Investigating Community: Imperatives For but Constraints Against Land Use Change in the Mackenzie/Waitaki Basin

Carolyn Morris

John R Fairweather
and
Simon R Swaffield

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Preface

The AERU has for some time been involved in collaborative research with the New Zealand Forest Research Institute on the social and economic aspects of land use change in the Mackenzie/Waitaki Basin. Earlier reports have focused on the specific issues of stakeholder preferences for land uses (Fairweather and Swaffield, 1994) and regional income and employment impacts (Butcher, 1997). In this report a change of focus is made to provide a broader view of the social context in which any land use changes will occur. The report examines the nature of community and serves as a useful reminder of the specific character of the rural community in this part of New Zealand and the role that community dynamics play in land use change.

Tony Zwart
Director
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Summary

This report uses an ethnographic approach to provide a description and analysis of the social context of land use change in the Mackenzie/Waitaki Basin. In order to understand current land use dynamics it begins by reviewing the history of land use change, identifying land user groups, and describing the environmental and political factors that influence land use. The report then accounts for landholders’ attitudes to farming and current trends in intensification and diversification, using first-hand quotations to illustrate points of view. The main findings are centred on land use dynamics, showing how these are based on specific landholder values and regional distinctions. Further, landholders perceive that they are in conflict with a number of groups but notably bureaucracy and government, and environmentalists. The use of the words ‘community’ and ‘sustainability’ among landholders in the Basin is examined. The report concludes by considering the policy implications of the findings, especially those policy issues that rest upon the questionable premise that there is, or can be, a consensus implied by the term ‘community’.
CHAPTER ONE

INTRODUCTION: BACKGROUND, OBJECTIVES, METHODS AND OVERVIEW

This report is part of a broader study of land use change in the Mackenzie/Waitaki Basin. The study has been funded by the Public Good Science Fund (PGSF) through the Foundation for Research Science and Technology (FoRST) and began in 1992 with the intention of both examining the implications of alternative land uses in the Basin, and to develop research methods relevant to improving planning for rural land use change. In the early stages of the research there was emphasis on technical issues (e.g. what different land use projections would look like and what they would entail for projected income and employment) and social issues (e.g. what alternative land uses stakeholders preferred and what social effects new land uses might have). The research programme was reviewed by FoRST in late 1994 and one of the main findings of that review was that the social context to land use change was not emphasised sufficiently. This criticism was made whilst acknowledging that in the initial round of research proposals to FoRST (of which this study was part) an application for extensive social investigation would probably have been unsuccessful. Nevertheless, following the recommendations of the review FoRST invited further application and funding was granted to introduce into the programme of research, in its final years, a stronger social science component that would link the technical, planning and other topics more directly to the social context of the Mackenzie/Waitaki Basin. This report provides an assessment of that social context and, in particular, focuses on community viewpoints and the local dynamics and attitudes that do and will impinge on land use change.

The main objective of this research is to describe how social networks interact with the process of land use planning. There are a number of sub-objectives, namely to:

1. Develop explanations, in historical and social terms, of the patterns of land use preferences found in earlier phases of the research.

2. Observe and describe how technical and attitudinal information collected and disseminated to date is incorporated into, and influences, community politics and land use decision making.

3. Analyse the social organisation and dynamics of the community within the Mackenzie/Waitaki Basin, including community politics that influence land use decision-making.

4. Analyse the respective roles and influence of the local community and ‘outsiders’ on land use change in the Basin.

5. Describe the meanings and importance of the biophysical, economic and social components of sustainable management as defined and practiced by different groups in the community.
The overall purpose of this publication is to report the findings for each of the above five subobjectives. This report, along with others in the overall research programme, can be used to contribute to understanding land use change and planning generally.

The primary method used to achieve the research objectives was ethnographic. An anthropologically-trained field researcher (the first author) was based in the township of Twizel for 12 months. Twizel is reasonably central to the Basin as a whole and provides good rental accommodation. From this base she established rapport with local residents and businesses, DOC officials, other groups and the landholders. Most attention was focussed on landholders, and altogether 60 (including men and women) were interviewed in depth, typically on their properties. We use the term ‘landholder’ instead of either ‘runholder’ or ‘farmer’ because people in the Basin disagree over what term should be used. About ten people belonging to other organisations were also interviewed. Formal venues, such as DOC public meetings, were useful occasions to observe and note different points of view. Another important venue was Mackenzie District Council hearings at which landholders were involved and at which land use change was the particular focus of attention. Attendance at about 15 of these meetings provided valuable insight into land use politics at work.

Interviews were transcribed and analysed to develop an account of contemporary dynamics and conflicts in the Basin, and to develop an understanding of local use of key words such as ‘community’ and ‘sustainability’. The approach to this research was exploratory, in that no preconceived notions about community and land use change were used to guide the research. Interviews were open ended and aimed to record locals’ perspectives and attitudes to land use. From these interviews ideas were first developed to provide an explanation of important aspects of what people said, and then tested and refined in later interviews. This grounded approach was used to build an interpretation of social aspects of land use change, culminating in an account that emphasises opportunities and constraints faced by landholders and the conflicts over land use between different groups. Also developed is an interpretation of the nature of community in the Basin, which specifies its particular character and dynamics and shows how this character has an important influence on land use change and land use planning.

The ethnographic method (Hammersley and Atkinson, 1983) provides insight into Basin social dynamics as they related to land use change and was sufficient to address all the main research objectives. However, in the time available, in which the first author had other research commitments (i.e. she was not engaged full time on this project for the entire field work period), an account was developed that was by no means a definitive analysis. Two related characteristics of the Basin also contributed to this. First, while Twizel clearly is a community, the same cannot be said for the broader Basin under study. In fact, as we argue later in this report, there is not a singular community that corresponds with the population in the Basin, but a cluster of different communities of interest. This makes it difficult to study social networks and their interaction with land use planning. Typically, ethnography works well when there is a clearly defined community to study. This turned out not to be the case in the present study. Second, the Basin covers a broad area and interviewing landholders entailed considerable travel. It was therefore difficult to develop the degree of close rapport with landholders that would be possible in a smaller and more defined community (e.g. Dominy’s study of the Rakaia (1993)). It was not possible to overcome this problem by living with any one or a small group of landholders, as this would unduly privilege a particular community of interest in the actual study.

The above factors meant that the ethnographic approach, which was essential to understand local social dynamics, was somewhat difficult to apply in this particular setting. The results
were time consuming to obtain and required considerable effort to work into a coherent report. Despite these methodological difficulties the results clearly provide an account of the prospects for land use change as seen by the different groups in the community, and in particular by landholders.

This report is divided into four main parts. Chapter 2 outlines the documented history and background to current issues relating to land use change in the Basin. It notes the geographical factors that affect land use, covers the main periods of farming history and identifies other land user groups. Although historical in perspective, the account provided also draws on observations from current landholders, which gives their view on some key points in the Basin's history (all unreferenced quotations are derived from interviews conducted for this study). Chapter 3 moves on to important contemporary factors influencing land use, namely the current environmental problems and the political setting, both of which are an important influence on landholders and other land user groups. This chapter also includes landholders' comments on topics relevant to the environmental and political setting. Chapter 4 focuses explicitly on landholder attitudes towards land management. It also includes their experience of attempting to change land use and it gives an account of their view of prospects for such changes. Chapter 5 focuses on contemporary dynamics and conflicts in the Basin. It emphasises landholders' roles in these issues, since they are the ones who will play a decisive role in land use change. Landholder's sense of self and community identity is described, and their view of conflicts is balanced by the views of other groups in the Basin. Finally, the chapter narrows the focus to the nature of community in the Basin and examines the use of the words 'community' and 'sustainability'. It discusses the implications of these concepts for land use change by focusing on the particular meanings they have in the Basin. Finally, Chapter 6 briefly revisits the research objectives and summarises the main findings in relation to these objectives.
CHAPTER 2

HISTORY AND BACKGROUND TO CURRENT ISSUES RELATING TO LAND USE CHANGE IN THE BASIN

2.1 Introduction

This chapter provides important background to current issues in the Basin by describing geographical factors affecting land use. It then reviews both Maori and Pakeha history as a precursor to describing the development of farming in three major stages. Finally, it gives an account of other land user groups.

2.2 Geographical Factors Affecting Land Use

Geography provides the raw materials for development, presenting both opportunities and constraints to land users. The geography of the Mackenzie/Waitaki Basin (including topography, soils, vegetation and climate) offers development potential, but at the same time presents considerable constraints. With mountainous country, poor soils and a climate characterised by low rainfall, frequent frosts and high seasonal and daily variations in temperature, the Basin is hard country in agricultural terms. On the other hand, it is good country for tourism development on account of the high landscape and conservation values. However, the Basin is ecologically delicate, and the potential for degradation, if development of any type is not managed carefully, is considerable.

2.2.1 Topography and Soils

The Mackenzie/Waitaki Basin is contained by the high glaciated mountain ranges of the Southern Alps to the west (over 3,000 m) and a lower range of mountains which rise to around 2,000 metres in the east. The interior Basin is about 500 metres above sea level and is characterised by outwash terraces and glacial moraines and fans. The Basin contains four major river basins, (Tekapo, Pukaki, Ohau and Ahuriri), the first three of which contain large glacial lakes and all of which contain braided river bed systems. Today, only the Ahuriri is unmodified by hydro electric development.

