) (%)	The environment is well managed in my region (Q.7) (%)
Northland	0	17
Auckland	22	11
Waikato	20	50
BOP	33	44
Hawke's Bay	57	43
Taranaki	86	100
Man-Wang	13	38
Wellington	50	38
Canterbury	8	23
West Coast	43	29
Otago	43	14
Southland	40	80

Note: Top quartile scores are in bold.

3.2.2 Policy development

Central government and regional councils are responsible for developing policy to address environmental issues. Environmental policy comprehensiveness is needed. However, very few respondents (10%) agreed that strategies, plans and policies address all the significant environmental issues in their regions by central government (Q.24: 76% disagree) or by regional councils (Q.22: 37% agree; 49% disagree). Variation between regional councils is apparent, and environmental management is moderately correlated to regional policy comprehensiveness (Q.22) ($r=0.65$) (Figure 7-4).

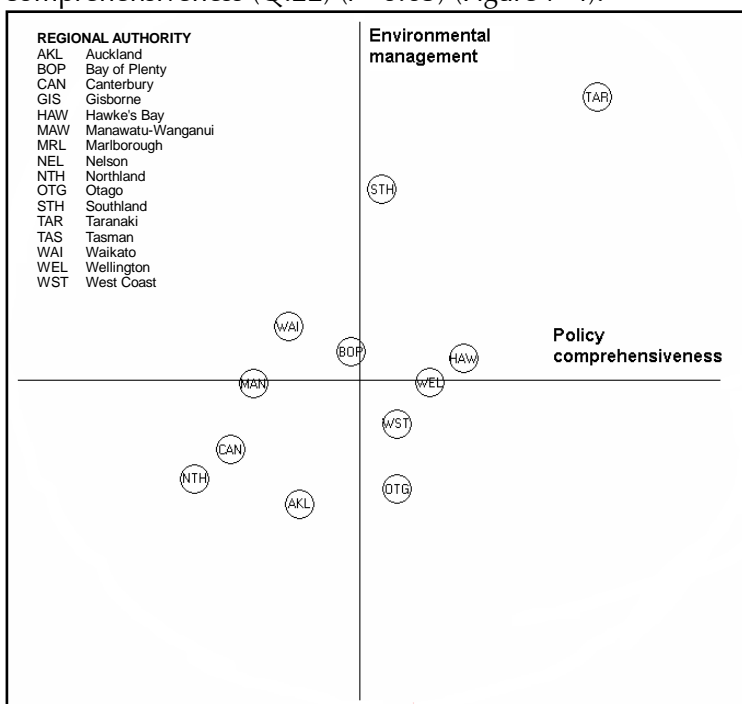


Figure 7-4: Relative environmental management performance by region. Axes indicate median scores (Q.24 & Q.7).

Further, only 15% of respondents agreed that central government monitors environmental policy implementation effectively (Q.43: 65% disagree), while 39% agreed that regional councils monitor environmental policy implementation effectively (Q.61: 35% disagree). These data indicate a poor policy framework nationally, and a patchy regional level framework.

Some concerns were evident about the ability of New Zealand’s environmental policies to be implemented. Nearly half (45%) of all respondents agreed New Zealand’s environmental policies exceed the country’s ability to implement them (Q.106) while 60% national level respondents agreed with the statement. There was significant differences between sectors, although also considerable indifference, with environmental managers least agreeing (together with the Dairy Farmers) (Figure 7-5). Over forty percent of territorial and regional authority respondents agreed with the statement, though almost as many regional council respondents disagreed.

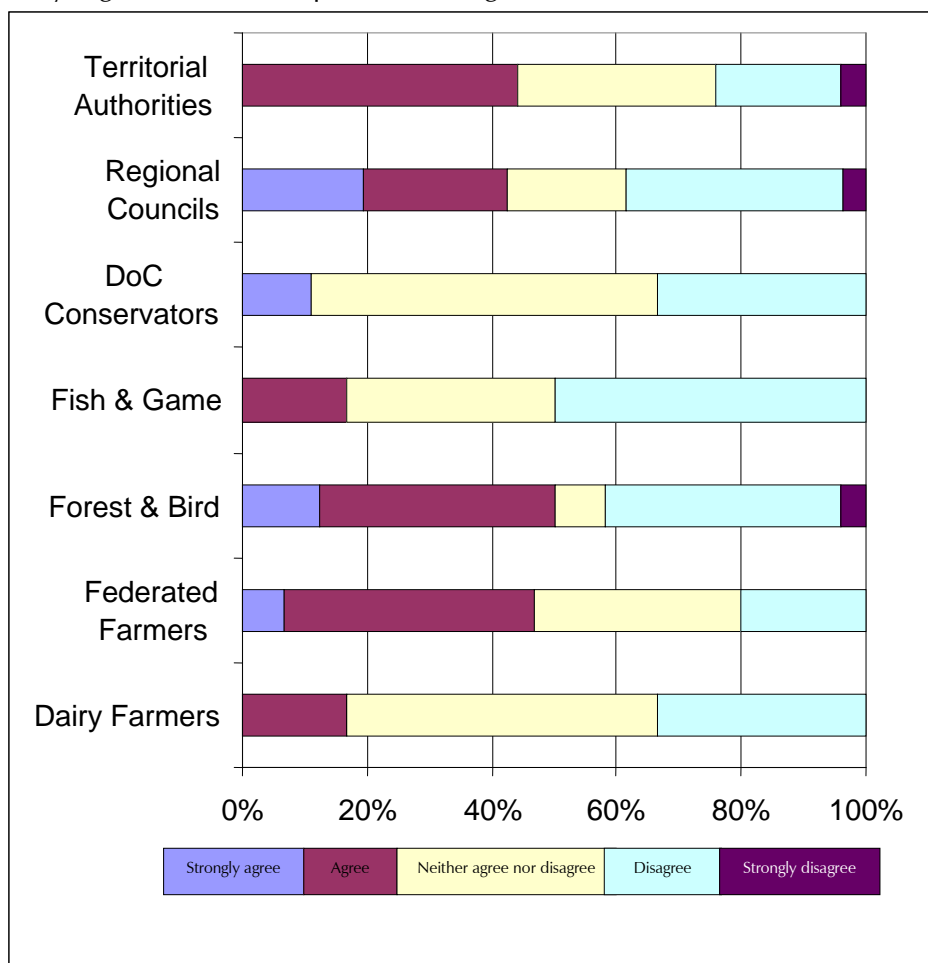


Figure 7-5: Respondents' agreement that environmental policies exceed the country's ability to implement them by sector (Q.106)

4. Operational feasibility

Perceptions of the efficiency of institutional arrangements, identifying whether power is located at the most appropriate locus, in terms of span of control, but also capability of sub-national agencies to undertake functions were sought.

4.1 Capability

The questionnaire sought to establish respondents' views on the capability of different levels of government and stakeholders to undertake environmental policy development and implementation. Capability is a loosely defined term, but the PCE provides a neat working definition: 'what an organisation needs, now and in the future, to deliver on its planned outputs to achieve its intermediate outcomes' (PCE, 2006: 19).

The following attributes are considered as necessary inputs to enable organisations to achieve their intermediate outcomes:

- Knowledge and expertise
- Leadership; and
- Financial resources.

4.1.1 Knowledge and expertise

Organisations need knowledge and expertise to guide effective policy development. Environmental managers need to understand the natural and physical resources they are responsible for, and expertise to use that knowledge to craft effective policy. They also need to be scanning for future threats and opportunities so they can act proactively.

Regional councils are seen to have the best understanding of the natural and physical resources under their jurisdiction: 70% of respondents agreed that their regional council has good understanding of the natural and physical resources in its region (Q.64). This contrasts with the Ministry for the Environment which only about half (45%) of respondents agree has good understanding of the natural and physical resources in New Zealand (Q.41). This is similar to respondents' views on territorial authorities' understanding of the natural and physical resources in their districts (Q.5: 53% agree).

Similarly, two thirds (66%) of respondents agreed that regional councils have good technical expertise to support regional environmental policy development (Q.27). Over half (58%) of respondents disagreed that central government provides good technical expertise to support national environmental policy development (Q.35: 22% agree). A third of respondents (34%) in territorial authorities agreed that territorial authorities have good technical expertise to support environmental policy development (Q.38). Fifty-eight percent of respondents disagreed that their regional council lacks the skills to undertake its environmental functions (Q.77: 19% agree; 58% disagree). Half of the respondents agreed that their region's policies benefit from overseas environmental policy and research programmes (Q.51: 50% agree).

4.1.2 Future focus

The environmental management organisations are not seen as being future-focused. Only a third of respondents agree the Ministry for the Environment is geared to identify future environmental threats and opportunities in New Zealand (Q.68: 37% agree), while slightly less than half of respondents agree that their regional council is geared to identify future environmental threats and opportunities in their region (Q.44: 47% agree) (Figure 7-6).

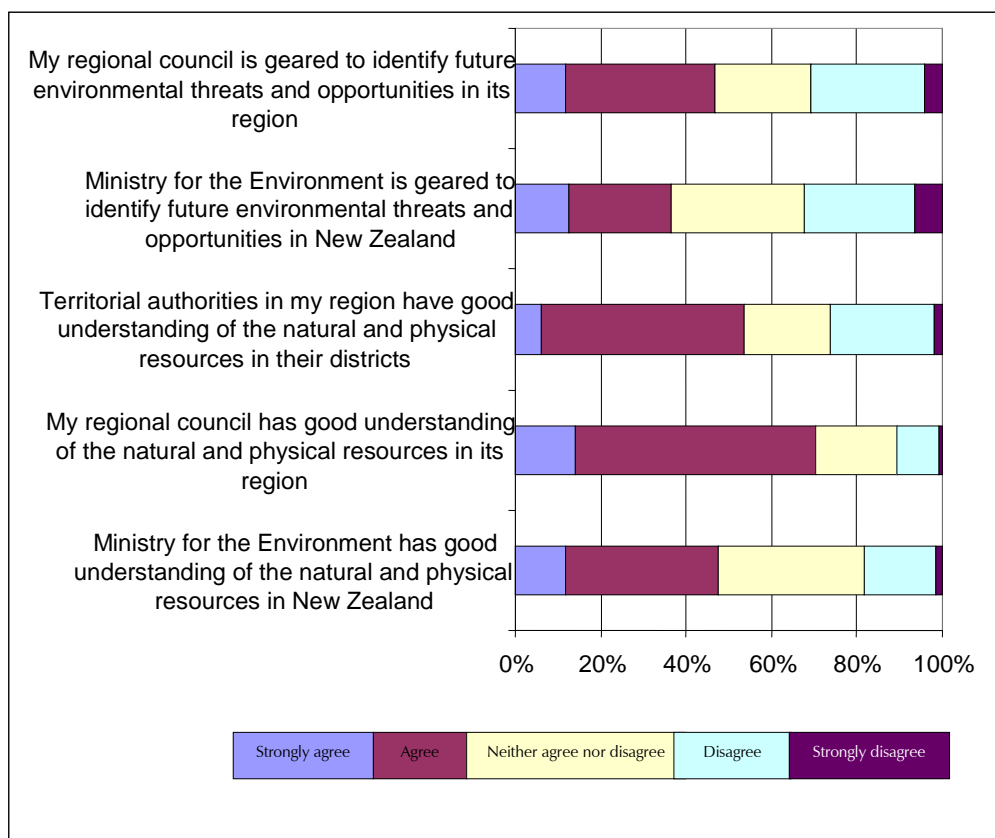


Figure 7-6: Future threats and present knowledge

Regional councils are seen to differ in their knowledge about environmental resources and their future focus (Table 7-10).

Table 7-10: Regional council understanding or their environmental resources and future threats

	Knowledge about region's environmental resources (Q.64) (%)	Future focus (Q.44) (%)
Northland	33	33
Auckland	50	67
Waikato	90	80
BOP	63	63
Hawke's Bay	86	57
Taranaki	100	100
Man-Wang	69	38
Wellington	88	38
Canterbury	46	23
West Coast	43	43
Otago	71	29
Southland	60	60

The freshwater resource was used as a specific example of institutional knowledge and future focus in order to ground the wider perceptions. In particular, respondents were asked about organisations' understanding of the pressures and state of the water resources, where pressure on a resource is indicates future impacts and issues and state shows current condition and is a function of historical resource use.

Only half of the respondents agreed that the Ministry for the Environment had a good understanding of either the pressure on or state of, the freshwater resources in New Zealand – comparable to non-government agencies (Table 7-11, Figure 7-7).

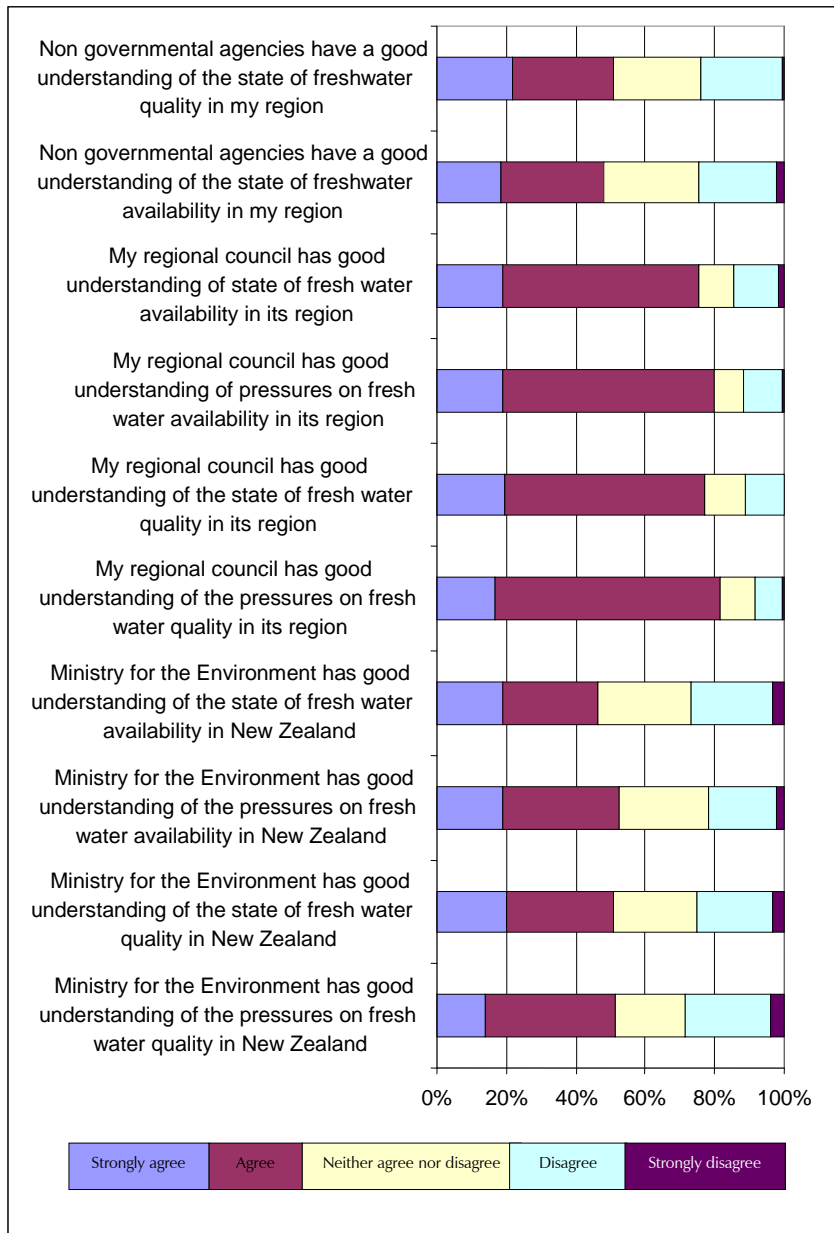


Figure 7-7: Organisational knowledge about water resources

Regional councils were seen to have a good understanding on water quality in their regions, and the pressures on water availability, but not on the state of water availability.

Table 7-11: Understanding of water issues by organisation

Organisation	Pressure (%)	State (%)
Ministry for the Environment		
Water quality (Q.23, Q.34)	51	51
Water availability (Q.46, Q.30)	52	46
Regional Councils		
Water quality (Q.59, Q.49)	82	77
Water availability (Q.28, Q.105)	76	51
Non-government agencies		
Water quality (Q.105)		51
Water availability (Q.92)		48

Variation between regional councils was apparent with high levels of agreement among respondents in Taranaki and Waikato (Table 7-12, Figure 7-8).

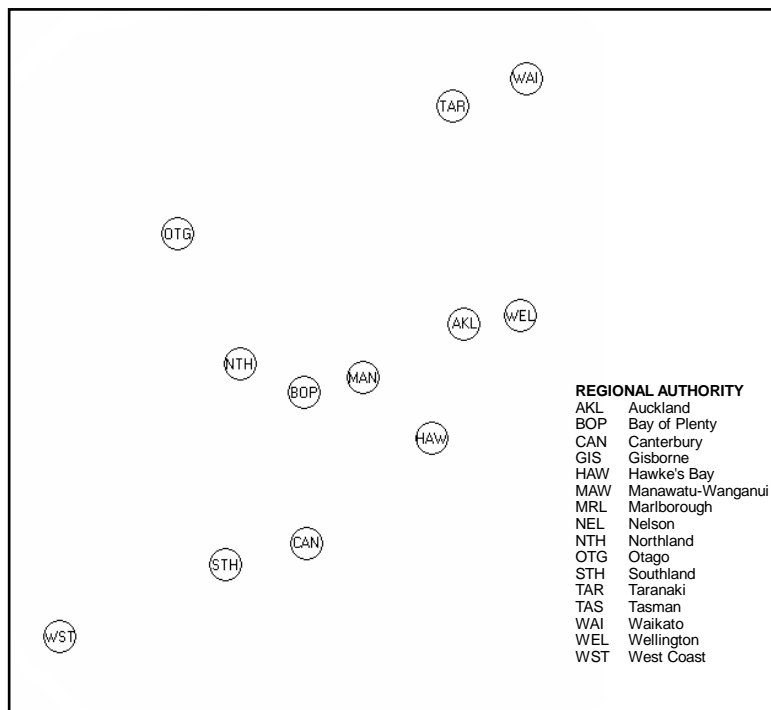


Figure 7-8: A multidimensional scaling depiction of perceived relative regional council understanding of pressure and state of their regions' water quality and quantity. The closer a region is to another, the more the similar they are (Objective value function = 0.059).

Table 7-12: Regional councils' understanding of water issues

	Water Quality		Water Quantity	
	Pressures Q.59	State Q.49	Pressure Q.28	State Q.78
Northland	67	67	83	67
Auckland	100	89	78	75
Waikato	100	100	100	100
BOP	75	63	75	78
Hawke's Bay	100	71	71	71
Taranaki	100	100	100	86
Man-Wang	81	75	75	75
Wellington	100	88	75	88
Canterbury	77	62	69	54
West Coast	29	43	57	57
Otago	71	57	100	71
Southland	60	60	60	60

4.1.3 Resources

Financial resources are needed both to develop and implement policy. As with other aspects of capability, neither central government nor territorial authorities are seen by respondents to have financial capability to support environmental management (Figure 7-9).

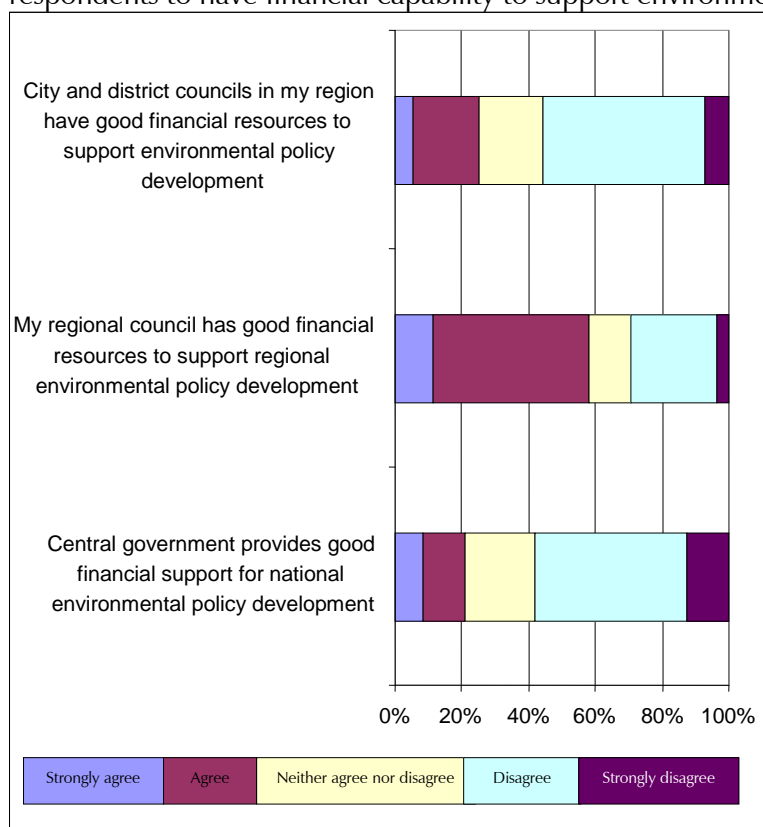


Figure 7-9: Financial resources

Only 21% of respondents agree central government provides good financial support for national environmental policy development (Q.19: 21% agree, 58% disagree) while a third (33%) agree central government agencies have enough resources to implement environmental policy effectively (Q.70: 33%). Only a quarter (26%) of respondents agree central government agencies have enough resources to monitor environmental policy implementation effectively (Q.75). Similarly, only a quarter of respondents agree territorial

authorities have good financial resources to support environmental policy development (Q.52: 25% agree).

Table 7-13: Regional councils have good financial resources to support their policy development (Q37) (%)

Northland	67
Auckland	67
Waikato	70
BOP	63
Hawke's Bay	71
Taranaki	100
Man-Wang	56
Wellington	88
Canterbury	46
West Coast	29
Otago	86
Southland	60

These response levels contrast with those for regional councils which are seen to have good financial resources to support their environmental policy development (Q.37: 58% agree). Most respondents disagreed that their regional council lacks the financial capacity to undertake its environmental functions (Q11: 38% agree, 45% disagree). Regionally, there is a perceived difference between councils, though with only a few, Canterbury and West Coast, with markedly poor responses (Table 7-13).

A bare majority of respondents also considered that funding mechanisms may not be appropriate. A half (56%) agreed the environment suffers from the existing rates-based funding mechanism for local government (Q.101) while the same number agreed central government should fund environmental management given the cross-regional boundary nature of environmental management (Q.94: 53% agree)

4.1.4 Leadership

Leadership is also needed to guide policy formation and to engage with the community to achieve environmental outcomes. In this regard only a third of respondents agreed that central government provides leadership to support national environmental policy development (Q.97: 32% agree). In contrast, over half of respondents agreed that regional councils provide regional environmental management leadership (Q.14: 57% agree). Only a quarter of respondents agreed that territorial authorities provide environmental management leadership (Q55: 25% agree).

Distinct differences are apparent between regions, both by regional councils and their constituent territorial authorities are apparent (Table 7-14). Waikato and Wellington regional councils were clearly seen as leaders, with territorial authorities in the Taranaki and Waikato seen as the leading territorial authority leaders.

Table 7-14: Environmental leadership by local authorities (Q.14 & Q.55)

Region	Regional council (%)	Territorial Authorities (%)
Northland	33	0
Auckland	67	25
Waikato	90	50
BOP	67	0
Hawke's Bay	57	0
Taranaki	71	57
Man-Wang	50	6
Wellington	88	38
Canterbury	38	31
West Coast	43	14
Otago	29	14
Southland	60	40

Respondents were also asked whether their own organisations are recognised for their environmental leadership (Q.40). Territorial authority respondents reflect the wider national perspective on their sector’s leadership with only a quarter agreeing the territorial authorities show environmental leadership. On the other hand, regional council respondents (74% agree) have a higher perception of their councils’ leadership than other respondents. Both the farming sector and Forest and Bird respondents believe their own organisations show leadership. The environmental group respondents reflect their organisational mission with over half of respondents (55%) strongly agreeing with the statement (Table 7-15).

Table 7-15: Individual organisations’ environmental leadership (Q.40) (%)

Dairy Farmers	100
Federated Farmers	73
Forest & Bird	93
Fish & Game	67
DoC Conservators	56
Regional Councils	74
Territorial Authorities	26

Capability summary

Respondents clearly perceived a lack of capability at the central government level. The capability of the environmental management institution is seen to be located at the regional council level of government. However significant differences in capability are apparent between regions. A clear group of regional councils with the consistent breadth of capability to manage the environment is apparent. Taranaki, Waikato and Wellington regions are seen to have most support. At the same time, other councils are seen relatively to be lacking in capability (Figure 7-10). The distinctions between councils do not seem to be related to bias in stakeholder composition of individual regions; the five councils with a similar bias identified in Table 7-6 and shaded in Figure 7-10 are scattered throughout the distribution.

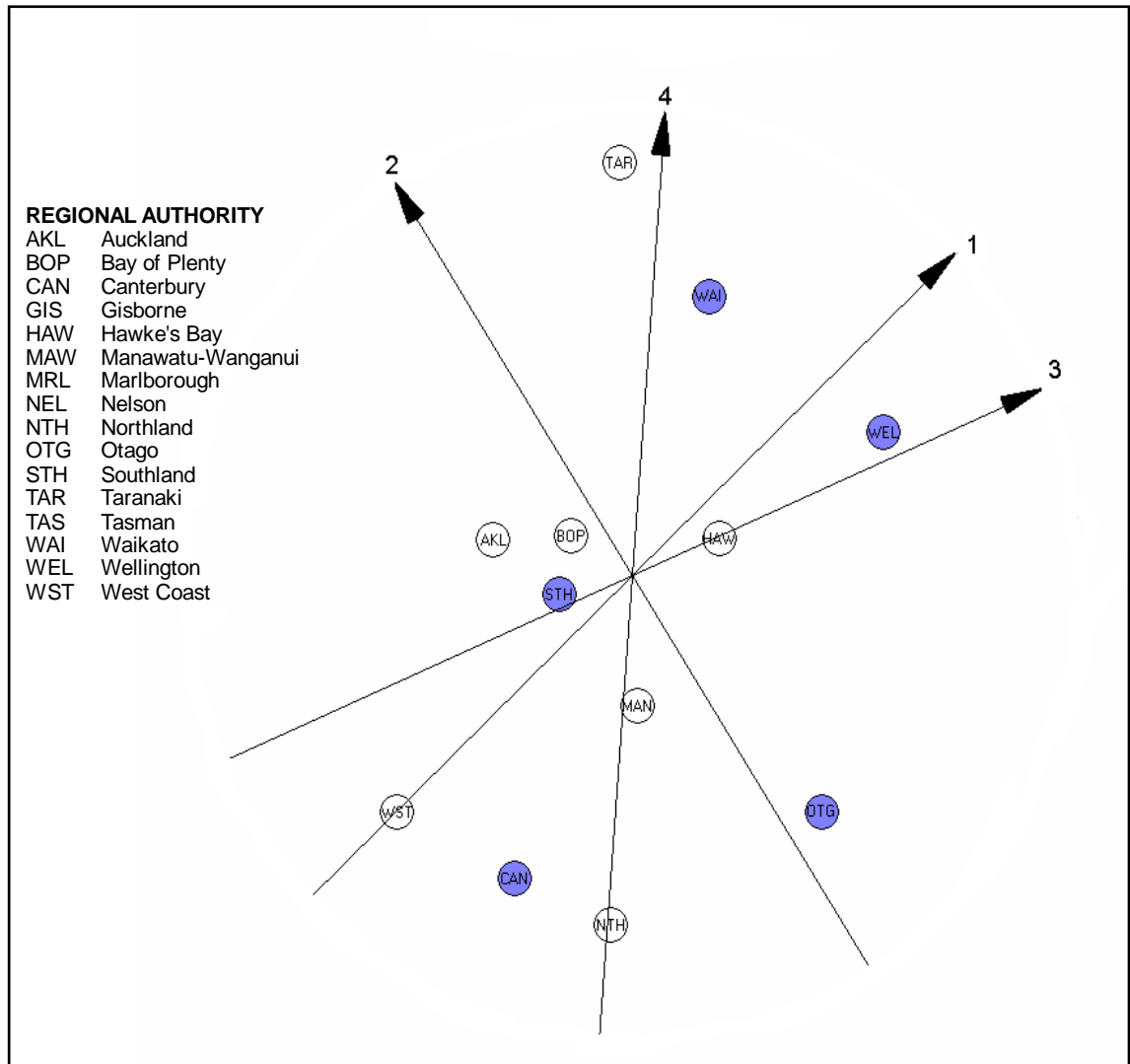


Figure 7-10: Multi-dimensional scaling depiction of perceived relative regional council capability. (Objective Function Value = 0.059). The closer a circle is to another, the more similar their perceived capability. 1= understanding of natural resources; 2= future focus; 3= financial resources; 4= leadership. The five shaded regions have similar stakeholder bias (see Table 7-6). MDS created using PERMAP program.