In the Upper Waitaki Catchment¹ area the topographic classes are as follows:

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¹ The Upper Waitaki Catchment area is a catchment board area. Catchment Boards existed to control water and soil resources before the advent of Regional Councils in the local body restructuring of 1989. The Upper Waitaki Catchment is an area of 946, 380 ha between the Kirkliston, Two Thumb, St Bathans, and Hawkdun Ranges and the Southern Alps. The area contains the whole of the Mackenzie/Waitaki Basin and extends down the Waitaki valley to around Otematata (Waitaki Catchment Commission and Regional Water Board, 1982: 86).
<table>
<thead>
<tr>
<th>Topographic Class</th>
<th>Area (hectares)</th>
<th>% of Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steeplands</td>
<td>447,750</td>
<td>47</td>
</tr>
<tr>
<td>Hills</td>
<td>138,560</td>
<td>15</td>
</tr>
<tr>
<td>Fans and Rolling Lands</td>
<td>168,690</td>
<td>18</td>
</tr>
<tr>
<td>Terraces and Fans</td>
<td>118,310</td>
<td>12</td>
</tr>
<tr>
<td>Lakes and Rivers</td>
<td>73,070</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>946,380</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*(Waitaki Catchment Commission and Water Board, 1982:86.)*

There is a variety of soil types in the high country ranging from alpine to desert types and because of this variation it is difficult to make generalisations about the impacts of different land uses on soils (Working Party on Sustainable Land Management, 1994:20). Soil types range from alpine soils above 2000 metres (bare rock and scree), through yellow-brown earths on steep hills and uplands in the higher rainfall area, yellow-grey soils in drier, lower areas to the more recent soils around rivers. The yellow-grey earths are moderately fertile, and some of the yellow-brown and brown-grey types respond well to development. However, in general it can be said that a great deal of the soils in the Basin are of low fertility, and are prone to degradation. Combined with the steep topography of the Basin this means that much of the land is not highly productive and the potential for agricultural development and significant increases in production is limited.

### 2.2.2 Climate and Water

In general the climate in the Mackenzie/Waitaki Basin is dry with marked seasonal variations in precipitation and temperature. Mean annual rainfall in the Basin can vary from 8,000mm to 500mm per annum, with rainfall declining further from the main divide. For example, the mean annual rainfall at Mt Cook is 4,071 mm per annum, but only 606 mm at Lake Tekapo (Waitaki Catchment Commission and Water Board, 1982:100). Rainfall is also highly variable from year to year, with drought conditions common. Severe droughts lasting two years occurred in 1889-91, 1907-08, 1910-11, 1914-15, 1930-31 and in 1955-56, in which times stock died, crops failed to grow, and some landholders faced extreme financial difficulties (Nordmeyer, 1981:33). Droughts resulting from low rainfall are exacerbated by the hot and dry nor’wester winds. Unexpectedly heavy snows have the ability to cause devastation to landholders. In 1895 about four metres of snow fell in parts of the Basin, to be followed by frosts and fog. Stock losses were horrendous. For example, Richmond station only had 300 survivors from their flock of 20,000; Ben Ohau lost 33,000, Balmoral and Glenmore 40,000, and Irishman’s Creek and The Wolds 10,000 (Nordmeyer, 1981:30). One informant reported that it snowed on Christmas day in Twizel one year, so snow can fall at any time. Management practices that mitigate this problem (such as stockpiling food reserves, improved tracking on runs and snowploughing, removing stock from snow-prone areas of the run, and the advent of helicopters) have been developed. Frosts can also occur at any time throughout the summer, as well as being an almost daily feature of winter life. This is one of the factors that may have hindered the development of orcharding in the Basin, for while stone fruit trees, such as peaches and plums, grow well in gardens, the risks to a commercial operator from frost would be great.
In the winter months the hill country is covered with snow for extended periods and there are snowfalls on the flats. As with rain, there is a good deal of annual variation in snowfalls. In the past, flooding\(^2\) was a problem though this hazard has been much reduced through the control of the region's water resources with hydro-electric development.

Temperature varies greatly too, both throughout the year and within a particular day, and there is generally a low level of humidity.

The climate in the Basin constrains agricultural development and makes farming an inherently risky venture. The climate also has an impact on the tourist industry; tourism is seasonal with most visitors coming in the summer months, and adverse conditions can restrict activities such as flightseeing.

Water is a significant feature of the Basin landscape, with the large glacial lakes of Tekapo, Pukaki and Ohau, braided rivers such as the Ahuriri, and many kilometres of hydro-electric canals. Most of the water that feeds this system of lakes, rivers and canals is from run-off from the mountain ranges of the main divide. Despite the seeming abundance of water there has been very little irrigation development, though rights to take 25.7 cumecs from the Upper Waitaki hydro-electric development existed in the past. This water right expired recently with less than two cumecs having been taken up. There is no adequate groundwater supply available for irrigation in the Basin. There has been some irrigation development around Omarama. In some areas there may be a conflict between the needs of irrigation and the needs of electricity generation, particularly during drought conditions.

The water resources of the basin are also utilised by the tourist industry and recreation groups for fishing, boating and water-skiing. The rivers are valued by conservation interests, being breeding and feeding grounds for many fish and birds, including the endangered black stilt.

### 2.2.3 Vegetation

In the last 150 years there have been major changes in high country vegetation. Before the arrival of the Polynesians, there were large areas of beech and totara forest in the South Island high country. Most of this forest was destroyed about 700 years ago by fire. Around 34,000 hectares of these forests survive today, primarily in gullies and valleys. When the first runs were established in the 1860s woody species such as matagouri and tall tussock were prevalent. Currently, short tussock grasslands, in varying degrees of health, are the most common form of vegetation.

In 1982 the vegetation cover in the Upper Waitaki catchment was as categorised in the following table. Since 1982, there is likely to have been more pasture improvement carried out. However, sheep farming in the Basin still relies to a great extent on the use of unimproved tussock pasture.

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\(^2\) In 1878 torrential rain caused Lake Tekapo to rise 12 feet higher than it had been known to previously. In that flood Lake Pukaki rose by 15 feet. In both cases houses were flooded (Nordmeyer. 1981: 28-29).
## Vegetation Type

<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Area (Ha)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barren</td>
<td>178,970</td>
<td>19</td>
</tr>
<tr>
<td>Snow tussock grassland</td>
<td>264,590</td>
<td>28</td>
</tr>
<tr>
<td>Short tussock grassland</td>
<td>193,570</td>
<td>20</td>
</tr>
<tr>
<td>Short tussock grassland with scrub</td>
<td>194,120</td>
<td>21</td>
</tr>
<tr>
<td>Forest</td>
<td>18,680</td>
<td>2</td>
</tr>
<tr>
<td>Improved pastures</td>
<td>23,380</td>
<td>2</td>
</tr>
<tr>
<td>Lakes and rivers</td>
<td>73,070</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>946,380</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*(Waitaki Catchment Commission and Water Board, 1982:98.)*

All grassland ecosystems have been modified by the introduction of exotic species to a greater or lesser extent. Since the settlement of the high country by pastoral farmers there has been a reduction in “the biomass, structure, cover and productivity of the vegetation” *(Working Party on Sustainable Land Management, 1994:34)*. There has been a significant reduction both in the genetic diversity and spread of indigenous vegetation species. There has also been a reduction in fauna - including birds such as weka, as well as invertebrates and moths *(Working Party on Sustainable Land Management, 1994:62)*. Tall tussock grasslands were modified to short tussock grasslands by the dual processes of burning and grazing (by both agricultural animals and rabbits). Agricultural intensification has contributed to this process more recently, and the short tussock grasslands continue to deteriorate *(Parliamentary Commissioner for the Environment, 1995:9)*. This situation has serious implications for future land use in the Basin, particularly for farming options. Further, deterioration in indigenous vegetation is a major concern for conservation, and if it continues may have a detrimental impact on tourism as ecotourism increases in popularity.

### 2.3 Maori History and Pakeha Alienation of Land

To explain current land use patterns in the Basin it is important to have an understanding of the history of land use. The following two sections (Sections 2.3 and 2.4) provide an account of the change in human perceptions of the basin and in the use made of the land. What follows is an account of the subsumption of Maori interests and values to Pakeha interests and values, and the establishment of pastoral sheep farming as the dominant land use in the basin. This history explains Kai Tahu’s continuing interests in what happens in the Basin.

By the time the first Pakeha arrived in Te Waipounamu (the South Island), Kai Tahu was the dominant tribe. Three principal lines of descent make up Kai Tahu today: Waitaha (the name given to the earliest groups), Ngati Mamoe, who came from the Heretaunga area and crossed the strait some time after the mid sixteenth century, and Kai Tahu, who originated from the East Coast of the North Island. Through marriage and through warfare Ngati Mamoe gained ascendancy over and incorporated the Waitaha, and later, the process was repeated by Kai Tahu. By 1800 it is estimated that there were some 20,000 people living in the Kai Tahu territory *(O'Regan, 1989:235-238)*.

The high country was (and continues to be) important to Maori, both as a source of food (mahinga kai) and as “a cradle of Kai Tahu mythology and tradition” *(O'Regan, 1989:245)*.
The Mackenzie country was a rich and valuable source of birds. Here in vast numbers were wekas, pukekos, bitterns, ducks, gulls, fantails, pigeons, stilts, keas and moas. Maori from South Canterbury made seasonal migrations into the Mackenzie to hunt these birds, living there from spring until autumn, harvesting and preserving food for the winter (Vance, 1980:9). Although some species (moa) had been hunted to extinction well before European colonisation, the area remained an important food resource until the mid-nineteenth century.