4.2 Institutional design

As discussed in Chapter 3, institutional design is considered important to deliver efficacious policy. New Zealand's environmental management structure is multi-layered, but other models are employed in other countries. These questions examine respondents' views on various multi-layer governance models for managing New Zealand's environment. Firstly, the design of the current model is considered. Alternative structures formed by collapsing layers – either by forming larger regional local government authorities or further devolving regional environmental functions to territorial authorities – the unitary council model are then considered. Finally, support for centralising some or all regional council functions is explored.

4.2.1 Support of existing government model

Support for the current model of a regionally based environmental management is ambivalent at best; only a half (49.6%) of respondents agreed the existing regional council system works well and should be retained, while a further 21% neither agreed nor disagreed

(Q.96). Even fewer respondents (37%) agreed that the current distribution of responsibilities between central government and regional and territorial authorities is an effective way to manage the environment (Q.82). However, most respondents (61%) disagreed that regional councils do not seem to be an effective way for managing the environment (Q.74).

Two thirds of respondents agreed that it was important to have an independent national agency to both provide strategic environmental information advice (Q.93: 66% agree), and to act as an environmental watchdog (Q.102: 58% agree). These functions are currently filled by the Parliamentary Commissioner for the Environment.

Single and multi-functional government

Ambivalence exists about the range of functions to be carried out by regional authorities. Split opinions among respondents were evident as to whether single purpose organisations manage the environment better than those with many functions (Q48: 42% agree; 34% disagree). There was little support to make regional councils responsible for making social and economic policy in their regions (Q.71: 64% disagree). Regionally, no respondents in five of the 12 councils supported the concept, while a third or less of respondents in the remaining regions supported it. Auckland respondents (38%) had the highest level of support, while Wellington, which shortly after the survey launched a draft regional Growth Strategy to be run under the auspices of the Regional Council, received no support at all.

4.2.2 Devolved or amalgamated models

Just over half of respondents (57%) agreed that New Zealand has too many local authorities (Q.36), though this agreement differed between regional level respondents (53%) and strong agreement by national level respondents (73%). However, any reduction is seen to be by horizontal amalgamation as there was little support for transfer of functions between regional and territorial authorities. There was strong opposition to transferring city and district council functions to regional councils (Q.65: 34% disagree, 38% strongly disagree), or of regional council functions to city and district councils (Q.98: 37% disagree, 42% strongly disagree) (i.e. formation of unitary authorities). This was reflected at the regional level, though at a lesser level in the unitary authorities, where 8 of 14 respondents (57%) in unitary authorities disagreed that regional councils should take over territorial authority functions. The exception was Auckland, where the eight respondents divided equally, perhaps reflecting Auckland's wider metropolitan governance issues.

4.2 3 Devolution and centralisation of functions

Functions can be located at different levels of multi-level governance structures. A centralised model locates policy function at the national level, with devolved implementation functions to regional level. Alternatively, policy can be made and implemented at regional level, with a national level oversight. Respondents show no clear preference for a particular model of governance, with support given for both centralised and decentralised functions.

A third of respondents (32%) agreed environmental policy should be made by central government and implemented by local government (Q.60: 32% agree; 55% disagree), while there was an even split on whether an independent national agency is needed to provide key environmental policy (Q.20: 42% agree; 42% disagree). Two thirds of respondents, however, agreed on the importance of having an independent national agency to provide strategic environmental information and advice (Q.93: 66% agree).

Most respondents agreed environmental monitoring should be undertaken primarily at the regional level of government (Q.104: 69% agree). However, opinions were split on whether environmental management research should primarily be carried out at the national level of government (Q.89: 46% agree; 33% disagree).

A half of respondents disagreed that environmental management systems monitoring should be undertaken by the national level of government (Q.100: 38% agree 49% disagree), while just over half agreed that an independent national agency is needed to act as an environmental watchdog (Q.102: 58% agree; 30% disagree). Differences in preferences are apparent between sectors (Figure 7-11). Forest and Bird and Fish and Game respondents were much more in favour of more centralised policy-making and an independent watchdog than other sectors. In contrast, the farming and both regional and territorial council respondents were strongly against centralising policy making.

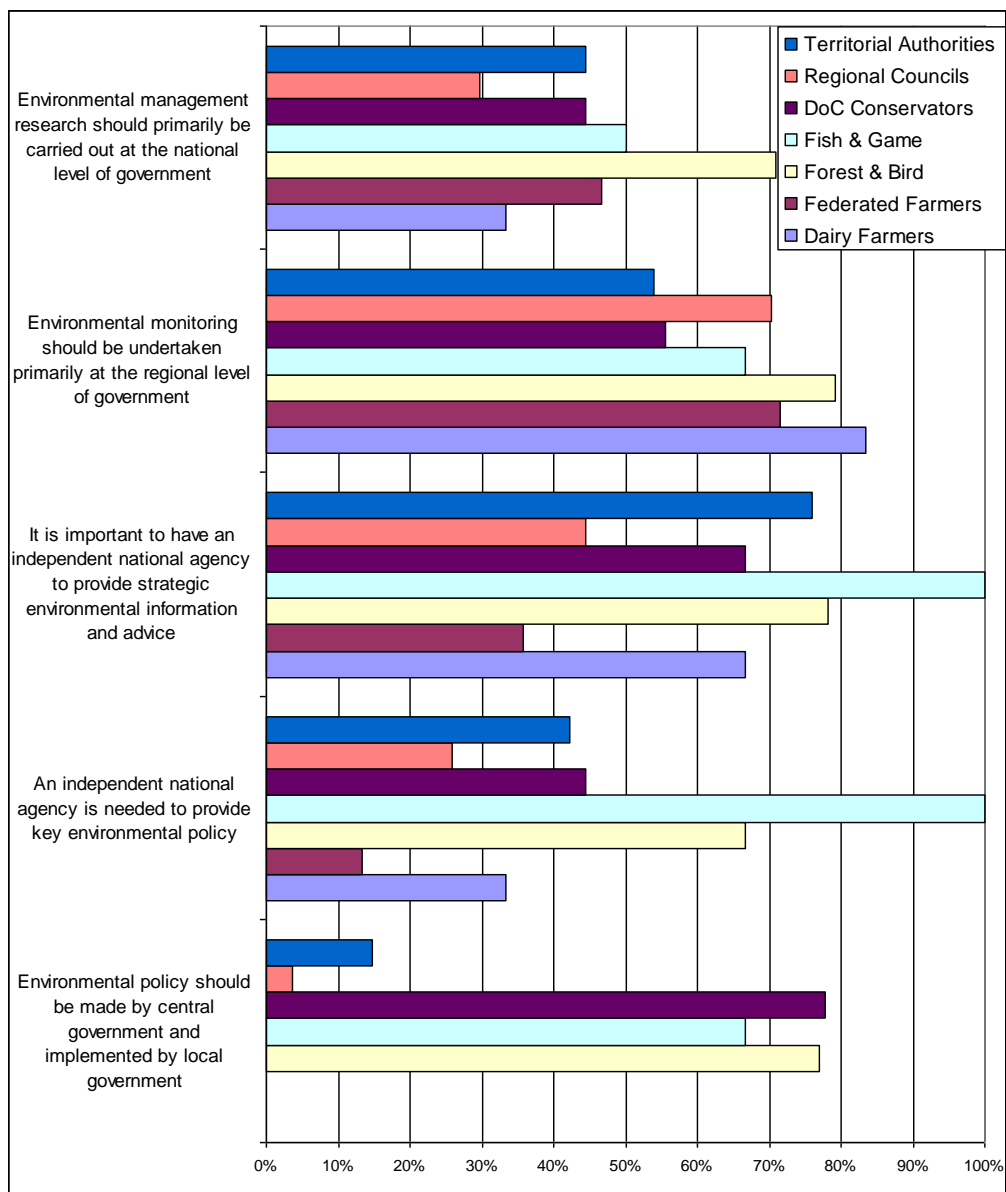


Figure 7-11: Location of functions by sector

These data give no clear preference for devolved or centralised modes of policy development. Both options have supporters, with local government and farming sectors

supporting a more decentralised model, and environmental managers and stakeholders supporting a more centralised model.

Respondents were asked which level of government is primarily responsible for policy making in their region for a series of environmental issues. They were then asked what level of government they thought should be responsible for these issues. There were 127 responses; a number of respondents chose not to complete this part of the questionnaire.

Respondents largely shared similar perceptions of the actual and preferred locus of responsibility for managing many environmental issues (Figure 7-12). Thus, air, water quality and quantity, the impacts of farming were all seen as regional functions; waste management, and urban environment were territorial local government responsibilities, while biosecurity, energy and climate change were seen as national government responsibilities. A number of respondents were unsure who was responsible for energy (17%), climate change (7%) and sustainable development (10%) – responsibilities located at the national level, but which up to and at the time of the survey had not clearly articulated policies and direction. Most respondents indicated that their preferred locus of responsibility largely reflected perceived existing levels of government.

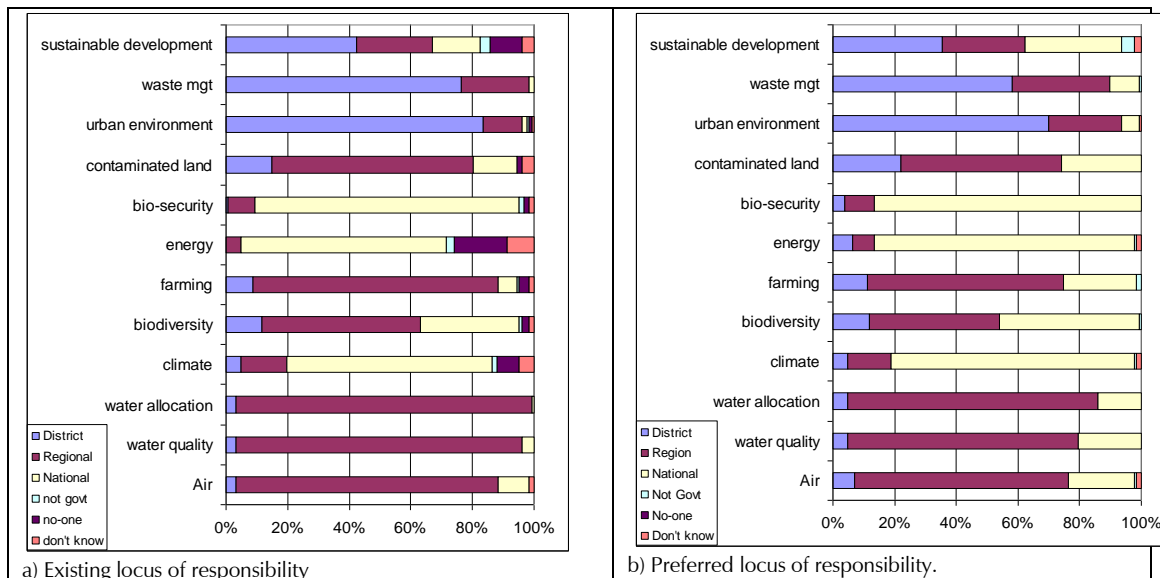


Figure 7-12: Perceived existing locus of responsibility and preferred locus of responsibility

However, there was some desire for a change from the present configuration, showing a preference for a centralisation of functions at the national level of government. This is particularly obvious for air, water quality and water allocation responsibilities, where although the majority of respondents still wanted these functions at the regional level, a significant minority indicated a preference for national management. This may be a reaction against perceived inadequacy of management at the regional level.

While most respondents preferred waste management and urban environment to be managed at the district level, an appreciable minority preferred this responsibility to be located at the region, or even the national level (Figure 7-13). Already, district councils in several parts of the country utilise a regional waste management service, while in Auckland there have been calls for a single urban authority.

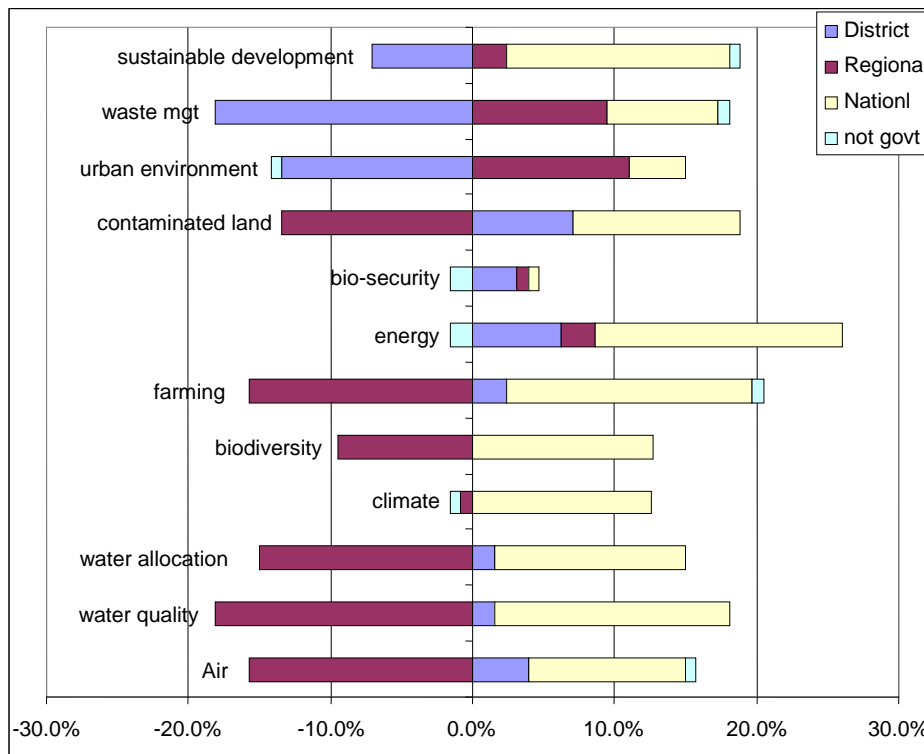


Figure 7-13: Difference between perceived actual and preferred locus of responsibility. Asymmetry results from respondents being unsure of the current locus of responsibility, but identifying where they think it should be. This is most noticeable for energy, climate change and biosecurity.

4.3 Geographic span

The questionnaire sought views on how well environmental issues match with regional scale of local government. They relate to the theory of fiscal federalism (Dollery & Wallis, 2001) that holds inefficiencies may result from rent-seeking behaviour, but also duplication of effort, where a mismatch between issues and jurisdictions occur.

A significant majority of respondents (83%) agreed that most environmental issues are common across New Zealand (Q.86). This view is reflected in all but one of the regions, and over three quarters of respondents in half the regions agreed. Just over half of respondents (52%) agreed that most of their region's RMA policies and rules could be applied across most regions of New Zealand (Q.29), though this dropped to 46% agreement among the national level respondents. At the same time, 59% of respondents agreed that more uniformity in environmental management policy across regions is needed (Q.73).

Just under a quarter (24%) of all respondents and a third of regional respondents in most regions considered regional council barriers are a barrier to dealing with key environmental issues (Q.91). Only respondents from Auckland (88%), and to a much lesser extent Otago (57%) and West Coast (43%) agreed that boundaries were a barrier. Reflecting ambivalence about regional councils should undertake wider functions, most respondents disagreed that regional boundaries should be based on communities rather than catchments (Q.42: 69% disagree), an important precursor to a wider multi-functional governance responsibility.

It should be noted that Otago and Canterbury Regional Councils were earlier in dispute over the jurisdiction of the Waitaki River catchment, resulting in a compromise management arrangement. Auckland is a special case, consisting of four large cities and three districts that together form a single metropolis. Governance issues have been a source of contention since the Auckland Regional Council's formation and, shortly after the survey was completed, the mayors of the four cities announced a proposal to form a single city council and to abolish the regional council²².

5. Authorising agency

Input legitimacy concerns democratic decision-making through citizen and interest group participation, ensuring different values are recognised in the decision-making process. Its importance derives in providing authorization and support for public intervention based on collective rather than individual preferences (see Moore, 1995). Questions explore respondents' perceptions about New Zealand's environmental management regarding:

- Democratic input and visibility with general public
- Stakeholder and community engagement and credibility
- Relations with other government levels.

As well wider governance issues are examined, reflecting contemporary concerns:

- The influence of the Local Government Act 2002, which seeks to establish a community based strategic planning framework
- The impact of international drivers, reflecting globalisation pressure.

5.1 Democratic input

An underpinning element of the current institutional arrangements is to allow local democratic decision-making and participation. The RMA makes environmental management policy-making a key role for regional councils, while providing opportunities for stakeholders and wider public to submit on draft regional plans and policy statements. The LGA2002 also provides for community input through the community outcomes process and in LTCCP and annual plan submissions.

The respondents strongly supported the notion that democratically elected representatives should contribute to sub-national environmental policy (Q.8: 80% agree). Although the views of regional councillors were not well-known through media and meetings (Q.103: 36% agree), just over half respondents considered councillors to make a good effort to represent the different communities and interests in the regions (Q.66: 56%).

Two-thirds of respondents (67%) agreed regional representation allows local communities' concerns to be heard and taken into account in making environmental policy (Q.53). Further, although over half (56%) respondents consider the same people submit on regional plans (Q.81), most disagreed that the councils appeared to listen only to a small group of interest groups (Q.6: 53% disagree). There is, however, some disquiet that regional

²² Shortly after the survey was completed mayors of the four Auckland cities proposed formation of a single city and the abolishment of the regional council. The invited audience included the Prime Minister. The proposal and ensuing controversy gained public prominence and extensive media coverage and comment. More recently (November, 2007) the government established a Royal Commission on Auckland Governance, as noted in chapter 3.

representation emphasises local and regional issues at the expense of the national interest (Q.91); whereas only 36% of regional respondents agree with this statement, 65% of national respondents agree with it (Figure 7-14).

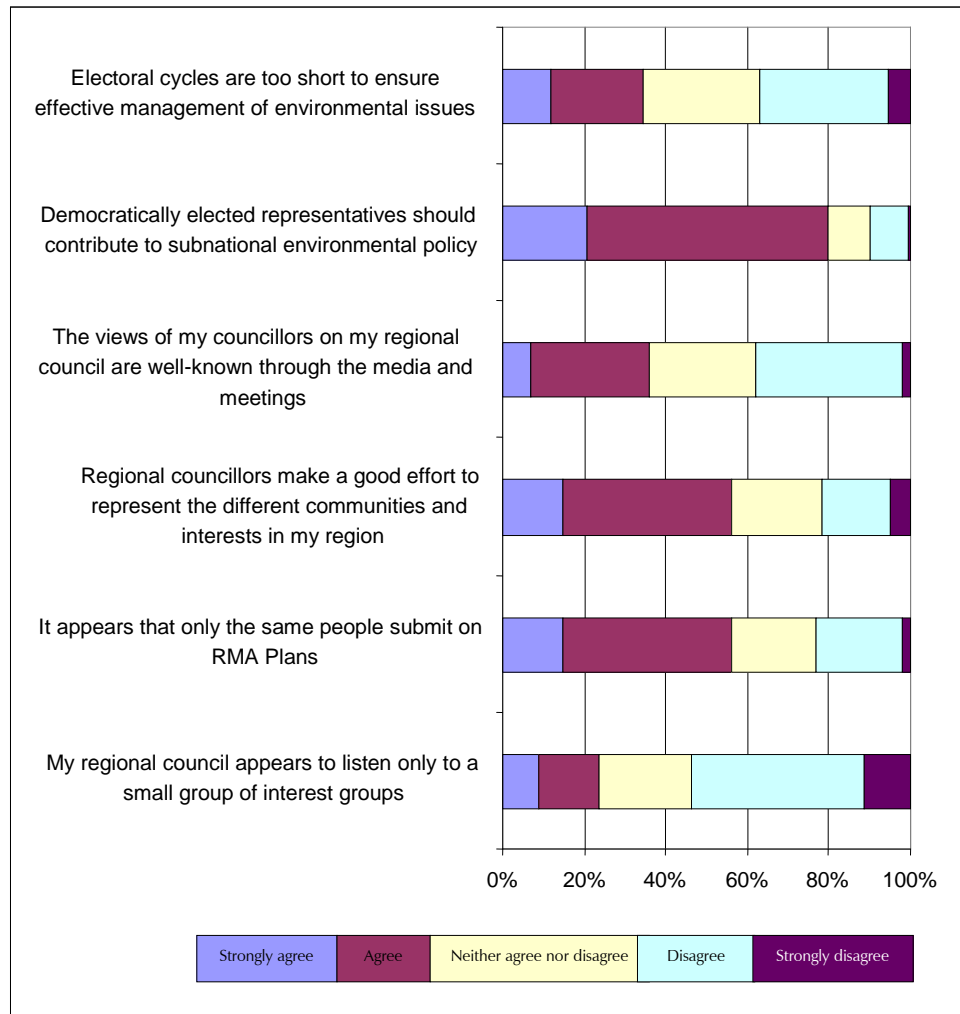


Figure 7-14: Democratic input

Despite some concerns that short-term electoral cycles work against long-term environmental policy goals, only a minority (35%) of respondents agreed that the three-year electoral cycles were too short to ensure effective management of environmental issues (Q.16).

These data, taken together, suggests a desire for reactive local accountability, rather than for proactive strategic policy development that would take time to implement and voter mobilisation to ensure ongoing political support.

5.2 Community and stakeholder engagement

The questionnaire sought to establish the support councils have in their communities and their relationships with different stakeholders, which have implications for governance beyond government.

Relationships between regional councils and their stakeholders are seen overall to be good, with over 20% of all respondents strongly agreeing that regional council have good relationships with each of the stakeholder groups identified (Figure 7-15).

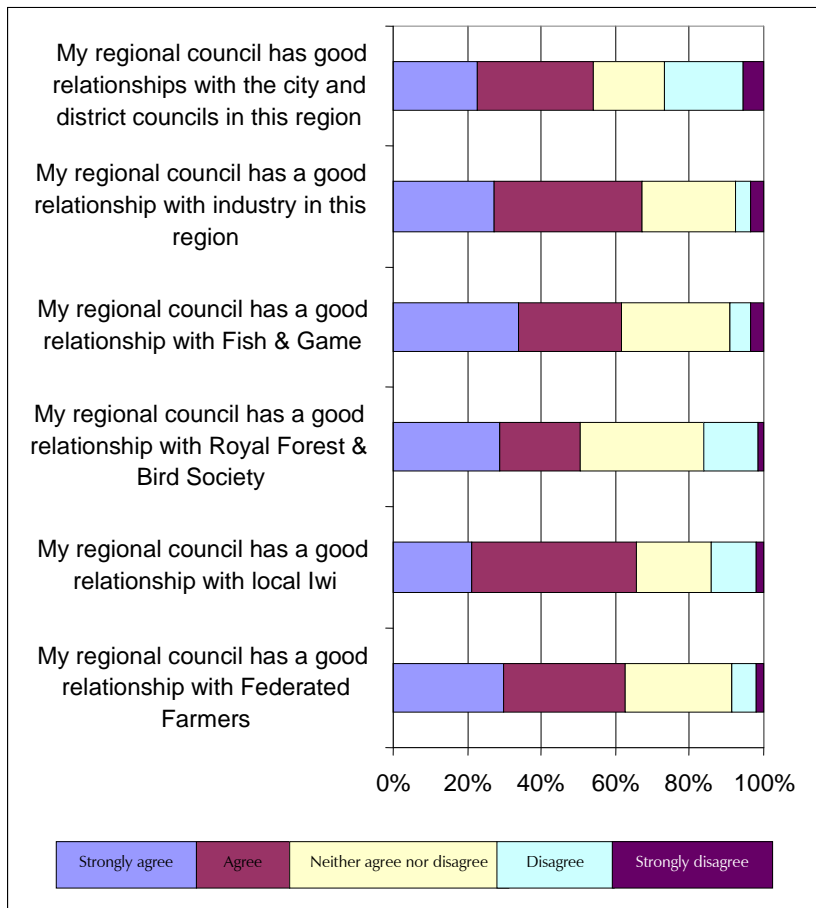


Figure 7-15: Regional councils' relations with stakeholders

Considerable differences are apparent at the regional level (Table 7-16). Regional respondents placed Hawke’s Bay, Waikato and Wellington, followed by Southland as top quartile councils in having good relationships with their stakeholders.

Table 7-16: Regional variation in regional council relations with stakeholders

Regional council relationship with:	Fed. Farmers	Iwi	Forest & Bird	Fish & Game	Industry	TLAs
	Q.12 (%)	Q.47 (%)	Q.25 (%)	Q.15 (%)	Q.21 (%)	Q.76 (%)
Northland	33	33	17	33	67	17
Auckland	44	67	67	67	67	38
Waikato	70	60	80	80	80	50
BOP	78	63	25	67	78	63
Hawkes Bay	100	100	57	86	86	100
Taranaki	86	71	57	57	100	71
Man-Wang	63	56	63	63	38	44
Wellington	50	100	75	88	75	88
Canterbury	46	69	38	31	54	23
West Coast	71	57	43	57	71	57
Otago	57	43	43	57	43	43
Southland	20	80	40	80	80	80

*Top quartile scores are in bold.

Relationships between regional councils and territorial authorities vary markedly as identified in chapter 3. Auckland and Canterbury Regional Councils historically have had fraught relationships, reflected in the survey here. In comparison, the Southland Regional Council has a recent history of cooperation with its constituent territorial authorities after a rocky start and efforts to create unitary authorities in the region.

Relationships may not be assisted by an often asymmetrical perception of the quality of the relationships between the parties (Table 7-17). Both Federated Farmers and Forest and Bird respondents felt their relationships with regional councils were much better than the regional councils and the wider respondent group believed.

The perception is reversed with territorial authorities, with regional councils overall having considerably inflated views of the quality of their relationships with territorial authorities. Most regional council respondents rate relationships with territorial authorities higher than their territorial authority counterparts do. In five councils this variability is small, but is marked in some of the others: one regional council's respondents' returned *agree* (2), while the territorial authority respondents returned *strongly disagree* (5)²³.

Table 7-17: Regional Council relations with stakeholders

Stakeholder	Proportion of respondents agreeing		
	All (%)	Regional Council (%)	Stakeholder (%)
Federated Farmers (Q.12)	63	68*	76
Forest & Bird (Q.25)	50	26	67
Fish & Game (Q15)	62	61	50
Territorial Authorities (Q.76)	54	70**	40

* 43% neither agree nor disagree; ** 30% strongly agree.