Kai Tahu were divested of ownership and control of the land of the Mackenzie/Waitaki Basin as a result of the failure of the Crown to adhere to the conditions of the Treaty of Waitangi. In 1840, while Crown agents were travelling New Zealand gathering the signatures to the Treaty of Waitangi from Maori, that would allow Governor Hobson to claim British sovereignty over New Zealand as an act of cession, he learned that the New Zealand Company was planning to install its own government at Port Nicholson. To forestall this, Hobson immediately proclaimed sovereignty over the North Island "by right of cession" (O'Regan, 1989:240). After Major Bunbury collected South Island signatures to the Treaty, Hobson proclaimed sovereignty over the South Island by cession in June 1840, four months after the Treaty was signed at Waitangi. This is the basis of Kai Tahu’s relationship with the Crown.

In 1848 Henry Tacy Kemp (on behalf of the Crown) purchased a great tract of land that is now known as Otago and Canterbury. Later in 1848 Walter Mantell, Commissioner for Crown Lands and Commissioner for the Extinguishment of Maori Titles, along with a New Zealand Company surveyor named Alfred Wills arrived at Akaroa to begin the process of marking out the reserves that Kemp had promised to southern Maori in this land purchase. At a meeting at Akaroa, Kai Tahu for the first time saw the map that went with the sale deed obtained by Kemp. They objected at once to the West Coast being included as they considered that they had only sold the land between the eastern foothills and the east coast. They claimed that the land beyond the eastern foothills, including the land between the foothills and the main divide and the west coast, had not been sold (Evison, 1993:287). Despite the boundary dispute with Kai Tahu in 1849, Governor Grey told the British Parliament that the purchase had been successful, and in 1850 the Canterbury Association was allowed to sell land to settlers.

Kai Tahu continued to claim that the Kemp purchase only contained the land from the coast to the foothills from about Maukatere (Mount Grey) down to Maukatua, past Dunedin. In 1877 a group of Arowhenua Maori established themselves on land in the Omarama district as they considered that they had not sold it and that as a result the occupying Pakeha runholders had no right to it. They fenced the land, and dug gardens. This enraged the runholders, who claimed that Maori dogs were worrying sheep and that Maori were stealing them. The authorities took the Pakeha side, and the Maori group were evicted by 12 armed police, backed up by 17 armed men from the Omarama and Benmore Stations (Nordmeyer:1981:36).

The result of the disagreement over the boundaries of the Kemp purchase is an area known as “The Hole in the Middle”. However, the Waitangi Tribunal has subsequently rejected Kai Tahu’s claims that they had not sold ‘the hole in the middle’ to Kemp (Evison, 1993:490), and legal processes now focus upon obligations under the deed of sale and the Treaty.

Kemp had promised Kai Tahu possession of their mahinga kai and kainga nohoanga in the deed, but the New Zealand company was determined that Maori land holdings should be consolidated rather than scattered, and furthermore that such mahinga kai as eeling weirs should not be allowed, as they would impede European settlement and development. Thus the
reserves marked out for Kai Tahu were small and concentrated around kainga. They did not include mahinga kai sources such as the Mackenzie/Waitaki Basin. The Waitangi Tribunal has recognised that Kai Tahu was dealt with unfairly by the Crown:

“The Waitangi Tribunal concluded that the Crown in the 19th century had exercised its ‘right of pre-emption’ under the Treaty of Waitangi without shouldering the ‘reciprocal Treaty obligation to ensure that Kai Tahu were left with an ample endowment for their present and future needs’.” (Evason, 1993:491).

Annual journeys by Maori from Temuka and Waimate into the Mackenzie Basin continued until the end of the 1880s. Vance (1980:42) reports that in the 1869-70 season a group of Maori from Waimate harvested and preserved three tons of birds in the Basin. Initially, according to Vance (1980:42), Maori were welcomed by the settlers, but as the flocks of sheep increased in size they were less welcome, on account of the dogs they bought with them which were accused of worrying sheep. Furthermore, the burning of the land by settlers destroyed the habitat of many native birds and numbers declined, almost to extinction in some cases and weka died off as they pecked at carcasses of poisoned rabbits (Waitangi Tribunal, 1991). By the 1880s the interests of settlers and sheep had overridden the interests of Maori and their access to traditional food sources.

2.4 Pakeha Settlement and the Development of Farming

O'Connor (1993:126) identified six main phases\(^3\) in the history of rural land use in New Zealand. We have adapted O'Connor’s classification into three periods that are relevant to the history of agriculture in the Basin.

1. the establishment and management of a system of extensive pastoral farming of fine woolled merino sheep (1855-1945).
2. the intensification of pastoral farming systems, brought about by technological advances and land development (1945-1985).
3. the economic restructuring of the agricultural sector, diversification, and the emerging threat to the future of pastoral farming in the high country (1985 to present).

These three periods will be dealt with in turn to provide an understanding of how current land use patterns developed.

The history of farming in the Mackenzie/Waitaki Basin is a dual history: a history of development and of increasing production, intimately connected with a history of progressive

\(^3\) The six historical phases are:
1-Adaptive and innovative Maori agriculture in the culture-contact period (1800-1840).
2-European settlement and pastoral occupation of open lands, principally for wool production (1840-1865).
3-Agricultural expansion including expansion of arable agriculture, clearing of forests, and pastoral expansion into cleared land for the sake of the refrigerated export trade (1865-1915).
4-Intensification of farming and forestry (1915-1945).
5-Farming redevelopment, horticultural innovation, expansion of intensive technologies into hill country and diversification of markets and products (1945-1985).
6-Farming economic readjustment, redevelopment and further diversification of markets and products (1985 ff).
environmental deterioration. Farming development has been constrained by topography and climate. The mountainous terrain and a cold and dry climate, prone to drought and snow, make farming a hazardous venture.

Despite the challenges posed by climate and terrain, sheep farmers in the Basin have generally prospered until recent decades because of the strong prices for fine wool. The series of contingent factors which masked financial and ecological viability problems will be discussed in more detail below.

2.4.1 Extensive Pastoral Farming, 1855-1945

This period saw the establishment of extensive pastoral farming in the Basin and its consolidation as the primary, and seemingly most appropriate, land use.

The story of the Pakeha ‘discovery’ of the Mackenzie Basin in 1855 by the sheep stealer James Mackenzie is well known. Two Maori shepherds, Seventeen and Taiko, who were working at the Cave out-station on the Levels run noticed that about 1000 ewes had gone missing. After fetching John Sidebottom, the overseer of the Levels, they tracked the sheep inland into what is now known as the Mackenzie Basin where they overtook James Mackenzie and the missing flock. Mackenzie escaped from the shepherds and was later caught in Lyttelton, tried, and sentenced to five years imprisonment. Mackenzie claimed that he was innocent of sheep stealing and that he had been hired by a man named James Mossman to drive the sheep to Otago, and that Mossman had brought the sheep to him. Mackenzie made two or three escapes from jail within the first year but was captured each time. In 1856 at the instigation of Henry Tancred, the sheriff of the Lyttelton gaol, Mackenzie was pardoned by the Governor Sir Thomas Gore Brown, some ten months after his imprisonment. Mackenzie then left for Australia and was never heard of again. The publicity surrounding the capture, trial, imprisonment and subsequent escapes of James Mackenzie brought the fact that there was land beyond the Eastern range of hills suitable for grazing sheep to the attention of the public. As Vance (1980:3) put it; “... in 1855, a Scottish sheep stealer revealed to them that beyond the Snowy Ranges lay their hearts desire - sheep country”. Within five years of its discovery almost all of the Basin had been divided into runs and taken up.

The first application for land in the Mackenzie Basin was made just three weeks after Mackenzie’s trial, by John Sidebottom, the Levels overseer who had tracked the alleged sheepstealer. However, he did not stock the land he applied for and his lease expired in 1857. The first settlers arrived in the Mackenzie Basin a year after its discovery. John McHutcheson and Mary, his wife, along with four other men established a run with 50 head of cattle on the south-eastern shores of Lake Pukaki. The McHutchesons only stayed for two years, as the property did not prove to be good cattle country. This run later became known as the Wolds. By 1859 280,000 hectares of land, divided into 33 runs, had been taken up in the Basin (Vance, 1980:37-38). When Andrew Burnett took up Mount Cook Station in 1864, in practical terms the whole of the Basin had been settled.

When the earliest settlers saw the high country they saw it as sheep country. Samuel Butler, who farmed on Mesepotamia Station encapsulated their attitude:

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1 The story of the discovery of the Mackenzie country presented here is taken from Vance (1980), Beattie (1946) and Gillespie (1958).

2 According to Vance (1980: 15) it is unclear whether Mackenzie escaped twice or three times. The newspaper of the day, The Lyttelton Times, reported two escapes, while Sergeant Seager, of the Lyttelton police, said in his account, written 45 years after the trial, that Mackenzie escaped from custody three times.
"I am forgetting myself into admiring a mountain when it is of no use for sheep. This is wrong. A mountain here is only beautiful if it has good grass on it. Scenery is not scenery - it is "country". If it is good for sheep, it is beautiful, magnificent, and all the rest of it; if not, it is not worth looking at" (Samuel Butler writing in A First Year in the Canterbury Settlement quoted in Vance, 1980:74).