²³ The strength of feeling was such that one of these respondents annotated the questionnaire saying it should be scored as '10'.

5.3 Multi-layer linkages

Within a multi-layer governance system, linkages between the different layers are important to align policy development and implementation (Bailey, 1999).

Linkages between central and local government are clearly regarded as inadequate in the New Zealand system (Figure 7-16). Central government is not seen as providing adequate environmental policy guidance and direction (Q.62: 57% disagree), while 29% of respondents agreed that there was good collaboration between central government and regional councils in developing environmental policy – though a further 31% neither agreed nor disagreed.

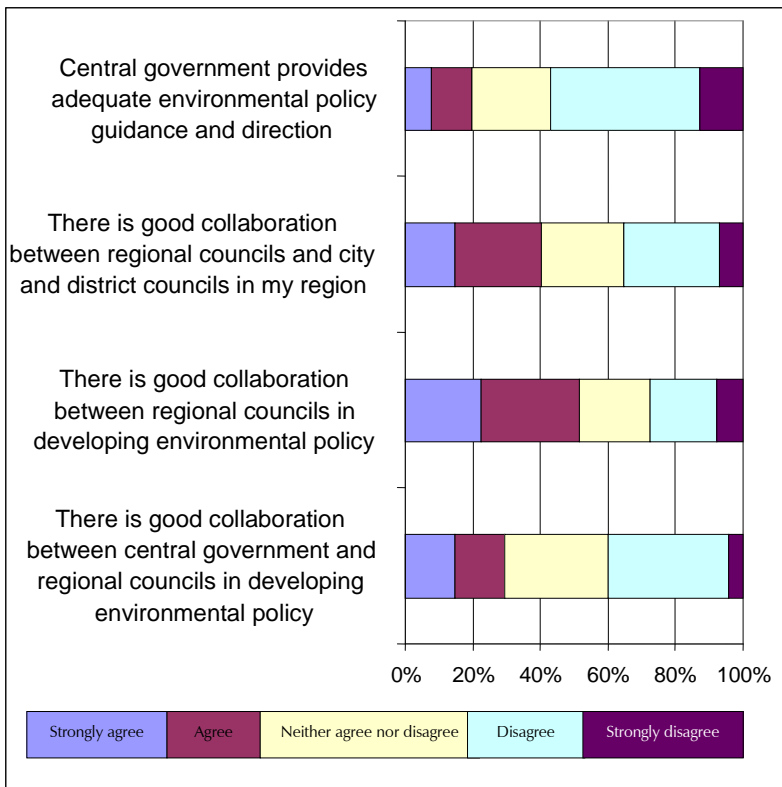


Figure 7-16: Collaboration between agencies

There is better collaboration between regional councils and city and district councils (Q.58: 40% agree) and between regional councils (Q.56: 51% agree), though still limited. This is not regionally consistent, although relations between councils in several regions (Hawke’s Bay, Taranaki, and Southland) were rated highly (more than 80%), reflecting the response to relationships between the councils (Table 7-18).

Table 7-18: Variation between regions in collaboration with other agencies

	There is good collaboration between central government and regional councils in developing environmental policy Q.33 (%)	There is good collaboration between regional councils in developing environmental policy Q. 56 (%)	There is good collaboration between regional councils and city and district councils in my region Q.58 (%)
Northland	17	67	17
Auckland	22	63	25
Waikato	50	60	20
BOP	13	38	50
Hawke’s Bay	43	86	86
Taranaki	43	71	86
Man-Wanganui	13	50	44
Wellington	38	50	63
Canterbury	23	54	15
West Coast	29	43	43
Otago	14	29	29
Southland	0	40	80

The lack of collaboration between levels of local government may reflect complementary functions. The relatively low rate of perceived collaboration may also reflect a low-profile nature of the collaboration, out of the public eye.

5.3.1 Partnerships and government

A significant thread in governance theory (see chapter 2) is the development of partnerships between different agencies and stakeholders. Partnership has taken several meanings but was not defined in the questionnaire. Respondents indicated that regional councils and stakeholders are perceived to be involved in environmental management as partners (Q.84: 59% agree), both in policy (Q.72: 64% agree) and implementation (Q.50: 66% agree). However most respondents feel that central government and regional councils do not manage the environment as partners (Q.57: 20% agree) (Figure 7-17).

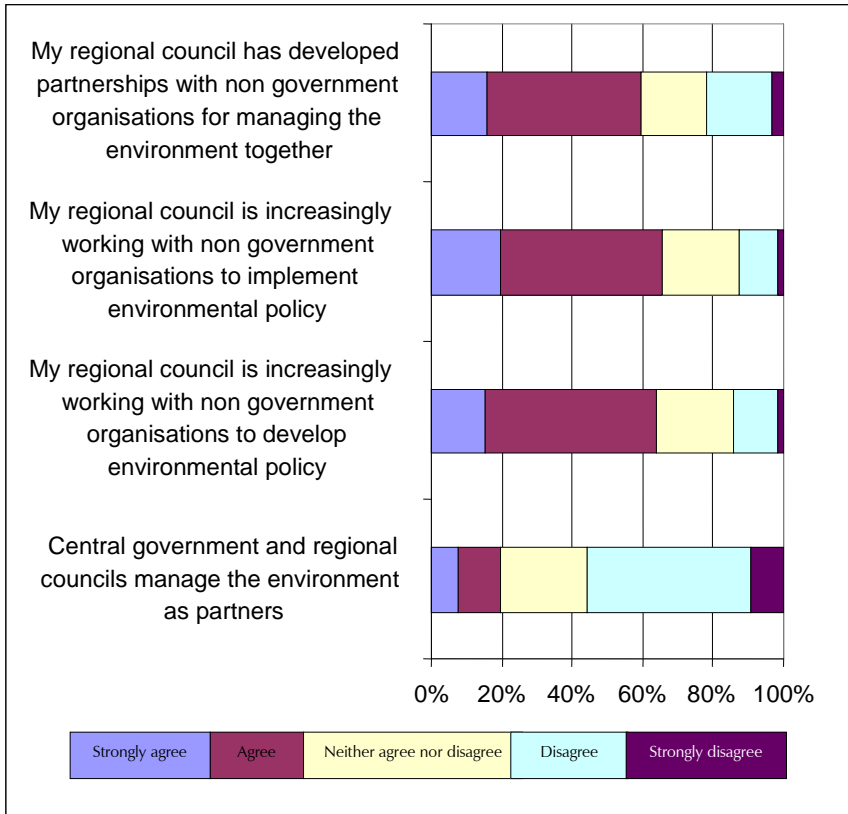


Figure 7-17: Partnerships between actors

5.3.2 Governance under the LGA 2002

The Local Government Act 2002 enables regional councils to undertake wider functions than previously. It also requires local authorities to plan strategically with their communities, which involves collaboration with other agencies. The questionnaire sought to identify any changes in regional council behaviour as a consequence of this legislation.

Many respondents neither agreed nor disagreed (over a quarter of respondents to each question) that changes in regional councils:

- Having new priorities (Q.79: 54% agree)
- Improving relationships with territorial councils (Q.99: 48% agree)
- Improving relationships between with environmental organisations (Q.90: 42% agree)
- Improving relationships with central government agencies (Q.54: 42% agree)

under the long-term planning process under the Local Government Act 2002 (Figure 7-18). This is perhaps not surprising as a SOLGM survey of all local authority senior managers (Thomas, 2006) found that the LGA 2002 had least impact on regional councils within local government. Rather, changes in regional council activities have been very much at the margin (Local Futures, 2007).

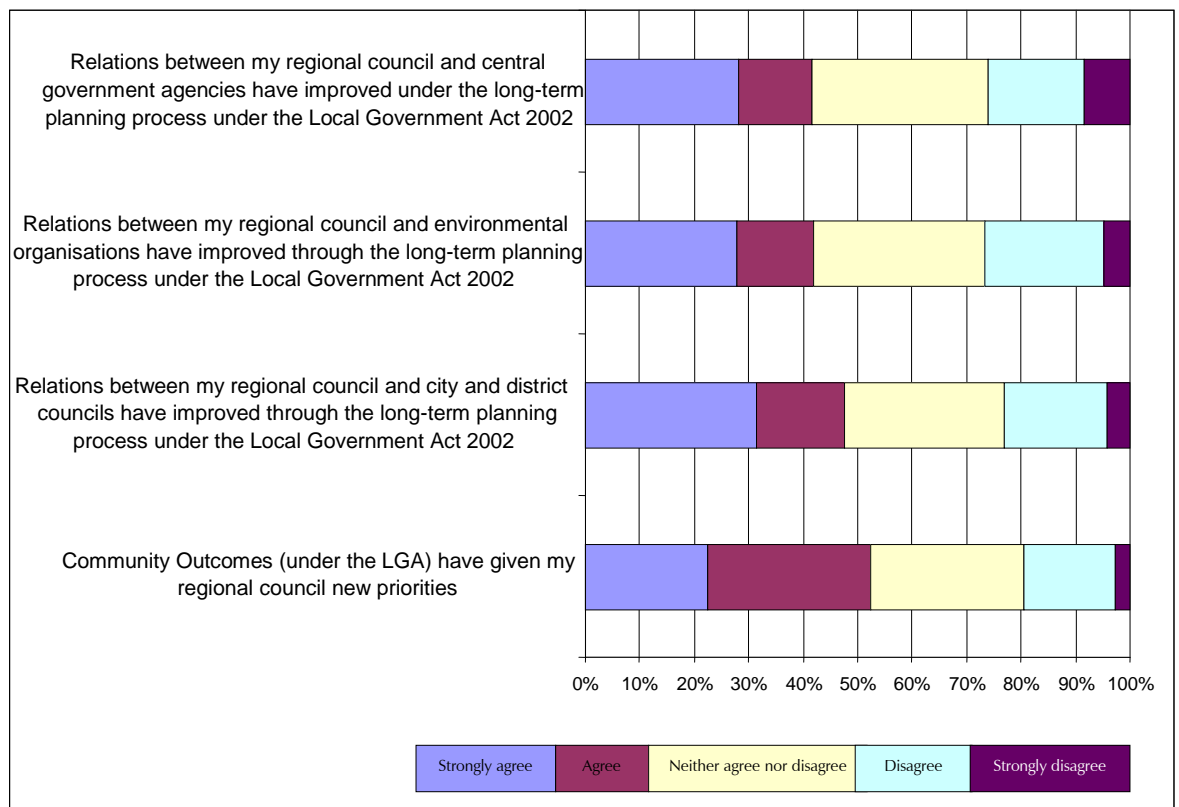


Figure 7-18: Impacts of the LGA 2002

Regional variations were apparent, and many respondents in a few councils (Northland, Auckland and Waikato Regional Councils) agreed that the community outcomes process had given their councils new functions (Table 7-19).

Table 7-19: Regional variation in impact of Local Government Act 2002 requirements

	Community Outcomes (under the LGA) have given my regional council new priorities (Q.79)	Relations between my regional council and city and district councils have improved through the long-term planning process under the LGA 2002 (Q.99)	Relations between my regional council and environmental organisations have improved through the long-term planning process under the LGA 2002 (Q.90)	Relations between my regional council and central government agencies have improved under the long-term planning process under the LGA 2002 (Q.54)
	(%)	(%)	(%)	(%)
Northland	83	33	33	67
Auckland	75	50	75	75
Waikato	70	60	50	60
BOP	44	33	33	50
Hawke's Bay	43	71	71	57
Taranaki	29	14	0	43
Man-Wang	50	63	44	31
Wellington	63	63	63	50
Canterbury	62	15	38	23
West Coast	29	43	14	57
Otago	0	29	29	29
Southland	60	60	40	20

Relationships with other government agencies appeared to be less affected, which is perhaps surprising, given one of the intentions of the planning process is to improve

community (including agency) engagement and strategy alignment, but consistent with other research (e.g. Local Futures, 2007).

5.4 International drivers

These questions identifying international drivers for environmental policies are indicative of a globalisation of environmental policy. If drivers for environmental management standards and practices are mainly exogenous then there is little possibility for proactive national or sub-national policy development. They are also indirectly related to capability, indicating ability for New Zealand to increase its expertise base.

Nearly two-thirds (63%) of all respondents agreed that overseas markets are increasingly influencing New Zealand’s environmental policy (Q.31), while 58% of respondents agreed that international organisations are increasingly influencing New Zealand’s environmental policy (Q.18) (Figure 7-19).

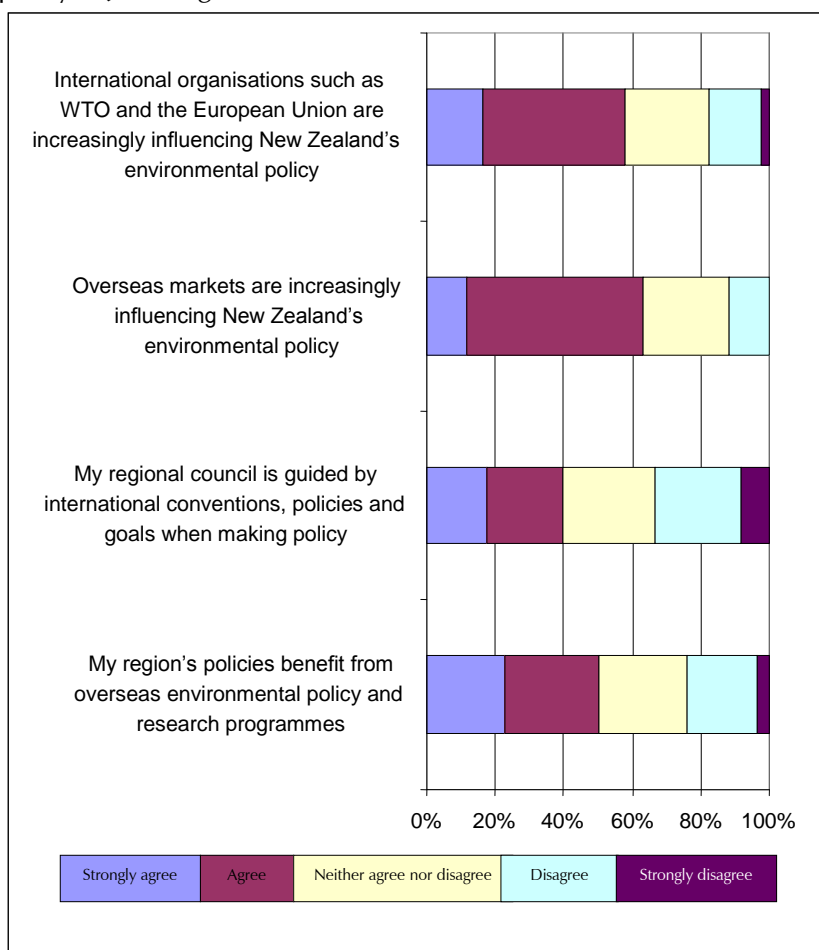


Figure 7-19: International influences on policy development

Fewer respondents (40%) agreed that their regional councils were guided by international conventions, policies and goals when making policy (Q.9). Half (50%) agreed that their region’s policies benefit from overseas environmental policy and research programmes (Q.39). However, only 12 (44%) of regional council informants, and 25% of the 16 TLAs who answered agreed with this statement, suggesting over-optimism by the other stakeholders. The implications of these results are addressed in the following chapter.

Chapter 8: Discussion

1. Introduction

This study has sought to explore the efficacy and role of regional government in New Zealand using environmental management as a case study. A review of regional government in New Zealand described a picture of a pervasive but unstable regional government with parallel decentralisation and devolution of functions. Nevertheless, the democratically elected regional councils, established in 1989 with boundaries largely defined by river catchments, were selected as the main vehicles for managing environmental resources under the Resource Management Act 1991. The choice of a regional level democratically elected model of government for managing the environment differs from that of many other western countries, which have chosen instead the decentralised EPA model.

This chapter discusses the findings of research into the documentary evidence and survey of environmental practitioners and stakeholders presented in the two preceding chapters to assess the public value of the New Zealand regional council model institution using the public value framework. It first reviews the documentary and survey results and assesses the individual public value dimensions of the regional council model for managing the environment. The ability of institutional arrangements to explain these results are explored and the findings are then used to assess the value of the regional model of government more generally.

2. Data quality

This exploratory investigation into regional government efficacy used existing publicly available data drawing on databases and published material, complemented by a survey of environmental resource practitioners and stakeholders. Published data were drawn from a wide range of reports to populate the public value framework, while the MfE-sponsored LENZ and REC databases were used to assess environmental similarity between regions managed by the regional authorities. Comprehensive data enabled a clear picture to be developed for authorising agency and operational feasibility.

The significant exception was the lack of any comprehensive reporting of environmental quality data to evaluate substantive value at the national level. Regional councils collect data on environmental quality each using their own indicators, methods and sampling frequency that make direct comparisons between regions impossible. While some data exist for water quality and quantity, allowing some generalisations, there was no ability to assess quantitatively the level of substantive value that either regional councils or the national government provide. Rather, only an inferred and partial assessment drawing on qualitative data was possible.

The survey of perceptions of the public value of the existing environmental management regime in New Zealand sent to 225 environmental management practitioners and stakeholders had a high response rate 144 responses (56.5%). The responses provided a good representation across sectors and regions and most questions were answered. These response rates and distribution gave confidence in the survey data. While this response can give confidence when identifying patterns at the national level, caution does need to be applied at the sub-national level of analysis. Regions differ by area and population so that in several cases the sample size was too small and patchy to have confidence in the results.

3. Public value of regional councils

The public value framework was used to structure the investigation with three elements: substantive value, operational feasibility and authorising agency. In this section each of the public value dimensions of substantive value, operational feasibility and authorising agency are examined to determine whether the regional council model of devolved government produced public value. The main findings of the survey were reported by McNeill and Holland (2007) (Appendix 5). Generally, the survey responses corroborated the results from analysis of the published data.

3.1 Substantive value

Substantive value refers to the achievement of the policy interventions. The primary environmental management legislation, the RMA, has as its purpose the 'sustainable management of natural and physical resources', which provides outcome criteria to measure institutional performance. Assessment of institutional effectiveness should be able to be undertaken by determining whether environmental quality has improved or not, both nationally and regionally over the time regional councils have been responsible for implementing the RMA.

There is no doubt that environmental gains have been made over the last 17 to 20 years, particularly in the control and reduction of point-discharges. The degree and extent of this degradation remains speculative as comprehensive data do not exist to quantify the extent of improvement. However, there is widespread agreement among survey respondents and interview subjects, as well as at seminars and conferences and in published research, to establish that the environmental record remains very patchy, so that, despite gains, overall environmental quality has reduced.

Published reports showed that water quality and quantity are the dominant resource management issues nationally and regionally with ongoing degradation as a result of non-point discharges to water, primarily as the result of agricultural intensification and in particular from dairying. Survey respondents showed different alignment of concern, with farmers, who are largely responsible for this degradation, much less likely to identify degradation than other groups. Concern also differed between regions and appeared to be higher in regions experiencing intensification of agriculture and the spread of dairying.

In terms of policy outputs, both regional councils and national government have produced a wide range of guidelines and, at the regional level, regional plans and policy statements. The comprehensiveness of individual plans was outside the scope of the study, but key informants suggested that in earlier plans at least councils were largely 'codifying the status quo' rather than substantially redefining property rights of resource users. Several councils are now preparing their second generation regional plans and regional policy statements. There were suggestions that they would be more effective than the current plans, but they are still subject to appeal and could well be attenuated before being adopted.

3.2 Operational feasibility

Operational feasibility, the ability for institutions to undertake activities mandated by the authorising agency to achieve policy outcomes, was assessed using community capability, organisational capability, institutional structure and geographic span of councils and national government as indicators. Differences were revealed between regions, suggesting some councils were more able than others to manage their environments, differing in expertise and resources available to them. However, performance was not always related to

resources, with at least one well-resourced council seen to perform particularly poorly. Differences were identified between regional councils and the much smaller unitary authorities. Differences between regions raise questions about treating councils similarly, suggesting high levels of autonomy, including own-funding from regional rates, without commensurate horizontal resource transfer may disadvantage some councils and impact on overall environmental quality.

Census and other data show differences between regions in population size, wealth and land area suggesting differences in ability to fund activities. Auckland, Wellington and Canterbury regions, each dominated by a large city, stand apart from the other regions. Some, such as Northland and Gisborne and the West Coast, are noticeably below the other regions in terms of these indicators, raising questions about their ability to resource environmental management policies and their implementation. Other than the urban regional councils and the unitary authorities, regional councils share similar resources on per head capita basis. While this homogeneity is equitable in the sense of ratepayers sharing similar burdens, the different size of councils raises questions about critical mass in absolute terms. This raises questions about the capability of small councils, particularly the West Coast Regional Council with its very small population (smaller than the unitary authorities) with its low rating base and large land area (though much is in national park).

Although all the regional councils operate under the same legislative requirements, comparisons between councils using representation, staff employee numbers, public equity and operational and capital expenditure all underline differences between councils. The twelve regional councils and four unitary authorities are very diverse, in part reflecting their different regional geographies, but also administratively. The unitary authorities are distinct from the regional councils as their structure and administration reflects their territorial authority functions. Comparisons also show that Auckland and the West Coast regional councils are extremely different, leaving a core of ten 'typical' regional councils.

Councils also had different perceptions of their roles, as evidenced in the adoption of trading names, with many of the provincial councils firmly placing themselves as special purpose authorities responsible for environmental management, though also undertaking legacy functions of public transport and civil defence inherited from the former united councils.

3.2.1 Institutional arrangements

Regional councils are part of a multi-layered governance structure that under the RMA is clearly predicated on a hierarchical system of national guidance and policy supported by standards to guide regional councils' policy-making. The RMA contains mechanisms to transpose policy from national government to lower levels of government. However, there has been very partial success in developing any consistent performance measurement, either of the regional councils themselves or of the environment they are managing, so that there is no nationally coherent dataset on the environment to assess policy effectiveness.

Regional councils need to interact with territorial councils and stakeholders. The survey revealed asymmetrical relationships, territorial council respondents generally felt that they did not have good relationships with their regional councils, while the regional council respondents felt that they did. Outright hostility between levels was detected in several cases and relationships appeared strained at best in the Auckland and Canterbury regions.

Stakeholder support for regional councils to manage the environment was variable and often weak. There was support for locating environmental management at the regional as opposed to local or national levels, though many of respondents from the unitary authorities, which are territorial councils with regional functions, supported local management. Resource users such as farmers appeared to be more supportive of having decisions made regionally than environmental NGO members.

Perhaps surprising given the prevalence of regional institutions is the ambivalent support they enjoy. The survey respondents indicated that on the one hand, they strongly preferred regional councils to continue holding the environmental functions they currently undertake, in favour of central or territorial local government. On the other hand, respondents neither were convinced that councils were necessarily doing a good job, nor viewed them as providing leadership.

3.2.2 Environmental correspondence

Part of the underpinning logic for the regional council model is that environmental conditions differ between regions in New Zealand so that decision-making should be informed by local information on environmental conditions and values rather than imposed by a national decision-making process. Fiscal federalist theory requires correspondence of jurisdictions with the function for efficient outcomes to occur (see chapter 2). The lack of match between regional council boundaries and land and river environments, used here as surrogate for overall environmental problems, and with environmental issues raise significant questions about the efficiency of the councils.

The LENZ and REC data clearly indicated regional differences both of terrestrial and river ecosystems. Not surprisingly, given the geography of New Zealand, distinctions were most apparent between the North and South Islands and, to a lesser extent, along a North-South axis within each island. Regions of similarity were apparent, suggesting on the basis of land environments four land management regions in the North Island, and four more in the South Island. However, these natural regions do not match existing regional council boundaries. The terrestrial and river environments reinforce several points. Most regions share characteristics of other regions, with only the West Coast being markedly different. Northland and Auckland are in environmental classification terms, part of the same region, while Tasman and Nelson unitary authorities are parts of a common region. The central and lower North Island regions form a more plastic region, sharing many characteristics as a result of the shared volcanic and mountain hill-country, but also have different elements, with different environments in their lower-lying lands. Canterbury has a core, but merges near its boundaries with its neighbours, suggesting it is a composite of several different regions. The West Coast similarly shares land environment characteristics with contiguous regions, but its river environments are unique. To reflect these land environments, regional boundaries would need to be redrawn to partition the composite regions and more clearly recognise South Island discrete east coast (Marlborough, Canterbury and Otago) regions that currently merge and overlap with each other. As well, Northland and Auckland form a single region, as does the central and lower North Island.

Regionally different environmental issues are not apparent to many people or in policy documents with respect to environmental management. Survey respondents showed strong agreement (83%) that most environmental issues are common across New Zealand, and over half thought that most of their regions' policies and rules could be applied across most regions of New Zealand. Environmental issues and communities' desired environmental outcomes identified in the regional councils' LTCCPs also indicate a broad commonality

across regions, suggesting a national level of policy to address them. Water quality and quantity issues (mostly driven by agriculture intensification) are widespread and form the dominant issue for nearly all regions.

Some issues do show locally specific characteristics, but even these are not unique to a particular region. So although 80% of New Zealand's geothermal activity occurs in parts of the Waikato region centred on Taupo, most other geothermal activity is found in the adjacent Bay of Plenty region, as both geologically part of the same volcanic region. Air pollution is unusual and perhaps underlines the need for unpacking environmental issues. Auckland and the Christchurch City part of Canterbury dominate air quality issues, though the causes differ. Auckland's pollution comes from automobile and industry, while Christchurch's results primarily from domestic heating (mainly fires). Isolated individual townships throughout New Zealand also face air pollution problems from winter air inversion layers forming in valleys. Likewise, hill country erosion is largely confined to a core area shared by several lower North Island regions. The non-contiguous issues suggest a sub-national, rather than regional, policy could be appropriate to address them.

Further, regional definition varies by environmental problems, so that a region defined in terms of one environmental problem will not necessarily match that of another. For example, Auckland and Northland are both part of the same land and river environment and a strong case could be made for amalgamation of the two regions to ensure consistency. However, the two regions also have other very different environmental problems, principally as a result of Auckland's metropolitan structure, providing a strong argument for separate management.

Also, at the national level, bimodal patterns in some survey responses were identified, corresponding to a resource user–conservation movement polarity. This bimodal response showed that respondents' perceptions tended to align with others of the same affiliation rather than with others within the same region. This suggests respondents' value-sets are identity rather than place based, bringing into question the value of regional, place-based decision-making government.

3.2.3 Structure

The basic institutional design was supported by survey respondents, but the functioning of the component parts is seen to be less than desirable. The Ministry for the Environment is not perceived to have strong capability to undertake environmental functions; rather, the mass of capability is seen to reside at the regional level. Territorial authorities are also not seen to have strong capability. The differences in perception between the levels of government may result in part from respondents having most to do with regional councils and so are more aware of their attributes compared to the other levels of government.

There is also a marked and consistent variation in perceived capability within the regional council sector itself. Some councils are seen by their respondents to be much more capable than others. While the number of respondents for each council is quite small, their assessment does not appear to be markedly a function of sample composition bias.

Despite a preference for the existing regional based structure, respondents perceive potential overlap and duplication of policy effort is perceived. A commonality of environmental issues across the country is widely recognised, although only half of respondents consider their councils' policies would have wider application. And a majority

also agree that more policy uniformity is needed across regions. These observations also suggest a failure of national level policy leadership and coordination.

3.3 Authorising agency

Authorising agency provides legitimacy for policy direction and within democratic institutions needs to reflect public interest. Independent surveys showed that New Zealanders hold higher levels of environmental values than those of many other western countries and are seen to be comparable to those of the Nordic countries (Salmon, 2007). The survey results show there is also a general concern about the quality of the environment, which also appear to be generally held across New Zealand's regions. These values suggest that the councils' decision-makers could be expected to have a mandate manage their regions to achieve a high environment standard.