In order to acquire a run a man would travel out into unoccupied areas of land, and select a tract that he considered desirable, draw a very rough map of the area and provide an often very vague description of its boundaries, then ride back to the town to register his claim to the lease. For example, John Sidebottom, who was the first applicant for a run in the Mackenzie Country, described the 75,000 acre area he wished to claim as follows:

"bounded on the north by the Snowy Mountains, on the east by the Snowy Mountains, on the south by a branch of the Waitangi River, and on the west by the Snowy Mountains" (Lyttelton Times, 23-04-1859, quoted in Nordmeyer, 1981:46).

Under the terms of early leases runs had to be stocked with one sheep per 20 acres or one cattle beast per 120 acres within six months of the granting of the lease. Runholders were required to pay an annual rent of a farthing per acre for the first two years, a halfpenny for the subsequent two, and from then on three farthings an acre. Runholders also had the right to freehold land around the homestead, farm buildings and other improvements (Nordmeyer: 1981:41).

In the early days there were no fences between runs, and runholders spent a great deal of time, sometimes days on end, searching for stock that had wandered. Shepherds were employed to guard the unfenced boundaries. They stayed for months at a time in small back-country huts with only their dogs for company, their job being to make sure that stock stayed on their own run and to chase back those that strayed. Runholders also exchanged strayed sheep with their neighbours after mustering. Over time boundaries between properties were fenced, a time consuming and expensive undertaking, for many many miles of fences were needed, and all materials had to be carried into the back country by horse. There were at times disputes over the boundaries of runs. For example, there was some confusion about the exact boundaries between Canterbury and Otago, and an argument between the two districts broke out when runs in the Ohau and Omarama areas were allotted by both districts to different people.

The first flock of sheep in the Basin were brought in by John Hay, who with his uncle took up Tekapo Station in 1857. By 1860 the Canterbury Provincial Government counted 17,500 sheep in the Basin. Sheep became the backbone of the high country farming economy, though many stations had some cattle as well. By 1877 there were some 300,000 sheep in the Basin. As pastoral farming expanded from the 1860s sheep became difficult to acquire. Some runholders had to drive sheep from as far away as Nelson to their runs. The numbers of sheep in the Basin declined between the early 1900s and the late 1920s, rose again, and again declined from the mid 1930s. The explosion in rabbit numbers was a major cause of this decline.

Much of the Mackenzie Basin was covered with thick vegetation when the Pakeha settlers arrived, vegetation so dense that it could be impenetrable to sheep. The solution was burning. "One of the first things a settler did was to fire his country" (Vance, 1980:41). Brothers
Laurence and Walter Kennaway and Frederick Delamain, for example, who established Burkes Pass Station (later called Rollesby) in 1857, burnt their way to their station. Fires lit by runholders often got out of control and burnt other runs as well.

Under the terms on the licences of the earliest runs, the leaseholder was not allowed to cultivate the land. Because they only held a licence to graze they burnt again to improve pastures and production: “The renewed growth enabled them to carry more stock and consequently increased the amount of wool for overseas markets” (Gillespie, 1958:302). Great swathes of countryside were burnt repeatedly. Gillespie states that in time the runholders realised the impact that burning was having on native vegetation and on native birds, and so only burnt when necessary and with great care: “burning, to many of them, became an art, practiced only when experience told them that weather and soil conditions were suitable” (Gillespie, 1958:303). Though burning opened the land up for sheep, it also ruined the shelter and food sources for native birds, contributing greatly to their decline.

The distance of the runs of the Mackenzie/Waitaki Basin from ports has meant that transport has always been a problem for runholders. Originally bullock teams were used to transport wool to the coast and supplies back to the runs, but their use declined after the 1880s. Horses were also a crucial part of the station system, and continue to be used to this day. Landholders also grew crops such as oats and hay to feed their horses and stock over the winter months.

Runs could employ large numbers of people, including carpenters and blacksmiths as well as shepherds, labourers and grooms. There was also a great demand for seasonal workers, for shearing in particular. Other runs, however, have always been “one man” runs.

The first New Zealand wool, a few bales, appeared on the English market in 1840: 20 years later in 1860 12,098 bales of New Zealand wool were sold (Gillespie, 1958:305-306). In 1882 the first Timaru wool sale was held (Vance, 1980:38). Prior to this runholders sent their wool directly to England to be sold, a practice which some continued up until the beginning of the first world war.

Unlike the Canterbury plains, in the high country of the Mackenzie/Waitaki Basin there was little subdivision of the original runs (and little or no pressure for subdivision), for the country was so inhospitable that many thousands of acres were needed to stock enough sheep to make a good living. On the Canterbury plains extensive pastoral farming ended in the 1880s with the breaking up of the runs, but it continued in the Basin. The relatively simple system of extensive pastoral farming that developed appeared well suited to the environment in which the high country runs were situated, and intensification did not occur to any great extent. In some ways the traditional farming system was a simple one:

“It was grazed on a natural basis, he... never made any hay, never had any machinery on the property at all. He used to winter all his stock on sunny faces on the hill block, low snow-risk type country which we call our winter country. Summered them on what we call our summer country which is the dark cold faces. The place was split into those type blocks”.

Though the pastoral farming system was basically successful in terms of providing good incomes to runholders, this success came at the price of ecological degradation. Other changes consequential upon European settlement (such as the introduction of rabbits and alien predators) compounded the problem. Burning and grazing (by both rabbits and sheep) had an
enormous impact on the native tussock vegetation, and by 1951 the carrying capacity of unimproved tussock grasslands declined to 10% of what it had been in 1881 (O'Connor, 1980:210). The decline in indigenous flora and fauna has already been noted. Erosion also became identified as a problem. This was perceived to have two components: the loss of soil in the eroding country itself, and the impact or erosion on the braided river systems, causing gravel build up and resulting in flooding of agricultural land and settlements downstream. In order to combat these problems the Soil Conservation and Rivers Control Act was passed in 1941. The first catchment boards, whose task it was to deal with the soil erosion problem, were set up in 1944 (Vance, 1980:103).

2.4.2 Developments in Farming, 1945-1985

Technologies developed after the end of World War Two led to the intensification of farming in the Basin, though intensification did not really take off until the 1960s (O'Connor, 1993:135). Up until then, productivity in the high country had steadily declined, the result of progressive soil degradation and overgrazing by both rabbits and domestic stock. Production was increased in the 1960s through pasture improvement, made possible by the development of aerial topdressing and the affordability of fertiliser (supported by high prices for wool and availability of government subsidies). The application of fertilisers has helped to increase the productivity of the high country, which in turn has allowed the retirement of poorer and more ecologically vulnerable lands. The development of the aviation industry also led to changes in high country management. For the first time it became possible to apply fertiliser and seed to large areas of rough and hilly terrain. Planes were also utilised for stock work, fencing and rabbit control. As early as 1949 aircraft were being used in Basin for stock management: H. R. Wigley used a plane on his Glen Lyon run to search for stragglers at the end of the muster (Gillespie, 1958:311). Planes and helicopters are now an integral part of the management system of many high country runs. More intensive stock management practices, brought about by increased fencing, also contributed to increases in production. There was some diversification, with a few landholders venturing into deer, goats and tourism, but generally the pattern of extensive sheep farming remained predominant.

Some of the problems that had emerged for landholders in the Basin in previous decades increasingly appeared to be able to be controlled. Rabbit numbers were reduced dramatically in the mid to late 1950s through aerial drops of 1080 poison and a dollar for dollar government subsidy (Parliamentary Commissioner for the Environment, 1994:4). The control of rabbits in conjunction with improvements in pasture through the application of fertilisers led to a rise in stock numbers.

The problem of erosion was also being dealt with, if not solved. In the early 1940s Catchment Boards were established, whose job it was to prevent, control and remedy erosion. In order to achieve their aims of soil conservation and the prevention of erosion and flood damage, the Catchment Boards introduced a policy of retirement, whereby eroded and erosion-prone lands were destocked and land more suitable for grazing was developed so that stocking rates could be maintained despite the surrender of parts of the run. This land, much of which was Class VII and Class VIII, supplied little if any grazing, and many landholders were happy to relinquish grazing rights and give control to the Catchment Boards. Catchment authorities also arranged soil and water conservation plans with various runholders. Under these plans the Catchment Board provided financial assistance for work, such as topdressing and oversowing, fencing, tree planting, firebreaks and dam construction, that promoted soil and water conservation objectives. Often these occurred in conjunction with retirement of land. By 1985 the Waitaki Catchment Board had implemented Soil and Water Conservation Plans
on 28 runs, resulting in 146,000 ha of land being destocked (National Water and Soil Conservation Authority & Land Settlement Board, 1985:5).

By the 1950s New Zealand was one of the wealthiest countries in the world in terms of per capita income. This wealth was based on agricultural production, and secure access to the British market, which took almost everything New Zealand could produce. There was almost no unemployment, an extensive social welfare system, high levels of protection for local industry, and considerable state support for agriculture. In 1974 New Zealand lost unrestricted access to the UK market when Britain joined the EC. Replacement markets did not provide the same level of returns. Furthermore, international markets in the early 1970s were unstable, affected by oil price shocks and inflation. For example, real wool prices halved between the 1972/73 and the 1974/75 seasons, while the real price for mutton declined by over 75% (Griffith & Martin, 1988:3). Government increased subsidies to the farming sector to compensate for the high costs of inputs, both locally produced and imported, and to encourage production for export by providing adequate incomes for landholders and reducing seasonal fluctuations in returns.