3.3.1 Representation

Regional council representation is very variable across regions. Differences in council composition between metropolitan and provincial councils are very apparent. Farmers are clearly over-represented on provincial councils which also have markedly lower proportions of women than city-regions. There are, however, some similarities across councils. Many representatives across all councils appear to be already locally established public figures, having been district council mayors, current or former Federated Farmers office-holders, former members of parliament, media personalities and the like.

Councillors were seen to have limited ability to provide environmental management policy direction. Some informants suggested many did not understand the technical complexities of environmental management. Regardless of their ability, councillors have limited ability to provide input, apparent at one level through the very high level of resource management consents hearings heard by commissioners or processed by staff. As a result, some researchers have been sceptical that such efforts to encourage public participation have much impact on the overall process. For example, Jackson and Dixon suggest that attempts to introduce more democratic and public participatory processes into resource decisions through the RMA have been 'impaired by technocratist legal formalism'. As a result, council staff, politicians, lawyers, the courts and business interests have dominated the process; only four percent of consents are notified, the vast majority being settled by applicants, officials and politicians without the public (Jackson and Dixon, 2007: 107). On the other hand, council and environmental law professional key informants suggested that such exclusion is quite appropriate as most resource consent applications are routine²⁴ and are only required so that the council can monitor performance and recover associated costs from the applicant.

The survey respondents revealed a view of councillors that seems initially contradictory. Generally, many respondents had no clear idea of what their councillors stand for, but were strongly supportive of having local representation. These results appear at odds with each other; respondents show a strong preference for a democratically elected government system, but also indicate they do not know what the elected representatives' views are. This is perhaps consistent with the absence of political party politics in New Zealand local

²⁴ 'Controlled activities' for example require council approval, which is automatic provided the applicant can demonstrate the conditions set out in the regional plan are met. An example of a controlled activity is a discharge to air from a boiler, where the application has to show that the proposed chimney height meets the specified height to ensure appropriate dispersion.

government. Together with the lack of concern with short electoral cycles, these results give the impression that respondents value local representation for its ability to provide a locally accountable check on the institution, rather than for providing proactive strategic policy.

3.3.2 Public participation

Public participation in terms of voter turn-out for regional council elections has been comparable to territorial local government and district health board voter turn-out. This may be a consequence of elections for all three organisations coinciding and sharing the same postal voting papers. The level of voting for all three is however substantially lower than for national government elections, about 48-50%, compared to 85-90% for national elections. Interestingly, regional council turnout is broadly similar to that for both European Parliament and Swedish regional councils. The European Parliament 2004 elections had a 45.6% voter turnout across Europe and 38% for Sweden, compared to European national elections of about 85% (European Parliament, 2004). The turnout for Scandinavian regional council elections is typically about 50% (Gidlund and Jerneck, 2000) compared to 82% for the 2006 national elections. While the similar ratios between sub- and super-national elections and national elections may be coincidental, the similarity in turnout shows that levels of government attract different levels of support within polities.

Relationships between regional councils and environmental stakeholders are generally seen to be good, though considerable differences are apparent between regions. Civil society is engaged in the management process, but perhaps kept at arm's length, as is territorial local government. The quality of this engagement varies regionally, and regional-territorial authority relations range from very good to very bad, hardly a foundation for constructive policy alignment.

3.3.3 Multi-layer alignment

There appears to be near universal agreement, as indicated in the OECD country report (2007), overseas and national commentators, numerous scholarly papers and general articles, comments at conferences and seminars and by survey respondents, that there is inadequate national level leadership in environmental management policy. Most point to a lack of formal national policy statements and paucity and only recent promulgation of any environmental guidelines and standards. Instead regional councils have very much been left to develop policy in a vacuum. Various non-statutory strategies have been promulgated by the national government, but their informal legal status has limited application, and several have been put aside, suggesting an ephemeral commitment.

There is also a widely criticised gap in environmental monitoring at the national level that means no comprehensive account for the environmental performance institution's performance can be made. Perhaps the most puzzling feature of this policy and information deficit is that it has been well-recognised for some considerable time, but has not been addressed in any substantive way.

Linkages between levels of government, between national government and regional councils, and between regional councils and territorial authorities are seen to be inadequate by survey respondents. Relations between regional and territorial councils also vary by region.

An obvious successful multi-layer policy alignment has been the Fonterra Dairying and Clean Streams Accord, which has seen the Fonterra Dairy Co-operative, central government and regional councils work together to reduce environmental impacts of dairying (see

chapter 4). However, this can be seen as a direct response to the 'Dirty Dairying' campaign initiated by the Fish and Game Council rather than an industry-led initiative.

3.4 Public value: an assessment

The overall public value of the current multi-layered environmental management institution's performance does not appear to be high (Table 8-1). Its performance has not been spectacular, with failure at the national level and variable performance at the regional level. While some environmental gains have been made, significant and rapidly developing pressures on the environment have not been effectively addressed so that environmental degradation, especially from agricultural intensification, has not been halted. Councils and central government are aware of the environmental issues facing them, but are unwilling or unable to respond at a speed necessary to result in comprehensive mitigation of adverse environmental effects.

Public value at the regional level appears to differ between councils. The responses to the survey and interviews with key informants indicate an acceptance of the regional council structure generally, but the efficacy of some of the individual councils is questioned. Poor performing councils were considered unable to be effective environmental managers. This ambivalence extends to the overall structure, to include the Ministry for the Environment.

Table 8-1: Summary of public value results

Dimension	Indicator	Criterion	Published data	Survey
Substantive Value				
Policy outcomes	National environmental quality	<ul style="list-style-type: none"> Maintenance or improvement in environmental quality since 1991 	<ul style="list-style-type: none"> no 	<ul style="list-style-type: none"> no
	Regional environmental quality	<ul style="list-style-type: none"> Maintenance or improvement in environmental quality since 1991 	<ul style="list-style-type: none"> no 	<ul style="list-style-type: none"> no
	Regional water quality and quantity	<ul style="list-style-type: none"> Maintained or improved water quality and quantity since 1991 	<ul style="list-style-type: none"> no 	<ul style="list-style-type: none"> no
Policy outputs	National plans and policies	<ul style="list-style-type: none"> Plans and policies address all significant environmental issues 	<ul style="list-style-type: none"> some 	<ul style="list-style-type: none"> no
	Regional plans and policies	<ul style="list-style-type: none"> Plans and policies address all significant environmental issues 	<ul style="list-style-type: none"> some 	<ul style="list-style-type: none"> no
Operational Feasibility				
Organisational Capability	Issue knowledge and expertise	<ul style="list-style-type: none"> Information on regional environment and environmental processes 		<ul style="list-style-type: none"> variable
		<ul style="list-style-type: none"> Awareness of regional environmental pressures 	<ul style="list-style-type: none"> yes 	
	Financial resources	<ul style="list-style-type: none"> Sufficient funding for organisation to develop and implement environmental management policies 	<ul style="list-style-type: none"> variable 	<ul style="list-style-type: none"> variable
	Leadership	<ul style="list-style-type: none"> Regional leadership by councils 		<ul style="list-style-type: none"> variable
Community Capability	Ability for regional community to finance council activities	<ul style="list-style-type: none"> Sufficient regional population base to fund activities 	<ul style="list-style-type: none"> variable 	<ul style="list-style-type: none"> variable
		<ul style="list-style-type: none"> Sufficient regional economic wealth to support activities 	<ul style="list-style-type: none"> variable 	<ul style="list-style-type: none">
Institutional Structure	Hierarchy coordinating mechanisms	<ul style="list-style-type: none"> Legislation to coordinate policy between levels 	<ul style="list-style-type: none"> yes 	
	Council functions	<ul style="list-style-type: none"> Council addresses environmental problems and issues 	<ul style="list-style-type: none"> variable 	<ul style="list-style-type: none"> variable
	Council budget	<ul style="list-style-type: none"> Allocation of resources to environmental functions 	<ul style="list-style-type: none"> variable 	

Geographic Span	Jurisdictional fit with function	<ul style="list-style-type: none"> • Environmental problems and issues correspond with regional jurisdictions • Environmental attributes correspond with regional jurisdictions 	<ul style="list-style-type: none"> • no • no 	<ul style="list-style-type: none"> • no
Authorising Agency				
Representation	Council makeup	<ul style="list-style-type: none"> • Council membership reflects community demographics 	<ul style="list-style-type: none"> • no 	
	Councillor visibility	<ul style="list-style-type: none"> • Councillors are seen to be representative of their communities 		<ul style="list-style-type: none"> • yes
Public mobilisation	Citizen values	<ul style="list-style-type: none"> • Strong public interest in environment 	<ul style="list-style-type: none"> • yes 	<ul style="list-style-type: none"> • yes
Public participation	Voter turnout at elections	<ul style="list-style-type: none"> • High voter turnout at elections 	<ul style="list-style-type: none"> • no 	
	Number of submissions on draft plans and policies	<ul style="list-style-type: none"> • Citizen participation and consultation in policy development 	<ul style="list-style-type: none"> • n/a 	
Leadership	National strategy statements	<ul style="list-style-type: none"> • National politicians provide clear vision for environmental management 	<ul style="list-style-type: none"> • no 	<ul style="list-style-type: none"> • no
	Regional strategy statements	<ul style="list-style-type: none"> • Councillors provide clear vision for environmental management 		<ul style="list-style-type: none"> • no
Multi-layer institutional alignment	National strategies and coordinating mechanisms	<ul style="list-style-type: none"> • Comprehensive national policies and strategies providing guidance to regional level for managing nationally significant environmental problems 	<ul style="list-style-type: none"> • no 	<ul style="list-style-type: none"> • no

However, a consistent grouping of regional councils is discernable across a range of dimensions, with the same councils consistently featuring in the first and fourth quartiles. Given different composition of respondents in each region, rather than attempting detailed statistical analysis, regions were ordered and grouped by quartiles when comparing attributes. It is apparent that regional patterns exist across a range of attributes, allowing a simple performance or league table of regional councils. Taranaki, Hawke's Bay, Wellington and Southland regions almost invariably ranked in the top quartile or just missed out. Northland, Canterbury and the West Coast consistently ranked in the bottom quartile. While the stakeholder bias may have some influence on the data, they have not skewed the results: top-performing Waikato and Wellington have similarly biased compositions to poorly regarded Canterbury. These rankings are also consistent with observations made by key informants who were shown the preliminary results (several of whom successfully predicted the rankings).

Comparisons between councils using representation, staff employee numbers, public equity and operational and capital expenditure all underline differences between councils. This has been exacerbated by the decision to create three unitary authorities in the top of the South Island. These unitary authorities are exceptional among the regional authorities, reflecting their core territorial authority functions and antecedents. Auckland and the West Coast Regions are clearly anomalies within the regional council stable; Auckland dwarfs the others, while the West Coast is dwarfed by the other councils.

Environmental stakeholders indicated a clear preference for a more centralised policy structure. The farming stakeholders indicated a preference for less government overall, emphasising individual rather than collective value to justify intervention. Central government was not completely trusted and support was strong in some quarters for an independent watchdog and advisor, a role currently filled by the Parliamentary Commissioner for the Environment, to oversee both councils and national government.

Wider governance issues were also identified. While there was overwhelming support for regional councils as primary environmental managers and for local representation, the nature of the representation is less clear; the value would seem to be primarily as a mechanism to hold decision-makers to account, rather than providing a collectively mandated strategic environmental policy. This has efficiency costs as environmental issues and many environmental policies are broader than single regions, suggesting duplication of effort in developing policy separately for each region.

The perceived variability between regional councils raises significant questions about the ability of devolved government to deliver consistent outcomes across the country. At a policy level, it raises questions about the factors that lead to this apparent inconsistency, that if addressed could improve public value. In summary, regional councils can be seen to be in a difficult position of being perceived as a necessary but unloved institution. There are a range of issues that in scale fit between national and municipal, implying a 'regional' scale of governance is necessary. However, the councils lack any high level of support to ensure they, unlike their predecessors, endure.

4. Explaining environmental management performance

The previous section identified that the public value provided by regional councils in managing the environment was not optimal. Possible reasons for this suboptimal performance may include inappropriate devolution of functions, the administrative

arrangements and external influences. Two assumptions in particular are central to the devolved regional council model of government for managing the environment: the need for a regional rather than national locus of authority, and regional democratic rather than technocratic decision-making. The findings outlined above raise questions about the validity of both assumptions.

New Zealand has a tradition of regional government. These institutions are not, however, stable and have been subject to constant national government reorganisation since 1840. This tradition has consisted mainly of a parallel system of strong decentralised national government departments coexisting with devolved, (partially) democratically special purpose authorities. This raises broader questions: to what extent can failure to achieve policy outcomes, in this case sustainable environmental resource management, be attributed to the regional council model, the wider environmental management institution that includes the national government, or to administrative short-comings? Are short-comings the consequence of formal institutional structures, or of informal institutional components acting within individual councils? This distinction has significant implications, the first suggesting restructuring or revisiting legislation, while the second suggests more the need to modify culture and practice, which may only be achieved where capability is lacking by structural intervention.

4.1 Locus of authority

A key argument for devolving decision-making and implementation to sub-national levels of government is that issues requiring government intervention are not homogenous, but are heterogeneous, requiring different responses across the country. Fiscal federalist theory also holds that the sub-national jurisdictions should correspond with the issues and services provided in order to ensure efficient intervention.

New Zealand has a diverse landscape (Marcus, 1987), suggesting a need for sub-national environmental management. The important point is less that there is regional variation, but the scale and regional area differs for different environmental media. For example, hill-country erosion is common throughout the lower North Island, but ambient air pollution occurs only in small townships located within the hill-country valleys. As a result, correspondence is not achieved by the existing regional councils for many environmental issues. Achieving correspondence at the sub-national level is even more difficult if not impossible to achieve given some of the environmental issues are not geographically contiguous.

Regional council boundaries are almost entirely defined using river catchments, suggesting for catchment management purposes at least, correspondence should be achieved. However, correspondence ramifications arise as a resulting of clumping to achieve administrative mass so that that jurisdictional size exceeds correspondence geometry. Most New Zealand rivers are actually very small, so that the regional councils are based on several catchments, rather than a single large one. Notably, the Manawatu-Wanganui Regional Council is responsible for managing two large and completely separate river catchments, the Manawatu and Wanganui rivers, that have completely different in character, issues and management requirements. The correspondence principle suggests the region is over-sized.

Regional scale can be at the same time too coarse and too fine to correspond with environmental issues. A purist application of fiscal federalist theory would seek to split land

management from river management, from geothermal and from air quality. However, this ignores the interrelated nature of environmental systems and reduces ability for integrated management that internalises externalities from use of individual resources.

Exogenous drivers can also influence environmental degradation so that they transcend environmental conditions. Thus, the environmental impacts of dairying, long associated with the core dairying regions of Waikato, Taranaki, and Southland and, to a lesser extent, the Manawatu-Wanganui regions, are now causing environmental degradation in other new-dairying regions, such as Canterbury and Otago. This has been achieved through application of newer intensive farming practices, such as irrigating the dry and stony Canterbury plains using expensive irrigation systems supported by higher international market prices for dairy products. This suggests at the least that geographic regions need to be seen as part of contextual economic regions operating at a higher level than regional council jurisdictions.

This scale issue is not unique to regional councils. The spaghetti map of sub-national central government administrative boundaries has long been a feature of New Zealand's geography (see chapter 3). On the one hand, this administrative tangle has been criticised and leads to inefficiencies for those within multiple administrative regions. As identified in chapter 2, institutions may persist despite changes in their external environments and expectations made on them. However, the persistence over long time periods of the spaghetti map, despite changes in both formation of and reorganisations within agencies, suggests that it portrays the integration of organisational efficiency and specific communities of interests.

The consequence is that optimising regional jurisdictional space to achieve correspondence is impossible. Taken to its limits, every aspect of the environment would have its own set of jurisdictions, resulting in an atomised administration unable to integrate management of resources. Conversely, the inability to identify the optimum sub-national scale for environmental management issues suggests aggregating environmental management functions to the national level in order to achieve integrated resource management. In short, the spatial dimensions of institutions undertaking integrated environmental management are inherently compromised.

4.2 Democratic and technocratic decision-making

The public's high environmental values, both nationally and regionally, suggest councils have mandates for developing and implementing proactive environmental management policy. However, these concerns and values are at odds with the poor performance of the current institutional arrangements. Perhaps councils' authorising agency somehow does not reflect wider public concerns and values held in their regions.

New Zealand differs from many other western countries in its devolution, rather than decentralisation of environmental management. Devolved government privileges democratic over technocratic decision-making as decision-makers are not chosen on the basis of technical competence. This study has not been able to examine attributes of individual decision-makers in any depth. However, it can be postulated that provincial regional councils are likely to be biased towards status quo decisions, reflecting the degree of sectoral bias in their composition by farmers and to a lesser extent by territorial authorities (former mayors), coming from the two sectors responsible for most water degradation. Rural councillors, through Federated Farmers connections and other rural

organisations, may well be influenced in their community associations. This may help explain the poor performance managing non-point discharges.

Councillors are also not assisted by the RMA which sets up a time-consuming and potentially litigious resolution system where affected parties can challenge draft council regional plans and rules and decisions on resource consent applications. Even in the absence of strong opposition, the statutory mechanisms for consultation and submissions means plan changes can take the best part of two years to complete. Strong opposition can hold up plans for a decade. The cost in staff time and legal fees in defending decisions is also high, providing a disincentive for councils to take strong positions likely to be opposed vigorously. This is consistent with the writings of Olson's (1965) suggestion of capture by small groups facing high costs from decisions that provide a lower level of benefit distributed over a wider population.

Democratic deficit is more subtle; high voter turnout for national elections suggests that there is no inherent democratic apathy within society, rather towards particular institutions within the polity. The lower voter turnout is common in the institutions which are primarily regulatory rather than redistributive. In New Zealand regional councils, the survey indicated that although respondents strongly supported local representation on the councils, most did not know what the councillors stood for. This suggests that rather than a strategic direction, that the representatives fulfil a checking, accountability function, reflected in the common election plank of 'no rates increases' (or no increase greater than inflation rate).

4.3 Administrative arrangements

4.3.1 Capability

The regional councils themselves vary considerably, in size, capability and in character, but different types can be identified, primarily on population size and location. Auckland remains a special case as a very large metropolitan council, as is demonstrated with the current review of Auckland local government. It is very different from the city-dominated regions of Wellington, Canterbury and to a lesser extent Waikato and Bay of Plenty, and the remaining provincial councils. The unitary authorities are clearly distinguished from the regional councils, given their far wider range of functions, their far larger budgets, which are dominated by capital expenditure, and their relatively small size, geographically and in population. Among the regional councils, the West Coast struggles with limited capability, which it acknowledges (WCRC, 2007). Resources are important both for implementing policy but also for undertaking expensive baseline monitoring and research to inform decision-making.

When the councils were formed in 1989, all councils except Canterbury inherited shares in the port companies formed from the previous harbour boards. Some ports are far more profitable, paying larger dividends, and valuable assets, which provide a strong asset base for councils holding shares in them (and a source of jealousy for territorial authorities). At the moment councils remain largely fiscally as well as politically autonomous, so that inequalities exist between councils on the basis of assets and rate-base, raising the need for considering horizontal and vertical transfers.

Size is also important to ensure a critical mass of staff expertise for undertaking resource management. Several respondents commented on below-critical mass of technical staff within councils, while there is acknowledgement within the professions of nation-wide skills shortages that are expected to be exacerbated as many experienced baby-boomers retire.

These pressures suggest consideration of centralising or at least building up national-level capability to be made available across regions.

Sumits and Morrison (2001) concluded that:

New Zealand overshot the mark in terms of decentralization and local decision-making, primarily because local authorities lacked capacity and resources, and their implementation efforts were not accompanied by central government oversight, guidance, and assistance.... Considering the virtual absence of higher-level support, the expectations of local government were unfairly high. In a sense, the RMA announced, “let’s implement sustainability” and then fully punted the task to local government authorities, many of which were ill-prepared for the task.

Despite a widening of regional councils’ task span under the LGA 2002, national government still has a significant regional presence across a range of policy areas, notable for their single purpose functions and independent administrative boundaries. These structures parallel the regional councils, serving to highlight the narrow task-scope of the councils and underlining why the councils cannot be considered to be true regional governments when compared to those of other countries.

4.3.2 Legislation

Although the RMA was originally regarded as a great improvement over the preceding institutional arrangements, support has been more subdued over time with, on the one hand resource developers complain of red tape and obstruction and the resulting high costs of doing business, while environmentalists are concerned about the inability for it to allow decision-makers to address significant environmental issues. Commentators such as Rod Oram (2007) appear to have support for pointing out that while the Act is essentially sound, its implementation has been less than optimal. Oram suggests that most of the effort to develop it has focused on its processes rather than its purposes. For example, councils and the Environment Court have significantly improved their skills in handling consents and cases. But far less work has gone into ensuring the RMA has kept pace with economic and environmental developments.

The legislation was also optimistic – the effects-based rather than command and control rationale for decision-making does not work well where the subjects are not supported by clear, objective, and scientific data, such as land use. A poor information base and a lack of scientific understanding of natural systems has exacerbated the problem of uncertainty and significantly stifled implementation of the effects-based approach in New Zealand. This also impacts on the ability to hold organisations and the wider institution accountable. As has been shown, the lack of good information has precluded an assessment of institutional effectiveness as part of this research.

4.3.3 National leadership

Despite an apparently strong public mandate for undertaking environmental management, neither national nor regional leaders appear to commit to strong environmental policies needed to halt environmental degradation. This is most obvious with the lack of any comprehensive suite of national level policies and strategies with ability to be enforced and that can be expected to endure. This is not due to any lack of capability; the RMA with its nested suites of national policy statements and environmental standards, regional policy statements and plans, and district plans establishes a hierarchical direction-setting mechanism intended to be used to transpose national policies to regional and local policies and action. This has not happened; rather, there is widespread agreement among reviews,

for example, (OECD, 2007), key informants and survey respondents that the national government has not provided leadership and direction. This is not to say that there has been no action, but the few national initiatives have become bogged down. The proposal for a National Policy Statement on Biodiversity remains inert, while the vaunted National Water Management Strategy, part of the Sustainable Plan of Action after four years remains still at a largely conceptual stage. National air quality standards have only recently been promulgated, while the independent review of the National Coastal Policy Statement (Rosier, 2004) found that there was little evidence that things had changed.

Taken together, this suggests a lack of national government commitment over the last two decades. Certainly, Young (2004) noted a general drop in interest in environmental matters and activism following the passing of the RMA, suggesting that the policy was unable to mobilise political action. National action has occurred where issues have high profile, such as the central North Island lakes and in response to the dirty dairying campaign. In the government's defence, the issues slated for national policy direction are difficult to deal with and with no easy solutions. They have been further challenged by, in the case of marine and freshwater management, by high political sensitivity around iwi ownership issues.

As well, the Environment Strategy was quietly shelved with a change in government and the current Sustainable Plan of Action has negligible public profile. This study had begun on the premise of multi-level government that implied interaction between the different layers. The reality has been more a de facto unitary system, with a total devolution of resource management to regional government. There appears to be some cooperation between the MfE and individual councils to address specific issues, this is most noticeable in joint plans of action together with central government funding assistance to address eutrophication of Lake Taupo with Environment Waikato and the Rotorua lakes with Environment Bay of Plenty.

Less conspicuous, but still insidious, is the failure of the national government to address the regional councils' performance. At one level this is difficult, given the absence of any comprehensive national environmental performance measures. But the responsibility for the lack of any comprehensive monitoring system can be sheeted back to national government which must be responsible for overall system performance. Similarly, the failure to intervene where an individual council's performance is by all the evidence very poor shows lack of national leadership. As well, the manifest inequality between regions has not been addressed in any comprehensive way. While the research results suggested that resources do not ensure good performance, lack of resources among smaller, poorer regions can be expected to limit their ability to perform. This might require horizontal resource transfers, or it might require a technical agency with sufficient critical mass to provide information for managing the environment in these regions.

4.3.4 Regional leadership

During the course of the research, several informants suggested that territorial and regional council chief executives were decisive in shaping organisational culture that in turn determined council performance. Certainly, the top-performing councils were seen by all key informants to have very experienced and politically astute leaders in their chief executives. Whether boosterism can also partly explain this performance is less clear.

The widely perceived poor performance of Environment Canterbury (Canterbury Regional Council) is difficult to explain, given the prosperity of the region and the organisational capability. Certainly, the preceding Canterbury United Council was seen as one of the

more progressive united councils, while the regional council has considerable resources. Its poor performance was recognised by informants in central government, consultants, and senior staff in regional councils. A local activist, Sam Mahon (2006) in his book *The Water Thieves*, describing his own crusade against water depletion in the region, strongly implies councillors' old school-tie networks as a contributing factor.

Whether councils' rankings will persist is unknown. Several long-serving regional council chief executives have recently left their positions and it can be suggested that several others may retire or move on quite soon; a repeat survey in several years' time may show whether new blood changes the councils' performance.

4.4 External influences

Wider, exogenous factors may also impact on institutional performance. National culture was identified by some key informants, while macro-economic forces were also suggested by others as influencing, or defining the scope of influence of institutional behaviour.

4.4.1 National and regional culture

The wider issue of public culture towards the environment and its management has been largely unexplored in this research that has largely focused on formal institutions. Culture can be significant; Vogel (1986), comparing efficacy of British and American air pollution management, came to the conclusion that both administrations achieved more or less the same outcomes, but that the costs of achieving those outcomes were an order of magnitude different. The non-transparent British system with its risk of sector capture cost tens of millions of pounds, while the American transparent and litigious culture with separation between industry and regulators cost hundreds of millions of dollars.

As identified in chapter 6, several key informants suggested that cultures, far more than configuration of formal institutions, were more likely to explain environmental management performance. The significance of culture in determining institutional success is identified in the literature; Polaschak (1956) ruefully wondered what local government would be like if New Zealand was to have been settled by neat-minded Danes, rather than the English (see Chapter 3). More recently, Young suggests that the less than fulsome success of the RMA was at least in part because:

The New Zealand mind was not ready to embrace the RMA in the way that would have more widely guaranteed its acceptance and success... the dairy farmers who, as they continue to make record handsome profits, seem largely reluctant to commit even small portions of their returns to ensuring clear, clean waste in the receiving streams of their farms, have not committed. Just as the estate developers who have not changed their modus operandi since the RMA do not seem to have thought beyond maximising their profits. And even the tourism industry, another major earner of overseas funds, has demonstrated far greater interest in quantum leaps of tourist inflows, than in vouchsafing the enormous demands that it makes on the New Zealand environment (Young, 2001: 84-85).

Salmon (2007) notes that while New Zealanders had high environmental values, comparable to those of the Nordic people, New Zealand had a less effective and less collaborative environmental management system. The Nordics have in place comprehensive suites of environmental goals and strategies built on consensus to achieve them. Salmon excluded historical culture, noting that the Finnish civil war and internal political division within Sweden during the Second World War had made those societies

very divisive. Rather, the Nordics had made a conscious effort to build collaboration to overcome this division.

However, differences between national cultures do not explain sub-national institutional performance. Putnam (1993) suggests regional differences in social capital may be important determinants of institutional performance, but respondents showed differences in attitudes more delineated by identity than territory. Farmers and environmentalists were reasonably consistent in their views across the country rather than showing regional congruence. While regional culture and social capital may influence performance, they cannot be seen as the only factors. In this regard, Young (2004) suggests that the passing of the RMA, with its wide-reaching integrative powers for managing the environment, has served to lower the level of public environmental concern – the big obvious issues have been addressed, only the slow, insidious forms of degradation remain.