Subsidies were also widely available in the forms of fertiliser subsidies, tax incentives, development loans and schemes, catchment board subsidies and price supports. Cheap finance was available through the Rural Bank. Research and extension services were also provided by the state. Price stabilisation schemes (operated through the producer boards) continued, and the Supplementary Minimum Price Scheme was introduced at the beginning of the 1978/79 season to provide adequate incomes for farmers. In the 1983/84 season, the cost of direct government incentives and subsidies to agriculture cost more than $500 million (O'Connor, 1993:136).

Farming in the Basin thus became heavily subsidised. At the height of the subsidies around 40% of the income of sheep farmers came from government revenue (Walker & Bell, 1994:5). Sheep attracted the majority of SMP payments during the time the programme was running. Furthermore, because of the undeveloped nature of much land, and the size of holdings in the Basin, landholders were able to take advantage of the land development and loan schemes. Many landholders in the basin undertook extensive development during this period:

"Since 1971 we've increased the stock numbers to 4,500 sheep and we now run 100 cattle and have approximately 60 acres in forestry, mainly pinus nigra. This has been done with extensive subdivision, oversowing and topdressing, the application of superphosphate, extensive soil testing and of course the planting of trees. As well as increasing the stocking rate we've increased the per unit performance as well, so that we're producing more wool per head, more lambs. It's through genetic selection...improved feeding and just general stock management".

One unintended consequence of the support framework was the areas of land that were perhaps not ecologically suitable for development could be developed, and more intensive production pushed onto environmentally marginal land.

The construction of hydro-electricity schemes throughout the Basin after World War II also brought great changes to the region, that directly affected runholders. Work on the first power station, Tekapo A, began in 1938, although was not completed until 1953 on the

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Information about hydro-electric development is taken from Sheridan, 1995.
account of the war. Work commenced at Benmore in 1957, with workers being housed at Otematata. The lower Waitaki developments impacted severely on runholders along the river valley, and there was a widespread perception that they were inadequately compensated (Sheridan, 1995:69-70). Many runs lost land along the edge of the river when it was dammed and flooded to create Lake Benmore. These river flats were often lambing paddocks with developed pasture used to grow hay, and their loss had a considerable impact on farm management practices. For example, Black Forest and Haldon lost 1,214 hectares, equalling the capacity to run 6,000 sheep, Glencairn lost 8,000 hectares and Waitangi Station lost their entire cattle operation. Otematata Station lost land for the building of Otematata village when Aviemore was flooded, and lost 2,023 hectares which was used to compensate Bog Roy and Rostreiver Stations for land lost when Lake Benmore was formed (Sheridan, 1995:70-76). However, despite these losses, and the change to a remote area brought about by the increase in population, there were benefits: sealed roads, schools, shops and medical services.

In 1968 the Benmore dam was commissioned and work and the workforce moved up into the Basin for the Upper Waitaki projects. The first workers arrived in Twizel in 1968, but work did not begin in earnest until the following year when the final go-ahead for the project was approved. By the end of 1972 the population of Twizel was 4,200 with 816 families and 509 single men (Sheridan, 1995:104).

However, hydro-electric development had already impacted on runholders in the upper basin. Lake Pukaki had been raised 9 metres in 1952 resulting in land losses for some properties. Further losses were sustained when the lake was raised a further 37 metres in 1976. Land was also lost to the construction of the 26.5 km canal between Tekapo A station (below Lake Tekapo), and Tekapo B station (on the shores of Lake Pukaki). 53,000,000 tonnes of material from the surrounding countryside was used in the construction of the canal. Bendrose Station lost 405 ha of Pukaki river bed; Pukaki Downs lost 182 ha, and farm buildings had to be resited or rebuilt; Glentanner lost much of its wintering land when Lake Pukaki was raised and bought Katherine Fields to replace the loss; Ferintosh lost 809 ha of river flats when the lake was raised in 1962 and received no compensation, and lost another 405 ha when the lake was raised again, inundating the farm buildings and homestead which were resited or replaced; Irishman Creek lost 1,200 ha, 800 ha when the lake was raised and 400 ha to the canal which cut through the property necessitating the building of bridges for stock movement.

Compensation negotiations were individualised and protracted, with some claims taking 18 years to finalise (Sheridan, 1995:317). The Braemar claim ended up in the High Court, and as in the lower Waitaki there is a perception that compensation was unfair and inadequate.

The loss of land to hydro development was a factor that led to developments in farming methods on some properties:

“When they fenced the river beds off we lost the grazing in the river beds...and in dry years dropped our stock numbers back to 3,000 sheep. We used to easily lamb 1,500 ewes on the river bed, I dropped it back to 1,100 ewes when they took those river beds away. I immediately developed the homestead block for hay paddocks and grazing....It certainly affected the viability of the property, no doubt about that. We fenced the hill blocks from three blocks...into twelve blocks. Oversowed, topdressed 1,200 hectares of it”.
Again like the lower Waitaki, access to improved services was the positive side of the development. The destruction of Pukaki, and later, the construction of Twizel made a considerable difference to the lives of surrounding landholders, with increased services and social opportunities, but a loss of the isolation and separateness and independence which was a defining feature of basin life and one highly valued by landholders:

“Socially there wasn’t a great deal [before the hydro development]. We used to have meetings once a week or fortnight at Pukaki. In those days we had to go to Pukaki to get mail, bread, milk. It changed once they got Twizel up. It was all delivered to the front gate... it was big changes... after 60 years of isolation and hardship, a way of life they enjoyed, all of a sudden there was a township of 6,000 people parked at the back door”.

The population of Twizel declined from 1979. The original plan was that Twizel would be bulldozed when the power projects were completed, but the residents fought successfully to save the town. In 1984 Twizel became a county town under the jurisdiction of the Mackenzie County Council.

The hydro-electricity projects therefore brought considerable changes to the basin. The most obvious impact is on the landscape, the canals, lakes, dams and powerhouses being major features. It also had an impact on tourist development with fishing in the lakes and canals, and the international rowing course established at Lake Ruataniwha. The first salmon farm was established in a hydro canal in 1992, and two more have been set up since, bringing money into the area as well as providing a further attraction for tourists. Furthermore, the services in Twizel and Otematata provided by the Ministry of Works for the hydro workers have to a considerable extent been retained in the area, and the villages provide the basis for a permanent population. The villages have also contributed to the development of the tourist industry, providing accommodation and services for visitors. Moreover, many of the houses in the villages are used as holiday homes by people from Christchurch, Timaru and cities further afield.

2.4.3 Developments Since the 1985

Nordmeyer wrote in 1981 that “with the extermination from the Upper Waitaki of wild deer, hares, chamois and thar, the farming future looks bright - provided nature does not provide a repeat of the 1895 snow” (Nordmeyer, 1981:75). However, this was not to be.

By 1983 it had become clear that the level of agricultural supports to New Zealand agriculture was economically unsustainable, and the process of dismantling the system began. This process escalated with the election of the 1984 Labour Government, which abruptly abolished subsidisation and exposed agriculture to the full effect of market forces. The Labour Government embarked on a comprehensive programme of economic deregulation: tariffs were reduced and import licensing restrictions removed; controls on interest rates and foreign exchange were removed; the exchange rate was floated; the financial sector was deregulated; many government departments were reorganised into state owned enterprises; GST was also introduced (Fairweather, 1989:1). These changes all impacted on landholders. There were also specific changes in the agricultural sector: Rural Bank interest rates were increased to market levels; fertiliser and transport subsidies were abolished; SMP’s were removed; producer and marketing boards no longer had access to cheap government finance for their stabilisation schemes and had to obtain it from the private sector; and user pays systems were instituted for research and extension services (Fairweather, 1989:1).
At the farm level these changes resulted in declining income, increasing interest rates, decreasing equity and a dramatic reduction in spending on inputs such as fertiliser. These changes came at a time when landholders had lost much of their previous political influence, and they reacted with anger, feeling that they were unfairly bearing the brunt of the consequences of economic restructuring (Fairweather, 1989:3).

In general, high country landholders gain the greatest proportion of their annual income from the sale of fine wool, which makes farm businesses very vulnerable to the vagaries of the international wool markets. The NZMWBES survey notes that in the 1988/89 season the average net greasy price received on properties sampled was $9.57 per kg and that it had declined to $4.57 per kg in the 1992/93 season (Working Party on Sustainable Land Management, 1994:47). Prices in the three seasons from 1991/92, adjusted for inflation, were the lowest since the 1945 season (Working Party on Sustainable Land Management, 1994:48).

For many farms in the Basin, four of the recent eight years had resulted in financial deficits and 28% were considered not to be financially viable, with a further 44% marginal. A third of these farms were paying more than 25% of gross income in interest and rent; in general, this ought not to be greater than 20%. Furthermore, working costs should not be greater than 45% of gross income, but on these properties the average was 62.5%, excluding Rabbit and Land Management Programme (RLMP, see Chapter 3) spending. These figures result from low returns for wool, and mean that these farm businesses have had very little resilience to economic fluctuations (Working Party on Sustainable Land Management, 1994:48). Not all landholders in the high country are in that position, though all face managing their properties on declining and uncertain incomes.