A distinction may need to be made between regionalism and regionalisation. The top performing councils, Taranaki, Hawke's Bay, Southland and Otago are all regions with well-established regional identities that precede the 1989 reforms and are examples of regionalism. Poorly performing Canterbury, with its breakaway attempts in the south and its earlier northern expansion when Kaikoura District split from Marlborough, in contrast is a synthetic region and an example of regionalisation.

4.4.2 Macro-economic drivers

Perhaps more importantly, these results underscore the significance of macro-economic drivers in over-riding micro-economic regulatory tools used by regional councils in determining environmental outcomes. There are also some indications that market forces and macroeconomic conditions may have a significant role in shaping environmental outcomes, which suggests an attenuation of authorising agency. Vitalis (2005) shows how the removal of agricultural subsidies in the late 1980s reduced agricultural pressures on the environment. Young (2001) summarised:

It has often been said that Roger Douglas, as Minister of Finance 1984-88, did more good for New Zealand conservation with his abolition of farm subsidies than any other single action in recent times (Young, 2001: 51).

Removal of subsidies revealed to farmers the real costs of converting marginal native forest and scrubland to agriculture, causing them to abandon this practice. Similarly, Young and McNeill (1999) identified the single biggest reduction in point-discharge to the Manawatu River was a direct result of the closure of the Longburn freezing works, followed by the closure of the many small dairy factories as milk processing was consolidated into the few large 'churn and burn' facilities that now dominate the industry.

The market power of large British supermarkets to impose de facto environmental standards on New Zealand's primary producers has been a focus of discussion for some time. More recently, the concept of 'food miles', a surrogate for carbon dioxide emissions has been seen to gain currency in the UK, prompting New Zealand analysis of relative energy budgets in the production and export of New Zealand produce (see Saunders, Barber and Taylor, 2006).

These environmental improvements as a result of macro-economic drivers are only second-benefits and environmental harms are also possible. The rapid rise of dairying pollution is a direct consequence of intensified and expanded dairy farming driven by an increase in dairy commodity prices internationally. As a result, regional councils are now in a

responsive mode, as farmers intensify and convert land, creating new environmental pressures. Vogel (1986), comparing efficacy of British and American air pollution controls, suggested that the significant improvements to those countries' air quality was less because of the regulatory regimes they introduced, but the wholesale export of the smoke-stack industries that caused the problem to Asian countries. This reflected much more the movement of capital globally than any political intention.

English environmentalist Tom Burke (pers. comm.) for example, maintains that environmental issues are driven and resolved by macro-economic conditions. He says that interest rates will make the greatest impact, with lower interest rates enabling firms to invest more quickly in more efficient and less polluting plants. Buoyant economies also allow innovation and investment. While this makes sense in western post-industrial societies, recent experience in New Zealand suggests rather the opposite; high interest rates have attracted foreign investment, forcing up the exchange rate and effectively strangling the export sector. A decrease in interest rates would likely see a drop in the exchange rate, a massive inflow of money into the dairy industry from increased local currency earnings and increased pressure to convert otherwise marginal land to dairying, putting more pressure on the environment.

But macro-economic forces are not necessarily environmentally benign. The extent of impact is conjectural and is worthy of further study, but these impacts nevertheless underline a lack of capability at the regional level to influence the major drivers impacting on the environment. Councils have no access to macro-policy levers so that the best they can do is to scan the horizon to try and anticipate trends as best they are able. It also suggests that environmental policy needs to be integrated with other national level policy-making.

5. The role of regional government

The functional span of New Zealand's regional government institutions has waxed and waned over time. As discussed in chapter 2, regions are contested political space; the regional councils have been challenged by territorial authorities, both after the regional councils' formation and most recently with events leading up to the establishment of a Royal Commission on Auckland Governance. While catchment boards and regional councils until 2002 were clearly special purpose authorities, the united councils had a wider, social, economic, environmental and cultural mandate that was lost to the regional councils until the LGA 2002 (Figure 8-1) (see chapter 3).

The functional span and level of devolution of functions to the current regional councils can be seen as a consequence of the political philosophy of prevailing national government that framed the legislation; a restrictive 'anti-planning' public choice paradigm in 1989 was replaced by a more inclusive community-focused 'Third Way' one in 2002.

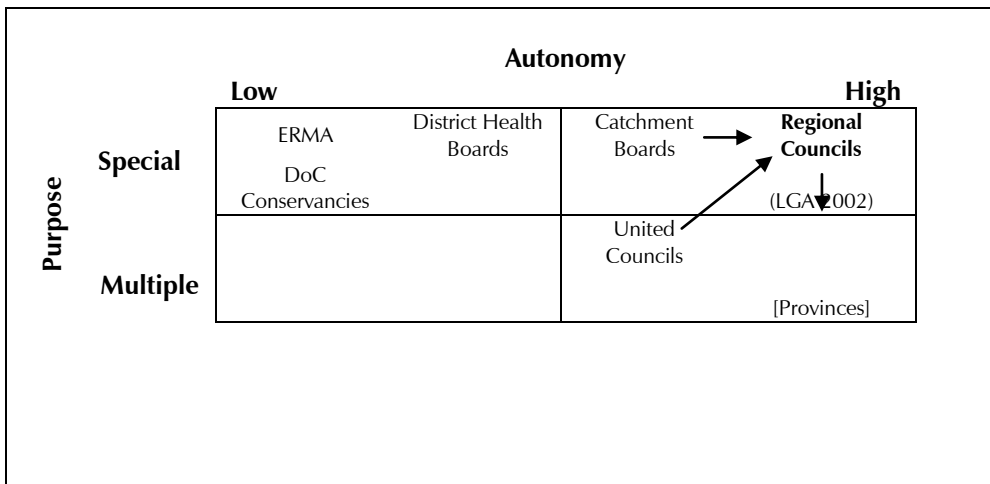


Figure 8-1: New Zealand regional government configuration

But perhaps paradoxically, functions located at the sub-national level are mixed. The councils were given a restricted task span that established them firmly as (multiple) special purpose authorities, responsible for environmental management with public transport and civil defence responsibilities, rather than true regional governments. They had lost the wider social, economic and cultural planning functions of the previous united councils. Although regional councils were given ability to expand their task span under the LGA 2002, councils have largely been reluctant to take up this opportunity in any comprehensive way, with small ad hoc adjustments only evident at this stage. Deconcentrated central government administrations for other functions, with limited local accountability were established in parallel. Gaps remain, and we are now seeing experiments by some of the larger councils to develop coordination between agencies. The consequence of the reforms is that the regional government institution was given greater accountability and local democracy to undertake a more restricted span of functions. Thus, New Zealand regional institutions can be seen as a set of paradoxes. They are seen as necessary rather than loved, lacking any constancy and subject to expediency by higher levels of government.

This discussion so far has identified that regional councils are essentially special purpose authorities, focusing on the environment and more variably on public transport. But these functions provide only an attenuated model of regional government, and it is paralleled with regional offices of central government agencies. At the same time there is at least an implicit expectation in the LGA 2002 that regional councils should expand their competence. Together, they pose the question: what should be the role of New Zealand regional councils?

This is not a new question; the fourth Labour government's local government reform in 1988-89 was seen by some as an opportunity to revisit the purpose and role of sub-national government. The Canterbury United Council (CUC) commissioned a study into a framework for a future regional government body (Canterbury United Council and North Canterbury Catchment Board, 1988). That study identified appropriate loci for government functions (Table 8-2) that can be seen to apply fiscal federalist logic with an underlying assumption of location of functions that provides a comprehensive task profile for the regional level of government, consistent with that found in other western countries. It suggests that national, or central, level government sets overall standards; regional government plans, coordinates and aligns policies; and territorial government implements

policy. The CUC identified several possible scenarios for a regional body ranging between a minimum special purpose organisation and full regional government. Each had its own set of advantages and disadvantages (Table 8-3).

The reality has been an attenuated version of the second, regional council model, but with a limited functional scope consistent with the first scenario. The minimum council was not preferred by CUC as it excluded 'other major government operations which should be situated at regional level', but could be seen as 'the first in a series of steps toward a fully fledged [sic] regional government body' (CUC, 1988: 88-93). This stepping stone approach was also one articulated privately by some senior public servants at the time.

Table 8-2: Overall distribution of functions between levels of government

Clearly Central	Clearly Regional	Clearly District
External relations	Regional planning	District environmental & land use planning
Human Rights	Maritime planning	Local roading
Defence	Transport planning	Sewerage
Customs	Water & soil conservation	Refuse collection
Immigration/Citizenship	Environmental management	Street cleaning
Macroeconomic policies & promotion	Health Care	Street lighting
Basic income & income redistribution	Ports	Drainage
Public health standards	Energy supply/distribution	Local reserves
Education standards	Major reserves	Community facilities
Housing Policy	Primary education	
Courts/penal system	Economic promotion	
Rail, post, telecoms		
Road standards		
National roads		
Science/research		
Central or Regional (pending further analysis/negotiation)		Regional or District (pending further analysis/negotiations)
Tertiary Education		Community/welfare programmes
Vocational Training		Libraries
Secondary Education		Domestic airports
Police		Bulk water supply
Traffic enforcement		Housing
International airports		Public health
Consumer protection		
Fire services		
Shared or undertaken at all levels		
Coordination with other tiers		Arts, recreation & tourism (including museums & art galleries)
Civil defence		Advocacy and promotion
Information/statistics		Taxation
Public administration		

Source: Canterbury United Council and North Canterbury Catchment Board, 1988: 81.

In this sense design was not strategic, but responding to the perceived opportunities and possibilities presented at the time. More recently, Christchurch City Council's then chief executive, Mike Richardson, led a Canterbury think-tank on the purpose of local government to inform the drafting of the LGA 2002. The 'Canterbury Forum' consisting of Canterbury local government chief executives and general managers (Richardson *et al.*, 1999) explicitly sought a kind of local government that did not simply 'refit the ship of state' but might bring about its 'fundamental redesign as a result of greater clarity as to what is required to achieve the outcomes that our communities want.' In this sense, regional government is no different from local government: unresolved is the question 'what should sub-national government in New Zealand be?'

Table 8-3: Advantages and Disadvantages of different regional authorities

Advantages	Disadvantages
Scenario 1: planning and environmental council	
<ul style="list-style-type: none"> • Interrelated tasks and consequent focus of the organisation • Minimum disruption of current situation • Ability to operate off an independent tax base or at least partly on a system of block grants. 	<ul style="list-style-type: none"> • Limited range of activity would limit its credibility as a government body and could disempower it in relation to central or district government bodies with strong works and/or welfare programmes • Liable to capture or labelling as a “green group”.
Scenario 2: regional council	
<ul style="list-style-type: none"> • Sufficient range of functions to develop credibility and influence, even when delegating or contracting out a number of functions • Substantial devolution of power from the centre • Optimum power relationships with central and district government • Requirement for a substantial and therefore politically sensitive tax base, to increase electorate interest and electoral accountability. 	<ul style="list-style-type: none"> • Range of activity could begin to be perceived as reaching the point where questions of bureaucratic remoteness and insensitivity to client group needs warranted special attention • Need for upgraded management skills at the regional level, requiring substantial investment in management development and ongoing training.
Scenario 3: regional government	
<ul style="list-style-type: none"> • Full range of functions to develop credibility and influence, with maximum capacity to delegate or contract out these functions • Substantial devolution of power from the centre • Requirement for a substantial and therefore politically sensitive tax base, to increase electorate interest and electoral accountability • Development of strong regional identity. 	<ul style="list-style-type: none"> • Range of activity would probably reach the point where questions of bureaucratic remoteness and insensitivity to client group needs were important • Need for immensely upgraded management skills at the regional level • Disempowerment of district government by being limited to infrastructure • Devolution of central government powers to the extent that they could lose substantial influence in the social policy and community protection areas.

Source: Canterbury United Council and North Canterbury Catchment Board, 1988: 82.

To date, a muddling-along approach has been evident. The 1989 local government reforms provided greater professionalism, efficiency and accountability to local government. The focus was on making things work better and in that sense, despite the enormity of the changes created by amalgamation was incremental. The 2002 initiative, despite expanding the potential role that regional councils can play and introducing a 10 year strategic planning process that involved the community, also can be seen to be incremental. It, too improves accountability and efficiency, especially the management of infrastructural assets (Local Futures, 2006), but focuses on process rather than exploring the role sub-national government should play within society. Local Futures (2008) suggest councils under the LGA 2002 have adopted positions across a continuum, from focusing on outputs (service delivery) to focusing on outcomes that involves engaging with the wider community and other organisations (i.e. adopting a governance model). They also suggest that their narrow task-span ultimately limits their ability to provide a comprehensive local government form as national government retains too many of the necessary policy levers to influence outcomes.

A comprehensive regional government focus allows for trade-offs across policy areas less easily achieved with special purpose authorities. As an indicative example, regional councils can manage ambient air pollution through incentives and regulating emissions to air under the RMA for public health goals. But they are not able to address indoor air pollution or its causes, such as cigarette smoking or underlying socio-economic drivers for these activities. Similarly, councils can make policy choices between funding development of regulation or provision of incentives to achieve environmental goals, but are unable to address wider allocative efficiency of supporting those environmental goals compared to other social or economic goals for the regional community. Clearly, the functions and geographic span will differ according to the choice.

These choices are perhaps determined by culture and social conditioning. The Anglo-American liberal-based approach is very much one of local government as service provider and the minimal state. The European model is more societal in focus, with a primacy in collective rather than individual good, and government is structured towards citizens rather than consumers. The role of New Zealand's regional councils appears to depend very much on whether they and their communities want the councils essentially to ensure service delivery (such as a clean environment and risk management) or to be a comprehensive arm of government that provides regionally services and governance.

5.1 The need for devolved government

The literature shows that although there are strong arguments for devolved government, revisionist thinking suggests that these arguments are largely normative and that arguments for devolution can also be applied for promoting centralism. Instead, writers such as de Vries (2004) suggest that functions need first to be identified and then the most appropriate institutional arrangements for undertaking them designed.

Such an approach suggests two questions in assessing New Zealand's regional council performance: whether function should be separate or bundled, and whether the level of autonomy is appropriate (i.e. devolved or decentralised).

Regional agencies have two distinct roles, as policy making and implementing. These require quite different characteristics.

In the policy making role, regional agencies act as intermediaries between regional communities and local government, and central government, while coordinating identification of preferences and actions between local governments within their jurisdictions. This is also regulatory, whereby outcomes are achieved through constraining and redirecting actions by individuals and firms to achieve policy goals and outcomes. Regional councils have been undertaking this role in implementing the RMA, where they are regulating individuals and firms to promote a national goal of sustainable use of natural and physical resources. Regional economic development is another.

Councils have an implementation role when they are directly providing or ensuring provision of services to a regional constituency. Public transport, flood protection and pest management are significant New Zealand regional council activities. However, regional councils need not be restricted to these; other countries have located education, police, hospitals and public health, and economic development at the regional level, functions associated in New Zealand with national government with a largely decentralised regional

presence (public health is overseen at the regional level by district health boards consisting of both elected and appointed members).

These different approaches to local, and regional, government suggest that there is no one model for good regional government; design criteria for good regional governments may well differ from regional special purpose authorities.

5.2 The need for regional voice

The previous section raises questions whether correspondence is achieved, or is even achievable within even special-purpose authorities, given the fractal-like nature of issues. As well, the strongly made argument for local government is local accountability, so that local decision-makers are held accountable for their decisions. But the evidence presented in chapters 6 and 7 suggests low public support for councils, their apparent capture by sectoral interests and a technical complexity of issues and solutions that confronts decision-makers.

The councils' lack of representation creates a potential for decision-making to support the interests of the rural sector in more predominantly rural regions. A regional council manager of a leading regional council that sought to address environmental issues commented that the only way staff were able to combat this conservatism was to invest heavily in science research so that the results could leave no room for alternative decisions by councillors. This option is not likely to be available to smaller councils, some of which face quite intense political scrutiny of their research budgets.

The survey respondents also revealed a view of councillors that seems initially contradictory, discussed above. The impression is that they have no clear idea of what their councillors stand for, but are strongly supportive of having local representation. This is perhaps best explained by considering the role of councillors as primarily one of organisational oversight and accountability rather than one of policy leadership and strategic direction for the region. The role of councillors, it would seem, is to keep the administration 'honest'. Such a persistent focus on accountability rather than strategic direction would seem to explain a nation-wide run-down in local government network infrastructure reported by the Local Government Rates Inquiry (2007). It could also explain the difficulty local government generally appears to have in articulating clear and focused community outcomes in their LTCCPs.

The picture that emerges is thus one of reactive rather than proactive councils, biased in their composition towards the very sectors that most impact on the environment and are likely to struggle with the technical complexity of the issues before them, but who have good name recognition. This raises important questions about the need for regional or local elected representatives on regional bodies where the emphasis is on expert technical knowledge. Sbragia (2000) argues that input legitimacy is not required where the issues and their resolution are technical, overall policy directions are relatively uncontested, and a higher level control function exists.

Dryzek (1987) argues that a more ecologically rational democracy requires radical decentralisation of decision-making powers down to local communities. Enhanced public participation in 'decision-making discursive democracy' is seen as leading to better environmental outcomes, boosting the legitimacy of decisions, and ensuring that local values and knowledge are used in coming to appropriate decisions. However, survey

respondents suggested quite the opposite, with environmentalists preferring centralisation and resource users preferring decentralisation.

Institutions that deal with complex or arcane matters that have low public profile receive little authorizing direction and are judged by the substantive value they provide (output legitimacy). This may be demonstrated by low voter turnout for intermediate type democratic institutions. It was suggested that regional council voter turnout may be artificially high as a consequence of being part of the territorial council and mayoral elections and shared ballot papers, so that the marginal cost of voters voting for regional and health board candidates is small. This could be tested if councils ran separate elections.

'Democratic deficit' has been a concern among European Union institution commentators in particular, but also in New Zealand where low voter turnout at local government elections is seen as cause for concern. This concern may be somewhat misplaced where over-riding systems responsibilities remain democratically accountable. Thus in New Zealand, although individual regional councils are not overly democratic, their continued existence and the Resource Management Act from which they derive much of their mandate are still under the purview of the national-level democratic government so that national government has capability for intervening where outcomes are not being achieved. Examples of this include ability under the LGA 2002 to install a commissioner where a council breaks down and for national call-ins under the RMA where consent applications have national significance. As well, the RMA provides for councils' resource management decisions to be appealed to the Environment Court. Thus decision-making is carried out under the shadow of higher authority, reducing the likelihood of perverse decisions.

The apparent democratic deficit in fact opens up the question of need for democratic representatives at the regional level at all. The RMA forces decision-makers down a fact-based rather than value-based decision process predicated on sustainable resource management consistent with criteria set out in the legislation. This effectively depoliticises decision-making to some extent and in any case most resource consent decisions are made at officer level, or under the guidance of an independent hearing commissioner. Provided clear national policies are articulated, there appears little value that politicians add to the resource management process, other than to hold regional bureaucrats to account.

Integrating scale and function is structurally difficult as different functions have different optimal size to achieve correspondence. The obvious solution is to create single-purpose authorities, each mapped so that issues correspond with beneficiaries. However, this leads to arrangements that compromise both input and output legitimacy.

It was identified that environmental characteristics, problems and issues have quite different spatial characteristics. Taken to its logical endpoint, fiscal federalist requirement for correspondence arrives at an atomistic administration that becomes an administrative morass. Further, correspondence assumes a spatial homogeneity, but as was demonstrated, similar environmental characteristics and problems may well have discontinuous spatial dimensions. Accordingly, some clumping of functions is necessary. This is ultimately arbitrary and is demonstrated by regional councils having some environmental management functions but not others for which arguments for their inclusion could be made. Instead these are undertaken by regional offices of national government departments. The level of clumping is perhaps best seen as an optimisation exercise between technical and allocative efficiency; the more functions to be undertaken, the greater the opportunities for efficient

allocation of resources between functions. Conversely, few functions allow greater technical competence and specialisation.

Chapter 9: Conclusion

1. Introduction

The purpose of this study was to assess the efficacy of and identify an appropriate role for regional government in New Zealand. Its objectives were to review the rationale for regional level of government, describe New Zealand's regional level institutional arrangements, assess the public value of regional council performance using environmental management as a case study and suggest an appropriate role) for regional councils in New Zealand, with particular reference to environmental management.

This chapter draws conclusions based on the research findings using the public value framework as a means of assessing efficacy of the regional council model for managing the environment in New Zealand and more widely about the appropriate role of regional government. These conclusions are used to suggest possible reconfiguration of regional government in New Zealand to manage the environment more efficaciously.

2. Context for regional councils

The rationale for and appropriateness of devolution and decentralisation of government functions is debated with many of the arguments for devolution also able to be used to support centralised government. Despite the presence of regional level governments in many western countries, a survey of the literature on sub-national government suggests devolution is not necessarily efficacious. Rather, regional level government is plastic, with different task-span and functions and levels of autonomy in different countries. It is helpful to recall Prud'homme's (1995) observation that devolution is a means to an end, rather than viewing it as a (normative) goal in its own right.

A review of New Zealand's regional government shows a persistent use of sub-national administrations over time. However, individual institutions have been historically subjected to reorganisation and task redefinition and modification of boundaries by the national government. A feature of New Zealand's institutional arrangements is the parallel decentralised national government and devolved regional councils. Thus some functions delivered regionally have national accountability while others have regional accountability. As well, regional council functions are almost entirely funded regionally, while others are funded through national taxation. The current regional government model also positions most regional councils as (multiple) special purpose authorities primarily responsible for devolved environmental resource management function. Structures also vary, with both regional councils and district (unitary) councils undertaking regional council functions. The combination of devolution providing considerable regional autonomy and a narrow task span confined largely to environmental management is unusual. Other western countries have chosen to manage their environments using decentralised specialist agencies, retaining policy making at the national level.

New Zealand's environmental resources are managed under the RMA that establishes an enabling policy framework within a hierarchical planning regime of national policy statements and environmental standards, and regional policy statements and plans. District council land use planning must in turn take account of regional policies and plans. Thus regional councils operate as highly autonomous organisations undertaking limited functions within a multi-layered structure.

3. The public value of New Zealand regional councils

A public value framework was developed for assessing regional council performance. This framework allowed evaluation of different aspects of democratic government's ability to respond to the needs and demands of its citizens, taking into account policy direction-setting, capability to deliver outcomes and achievement of outcomes. This assessment was not complete due to lack of data about environmental outcomes, but the weight of available evidence strongly supports a conclusion that New Zealand's regional council model of regional environmental management has generated limited public value.

Some councils have made good gains, while others are regarded as having performed poorly so that the national environment overall has had variable gains since the regional council structure was established in 1989. Rather, councils collectively appear to be unable to manage the difficult and important environmental challenges, such as non-point agricultural discharges that have arisen from agricultural intensification, so that the environment is worse than when they took responsibility. This performance can be seen to be due to a range of factors that collectively raise questions about this model of government. These factors include the lack of correspondence between environmental parameters and issues with regional boundaries leading to overlaps and duplication, the difficulties democratic institutions have in dealing with environmental issues, differences in resources and failure by the national government to provide overall policy direction.

While a public-value failure is apparent at the national level, the differences between regions in perceived public value generated raises questions, despite relative homogeneity of values held by different stakeholders, and population, about environmental values. The top performing regions, including Southland, Hawke's Bay and Taranaki share characteristics of being rural, relatively small²⁵, prosperous and self-contained, with small populations and distinctive regional identities. As well they have only a small number of territorial authorities in their jurisdictions, making relationships between councils easier to form and maintain than those of larger regions. They are essentially regions of separation. As suggested earlier, part of their perceived high value may result from boosterism. They have also largely 'stuck to the knitting', providing pragmatic environmental management functions, rather than widening their functional scope to socio-economic issues to any significant extent.

The three councils perceived as worst performing are in comparison, different in character. Northland and the West Coast regions are socio-economically disadvantaged, limiting their ability to resource activities. Underlining this is a general recognition by national and the regional council that the West Coast is essentially below critical mass, but its size and isolation make it difficult to associate with any other region; it, too is a region of separation. Thus, lack of social and community resources could be used to explain these two councils' poor perceived performance.

On the other hand, the third poor performing region, Canterbury, is prosperous. It is however, a region of contact with artificial administrative boundaries, merging into regions to both north and south, as evidenced by the decision of Kaikoura District to the north

²⁵ Southland is physically large, but over half of its area is uninhabited and inhospitable wilderness, forming national parks and is therefore not managed by the regional council. Its effective management size is thus very much smaller.

joining it in 1991 and the ongoing efforts for the southern part to break away. The strong polarity of a metropolitan city and rural hinterland may also explain tensions as town and country conflict surface.

It is beyond the scope of this research to investigate organisational performance, but several informants were adamant that organisational culture was critical to Canterbury's performance. Its then chairman Sir Kerry Burke in frustration once remarked in a council meeting that ECAN was "ECAN't". This may explain immediate performance but does not explain why the council as authorising agency has let matters persist for some two decades. In any case, recent executive changes will provide the opportunity to examine whether staff cause poor institutional performance or are merely scapegoats.

Importantly, the regions' differing public value dimensions reflect their performance. The regions' attributes (identified in chapter 6) are reflected in perceived performance (chapter 7), suggesting the public value framework is valid. Regions with high operational feasibility in terms of resources available through the community are more likely to perform well than those that do not, but those with reduced authorising agency may perform less well, despite their operational feasibility.

Accordingly, the current level of devolution of environmental functions can be queried. In the first instance, locating decision-making at the regional level ignores that most environmental conditions or problems do not correspond with regional council boundaries. Rather, most are shared by several or many regions so that a single policy approach would be more efficient. As well, despite the arguments that local voice allows information such as preferences to be revealed, the research suggests environmental issues, contested problems, are either common across the country or are identity rather than spatially located. The assessment of environmental issues and environments therefore suggests a national approach is appropriate.

New Zealand has devolved as opposed to a decentralised environmental resource management, so that democratically elected councillors are responsible for policy-making. There is limited evidence that elected decision-makers are well-placed to decide on technical matters. While they provide administrative accountability, they do not facilitate addressing wider environmental problems. The devolved model also exposes special purpose authorities to sector capture and in any case, under the RMA many of the decisions are either delegated to independent experts or can be appealed to the Environment Court for judicial resolution. This necessity of local representation is further questioned by the use of parallel decentralised national government for managing other aspects of the environmental conservation, and social and economic functions that impact on the regions' citizens' lives.

Importantly, the regional councils are only one part of a multi-level institution that has in many ways failed to deliver. The RMA provided for a hierarchical policy making that allowed cascading of policy, but although the national government has produced guidelines, it is only now starting to make serious efforts to develop binding policy in the form of national policy statements and national environmental standards. This is seen to be the result of a lack of political will rather than formal institutional failure. In any case, the New Zealand model appears to have devolved authority one tier too many, so that regional councils undertake functions usually associated with national EPAs in other countries.

Instead of providing political leadership, the role of political councils appears to be one of holding to account rather than strategic decision-making and positioning for a better environment. As well, some councils are not representative of the regions' populations, with many regional councils predominantly consisting of farmers. Arguably a conservative sector of society, they also can be seen to serve to attenuate interventions that impact on the industry, which may serve to explain the slow response by councils to dairying impacts over this time. In conclusion, the New Zealand devolved special purpose policy making has been found wanting.

4. A role for regional government

The research findings have implications for both New Zealand's regional councils' environmental management, but also for wider regional government and the role it should play. The results of the research on public value of New Zealand's regional councils provide conflicting views of the appropriate role for regional councils. There appears a desire to have a local level of accountability, but that this is reactive, maintaining system honesty, while others want a more centralised and homogenous policy making capacity.

4.1 New Zealand's regional government paradox

New Zealand regional government is paradoxical. It is attenuated when compared to federal systems with fully fledged multiple purpose and highly autonomous regional governments. Instead, it operates several different parallel administrative structures, each with different functions, levels of autonomy and accountability. This is most obviously portrayed in the spaghetti maps created by the different administrative boundaries used by the different organisations. It is also apparent at local body elections which affect only a few of the regional level organisations. While regional councillors and (some) district health board members are elected and accountable to their regional electorates, members of other regional level organisations are appointed, while many functions are undertaken by regional offices of the national government and have no sub-national accountability. Thus New Zealand's regional government consists of regional councils undertaking a few special-purpose functions, environmental management, public transport and civil defence planning. But at the same time, this small task-span is undertaken by councils that have high autonomy, consisting of locally elected representatives, largely self-funding through user-charges and rates (land-taxes) supplemented by investments, and with ability to make strong secondary legislation (regulations known as regional rules) under the RMA. Paradoxically then, regional communities have a very high level of autonomy over very little that affects their daily lives.

A second paradox is that regional government in New Zealand historically has shown itself to be an enduring concept but an inherently unstable institution with ongoing reformulation of functions and institutions. The geography of administrative regions has also shown a degree of plasticity, both historically and by agency. The number of regions by administrative function gives an indication of the many ways New Zealand can and has been divided. Some regions are naturally formed through boundaries of separation, supporting regionalism, while others are formed through boundaries of cooperation and unification is a product of regionalisation. This results in a mixture of clearly defined regions with clear sense of identity and more flexible ones with gradations of identity, allowing variable administrative geometries.

But regional institutions have been and continue to be modified by national governments over time. This institutional plasticity is partly a consequence of regional and local

government's lack of constitutional independence enjoyed in many western countries so that its functions, autonomy and administrative requirements can all be changed by legislation. Most government regional agencies, along with modern regional councils, only date back twenty years at most, although most are the successors of a series of antecedent authorities. Elected regional councils for example have less autonomous antecedents in the former catchment boards and united councils. But despite local representation, one does not observe any public mobilisation to protect these regional institutions. Instead, efforts have been made to disestablish regional councils with variable success from since they were established in 1989 to the present. Public support as evidenced through voter turnout and participating in regional processes is in no way remarkable and survey respondents gave only ambivalent support to the councils.

The New Zealand regional councils were established as multiple single purpose authorities that enabled technical efficiency. But there is now a desire by national government to increase their functions and to address wider social, economic and cultural roles, which they have largely resisted. The persistence of parallel decentralised regional administration by individual national government departments, serves both to underline an apparent need for sub-national administration while highlighting an inconsistency between regional democratic decision-making for a limited range of functions, but not for other government services that also affect people's lives. A simple result is that the different structures and accountabilities reduce ability for regional decision-makers to achieve allocative efficiency in allocating resources between functions.

4.2 Regional government

Casting more widely, some conclusions can be reached about regional government, drawing on the New Zealand experience although care needs to be taken extrapolating the findings to other aspects of regional government. Environmental management is only one function regional councils undertake and other functions, such as public transport, may have different characteristics. Nevertheless, the findings underline the need to address together the locus of authority, autonomy and task span to achieve policy outcomes, rather than individually in an ad hoc manner.

Integrating scale and function to identify the appropriate locus of authority and scale of government is challenging as different functions have different optimal size to achieve correspondence. The correspondence principle can be considered theoretically elegant, but impractical in application. It privileges technical efficiency at the expense of allocational efficiency, while the physical boundaries of some policy subjects, such as the environment, do not necessarily match social and economic communities. These observations support the notion put forward by de Vries (2000) of the 'fallacy of the optimal scale'. Rather, compromises are necessary, so that institutional architects need to be explicit in the trade-offs that are being made to avoid false expectations and to encourage forming informal institutional mechanisms beyond structure to facilitate organisations to overcome their design limitations.

There are strong normative expectations for devolution with reallocation of authority to sub-national levels of government and to the community. Nevertheless, decentralised and devolved regional or meso level institutions have been part of the polity since then. These parallel institutions raise questions; if local voice and accountability is so important, should not decentralised agencies become part of a wider regional government? Conversely, if the democratic regional council system is ineffective, should it be retained?

The findings from the present research suggest the need for reconsidering the need for regional government, at least with regard to special purpose authorities on the basis of sector capture and ability for democratic institutions to cope with complexity. The environment policy domain is technical and the ability for lay-people to grasp the nuance, complexity and ramifications of issues remains uncertain. Politicians are drawn largely from the lay-public and do not have the technical background. Input legitimacy is compromised as a result of special interests capturing individual organisations (Olson, 1965) as demonstrated with the provincial regional councils and coordination between agencies (e.g. air and water authorities), the antithesis of the intention for integrated resource management.

This suggests that councillors may well represent community interests, but are unable to recognise or provide for environmental bottom lines to ensure systems integrity and strongly suggests the value of democratically elected representatives is to act as a check on the bureaucracy rather than leading. In any case, the loss of democratic oversight at the regional level does not necessarily reduce institutional legitimacy as regional government in New Zealand and the laws they operate under remain under national level democratic government authority and which has always had the ability to intervene in local government matters.

Finally, when considering regional government institutions, designers need to consider the task span, ranging from special purpose authority to generalised regional government. In other words, it is necessary to determine whether the institution is required to provide efficacious administration of particular function or functions, or to have a general task span. The two have quite different requirements and implications, not the least a regional government requiring devolving and bundling of decentralised national government functions. This comes to the heart of how the polity is viewed and reflects historical decisions and culture that have become constitutionally embedded. Thus in Germany under the Basic Law (constitution) the default government unit is the regional government, with very few functions located at the national level, while in the UK it is the national government. The historical record is very much the latter in New Zealand.

5. Alternatives for governing New Zealand's regions

Consideration of the alternatives to New Zealand's present regional government model is appropriate given ongoing incremental changes to regional councils. The LGA 2002 has opened the possibility for regional councils to expand their task span, though with few takers, explicitly requiring all local and regional councils to promote sustainable development. As well, the Ministry of Economic Development has indicated it wants to locate management of regional economic development at the regional level, while the Royal Commission into Auckland Governance suggests a new role for metropolitan and regional government, at least for Auckland. These are all ad hoc responses to issues as they arise. A more proactive consideration of the role and structure of regional government may provide guidance to institutional design and its consequences.

This research shows that there is a historical use of and an ongoing need for some sort of regional institutional presence. Despite some freeing of shackles, most regional councils retain a special purpose authority position, rather than a wider regional government one. There is also strong evidence, based on the existing New Zealand regional councils' environmental management that the performance is suboptimal. This raises the question

whether existing structures should be modified or alternative institutions be constructed that better deliver policy outcomes.

The general principles of addressing together the appropriate locus of authority, level of autonomy and task span identified in chapter 3 can be applied to generate possible configurations to stimulate discussion. Helm and Smith (1987) and Bailey (2004), among others, make the point that form follows function and that the first matter to be resolved is the function of the institution. This is an important point for New Zealand, where regional councils were established essentially as special purpose authorities, but in more recent years have been progressively expected to widen their task spans. However, jurisdictional boundaries drawn for managing the natural environment do not necessarily fit social, economic and cultural communities of interest. Recognising no optimum fit exists, the extent to which the correspondence principle is violated needs to be addressed and concurrently other informal institutional arrangements can be developed to reduce the consequent inefficiency. Finally, the extent to which local or regional information about local preferences and technical knowledge needs to be decided.

The temptation is to define what regions ought to look like. There is no shortage of rationales and methods for determining regional boundaries for special purpose authorities. For example, the LENZ and REC land and river environments databases could quite easily be interrogated to generate regions of similarity; their original purpose was partly to provide consistent policy after all. These data immediately suggest a regional administration based on natural and physical environment that amalgamates Auckland and North Auckland, and aggregates the lower North Island regions, while amalgamating the top of the South Island unitary authorities, with reconfiguring the other South Island boundaries.

However, it is well beyond the limits of this research to identify the most appropriate boundaries for regional organisations. The critical point is that there is not going to be an optimum regional scale or boundaries to achieve correspondence; rather, any boundaries are satisfying so that there is no *a priori* 'right' solution.

Three models for regional government are identified that each differs in locus of authority, level of autonomy and task span (Figure 9-1):

1. status quo: regional councils as autonomous, (multiple) special purpose authorities;
2. recentralised special purpose authority, such as the EPA model, a special purpose authority with low autonomy;
3. regional government a multiple purpose autonomous authority; and
4. depoliticised authority.

		Autonomy	
		Low	High
Purpose	Special	EPA model	Regional councils
	Multiple		Regional government

Figure 9-1: Possible institutional models for managing New Zealand's environment

5.1 Regional councils

The regional council model continues the existing model of regional government. Councils are considered part of local government and retain to a greater or lesser extent a multiple special purpose authority character. The focus for councils remains primarily on environmental management, though with public transport and civil defence continuing to play supplementary roles. The system is notable for its high level of devolution. An attraction to central government at least, is that councils are funded regionally and so do not draw on the central government tax take. Regionally this also provides insulation from mercurial central government policy-making.

Decision-making remains at the regional level. This clearly has costs from duplication as each council independently develops policies and puts them through the RMA processes. The uncertainties inherent in the RMA process, combined with differing regional council priorities, also result in a piecemeal approach to managing individual environmental issues, so that ability for coordinated action and opportunities for enjoying economies of scale are reduced.

Two further capability issues are posed by the technically complex nature and long-time spans of environmental issues. As identified earlier, environmental issues are technically complex and require significant investment in baseline information and understanding of the different materials and biological systems operating. These requirements make considerable demands on councils, which some smaller councils struggle with, quite apart from having and retaining a critical mass of expertise on their staff. This expertise is important given that evidence suggests that the councillors are challenged by the technical complexity in any case.

Ad hoc developments are likely to continue, the metropolitan Auckland Regional Council is unlikely to remain in its current form. Discomfort and difficulties may continue as other functions or existing functions or augmented are expected of regional councils from either central government or the regional community. Ad hoc decisions, such as funding regional sports stadia, suggest one-off solutions will not tear the overall fabric, but at the same time are not necessarily efficacious. Central government regional economic development, for example, may less easily sit with many regional councils. Given the current lack of overall central government interest in the environment and the convenience of existing functions being funded regionally, it is hard to see any significant political will to move from this position.

The special purpose focus of the councils would allow the possibility for increased efficiency. Councils are already exploring shared government arrangements to a limited level. This has mostly occurred between territorial authorities and in joint regional-territorial authority arrangements. Shared services are increasingly common (Local Futures, 2007; OAG, 2004) between smaller district councils to obtain economy of scale advantages. These are essentially contractual agreements for services and do not require councils to give up their authority. As well, Auckland and Canterbury regional councils have also established joint governance arrangements with their territorial authorities. There is, however, no legislative mandate to ensure that such initiatives are developed are maintained, so that they are inherently ad hoc.

5.2 Decentralised special purpose authorities

The Environmental Protection Agency (EPA) model is an example of a decentralised special purpose authority widely adopted in Europe, the USA and Australia. A small national government ministry provides policy advice to the government, drawing on an arm's length EPA for technical advice. The EPA also has regional offices responsible for implementing policy and monitoring environmental conditions. The EPA model accordingly strengthens the decentralised special-purpose authority model of government. The emphasis on providing expert technical knowledge and has therefore low input legitimacy, but Sbragia (2000) argues that input legitimacy is not required where the issues and their resolution are technical, overall policy directions are relatively uncontested and a higher level control function exists. Rather, this model gains its legitimacy through the achievement of environmental outcomes. Arguments in favour of its adoption in New Zealand include the widespread nature of environmental issues and values, lack of capability in smaller regional councils and depoliticisation at the local or regional level of decision-making that has stymied regional councils

The EPA model has been an enduring but unsuccessful concept in New Zealand. It was mooted in the 1980s as an alternative to the regional council model and is possibly best compared to the NWASCO-catchment board model. This model has again been raised by the National Party's BlueGreen think-tank (Smith, 2006). The disadvantage of such a model is that while it inculcates technical efficiency, it is not well-placed to address allocative efficiency issues. In that respect it is ill-suited to addressing sustainable development, as opposed to management, functions. The model could be improved to address these concerns by widening the task span to include other decentralised environmental management functions, such as those currently undertaken by DoC.

5.3 Regional government

The regional government model consists of a fully autonomous, general purpose regional government. It builds on elected accountability of regional councils, but expands the scope of functions. In part the regional governments would assume the existing central government departments with regional offices or regionally focused activities, including District Health Boards, DoC conservancies, Ministry of Social Development regions, Ministry of Economic Development, Ministry of Education and Transit (roading and public transport). The functions are currently carried out by decentralised national government agencies operating in parallel to the devolved regional councils and are all undertaken by regional governments in other western countries.

The model provides the basis for a more democratic and efficient government. While a special purpose authority risks capture by appealing only to a small group of beneficiaries, a general government model appeals to a range of different groups of beneficiaries. The range of functions could be expected to encourage contestability for elected positions from across a wide range of sectors, and so reduce the risk of individual sector capture. The general regional government provides a mechanism for allocative efficiency across policy outputs, the underlying argument for sustainable development. In essence, it addresses technical complexity by providing multiple foci that provide competition between policy outputs. Although decision-makers may not have specialist knowledge to address specific issues, it encourages competition by technical sectors to compete against each other to win resources.

It also firmly places to the fore the role of sub-national government in New Zealand. Challenges include capability, quite apart from bureaucratic and central government reluctance to give up power and is therefore politically brave. This requires a full-scale review of the role of local government and, as identified by Bailey (1999), requires concurrent consideration of structure, function and finance in order to achieve a strategic approach.

Perhaps the biggest challenge is that such a model seriously challenges the primacy of Wellington-based centralised national government. Deprived of many of the domestic policy levers it currently holds, the national government's authority and ability to influence national events would be seriously compromised. But this may be a safer way than another looming alternative. The national government is in a difficult position; resolution of Auckland's metropolitan governance is needed to create a fundamental platform for turning Auckland into a world class city, part of the Labour led government's economic transformation goals (Mallard, 2006) on the back of which the rest of the nation can ride. But resolution also will result in a single, very powerful region that will challenge the Wellington located national government's primacy. Vigorous regional governments in other parts of the country may help counterbalance the Auckland region.

5.4 Depoliticising the Environment

As an adjunct to any of the models, this research suggests an ongoing need for an apolitical and independent institution, such as the existing Parliamentary Commissioner for the Environment. A political neglect of the environmental management policy arena, by successive national governments is all too apparent. As discussed above, a critical feature of the environmental problematique is its technical complexity. This complexity is an argument for a technocratic government such as the EPA. This complexity also means that the public are not able easily to ascertain the efficacy of institutions. One of the PCE's statutory functions is to provide an independent watchdog on the environmental management system. Provided the office is sufficiently well resourced to investigate technical matters, interpreting monitoring data collected by the EPA on behalf of the wider public, providing accountability.

The former Parliamentary Commissioner for the Environment, Morgan Williams, has argued for an institution that is the 'Keeper of the Long View', so that long-term environmental goals can become depoliticised and so endure across political cycles (Young, 2007; Williams, pers. com.). He gives the example that long-term resolution on New Zealand's long-running (since the 1970s) political debate over the country's superannuation scheme was only achieved when the political parties recognised that a common position was needed and that the electorate were seeking a binding resolution.

Salmon (2007) as part of the current Foundation for Research, Science and Technology-funded research project 'Institutions for Sustainable Development', has promoted New Zealand develop a national consensus around clearly stated goals and milestones for environmental policy. This research has directly fed into the National Party's environmental discussion paper (Smith, 2006). Advantages of this approach are seen to include effectiveness in getting results from consistent and effective policy implementation by private and public sectors and organisations, long-term consistency through multi-stakeholder agreement and support and better use of information. This governance model effectively depoliticises environmental issues and achieves Dr Williams' vision of policy enduring across political cycles. This clearly requires national government level leadership

across political parties. It also requires comprehensive strategic planning across national government in order to ensure allocative efficiency and sustainable development outcomes, something that remains elusive (see Chapman, 2006).

Again, these types of governance models seek to depoliticise a technically complex policy arena, reducing input legitimacy in the interests of output legitimacy. A consequence is implicit support for an EPA model of environmental government, a strong apolitical consensus forged between national government and environmental stakeholders leaves little room for political discretion in policy-making at the regional level, other than perhaps in how policy is implemented to take account of regional geographical differences.

6. Conclusion

The obvious conclusion from this investigation is that regional government is messy. The field is lightly researched compared to local (i.e. municipal) government and regional organisations are even more variable between countries in their roles and functions, making comparisons difficult and ability to draw wider conclusions seemingly limited. However, this and other research confirms the regional paradox; regional government appear to have limited democratic legitimacy, rewarded with public indifference and relatively low voter turnout and face the risk of special interests capture. And yet regional organisations are an enduring and important element of political organisations, responsible for specific functions that impact on communities' wellbeing and are looked to by national governments as a means for implementing policy and coordinating territorial government.

Nevertheless, while the need for regional organisations is persistent, New Zealand's regional councils are not secure. This research clearly identifies the regional council institution as having weak legitimacy, enjoying ambivalent input legitimacy and indifferent environmental achievements in an era of increasing environmental awareness. This result is not entirely the consequence of the councils themselves, as the national government has only recently started to provide strong national guidance that would facilitate comprehensive and coherent environmental management. Yet all the councils operate under the same legislation and with few exceptions face similar environmental issues, suggesting that formal institutional arrangements are not the only factors determining performance.

7. Further research

This study established the broad parameters of regional institutions and asserted that regional government is a part of the modern government institution. It also identified opportunities for further study in order to understand better how formal and informal institutional arrangements impact on public policy development and implementation. Its findings and data provide opportunities for further research on regional government.

In the first instance, there may well be value to explore the importance of democratic authorising agency by undertaking a comparative study of devolved and decentralised institutions using the public value model. This could be undertaken by largely applying the research design of the present study to the decentralised Department of Conservation with its fourteen conservation boards. The results of this research could be then compared to those of the present study with its focus on devolved institutions. The regional councils and conservation boards are broadly similar in size and their policy decisions are technical in scope, so that the effect of democratic authorising agency would be effectively isolated.

The present study identifies differing public value generated by different regional councils sharing similar institutional arrangements. Reasons for these differences are not explained fully, though different capability is cited as one possible factor. However, several informants suggested that organisational culture and leadership may be important. Certainly, some of the higher performing councils have had enduring office holders and senior management.

This provokes two key areas for further research. First, an exploration of the type and level of leadership of chief executives and chairmen of the different regional councils is suggested, to ascertain the relationship between high performance and superior leadership. The second is broader and would seek to examine the relationship between council performance and the social capital of the region, exploring the adage that citizens get the government they deserve. This research would clearly parallel Putnam's (1995) seminal work in Italy. However, an important parameter is to differentiate between regions primarily with boundaries of separation and reflecting regionalism and those with boundaries of contact that result from regionalisation. High performing councils in the present study have geographies and histories that suggest they are the result of regionalism, but regions' social capital were not measured. Arguably, regions with strong endogenous regional identity will have higher performing regional institutions.

The formal and informal relationships between central and regional government would also be revealing. In particular, the mechanisms and their application for coordinating and aligning decision-making would be of interest. There appears to be little formal means at present, confined largely to set-piece meetings between chief executives of the councils and government departments. Scope for enhancing relationships would seem useful from a practitioner's perspective.

Finally, scale effects can be explored by examining the performance of New Zealand's many economic development agencies. The Economic Development Association New Zealand has some 70 members that range from the smallest to largest territorial authorities in New Zealand, with governance structures ranging from territorial authority to stand alone boards. It is also an area where there is pressure for rationalisation and a regional voice; Wellington Regional Council has recently assumed a regional responsibility for economic development coordination in the region and the Ministry of Economic Development (MED, 2007) has indicated it wants to see a regional approach to economic development.

As noted in chapter 1, the region has not been of any major interest to political scientists. This exploratory research has shown regional institutions to be unstable, unloved and uncomfortable, but they endure through different incarnations. It suggests that in practical terms the design and functioning of the meso level of government has significant consequences locally, regionally and ultimately nationally. To citizens and public policy makers, the functioning and success of regional institutions are important and accordingly justify greater attention than they have been given.

The 1980s marked the start of a New Zealand experiment in regional government. Two decades later, the evidence suggests the regional council model of democratic government of special purpose authorities may not be achieving sustainable environmental resource management. Rather, it suggests it is timely to revisit the logic of devolving power and decision-making for a better environment.

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Appendix 1: Matters to be dealt with in regional schemes

First Schedule Town and Country Planning Act 1977

1. Social – provision for social and economic opportunities appropriate to the employment, housing, and welfare needs of the people of the region
2. Economic – development of the regional economy, including the growth of and balance between primary and other basic industries and service industries
3. Natural resources and environment – the identification, preservation, and development of the region's natural resources, including water, soil, air, and other natural systems, farmlands, forests, fisheries, mineral (including sand, metal, and gravel), and areas of value for the enjoyment of nature and the landscape
4. Type and general location of developments –
 - a. the regional pattern and general focus of urban and rural development;
 - b. General identification of areas for urban growth...
 - c. General identification of areas to be excluded from future urban developments, including land of high productive capability...
 - d. General identification of the regional pattern of industrial and commercial employment centres.
5. Public works, utilities, and facilities – regional needs for the provision and protection of...
6. Recreation – regional needs for land and water based recreation.
7. Communications and transport – provision for communications and transport to structure and support the regional pattern of development and provide access to the resources, employment, housing, shopping and commercial areas,... within, and outside, the region.
8. Community facilities – regional needs for –
 - a. Civic and commercial facilities, including conference centres and halls; and
 - b. Refuse disposal sites and systems.
9. Cultural facilities and amenities – regional needs for –
 - a. Cultural facilities...
 - b. Tourist resort areas, camps and sporting facilities, including sports stadia and racecourses;
 - c. Zoological and botanic gardens; and
 - d. Marae and ancillary uses, urupa reserves, pa, and other traditional and cultural Maori uses.

Appendix 2: Land and River Environments Classifications

1. Introduction

The Ministry for the Environment sponsored development of two environmental classifications of New Zealand intended to provide a framework for environmental management, drawing on existing databases.

Classification principles

The Land Environments of New Zealand (LENZ) (MfE, 2002) was developed by Landcare Research. It differs from previous ecological classifications in that it uses numerical data layers describing various aspects of New Zealand's climate, landforms and soils. Variables were selected after analysing relationships between forest pattern and environment, drawing on long-term meteorological data and the New Zealand Land Resource Inventory. It is the most comprehensive synthesis yet undertaken in New Zealand and its data layers well documented and substantiated (MfE, 2002a); this research takes its rigour as a given on the strength of the inputs and reputation of agencies involved.

The National Institute for Water and Atmosphere (NIWA) has developed a GIS-based environmental classification of New Zealand's rivers (NIWA, 2002). The development of the River Environment Classification (REC) was supported by the MfE with the involvement of a number of regional councils. The REC is an ecosystem-based spatial framework for river management purposes and provides a context for inventories of river resources, and a spatial framework for effects assessment, policy development, developing monitoring programmes and interpretation of monitoring data and state-of-environment reporting. The REC has been used to classify all the rivers of New Zealand at a 1:50,000 mapping scale. The area classified comprises 267,000 km² and 426,000 km of river network.

2. Land Environments

LENZ is a geographic classification of New Zealand using existing national and regional databases using to describe multivariate analyse to generate 'environmental distance' based on climate, slope and soil parameters between geographical points across the whole of the country. These output data were then combined to generate a hierarchical classification of similarity (Leathwick, 2002: 34-36). It differs from previous ecological classifications in that it uses numerical data layers describing various aspects of New Zealand's climate, landforms and soils. Variables were selected after considerable study between forest pattern and environment, drawing on long-term meteorological data and the New Zealand Land Resource Inventory. It is the most comprehensive synthesis yet undertaken in New Zealand and its data layers well documented and substantiated.

The concept of environmental distance is fundamental to the LENZ classification process. Where two data points are described by a set of environmental variables, the environmental distance between these points is the difference in environment, averaged across all environmental variables. LENZ uses the Gower metric (Gower, 1971):

$$D = \frac{1}{n} * \sum_{i=1}^n \frac{|x_{ij} - x_{ik}|}{range(x_i)}$$

Environmental distance within and between regions can be similarly calculated for the purposes of this analysis, using the proportion of a jurisdiction's land-cover environments as

the variables. All multivariate analytical tools remain interpretative aids rather than definitive assessments, allowing researchers to identify possible relationships rather than establish definitive ones.

LENZ is scaleable, but provides as a default four levels of aggregation (Table 1). This research uses comparisons between jurisdictions at Level I, containing 20 different environments. Dominant environments determined by land area rather than total number of environments at a particular scale, were used to characterise each regional council.

Table 1: LENZ scales

Level	Number of environments	Scale (mean environment size (ha))
I	20	National: 1.3 million
II	100	Regional: 260,000
III	200	District: 130,000
IV	500	Local: 52,000

Land Environments New Zealand (LENZ) data were used to identify dominant land management environments to use as a basis for comparison between regions (LENZ, 2002). However, this approach does need to be treated with a degree of caution. These are classifications imposed on the environment and result from aggregating similar (but still different) classes. Thus Environment F – *Central Hill Country and Volcanic Plateau*, the largest single Environment Group, is a synthesis of seven Level II Sub-groups which in turn are aggregated from 17 Level sub-groups (Figure A-1). This group includes a range of soils with quite different characteristics with soil parent materials that include greywacke and granite, sandstones and mudstones, a range of volcanic tephra, and Loess (wind-deposited soils) on Banks Peninsula. While these soils are all erodible, their erosion characteristics vary. Comparisons at the high Level I of aggregation can be supported by noting that environmental policy does not usually operate at a finer scale of resolution.

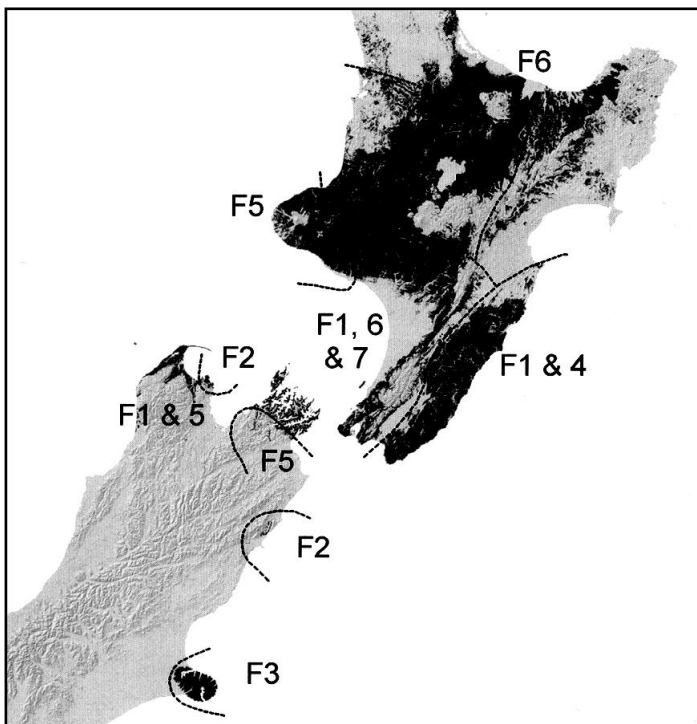


Figure A-2: LENZ Environment F - Central Hill Country and Volcanic Plateau (Leathwick et al, 2002:88). The F Environment is the largest single environment, covering 20% of New Zealand.