Since the removal of subsidies in the mid to late 1980s stocking rates, stock numbers and production have declined as landholders have struggled to maintain fertiliser inputs in the face of declining and erratic prices. They are unable to readily start new development initiatives. Much of the harder country developed under the loans system has now reverted to its previous state, and some has degraded even further as a result of development attempts. According to Working Party on Sustainable Land Management most of the landholders in the RLMP programme area apply less than half the recommended quantity of fertiliser necessary for maintenance on developed land (Working Party on Sustainable Land Management, 1994:46).

Moreover, the removal of subsidies on fertiliser and the disestablishment of the Rabbit Boards meant that income on farms no longer covered outgoings. Landholders could not afford the costs of rabbit control, and, as the responsibility for control had always rested with the Rabbit Boards, some landholders did not “own” the situation. As a result rabbit numbers again rose to plague proportions. Many farm systems currently revolve around the problem of rabbit control, both practically and financially:

“....they get the odd rabbit hole under the fence type of thing, but it’s basically a management thing if you are going round mustering sheep. I work on about once every 17 days I get around all my fences”.

“I’m going to poison my flats this year, it’s going to cost me $25,000. I’ve got to find that somewhere and with wool prices at $5.00 kg it’s not very flash. In fact I’ve got bank managers coming next week to see how my overdraft’s going to be for next year. Anyhow, that’s how the management system works”.
"I've done $5,000 to $6,000 worth of Pindone every year on patch poisoning the last five years on this one part of the property..."

Deer were introduced into the Basin as landholders tried to diversify their systems in the face of declining income from sheep. In 1987, when the Agricultural Census started counting deer by county there were 9,050 deer in the Mackenzie County7. This number had increased to 12,227 in 1993 (Statistics New Zealand, 1995). However, the development of deer farming has been constrained by the costs of establishment.

From the 1980s onwards, therefore, a number of serious problems with high country farming emerged: removal of subsidies led to severe financial viability problems, and the rabbit population exploded again. Furthermore, evidence of extensive soil and vegetation degradation emerged, degradation which many commentators stated was the result of pastoral farming practices. The spread of hawkweed (Hieracium species) also accelerated, and became the focus of attention (see Chapter 3). It became apparent that high country farming was in serious trouble and the Government produced a number of reports on the issue8. These reports showed that there was serious environmental degradation in parts of the high country and that many high country properties are now marginal in terms of financial viability (Working Party on Sustainable Land Management, 1994:v).

It is difficult to generalise about the current on-farm situation in the Basin. Some landholders are still doing reasonably well - those with comparatively low debt, on less rabbit-prone country, with good management skills, and those who by accident of location can take advantage of particular opportunities (e.g. Glentanner on the border of Mt Cook National Park, which has an extensive and expanding tourist venture). Others face severe financial and management problems, and have few options available to them. Those who borrowed heavily to develop, or to adjust to the withdrawal of support in the mid-1980s, are now having trouble paying mortgages:

"A lot of farmers had to borrow money back in the high interest days of the last Labour Government and that was probably when their problem developed, and of course it’s just escalated since then. More and more money is being used to service debt and that means that there is less and less money available to reinvest in the property or reinvest in production or plant".

Lamb prices are low, as are wool prices, and the returns from beef are very low, failing to cover the cost of buying the animal in the first place in some instances. The state of the international wool market plays a crucial part in farmers’ ability to control pests and develop their farms. On-farm economic factors are also key with debt loadings, interest rates and costs

7 Note that the Mackenzie County area does not include the entire Basin, but stops at the Ohau river. It also includes the land in the Fairlie Basin and some of the deer are undoubtedly in that area. However, what is shown is that there has been an increase in deer numbers over the years. Prior to 1987 deer were counted by region.
8 The Reports are:
- Parliamentary Commissioner for the Environment (1991), "Sustainable Land Use for the Dry Tussock Grasslands in the South Island"
of inputs imposing severe limitation on landholders’ management strategies and practices. Economic constraints can lead to further land degradation, as landholders are less able to control pests, maintain improvements to their land, or explore changing land uses. Rabbit numbers are up again, as this season has been very good for rabbits. On some runs, again those with the least financial resources, numbers are apparently up to pre-RLMP levels. Farmers are pinning their hopes for a recovery on the introduction of the rabbit calicivirus and the tenure review process.

This constellation of circumstances means that landholders may be inclined to maximise production in a good year, or increase their stocking rates, despite the fact that they may realise that this may not be sustainable in the longer term. Short term economic pressures override the requirements of ecological sustainability. One study reported by the Working Party on Sustainable Land Management stated that to prevent overgrazing, permanent stock numbers would have to be reduced by 30% (Working Party on Sustainable Land Management, 1994:46-47). Some landholders are attempting to diversify into tourism and forestry (see Chapter 4), but again are constrained by finance and by opposition from some conservation and recreation interests. As a last resort, a number of landholders are considering leaving the area. According to local reports there are about nine runs in the northern part of the Basin which are either on the market or have recently been sold.

2.5 Background to Other Land User Groups

2.5.1 Forestry

The first exotic trees in the Basin were planted by settlers around their homesteads, in an attempt to familiarise the landscape. Over time landholders have planted shelter belts and some plantations. In 1976 there were 1,547 ha of plantations of exotic forestry in the Mackenzie Basin and this had only increased to 1,854 ha in 1993. These plantations are generally farm forestry, though the Mackenzie District Council has forestry interests as well. There has been no commercial forestry development, which forestry proponents in the Basin put down to the leasehold system; commercial companies will not invest in forestry unless they have freehold:

"It won’t go in until they sort out land tenure, I don’t think. There’s been interest from overseas companies and until they can get freehold land I think it will restrict forestry”.

In the Canterbury high country as a whole there are around 400,000 hectares of land that would be appropriate for forestry development, but to date less than 0.1 percent is planted (Working Party on Sustainable Land Management, 1994:71).

There is much debate about forestry in the Basin. Commercial forestry is held in some quarters to be the answer to environmental degradation although others focus upon its potential negative impacts. In general it appears there is fairly widespread support for forestry of some sort, even amongst some conservation interests, provided that it is planned and

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9 Personal communication by individual involved in rabbit control.
10 There is one farmer in the Waitaki end of the Basin with extensive forestry plantings, but his property does not appear in the Mackenzie District statistics. There is also another farmer who is planning an extensive forestry development.
implemented carefully (in terms of siting, species and scale) so as to minimise landscape and environmental impacts. Landholders see the economic potential and the potential to gain production off poor land, as well as to stabilise and improve degraded land. People in the towns see the potential for employment. There is concern generally that there should not be "too much" forestry: the Basin is a very treeless landscape and any large scale plantings would have significant landscape impacts.

The spread of wilding trees is also seen as a significant problem in the Basin. Most landholders see wildings as a weed, as a threat to pastoral farming and an added cost in the farm budget. Generally wilding trees do not have high value in forestry terms and are only useful for posts or firewood. There is also widespread concern about the impact of wildings on the landscape, and, for environmental groups, on native vegetation.

According to forestry research in the area the potential long-term profits from forestry are far greater than from pastoral farming (Working Party on Sustainable Land Management, 1994:71). However, there has been little major forestry development for several reasons, including: lack of information about how to grow trees successfully in the high country, the amount of money needed for establishment and the length of time between outlay and income, district plan regulations, and, according to Working Party on Sustainable Land Management, (1994:71), because of the pastoral leasehold tenure system, which, they claim, constrains the development of forestry.

2.5.2 Tourism

Tourism has long been part of the economy of the Mackenzie/Waitaki Basin, focused on Aoraki/Mt Cook.\footnote{69,200 hectares of the Mount Cook area were designated a National Park in 1955. The park contains all of the region's mountains which are higher than 3000 metres (Vance, 1980: 85).} Tourism in the Basin is seasonal, with the majority of tourists visiting in the summer months. Mt Cook is the centrepiece of the tourist economy, a stop-off on many bus tours, and attracting visitors as well as independent trampers, hunters and climbers who appreciate the scenery. Furthermore, the mountain provides the basis for guided hunting, tramping and climbing ventures. According to the Department of Conservation (DOC) at Mt Cook, numbers of tourists visiting the Basin are increasing. No accurate statistics are available (which causes planning difficulties) but the DOC centre at Mt Cook has around 180,000 visitors per annum through its doors, and estimates that there are around 240,000 visitors a year to Mt Cook. With the increase in numbers of tourists there has been an increase in both the variety and number of tourist services available.

The Maori name for Mt Cook is Aoraki (or Aorangi). The Pakeha name was given by Captain John Stokes of the survey ship Acheron in 1851. Julius von Haast was the first Pakeha to explore the mountainous region in 1861, but it was not until the 1880s that there was much interest from many in visiting the area.

The first Hermitage at Mt Cook was built by a private company in 1884, and this same company advertised Mt Cook as a tourist destination, having a poster printed. In 1886 a regular coach service to Mt Cook commenced. Competition entered the Mt Cook tourist industry early on, with another coach service started in 1888. This new service, apparently, was not thought to be sporting, as there was not enough business for two companies. The Hermitage was taken over by the Government in 1895. The original building was replaced in 1914, as it was no longer adequate to meet the demands of the increasing tourist trade.
Furthermore, the original Hermitage was severely damaged by a flood in 1913. The second Hermitage was built some two miles down the valley from the original site. This building burnt down in 1957 and replaced by the current Hermitage (Vance, 1980:84-85). Aside from the Hermitage there is another hotel, a youth hostel and a camping ground managed by DOC. These businesses provide a considerable amount of seasonal employment in the area.