LENZ Analysis

The LENZ database was interrogated using the ArcInfo™ program. Regional data for each of the twenty level I environments was obtained by using the Region boundary shape file. The LENZ level I raster image and classification data were loaded and converted to features using Spatial Analyst™. A union between the LENZ shape file with regions resulted in 84,508 records, from which areas were recalculated. A table of LENZ class letters and grid codes was created from these records.

The records were then loaded into MS-Access™ database in order to summarise them. The data were divided by 10,000 to obtain values in hectares and the results were then exported to MS-Excel™ to allow further manipulation. To check accuracy, the grand total (26,238,500.34 ha) was compared to the Land Area grand total from LENZ Level 1 layer (26,224,500 ha), giving a difference of 14,000ha. This difference may be a result of the boundary problem associated with raster data where the raster squares of 100m² do not fit the coastline exactly. The difference of 0.05% is not significant.

The regions are of different sizes, so the data were then normalised to allow comparisons with each other by calculating the percentage land cover of each environment for each region. Comparisons were made using multi-dimensional scaling program PERMAP to identify degrees of similarity between regions based on the level of shared land environments (see Appendix: Multi-dimensional Scaling).

3. River Environments

The REC is an ecosystem-based spatial framework for river management purposes and provides a context for inventories of river resources, and a spatial framework for effects assessment, policy development, developing monitoring programmes and interpretation of monitoring data and state-of-environment reporting. The REC has been used to classify all the rivers of New Zealand at a 1:50,000 mapping scale. The area classified comprises 267,000 km² and 426,000 km of river network.

Classification principles

The REC introduces two major differences to other landscape classifications or 'regionalisations'. It is:

- a multi-scale classification, delineating patterns at a range of scales from approximately 10⁴ km² to 1 km²; and
- based on a network of 'sections' that are associated with their upstream catchments. The mapped classification appears as a linear mosaic showing longitudinal spatial patterns that are typical of patterns of many properties of river ecosystems.

NIWA developed a GIS-based river environment classification (REC) as a resource management tool to organise and map information about the physical characteristics of New Zealand's rivers that include catchment climate, topography, geology and land cover (Snelder et al, 2004). It was developed for MfE to complement the LENZ. The classification is based on the recognition that most physical and chemical characteristics of rivers are the outcome of several interacting processes or factors. The first four factors in the REC hierarchy characterise 'catchment processes', supply and route water, sediment and other constituents of flow through and off a landscape. The fifth and sixth factors characterise 'local processes' – the outcome of catchment processes (e.g. hydrology and sediment supply) interacting with topographic factors operating at the scale of the local channel

network. Consequently, as well as defining a spatial hierarchy, the hierarchical organisation of factors reflects a process hierarchy (Snelder *et al.*, 2004).

The REC groups and classifies rivers, or parts of rivers, at six hierarchical levels. The location of each REC class is mapped so that the class of any section of river in New Zealand can be identified. REC classes discriminate variation in physical and biological characteristics at a range of spatial scales. Characteristics that are important for management such as hydrology, hydraulics, water quality and biological communities are similar within classes and significantly different between classes.

Each of the REC's six hierarchical classification levels is defined by one of six controlling factors:

- Climate,
- Source-of-Flow,
- Geology,
- Land-Cover,
- Network-Position and
- Valley-Landform.

There is an increasing number of potential classes moving down the REC hierarchy generating a theoretical 2,352 possible combinations (Table A-2).

Table A-2: REC classifications

Climate category		Source of Flow		Geology		Land cover	
Warm-Extremely- Wet	WX	Glacial-Mountain	GM	Alluvium	Al	Bare ground	B
Warm-Wet	WD	Mountain	M	Hard sedimentary		Indigenous	IF
Warm-Dry	CX	Hill	H	Rocks (greywacke, schist)	HS	forest, Scrub, Tussock	S T
Cool-Extremely- Wet	CW	Low- Elevation	L	Soft sedimentary	SS	Pastoral	P
Cool-Wet	CD	Lake	Lk	(siltstone, mudstone and limestone)		Exotic forestry	EF
Cool-Dry		Spring	Sp			Urban	U
		Wetland Humic	W	Volcanic basic	VB		
		Regulated	R	Volcanic acidic	VA		
				Plutonics	PI		
				Miscellaneous	M		

Source: Snelder *et al.*, 2004).

The classification hierarchy is also spatially hierarchical. When mapped, the higher levels of the classification show large-scale patterns where rivers can share the same class over large spatial areas. Lower levels of the classification, when mapped, show smaller scale patterns associated with the more specific characteristics that vary at smaller scales (Figure A-2).

The climate factor delineates large-scale patterns discriminating differences in the general characteristics of rivers: flow and temperature (the hydrological and temperature regimes). The Source-of-Flow level of the classification delineates smaller scale patterns that correspond to more specific similarities in hydrological and temperature regimes as well as discriminating differences in the supply and transport of sediment and, therefore, patterns in sediment regimes. The lower REC levels define finer scale patterns that correspond with more specific similarities in hydrological and sediment regimes as well as water chemistry. This hierarchy is important for environmental management as physical conditions are strong determinants of biological characteristics. Climate conditions broadly determine the potential pool of species that a river type could be expected to support. The source-of-flow level further discriminates differences in potential biological communities by defining water temperature and the physical growing conditions, primarily water velocity and its variation changing over time as a result of the flow regime, primarily flood frequency and substrate stability (Snelder *et al.*, 2004: 38).

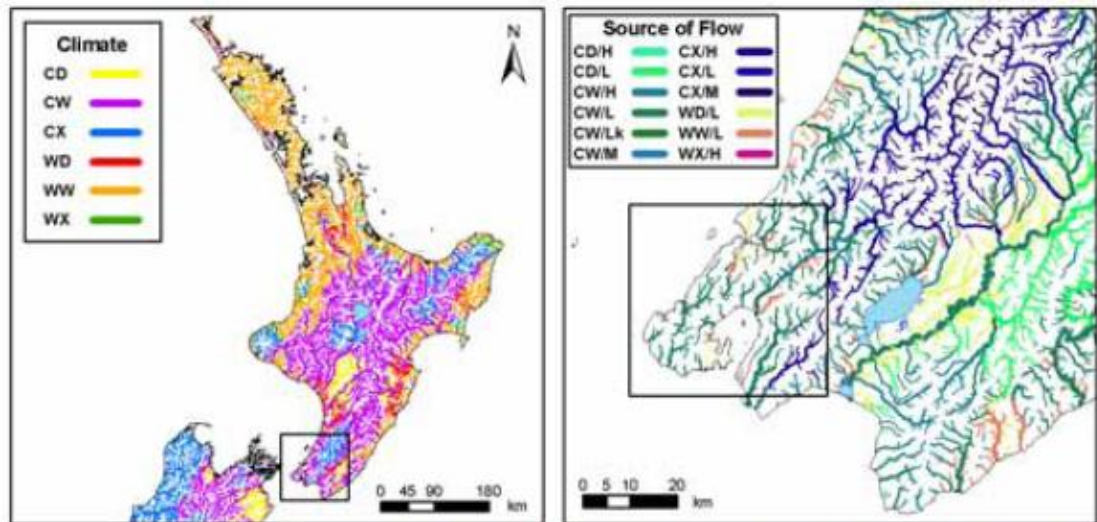


Figure A-3: Map of REC Climate and source of flow (levels 1 and 2) (Snelder *et al.*, 2004)

Analysis

Management tends to be at the catchment level, so that the only first three 'catchment processes' factors were used in analysis. Compared to the LENZ, analysis of the hierarchical REC database was relatively simple. Firstly, the database was interrogated using ArcGIS™ program to create pivot tables to sum the distances of each river type by the three factors. These data were transferred to MS-Excel™ files for subsequent manipulation. They were then normalised by converting them into percentages of the total river length in each region and compared using multi-dimensional scaling. The data were then analysed using PERMAP multi-dimensional scaling program to identify relationships between regions.

Appendix 3: Multidimensional scaling

Multi-dimensional scaling (MDS) is a multivariate statistical tool to aid researchers identify similarities in data sets, developed by Kruskal and Wish (1978). The underlying assumption of MDS is that the similarity between pairs of points can be represented in Euclidean space, where distance between them can be measured using a similarity metric. Thus in R-dimensional space, the distance between two points, i and j , can be calculated using the formula:

$$d_{ij} = \sqrt{(x_{ij} - x_{ji})^2 + \dots + (x_{iR} - x_{jR})^2}$$

$$= \sqrt{\sum_{r=1}^R (x_{ir} - x_{jr})^2}$$

The underlying concept of MDS is that the distances between the points should correspond to their proximities (Kruskal & Wish, 1978). Thus ideally:

$$\text{distance} - \text{similarity} = 0$$

An iterative method is used for picking the “best” configuration in as few dimensions as possible, starting from the original data without violating this relationship. In practice some violation, termed stress (often measured as the Objective Function Value) occurs as dimensions are collapsed (figure 4). This stress is measured as a regression from

$$\text{distance} = \text{proximity}$$

$$\text{Stress} = \sqrt{\frac{\sum_i \sum_j [f(d_{ij}) - D_{ij}]^2}{\text{scalefactor } r}} \quad \begin{array}{l} d_{ij} = \text{proximity } i,j \\ D_{ij} = \text{distance } i,j \end{array}$$

To be useful, MDS output should be in no more than three dimensions, which is the largest number of dimensions that human minds can readily cope with. There is no satisfactory statistical means for assessing the optimum number of dimensions, with the choice left to the researcher. However the stress value is an indicator of the robustness of any configuration. The strength of this is that it provides several ways to view pattern in a data-set, each aiding interpretation by the researcher. In this context it is important to note that MDS is not a method for analysing a data-set, but rather a way of aiding the interpretation of relationships.

For this research the PERMAP program was used. PERMAP is an interactive MDS program developed to facilitate real-time manipulation of multidimensional scaling solutions (Heady & Lucas, 2006). While it only provides outputs in two dimensions, this limitation is offset by its practicability and statistical analysis functions that allow reiterations to identify least stress solutions and to identify when local (false) minima are arrived at.

The two-dimensional depiction of similarities between objects will always involve some distortion, unless the objects are described only in two dimensions. As well as the calculation of the objective function value, the effects of displacement can be represented for each dimension (or vector) (Figure 20). Again, this serves to underline that MDS, as with other multivariate statistical tools, is primarily to assist researchers interpret their data, and that ultimately decisions on interpretation rest with the researcher.

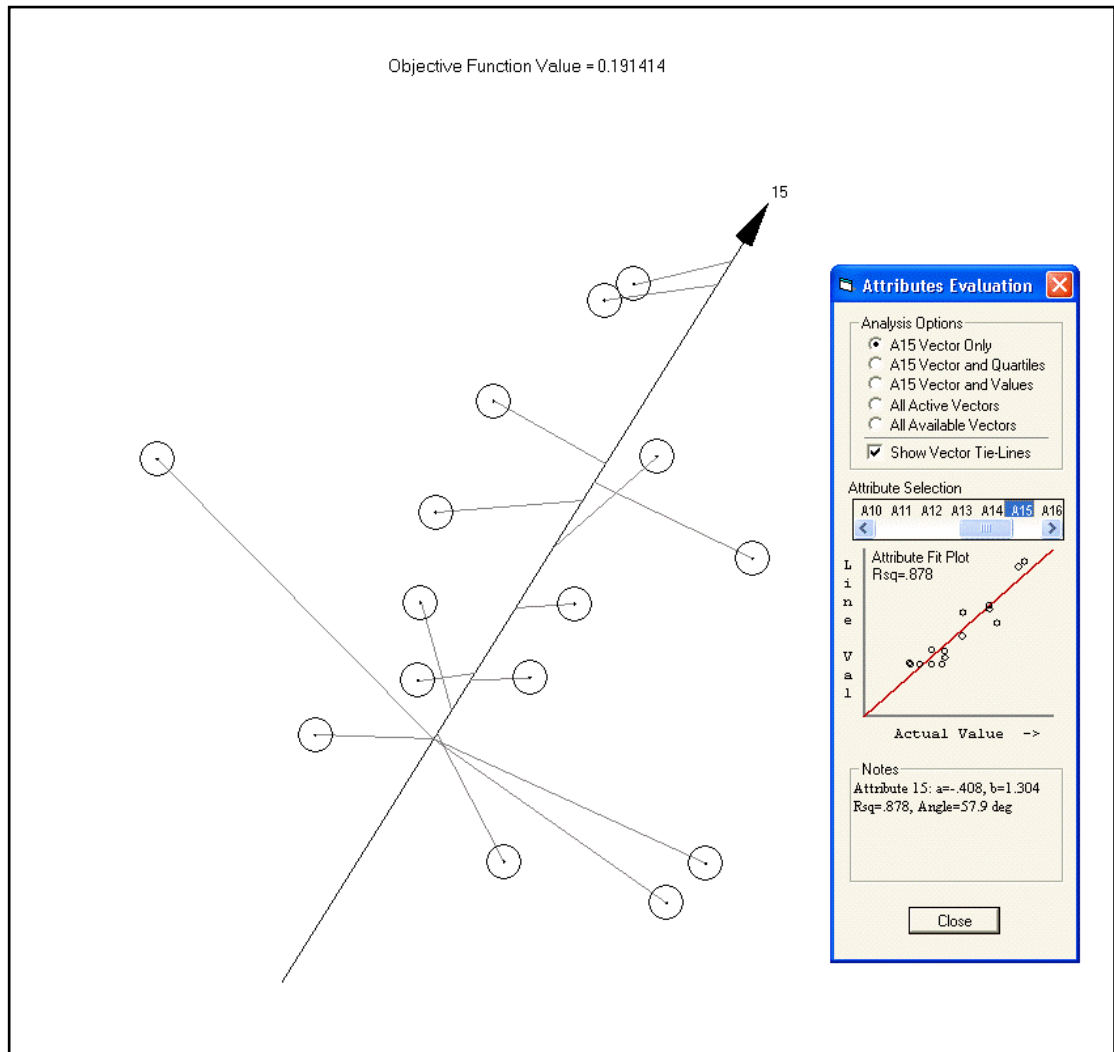


Figure A-4: Screenshot of PERMAP output showing vector tie-lines for one attribute. The vector lines show the distortion that has occurred as a result of the program collapsing dimensions of explanation. Note the regression line describing the correlation between the line value and the actual value, together with its r-square value in the Attribute Evaluation box. The Objective Function Value, measuring the total amount of stress generated by this configuration is 0.1914, a level that experience shows is low and suggesting little stress has occurred.

Appendix 4: Survey Questionnaire

Survey on the role of environmental agencies



August 2006



Questionnaire

Thank you for your time. Your response helps provide a more complete picture of environmental management in New Zealand.

What is the study about?

This survey is part of doctoral research exploring the role of different agencies in managing the environment.

Who is the researcher?

The research is being conducted by Jeff McNeill as part of his doctoral studies at Massey University. Jeff has previously worked in both central government and regional councils. He can be contacted: jeff.mcneill@clear.net.nz phone: 021 386 701; home: (06) 359 4589.

Who are the participants of the study?

Managers, senior staff and representatives of private and public sector agencies and stakeholder organisations that have a direct interest in environmental policy.

Survey Duration

The survey should take approximately 15 minutes to complete.

Confidentiality

The survey results will be used in a way that individual respondents cannot be identified. Completed forms will be kept by the University and will be destroyed when the research is completed. They will not be released to third parties.

The project has been evaluated by peer review and judged to be low risk. Consequently it has not been reviewed by one of the University's Human Ethics Committees. The researcher named above is responsible for the ethical conduct of this research. If you have concerns about the conduct of this research that you wish to raise with someone other than the researcher, please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics and Equity), telephone 06 350 5249, email humanethicspn@massey.ac.nz.

Returning the survey

Please post the completed survey using the reply-paid envelope provided by

Monday 21 August

If the envelope is missing, please send survey to Jeff McNeill, School of Sociology & Social Policy, Massey University, Private Bag 11222, Palmerston North.

The supervisor for this research is Dr Christine Cheyne, Massey University, who can be contacted: C.M.Cheyne@massey.ac.nz Tel: 06 356 9099 x2816; Toll-free: 0508 439677.

Results

A short summary of results will be made available to respondents.

Part 1: Background information

Ref: L.....

1. Which of the following best describes where you work?

Organisation Type		Tick <input checked="" type="checkbox"/>
A	Central Government Head Office	
B	Central Government Regional Office	
C	Regional council	
D	Territorial Authority	
E	Membership-based Organisation* (national level)	
F	Membership-based Organisation* (local level)	
G	Business	
H	Resource Management Consultancy	
I	Research Agency	
J	Other (describe in broad terms)	

* eg Forest & Bird, Federated Farmers, Fish & Game

2. Which of the following best describes your position?

Your position in organisation	Tick <input checked="" type="checkbox"/>
A Senior management	
B Other management	
C Other staff	
D Elected representative	
E Researcher	
F Other (describe)	

3. Which regional or unitary council(s) do you deal with most frequently?

	Regional council	Tick <input checked="" type="checkbox"/>
A	Northland	
B	Auckland	
C	Waikato	
D	Gisborne District	
E	Hawkes Bay	
F	Taranaki	
G	Manawatu-Wanganui	
H	Wellington	
I	Tasman District	
J	Nelson District	
K	Marlborough District	
L	Canterbury	
M	West Coast	
N	Otago	
O	Southland	
P	All of them	

Part 2: Environmental management

For each question, circle the number that best describes the extent to which you agree with each of the following statements using the key below:

1 Strongly Agree	2 Agree	3 Neither Agree nor Disagree	4 Disagree	5 Strongly Disagree	0 Don't know
-------------------------------	-------------------	--	----------------------	----------------------------------	---------------------------

Do not think too long about your answers – your first, quick response is often the best. Rather, try and work through the questions at a steady pace.

	1	2	3	4	5	0
4. New Zealand is cleaner than other countries only because of our small population	1	2	3	4	5	0
5. Territorial authorities in my region have good understanding of the natural and physical resources in their districts	1	2	3	4	5	0
6. My regional council appears to listen only to a small group of interest groups	1	2	3	4	5	0
7. The environment is well managed in my region	1	2	3	4	5	0
8. Democratically elected representatives should contribute to sub-national environmental policy	1	2	3	4	5	0
9. My regional council is guided by international conventions, policies and goals when making policy	1	2	3	4	5	0
10. New Zealand's environment is seriously endangered by pollution of rivers, lakes and streams	1	2	3	4	5	0
11. My regional council lack the financial capacity to undertake its environmental functions	1	2	3	4	5	0
12. My regional council has a good relationship with Federated Farmers	1	2	3	4	5	0
13. Current legislation does not allow effective management of non-point discharges into the environment	1	2	3	4	5	0
14. My regional council provides regional environmental management leadership	1	2	3	4	5	0
15. My regional council has a good relationship with Fish & Game	1	2	3	4	5	0
16. Electoral cycles are too short to ensure effective management of environmental issues	1	2	3	4	5	0
17. New Zealand's environment is seriously endangered by pollution from industry	1	2	3	4	5	0
18. International organisations such as WTO and the European Union are increasingly influencing NZ's environmental policy	1	2	3	4	5	0
19. Central government provides good financial support for national environmental policy development	1	2	3	4	5	0
20. An independent national agency is needed to provide key environmental policy	1	2	3	4	5	0
21. My regional council has a good relationship with industry in this region	1	2	3	4	5	0
22. My regional council's strategies, plans and policies address all the significant environmental issues for this region	1	2	3	4	5	0
23. Ministry for the Environment has good understanding of the pressures on fresh water quality in New Zealand	1	2	3	4	5	0

24. Central government's strategies, plans and policies address all the significant environmental issues in my region	1	2	3	4	5	0
25. My regional council has a good relationship with Forest & Bird	1	2	3	4	5	0
26. The environment is well managed in New Zealand	1	2	3	4	5	0
27. My regional council has good technical expertise to support regional environmental policy development	1	2	3	4	5	0
28. My regional council has good understanding of pressures on fresh water availability in its region	1	2	3	4	5	0
29. Most of my region's RMA Policies and Rules could be applied across most regions in New Zealand	1	2	3	4	5	0
30. Ministry for the Environment has good understanding of the state of fresh water availability in New Zealand	1	2	3	4	5	0
31. Overseas markets are increasingly influencing New Zealand's environmental policy	1	2	3	4	5	0
32. Regional plans and policies for my region favour farming over the environment	1	2	3	4	5	0
33. There is good collaboration between central government and regional councils in developing environmental policy	1	2	3	4	5	0
34. Ministry for the Environment has good understanding of the state of fresh water quality in New Zealand	1	2	3	4	5	0
35. Central government provides good technical expertise to support national environmental policy development	1	2	3	4	5	0
36. New Zealand has too many local authorities	1	2	3	4	5	0
37. My regional council has good financial resources to support regional environmental policy development	1	2	3	4	5	0
38. City and district councils in my region have good technical expertise to support environmental policy development	1	2	3	4	5	0
39. My regional council is guided by central government policies, pronouncements and goals when making policy	1	2	3	4	5	0
40. My organisation is recognised for its environmental leadership	1	2	3	4	5	0
41. Ministry for the Environment has good understanding of the natural and physical resources in New Zealand	1	2	3	4	5	0
42. Regional boundaries should be based on communities rather than catchments	1	2	3	4	5	0
43. Central government monitors environmental policy implementation effectively	1	2	3	4	5	0
44. My regional council is geared to identify future environmental threats and opportunities in its region	1	2	3	4	5	0
45. Environmental groups have too much influence in environmental policy-making	1	2	3	4	5	0
46. Ministry for the Environment has good understanding of the pressures on fresh water availability in New Zealand	1	2	3	4	5	0
47. My regional council has a good relationship with local Iwi	1	2	3	4	5	0
48. Single purpose organisations manage the environment better than those with many functions	1	2	3	4	5	0
49. My regional council has good understanding of the state of fresh water quality in its region	1	2	3	4	5	0
50. My regional council is increasingly working with non government organisations to implement environmental policy	1	2	3	4	5	0

51. My region's policies benefit from overseas environmental policy and research programmes	1	2	3	4	5	0
52. City and district councils in my region have good financial resources to support environmental policy development	1	2	3	4	5	0
53. Regional representation allows local communities' concerns to be heard and taken into account in making environmental policy	1	2	3	4	5	0
54. Relations between my regional council and central government agencies have improved under the long-term planning process under the Local Government Act 2002	1	2	3	4	5	0
55. City and district councils in my region provide environmental management leadership	1	2	3	4	5	0
56. There is good collaboration between regional councils in developing environmental policy	1	2	3	4	5	0
57. Central government and regional councils manage the environment as partners	1	2	3	4	5	0
58. There is good collaboration between regional councils and city and district councils in my region	1	2	3	4	5	0
59. My regional council has good understanding of the pressures on fresh water quality in its region	1	2	3	4	5	0
60. Environmental policy should be made by central government and implemented by local government	1	2	3	4	5	0
61. Regional councils monitor environmental policy implementation effectively	1	2	3	4	5	0
62. Central government provides adequate environmental policy guidance and direction	1	2	3	4	5	0
63. In my view the RMA has contributed significantly in improving water quality in my region	1	2	3	4	5	0
64. My regional council has good understanding of the natural and physical resources in its region	1	2	3	4	5	0
65. Regional councils should take over the functions of city and district councils	1	2	3	4	5	0
66. Regional councillors make a good effort to represent the different communities and interests in my region	1	2	3	4	5	0
67. Surface water quality in my region is better than it was 15 years ago	1	2	3	4	5	0
68. Ministry for the Environment is geared to identify future environmental threats and opportunities in New Zealand	1	2	3	4	5	0
69. Overall, the environmental quality of my region is good	1	2	3	4	5	0
70. Central government agencies have enough resources to implement environmental policy effectively	1	2	3	4	5	0
71. Regional councils should be responsible for making social and economic policy in their regions	1	2	3	4	5	0
72. My regional council is increasingly working with non government organisations to develop environmental policy	1	2	3	4	5	0
73. More uniformity in environmental management policy across regions is needed	1	2	3	4	5	0
74. Regional councils do not seem to be an effective way for managing the environment	1	2	3	4	5	0
75. Central government agencies have enough resources to monitor environmental policy implementation effectively	1	2	3	4	5	0
76. My regional council has good relationships with the city and district councils in this region	1	2	3	4	5	0

77. My regional council lack the skills to undertake its environmental functions	1	2	3	4	5	0
78. My regional council has good understanding of state of fresh water availability in its region	1	2	3	4	5	0
79. Community Outcomes (under the LGA) have given my regional council new priorities	1	2	3	4	5	0
80. Overall, the environmental quality of my region is better than that in most other parts of the country	1	2	3	4	5	0
81. It appears that only the same people submit on RMA Plans	1	2	3	4	5	0
82. New Zealand's current distribution of responsibilities between central government and regional and territorial councils is an effective way to manage the environment	1	2	3	4	5	0
83. My regional council's water allocation framework balances needs of users while maintaining environmental quality of streams	1	2	3	4	5	0
84. My regional council has developed partnerships with non government organisations for managing the environment together	1	2	3	4	5	0
85. Resource users in my region are significantly more environmentally aware than 15 years ago	1	2	3	4	5	0
86. Most environmental issues are common across New Zealand	1	2	3	4	5	0
87. Regional council boundaries are a barrier to dealing with key environmental issues	1	2	3	4	5	0
88. New Zealand's environment is seriously endangered by pollution from farming	1	2	3	4	5	0
89. Environmental management research should primarily be carried out at the national level of government	1	2	3	4	5	0
90. Relations between my regional council and environmental organisations have improved through the long-term planning process under the Local Government Act 2002	1	2	3	4	5	0
91. Regional representation emphasises local and regional issues at expense of the national interest	1	2	3	4	5	0
92. Non governmental agencies generally have a good understanding of the state of freshwater availability in my region	1	2	3	4	5	0
93. It is important to have an independent national agency to provide strategic environmental information and advice	1	2	3	4	5	0
94. Central government should fund environmental management given the cross-regional boundary nature of environmental management	1	2	3	4	5	0
95. Most people in my region have a strong environmental ethic	1	2	3	4	5	0
96. The existing regional council system works well and should be retained	1	2	3	4	5	0
97. Central government provides leadership to support national environmental policy development	1	2	3	4	5	0
98. City and district councils should take over the functions of regional councils	1	2	3	4	5	0
99. Relations between my regional council and city and district councils have improved through the long-term planning process under the Local Government Act 2002	1	2	3	4	5	0
100 Environmental management systems monitoring should be undertaken by the national level of government	1	2	3	4	5	0

101	The environment suffers from the existing rates-based funding mechanism for local government	1	2	3	4	5	0
102	An independent national agency is needed to act as an environmental watchdog	1	2	3	4	5	0
103	The views of my councillors on my regional council are well-known through the media and meetings	1	2	3	4	5	0
104	Environmental monitoring should be undertaken primarily at the regional level of government	1	2	3	4	5	0
105	Non governmental agencies generally have a good understanding of the state of freshwater quality in my region	1	2	3	4	5	0
106	New Zealand's environmental policies exceed the country's ability to implement them	1	2	3	4	5	0
Dairying as a Case Study: If your organisation does NOT have an interest in the environmental impacts of farming, please go to Question 121.							
107.	Dairying has a significant environmental impact in my region	1	2	3	4	5	0
108.	My region's environment cannot sustain another 15 years of dairying pressure at current levels on it	1	2	3	4	5	0
109.	My regional council has a good understanding of the environmental impacts of dairying	1	2	3	4	5	0
110.	My regional council has good information to inform policy-making to address dairying impacts	1	2	3	4	5	0
111.	My regional council has a good set of policies to address impacts of dairying	1	2	3	4	5	0
112.	Regional councillors in my region have a good understanding how dairying impacts on the environment	1	2	3	4	5	0
113.	My regional council plays a key role in managing the environmental impacts of dairying	1	2	3	4	5	0
114.	Central government needs to play a stronger role in managing the environmental impacts of dairying	1	2	3	4	5	0
115.	The dairying industry needs to play a stronger role in managing the environmental impacts of dairying	1	2	3	4	5	0
116.	Dairy farmers need to bear more environmental costs of their activities than at present	1	2	3	4	5	0
117.	The Fonterra "Clean Stream Dairying Accord" will significantly reduce negative environmental impacts in my region	1	2	3	4	5	0
118.	The Fonterra "Clean Stream Dairying Accord" has significantly changed dairy farmers' behaviour in this region	1	2	3	4	5	0
119.	My regional council is implementing and enforcing its environmental policies regarding dairying	1	2	3	4	5	0
120.	Voluntary methods will not significantly reduce environmental impacts of dairying	1	2	3	4	5	0

Part 3: Managing environmental issues

This question is set out to see if you think the right job is being done by the right organisation

121. Which level of government is primarily responsible for policy-making in your region for each environmental issue listed? (tick <input checked="" type="checkbox"/> one only for each issue)						Environmental Issue	122. Which level of government should be primarily responsible for policy-making to address each environmental issue in your region? (tick <input checked="" type="checkbox"/> one only for each issues)				
Present situation							Preferred situation				
Territorial	Regional	National	Not govt. job	No one	Don't know		Territorial	Regional	National	Not govt. job	Don't know
						Air quality					
						Water quality					
						Water allocation					
						Climate change					
						Biodiversity					
						Impacts of farming					
						Energy security					
						Bio-security (from overseas pests)					
						Contaminated land					
						Urban environment					
						Waste management					
						Sustainable development					

If your organisation has an interest in the environmental impacts of farming, please continue; otherwise this completes the Survey. Thank you for your participation.