The townships of Tekapo and Omarama (and Twizel after the completion of the hydro-electric projects) have developed to take advantage of the tourist trade. All three centres provide accommodation ranging from hotels and motels to backpackers, bed and breakfasts and camping grounds, and many of the houses in the townships are holiday homes. Many tourism businesses such as flightseeing and guiding are based in these centres, and shops service tourist as well as local needs.

The establishment of huts at Mt Cook from the late 1880s made it easier for climbers in the region by providing shelter and staging posts. This series of huts, extended over the years both in the National Park and by the former Forestry Service on land now under the control of DOC, is an important resource for recreational trampers, climbers and hunters and for guided tramping, climbing and hunting.

In 1956 the first plane landed on the Tasman glacier, thus beginning the tourist aviation industry in the region. This industry is currently undergoing further expansion, with increasing numbers of companies with both fixed-wing and helicopter operations competing for the tourist dollar. There are also two commercial ski fields operating in the region, Mt Dobson and Ohau, and heli-skiing and cross-country skiing are available as well.

Some landholders are seeking to take advantage of the tourist trade as returns from traditional pastoral farming decline. The most obvious example of this is Glentanner station, which has established a tourist centre with flightseeing, accommodation and horse trekking. Several farms in the area offer farmstays, and a hunting safari park operated at Lilybank Station in the early 1970s. Landholders have also leased their property to film crews and vehicle manufacturers for testing new cars, and several lease land to helicopter flightseeing companies for snow landing sites. Tourism is becoming an increasingly important feature of the local economy, as is demonstrated by the Mackenzie District Council’s establishment of the Mackenzie Tourism and Development Board which aims to promote and support the development of tourism in the region.

2.5.3 Conservation

Conservation concerns emerged early in the Basin, with complaints in 1884 about grazing sheep and the practice of burning destroying indigenous vegetation (especially the Mt Cook lily) resulting in the appointment of a ranger. A thread of concern about the mountain environment runs through the history of Pakeha habitation of the Basin. Currently, official conservation interests in the basin are represented by the Department of Conservation (DOC), which has a field centres at Twizel and at Mt Cook National Park. National organisations such as the Royal Forest and Bird Society are also active interest in conservation issues in the Basin. Under the Resource Management Act (1991) (RMA19), District Councils also have responsibilities for aspects of conservation in terms of the sustainable management of natural and physical resources.

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12 This venture was closed down by the Land Settlement Board in 1976.
With the establishment of the Department of Conservation in 1987\(^{13}\) responsibility for various aspects of conservation that had previously been spread across several government departments became concentrated in the one organisation. The Waitaki conservancy of DOC is responsible for the management of the conservation estate in the Basin (including land, flora and fauna) and for the promotion of conservation on land in the Basin they do not own. They are also required to advocate for conservation under the Resource Management Act (1991). Priorities for DOC as outlined in the draft Conservation Management Strategy include landscape protection, identification and protection of a representative range of Basin ecosystems and species\(^{14}\), the control of pests and weeds such as wilding trees, thar and rabbits which are a threat to conservation values, the improvement and promotion of access to and recreation on the conservation estate and the development of Mt Cook village. DOC has special programmes focused on the endangered Black Stilt and on braided river recovery. DOC also manages unoccupied crown land, land which does not necessarily have conservation values - for example, DOC responsibility for riverbeds, which basically is a rabbit and weed control job. DOC and local landholders have come into conflict over these areas, with some landholders asserting that rabbits spread onto their properties from riverbeds and that DOC fails to control them effectively.

DOC has land directly under its control, but is also responsible for conservation advocacy on leasehold and freehold land. DOC has several methods available to achieve their conservation goals on private or leased land. They do this through education and advocacy and by working out management plans with individual landholders that will accommodate both production and conservation goals. DOC also makes submissions to consents sought under the Resource Management Act (1991), if proposed activities are considered to be incompatible with conservation interests.

District councils are required to deal with conservation issues in their district plans. Both the Mackenzie and Waitaki District Councils have utilised data gathered by DOC under the Protected Natural Areas Programme\(^{15}\) to meet the conservation requirements, resulting in a great deal of bad feeling and conflict with landholders. The antagonism has been largely directed at DOC despite the fact that it is the Councils who are responsible for the use of the data, and has inflamed the already often strained relationships between DOC and landholders, with some refusing DOC access to their land. (See, for example, The Press June 19, 1997, page 22.)

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\(^{13}\) The Department of Conservation incorporated the non-commercial operations of the Department of Lands and Survey and the Forest Service, the Wildlife Service and parts of the Ministry for the Environment and the Historic Places Trust.

\(^{14}\) The species are: scree and striped skinks; the robust grasshopper; the following birds - black stilt, wrybill, kereru/pigeon, southern crested grebe, kea, black-fronted tern, banded dotterel, rock wren; the long-jawed kokopu fish; and several plants (Department of Conservation, 1995: 127).

\(^{15}\) The Protected Natural Areas Programme started in the 1980s and aimed to “identify and protect representative examples of the full range of indigenous biological and landscape feature in New Zealand, and thus maintain the distinctive New Zealand character of the country” (Working Party on Sustainable Land Management, 1994: 63). Areas of ecological importance within an area were identified by DOC and the management of the area was worked out between DOC and the landholder. Participation by landholders in management plans was on a voluntary basis. In District Plans, Councils have designated these areas as Sites of Natural Significance, and landholders will be required to apply for resource consents if they wish to undertake certain activities in these areas. Note that landholders are currently required to apply to the Commissioner of Crown Lands to undertake these activities.
The establishment of DOC resulted in a focused and coordinated approach to conservation issues, but also provided a focus for protests from groups who consider that conservation interests have too much power in the Basin. The conflict between conservation interests and other interests is the major site of disagreement about land use. The area of the greatest conflict is between "productive" uses and conservation uses, resulting in friction and at times open hostility between DOC and some runholders in particular\(^\text{16}\). The improvement of relations between DOC and landholders is one of the key issues identified in the draft Conservation Management Strategy (Department of Conservation, 1995:121).

There is also the potential for conflict between DOC and tourism interests. (See Chapter 5 for a more detailed account of these conflicts.) While in many instances recreation and conservation goals and land uses are compatible, this is not always the case. The Department of Conservation is required to manage the land under its control to "enhance recreational opportunities compatible with nature conservation" (Perkins et al, 1993:185), but recreation uses are necessarily always secondary to conservation goals. For example, DOC views that and chamois as pests which ought to be eradicated in some areas to protect indigenous vegetation, while hunters see them as a resource that needs to be managed so that the resource continues to be available for recreational hunting.

2.5.4 Recreation

The recreational values of the Basin are high. These uses include: fishing, hunting, tramping, mountaineering, boating, mountain biking, four-wheel driving and skiing. Omarama is an internationally renowned centre for gliding and at Twizel, Lake Ruataniwha is a national centre for rowing. Recreational users of the basin utilise many of the same resources (and in many of the same ways) as the tourist industry. Indeed, some facets of the tourist industry, such as guided fishing, hunting and climbing, are simply commercialised recreational uses.

Many recreational users are independent users and many others belong to clubs such as tramping, skiing and climbing clubs. The Federated Mountain Clubs (FMC) of New Zealand, established in 1931, takes a particular interest in the Basin (and in the high country generally) because it is a key recreational resource for their members. In 1981, 15,800 individuals were members of tramping, skiing, mountaineering and deerstalking clubs which were affiliated to the Federated Mountain Clubs of New Zealand (Federated Mountain Clubs of New Zealand, 1981:17). The Federation is the key advocate for recreational users in the basin, with a formal role in the tenure review process.

The key issue for FMC is continued and guaranteed access to the mountain lands and high country for the full spectrum of users and uses. They are particularly concerned that tenure review, freeholding and settlement of Maori claims does not limit recreational opportunities, and that commercial tourism interests will not exclude independent users. They are also concerned that in the current user pays environment, where DOC is focusing its resources on facilities with the highest level of use\(^\text{17}\), facilities with lower levels of use such as back country huts will not be adequately maintained (Working Party on Sustainable Land Management, 1994:65).

\(^{16}\) This conflict is not universal, and there are examples in the Basin of landholders and DOC working in partnership.

\(^{17}\) Short bush walks are one of the two most popular activities for visitors to New Zealand (New Zealand Tourism Board, 1993: 19).
There can be conflict between recreational users, and conflict between tourism and recreation interests. Climbers and trampers, for example, resent the intrusion of helicopters and planes. There is also a potential for conflict between independent and commercial users of resources such as trout rivers and wild animals. Much of the work done by acclimatisation societies and recreational anglers to keep the rivers well stocked is voluntary, and guides (or commercial ventures such as fishing lodges that may develop) may be seen to be exploiting a resource provided though the free work of others. The aims of recreational hunters and fishers can be in conflict with the aims of landholders (as with control of Canada geese), conservation interests (as noted above) and hydro-electric interests. The demands of hydro-electric generation have led to the destruction of fishing rivers such as the Ohau and parts of the Ahuriri and Waitaki.