Dairying and the Environment Case Study

This question is set out to see if you think the right job is being done by the right organisation

123. <i>With respect to dairying, which level of government is primarily responsible for these functions in your region for each environmental issue listed? (Tick <input checked="" type="checkbox"/> one only for each issue)</i>						124. <i>With respect to dairying, which level of government do you think should be primarily responsible for these functions in your region? (Tick <input checked="" type="checkbox"/> one only for each issues)</i>					
Present situation						Environmental Issue	Preferred situation				
Territorial	Regional	National	Not govt. job	No one	Don't know		Territorial	Regional	National	Not govt. job	Don't know
						<i>Research to identify causes of environmental impacts</i>					
						Providing Information to reduce impacts					
						Negotiating voluntary industry performance standards and agreements					
						Reducing environmental impacts					
						Enforcing policy to reduce impacts					
						Developing policy to address dairying impacts					
						Monitoring environmental impacts					
						Maintaining stream water quality in dairy land					
						Controlling land-use that allows dairying					
						Allocating ground and surface water to dairy farmers					
						Monitoring water quality					
						Greenhouse gas emissions from dairying					

End. Thank you again for your time and effort.

HOW LOW CAN YOU GO? PERCEPTIONS OF NEW ZEALAND'S MULTI-LAYER ENVIRONMENTAL GOVERNANCE²⁶

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ABSTRACT

New Zealand, like many countries, has devolved some functions to sub-national levels of government as part of government reforms in the 1980s and 1990s. However, concerns about capacity and capability, duplication of efforts and coordination and alignment within and between levels of government have been raised. Accordingly, examination of both the rationale and efficacy of multi-layer governance in setting and delivering policy outcomes in the light of experience following reforms is now appropriate.

Environmental management is used as a case study. Findings from a survey of over 140 practitioners and managers in central and local government, as well as regional and local representatives from conservation and farming organizations, are used to assess perceptions of the public value generated by current multi-layer institutional arrangements for managing New Zealand's environment.

Preliminary results indicate a perception of mixed institutional performance. While some polarities between respondents' perceptions are apparent, they collectively suggest a patchy capability and performance overall, both within and between layers of government. While some results are indicative of individual agencies, others suggest a more fundamental reconfiguration of current institutional arrangements may be needed to realise environmental outcomes. More fundamentally, a reconsideration of the role of democratic decision-making within technical policy arenas may be appropriate.

Introduction

Devolved governance is now common in western countries (Marks & Hooghe, 2004; PUMA, 1997). This may be seen as a theoretically-based response to the post-war leviathan of top-down 'big government', invoking a bottom-up paradigm that local knowledge, values and accountability can provide greater efficiency and effectiveness. It may also be seen as a pragmatic response to public policy issues that embody a wide range of spatial scales, consequences and solutions. New Zealand has been no exception to this trend. Since the mid-1980s, as part of public sector reforms under a New Public Management paradigm, decision-making has been devolved and sub-national institutions rationalised and strengthened (Martin, 1991). Initiatives covered a wide range of policy sectors, including education, health and natural resource management. However this relocation of responsibility has not been uniform in form or function. A variety of structures have been established, each differing in their lines of accountability, degree of autonomy and governance arrangements (Gill, 2002). Some of these boundaries also have become blurred as the central government endeavours to strengthen local democracy by setting cross-cutting responsibilities for local government for promoting

²⁶ Peer reviewed paper presented at NZPI Conference, Palmerston North, New Zealand, March 2007.

their communities' social, economic, environmental and cultural well-being (e.g. Forgie *et al*, 1999).

At the same time, there has been some disquiet about the consequences of some of this devolution and the democratic legitimacy of devolved structures has been questioned. This disquiet addresses both the organisations' ability for political decisions to derive from authentic preferences of citizens and their ability to achieve the goals that citizens collectively care about.

Devolution of New Zealand's environmental management follows from a logic that those closest to issues are best placed to have the information to structure policy that meets individual needs and values (Ministry for the Environment, 1988). It is also predicated on the mistrust of big government stemming from the 1950s and 1960s and typified by the 'Think Big' projects of the late 1970s and early 1980s, together with recognition that central government is incapable of delivering all the outcomes expected by communities (Memon, 2005).

The nature of devolution has varied, as different models evolve. For example, environmental resource use is managed under a highly devolved framework, with regions managed by autonomous elected Regional Councils under the Resource Management Act (RMA). Indigenous biodiversity and national parks in contrast are managed under a deconcentrated model by the Department of Conservation, and appointed regional Conservation Boards under the Conservation Act.

At the same time, political theory and its application has continued to evolve, leading to a palimpsest of institutional arrangements, each reflecting the theory of its time, but not necessarily consistent with each other's. Thus the RMA, which devolves power, is constructed on a hierarchical structure with mechanisms for central government direction and a market-determined resource allocation. The more recent Local Government Act 2002 seeks to enable a less hierarchical, network governance structure.

Despite central government's confidence in 'local decisions locally arrived at', a growing concern about the proper locus of environmental management decision-making is evident. These include concerns about national implications of local decisions, such as the national energy generation and transmission, and the potential for duplication of territorial authority policy development to address impacts of wind energy (PCE, 2006). And a recent discussion paper by the National Party's environmental ginger group, the Blue-Greens, revives the concept of a centralised Environmental Protection Agency (Smith, 2006).

There are always calls for institutional change as demands on the environment change. Pragmatically there is a need for objectively assessing the *status quo* of existing arrangements for managing the environment. The challenge is to find the best way forward for achieving society's and environmental outcomes – how we get there is a matter for debate.

Measuring up

This paper forms part of a wider research into the efficacy of devolved governance in New Zealand using environmental management as a case study. A model for assessing institutional performance is suggested. The model is then used to explore perceptions held by managers and stakeholders of the public value of the existing multi-layer environmental management system.

A model for analysis

Assessment of the public value generated by government intervention is challenging. The achievement or not of desired environmental outcomes is the ultimate measure of

success. However, the long time periods between intervention and noticeable effect, complex networks of physical, biological and social causation, and complex geographic patterns of impact and causation can make it difficult to establish whether an initiative can be deemed successful (Lafferty & James, 1996). Instead, practitioners and researchers have tended to focus on the intervention processes, assuming that good practice will deliver good outcomes. This has underpinned earlier assessments of New Zealand's environmental planning (e.g. Ericksen *et al.*, 2003), and underpins local government strategic planning under the Local Government Act 2002 (Reid *et al.*, 2006). However, good process may not necessarily be either appropriate or sufficient by itself to deliver desired outcomes. More fundamentally, environmental management, as with any intervention is political; assessing process does not address the wider issue of appropriateness of government intervention and its coercive demands on citizens.

A more comprehensive framework based on the notion of 'public value' has been suggested by Mark Moore (1995). He posits that public value is created within a strategic triangle of authorising agency, substantive value and operational feasibility (Figure 1). Authorising agency provides the justification for public intervention into citizens' private lives to achieve collective goals. This authority must be legitimate and politically sustainable and in democracies is derived from electoral mandate. Substantive value focuses attention on what constitutes the ultimate value that an organisation seeks to produce as a result of intervention. Operational feasibility addresses the organisations' capability and alignment of activities to accomplish the authorised valuable activities. All three pillars are required to generate public value.

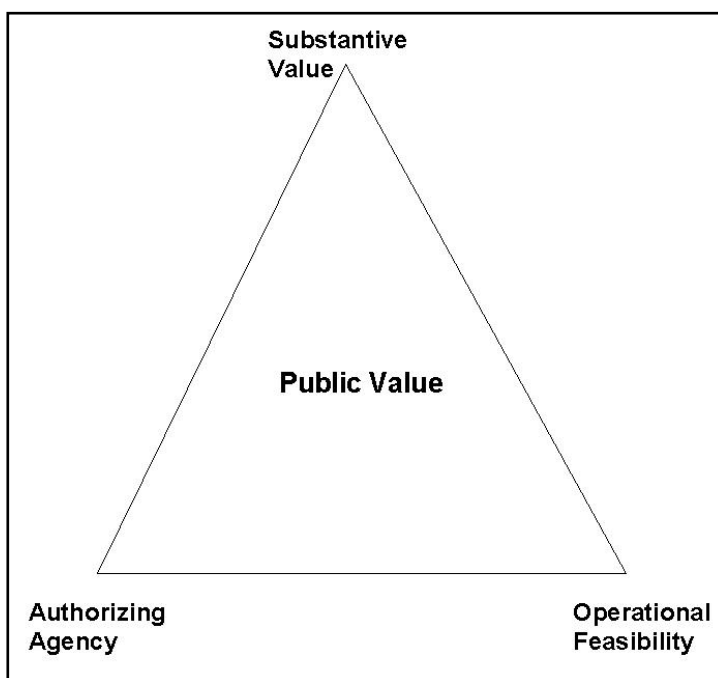


Figure 5: The Public Value Triangle (after Moore, 1995).

Although developed for organisations, it is suggested that this model can be used to structure an assessment of New Zealand's institutional arrangements for managing the environment. Populating the model requires quantitative but also qualitative data to capture the value placed on these attributes. The remainder of this paper reports on perceptions regarding all three facets of public value.

Environmental management survey

To gauge the perceptions of environmental managers and stakeholders in New Zealand, a survey was designed and implemented during 2006. A stratified sample of practitioners was used to ensure a cross-section of individuals with both interest and experience working within the environmental arena and likely to be aware of environmental policy initiatives, while maintaining a practicable response.

Questionnaires were sent to senior managers in core policy central government agencies, national offices of stakeholder organisations and national level industry with involvement or interest in environmental management, as well as a group of independent experts: individuals with experience and expertise allowing a national-level overview, drawn from universities, consultants, legal firms, and commentators. At the sub-national level, questionnaires were sent to planning managers of all territorial authorities, second-tier environmental policy managers and Environment Committee chairpersons of regional councils, DoC conservators, Fish and Game regional managers, branch chairpersons and presidents of Forest and Bird, Federated Farmers and Dairy Farmers of New Zealand. The questionnaire consisted of 120 questions seeking respondents' views on environmental management, asking them to score their responses to a set of statements on a 5-point Likert scale.

Some 144 responses to the 250 questionnaires mailed out in July 2006 were received by the cut-off date giving a response rate of 56.5%. They consisted of 26 national level responses and 118 regional level responses. The overall response rate compares favourably with other social science mail surveys. The regional and unitary council managers groups had the highest response rates (100%); the lowest was the territorial authority planning managers (39%), with most of the remainder having around two thirds response rates. Most respondents at the sub-national level stakeholders were branch presidents or secretaries, and local government senior managers. The small number of responses from several unitary authorities meant excluding these agencies from regional comparisons to avoid bias and protect respondent confidentiality.

Public Value perceptions

The pattern of responses varied from across-the-board support for some issues to regional preferences, while yet others were aligned by stakeholder or organisation affiliation. Clear patterns were however evident for each component of the public value triangle.

Environmental outcomes

Determining the substantive value for any single organisation's contribution to achieving multi-stakeholder outcomes is difficult. For environmental management this outcome is the maintenance or improvement of environmental quality. This outcome is long-term and influenced by a range of factors, some beyond the control of the organisations, so that direct cause and effect relationships are often not able to be clearly ascribed. This suggests the need to include also more agency-specific products such as regional plans and policies. These intermediate outcomes are more closely related to outputs and make the assumption that good outputs will help promote achievement of good outcomes.

The survey results show respondents regard the quality of their environment with some ambivalence. Less than two-thirds (61%) of respondents agreed that overall, the environmental quality of their regions was good. Less than half (44%) perceived that water quality and quantity is better than it was when the current regime was instituted 15 years ago – a perception corroborated by a subsequently released scientific review (Scarsbrook, 2006). Perceptions varied strongly by stakeholder affiliation – three-quarters of farming and regional council respondents agreed, compared with less than a third of environmental stakeholders (Forest & Bird branch executives, Fish & Game

Managers and Doc Conservators). Responses also varied by region, with only Waikato and Taranaki regions regarded as having good environmental quality by most of their respondents, regardless of stakeholder affiliation.

Environmental management is found wanting, especially at the national level and, to a lesser extent at the regional level. Only a third (36%) of all respondents agreed that New Zealand’s environment is well-managed, while another quarter expressed a neutral position. Differences in management at regional level were also apparent (Table 1).

Table 1: Proportion of respondents agreeing that regional level environmental management is well managed by region.

Regional Council	My regional council’s strategies, plans and policies address all the significant environmental issues for this region (% respondents agree)	The environment is well managed in my region (% respondents agree)
Northland	0	17
Auckland	22	11
Waikato	20	50
BOP	33	44
Hawke’s Bay	57	43
Taranaki	86	100
Manawatu-Wanganui	13	38
Wellington	50	38
Canterbury	8	23
West Coast	43	29
Otago	43	14
Southland	40	80

Operational Ability

Operational feasibility addresses the institution’s capability and alignment of activities to accomplish the authorised activities. Respondents’ perceptions of agency capability, institutional design, and systems integrity were sought.

Capability

The following attributes are considered as necessary attributes to enable organisations to achieve their intermediate outcomes:

- Knowledge and expertise about the environment and scanning for future threats and opportunities to guide effective policy development
- Financial resources
- Leadership to guide policy formation and to engage with the community to achieve environmental outcomes.

Most respondents perceived a lack of capability at the central government and territorial authority levels, particularly with regard to understanding of natural resources and leadership. Rather, environmental management capability is seen to be located with regional councils. However, responses at the regional level, regardless of stakeholder affiliation, show a consistently perceived patchiness between regions across all attributes. Taranaki, Waikato and Wellington regions are seen to have high capability, while other councils are seen to be lacking (Figure 2).

Differences in perception between the levels of government may result in part from respondents having most to do with regional councils and so are more aware of their attributes compared to the other levels of government.

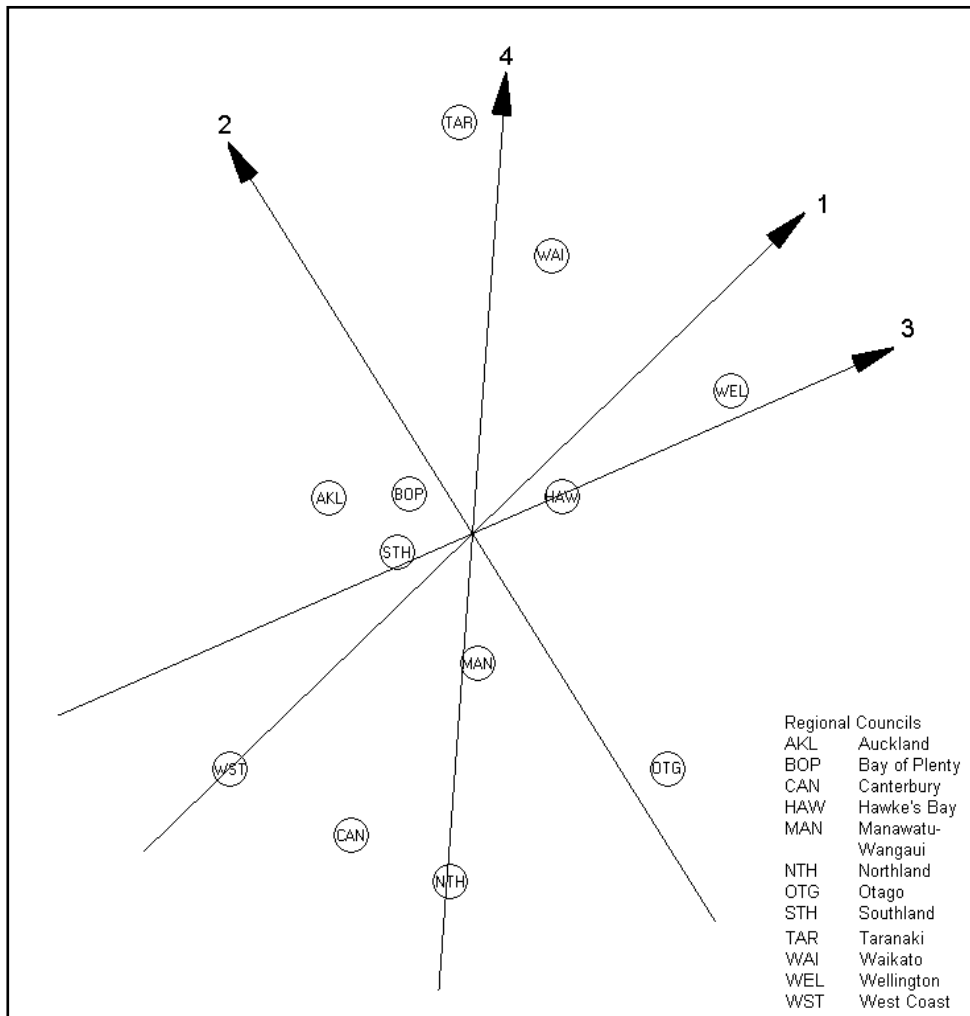


Figure 2: Multi-dimensional scaling depiction of similarities between perceived regional councils' capability; the closer the proximity, the greater the similarity. Correlation lines: 1=understanding of natural resources; 2=future focus; 3=financial resources; 4=leadership. MDS created using PERMAP program.

Institutional Structure

Support for the current model of regionally based environmental management is mixed. Only a half of respondents agreed that the existing regional council system works well and should be retained, while a further 21% neither agreed nor disagreed. Even fewer respondents (37%) agreed that the current distribution of responsibilities between central government and regional and territorial authorities is an effective way to manage the environment. However, most respondents (61%) agreed that regional councils seem to be an effective way for managing the environment.

Just over half of respondents (57%) agreed that New Zealand has too many local authorities, though this agreement differed between regional level respondents (53%) and strong agreement by national level respondents (73%). But any reduction is seen to be by amalgamation as there was little support for transfer of functions between regional and territorial authorities. There was strong opposition to transferring city and district council functions to regional councils (34% disagreed, 38% strongly disagreed), or of regional council functions to city and district councils, forming unitary authorities

(37% disagreed, 42% strongly disagreed). The exception was Auckland, where respondents were equally divided, perhaps reflecting Auckland's wider metropolitan governance issues.

Two thirds of respondents agreed that it was important to have an independent national agency to both provide strategic environmental information advice, and to act as an environmental watchdog. This appears to confirm support for the Parliamentary Commissioner for the Environment.

Functions can be located at different parts of multi-layer governance structures. A centralised model locates policy function at the national level, with devolved implementation functions to regional level. Alternatively, policy can be made and implemented at regional level, with a national level oversight.

Only a third of respondents (32%) agreed environmental policy should be made by central government and implemented by local government, while there was an even split on whether an independent national agency is needed to provide key environmental policy. Two thirds of respondents however agreed on the importance of having an independent national agency to provide strategic environmental information and advice.

The survey results show no clear preference for devolved or centralised modes of policy development. Differences in preferences are however apparent between sectors. Forest and Bird and Fish and Game respondents were much more in favour of more centralised policy-making and an independent watchdog than other sectors. In contrast, the farming and regional and territorial council respondents were strongly against centralising policy making.

Geographic span

Despite a preference for the existing regional based structure, respondents perceive potential overlap and duplication of policy effort. A commonality of environmental issues across the country is widely recognized and a majority also agree that more policy uniformity is needed across regions. However, only half of respondents consider their councils' policies would have wider application to other regions. These observations also suggest a failure of national level policy leadership and coordination to identify and address regionally shared issues.

Democratic decision-making

Authorising agency concerns democratic legitimacy of decision-making through citizen and interest group participation, ensuring different values are recognised in the decision-making process so that collective rather than individual good is achieved. It is significant in New Zealand's environmental management given the devolved policy-making to democratically elected local government.

Respondents' perceptions were sought on New Zealand's environmental management regarding:

- Democratic input and visibility to general public
- Stakeholder and community engagement and credibility
- Relations with other government levels
- Impact of international drivers, reflecting globalisation pressure.

Responses indicate a mixed view on the democratic authorization of the existing environmental management regime (Figure 3). In the first instance results appear at odds with each other; respondents show a strong preference for a democratically elected governance system (80%), but also indicate they do not know what the elected representatives' views are. This is perhaps consistent with the absence in New Zealand local government of political party politics. Together with the lack of concern for short

electoral cycles despite the long-term nature of environmental issues, these results give the impression respondents value local representation for its ability to provide a locally accountable check on institutional performance, rather than strategic policy direction.

Civil society is seen to be engaged in environmental management, but is seen to be kept at arm’s length, as is territorial local government. The quality of this engagement varies regionally, and regional-territorial authority relations range from very good to very bad – hardly a basis for constructive policy alignment. Perceptions also appear asymmetric; many regional council respondents rated relations between the two arms of local government as better than their territorial authority counterparts.

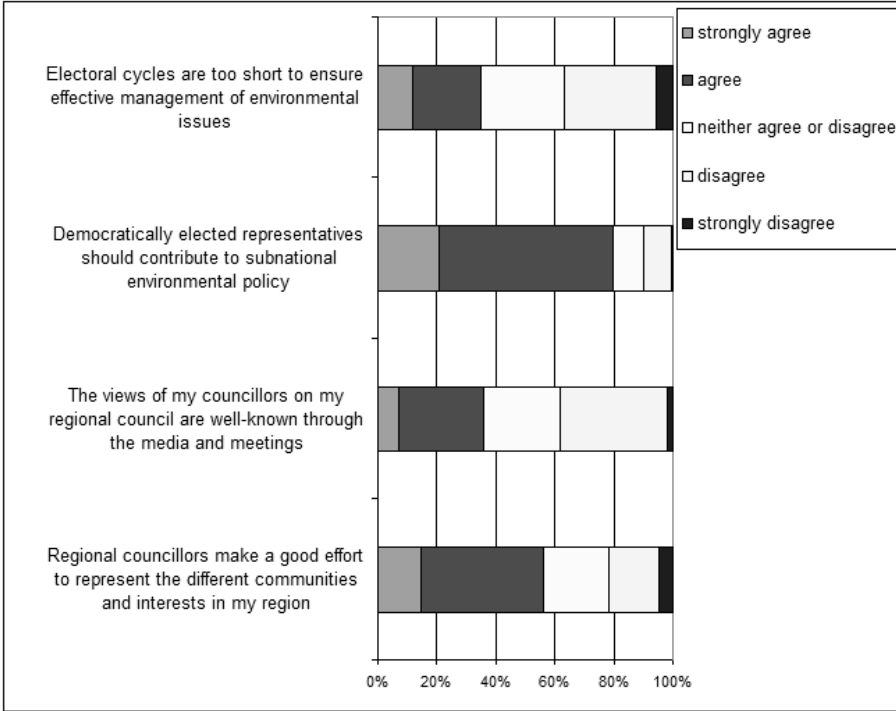


Figure 3: Preferences for democratic authority

Conclusion

The research reported here has sought to assess the public value of the existing devolved environmental management regime in New Zealand, as perceived by environmental management practitioners and stakeholders.

The questionnaire’s response rate (56.5%), with good representation across sectors and throughout the regions gives a reasonable level of confidence in the results. Overall, the response only provides a muted endorsement of New Zealand’s environmental management institution. While environmental awareness is seen to have improved over the last 15 years, environmental quality is not seen to have improved. This may seem unfair; evidence shows that some environmental conditions improved, for example pollution point-discharges into freshwater. However, these gains have been offset by new challenges such as diffuse discharge to fresh-water and increased water abstractions which have markedly increased, for which regional council policy-making is playing a catch-up game to address. It underlines the need to view performance beyond process.

A prominent and recurring theme of respondents’ perceptions of New Zealand’s environmental management is the wide variability in performance and capability of the environmental management agencies, both between levels of government, and

horizontally within levels of government. In essence, while the basic institutional design is supported, central government is seen to be performing poorly and with low capability, while regional councils, while overall much more capable, are regionally patchy in performance and capability.

Perceptions of regional patterns are consistent, with Taranaki, Hawke's Bay, Wellington and Southland regional councils almost invariably ranked within or just outside the top quartile of councils. Another group of councils consistently featured in the bottom quartile. The perceived variability between regional councils raises significant questions about the ability of devolved government to deliver consistent outcomes across the country. At a policy level, it raises questions about the factors that lead to this apparent inconsistency that, if addressed, could improve public value.

Wider governance issues are also identified. While there was overwhelming support for regional councils as primary environmental managers and for local representation, reasons for continued local representation are less clear. The value of local presence and representation would seem to be primarily as a mechanism to hold decision-makers to account, rather than providing a collectively mandated strategic environmental policy direction. This accountability mechanism has an implied efficiency cost – respondents clearly recognized that environmental issues and many environmental policies are broader than individual regions, suggesting duplication of effort in developing policy separately for each region. More widely again, the shadow of globalization on the policy process is perceived – the implication is that overseas markets may increasingly have more *de facto* coercive power than the regional regulators.

These results give an insight into key resource managers' and stakeholders' perceptions about the environmental management regime. The perceptions are of an institution that while achieving goals, is failing to get on top of issues as they arise. These perceptions now need to be corroborated with more quantitative data to substantiate and understand:

- Causes of differential performance between and within levels of government
- Degree of homogeneity of environmental management issues and policies to assess whether duplication of effort is occurring.
- whether the value of local democracy is primarily negative – holding the process to account as opposed to providing a collectively mandated strategic direction to manage the environment.

Accordingly, the results place on the agenda not only the efficacy of the current institutional regime, but the appropriate locus for power, and whether the separation of direction-setting and accountability functions is preferable for technical regulatory jurisdictions. This may not be so simple – different stakeholders store different value on local representation. Interestingly, the conservationists who were the driving force for local decision-making are now seeking a more centralized policy-formulation locus.

This paper, while identifying potential short-comings of the existing institutional arrangements, does not explore alternative models that may deliver collectively identified environmental outcomes more efficaciously. Rather, it suggests it is timely to revisit the logic of devolving power and decision-making for a better environment.

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