2.5.5 Kai Tahu

Kai Tahu continue to maintain traditional interests in the Basin, and in the last 10-15 years their influence on land use has increased as a result of changes in government policy and practice, which mean that Maori interests have to be taken into account. For example, the Department of Conservation works with local iwi to ensure that the activity of the Department is compatible with Maori approaches, and the District Councils are required by statute to consult with local iwi and to take into account Maori interests and points of view in producing district plans under the RMA91.

The high country and the mountains are at the core of Kai Tahu tradition and mythology, and as such the iwi desires that this be recognised, and that they have control over Maori interpretations of the landscape and its history; “there is a deep resentment amongst Kai Tahu at the region’s ‘cultural capture’ by conservation and tourist interests which ignore the tribe’s ancient associations and continuing connections with it” (O’Regan, 1989:245). Kai Tahu therefore seek as of right input to decisions about the future of the basin, in order to safeguard their cultural taonga.

At the Waitangi Tribunal hearing of the Kai Tahu claim high country landholders expressed antipathy to the idea that crown pastoral lease land might be used as compensation for the injustices done to Kai Tahu. However, Kai Tahu has stated that even if lease land is given to them as part of their settlement they will not resume direct control, and the leasehold system would continue with the rights of the runholders unchanged. However, they would require more input into the direction that the management of the high country took, as past land use practices, into which Kai Tahu had no input, had led to the destruction of mahinga kai (O’Regan, 1989:258).

There is still some concern amongst runholders, nonetheless, about Kai Tahu aspirations, which is perceived by some as interference by an “outside” group which does not understand or respect the goals and practices of pastoral farming.

2.6. Conclusion

The geographical features of the Basin mean that land uses are seriously affected by climate and they occur on terrain that is difficult to develop and manage. Following the alienation of land from Maori, there was an initial settlement phase based on extensive pastoralism, followed by intensification after 1945. This latter phase seemed to successfully apply
technology to the solution of problems, and was strongly influenced by government policies to develop hydro-electric schemes and subsidise farming. The third phase (post 1985) features significant changes for landholders, including acute financial pressure and ecological problems. In addition to landholders, there are others who have interest in the future of land use, including: Kai Tahu, forestry, tourism, conservation and recreation groups.

The current pattern of land use in the Mackenzie/Waitaki basin is the result of a complex history of human interaction with a landscape which presented both opportunities and constraints to human use of the land. What is interesting about the history of land use in the Basin is the comparative stability of the pattern of land use which developed following Pakeha settlement, a pattern which has only come under serious threat in the last decade or so. The major uses of land - extensive pastoral sheep farming, tourism, conservation and recreation - were firmly established last century and have continued to this day, albeit with fluctuating fortunes. What factors contributed to this stability? First, the mountainous topography and harsh climate limited agricultural possibilities, and at the same time provided the basis for the development of conservation, recreation and tourism interests in the area. Second, until the 1980s and the deregulation of the agricultural sector and the New Zealand economy, extensive pastoral farming of fine woolled sheep was generally a predictably profitable business. While a few landholders diversified into deer, tourism and forestry, most did not. Stability is now followed by change. The current search for alternative land uses is to a considerable extent the result of changing market forces, combined with a growing concern about the ecological sustainability of current farming practices. In addition, changing government policies (land tenure review, RMA91, local government reform) have considerably altered the ways in which land use is controlled. And finally, there have been changes in ideas about what land is for, a shift away from viewing the basin as primarily sheep country to a greater recognition of its scenic and conservation values.

In the last decade or so the context in which land use change occurs has changed dramatically, with a radical restructuring of government and the economy which has seen landholders removed from their traditional position as “the backbone of the nation”, both economically and ideologically. This, along with evidence of the ecological degradation of the basin and the growth in the green movement, has led to a questioning of current land use practices. This altered context provides a good opportunity to examine landholder attitudes towards land use and to examine contemporary dynamics and conflicts in the Basin, including their distinctive discourses about community and sustainability. This will be done later in Chapters 4 and 5 of this report, based primarily on interviews with local stakeholders. However, in the meantime it is necessary to further develop the context of landholders’ attitudes and social practices, by reviewing the environmental and political factors that impinge on land use.
CHAPTER 3

ENVIRONMENTAL AND POLITICAL FACTORS INFLUENCING LAND USE

3.1 Introduction

This chapter considers a number of important factors which influence landholder’s use of land. Environmental problems constrain land use on a daily, weekly, and annual basis. The legal status of the land that landholders use is also a limiting factor: Crown pastoral leasing is currently being reviewed. Other significant legislative change that has occurred recently and which impacts directly on land use includes the Resource Management Act (1991) and the Local Government Act (1989). These factors are considered in turn, and landholders’ perspectives on them are reported in some detail to illustrate how they see and respond to the limitations and opportunities they create.

3.2 Environmental Problems

The Working Party on Sustainable Land Management (1994:24) sums up the environmental situation in the Basin by stating: “Basically, long term, the current pastoral use of unimproved high country lands is not sustainable”. The following sections on soil erosion and fertility, burning, hieracium and rabbits outline the ecological problems that have emerged in the Basin, and some responses to these issues. One particularly significant feature is the way landholders feel that they have been under attack from “green” interests. This, combined with the decline in government support for landholders, has contributed to the development of a siege-like mentality, where landholders feel misunderstood and “got at” by outsiders who do not really understand the high country. This in turn has a significant impact on attitudes to land use change.

3.2.1 Soil Erosion and Fertility

In 1982 in the Waitaki Catchment Commission determined that 36% of the land in the Catchment was affected by moderate erosion, while 38% was eroded from a severe to extreme extent. Only 18% of the land had nil to slight erosion (Waitaki Catchment Commission and Water Board, 1982: 95).

Until the late 1970s it was considered that human activity (anthropic erosion) was a major cause of soil loss in the high country, caused by pastoral landholders over-grazing and repeatedly burning, and by the introduction of animals such as rabbits and thar. More recently, it has been recognised that anthropic erosion, though it does occur, has had only a very minor impact on the amount of erosion in the high country, compared to natural erosion. However, whatever the causes of erosion, “if soil is lost through erosion, then the options for the future use of that land are vastly reduced” (Working Party on Sustainable Land Management, 1994: 26).
Though much erosion is not caused by human activities, obviously it is a serious problem in the areas where it does occur, as this is the land that is used by landholders for agricultural production, and will reduce the land use options available. Vance (1980:103) identified another potential cause of erosion: farms facing financial problems in tough economic times, which need to push production to the limit in order to remain viable. When returns are low, landholders may find it difficult to control rabbit populations or maintain fertiliser applications, and be tempted to increase stock numbers to make up the income shortfall.

More widespread, and potentially more serious in terms of land use, is the decline in soil fertility. The Working Party on Sustainable Land Management observed that there are indications that, on the whole, levels of soil fertility were declining in the high country, and that this decline was likely to continue if current patterns of land use continued (Working Party on Sustainable Land Management, 1994: 18). The Working Party considered that the degeneration was the result of extensive pastoral farming practices such as grazing and burning without fertiliser inputs. The decline in soil fertility was indicated by declining soil organic matter, low plant litter return, a loss of soil nutrients and mineralisation (Working Party on Sustainable Land Management, 1994: 18). As noted in the previous chapter the decline in fertiliser applications has been a result of changing economic conditions, such that open market prices are inadequate to sustain the level of inputs needed to maintain fertility.

3.2.2 Burning

Burning was once a common feature of land management in parts of the high country, but is used less nowadays. Landholders have burnt, and some continue to burn for a variety of reasons: to clear scrub from grazing lands both to encourage the regrowth of tussock and other palatable species and to allow stock access, to remove scrub weeds such as bracken fern; to clear land for development or forestry and to reduce the chance of accidental fire by the removal of plant litter build-up (Parliamentary Commissioner for the Environment, 1995: 10). Burning is still carried out by some landholders (generally those considered to be more “traditional”) but among landholders it is less popular than it used to be:

"The traditional fellows do occasional burning. The end doesn’t justify the means as far as I can see. All they are doing is burning it off and the hieracium seems to get into it. Being the bad weed it is I don’t think it’s helped them a great deal. Some runs have got no option because the snow tussock gets so thick you can’t get stock through it or into it. Therefore it affects the property’s viability by restricting their grazing or access to grazing. There’s a place for burning done under proper management".

Despite all precautions it is still possible for fires to get out of control and do a great deal of damage. In 1982, for example, a fire originating on the Haldon run spread and destroyed 2,000 hectares of land on the Waitangi run (Sheridan, 1995: 74).

According to the report of the Parliamentary Commissioner for the Environment on tussock burning there is very little burning now carried out in the Mackenzie Basin (1995: 11). Permission to carry out burns has to be obtained from the Canterbury Regional Council under the Resource Management Act 1991 legislation. In applying for a permit landholders have to supply the following details: property information, neighbouring landholders, fertiliser and burning history of the area to be burnt, geographical details including aspect, altitude, slope, soil type, current vegetation and plans for the management of the area after burning (Parliamentary Commissioner for the Environment, 1995: 36). The applicant also has to
supply written approval from those who are likely to be affected by the proposed burn. The decision is made on the basis of the information supplied by the applicant, in conjunction with the Regional Council's land use inventory and land use capability maps, though the council does have the ability to request further information as it sees fit. According to the report of the Parliamentary Commissioner for the Environment, applicants sometimes do not supply full or even any details of the potential ecological impacts of burning, indicating a lack of knowledge about the environmental implications of burning (Parliamentary Commissioner for the Environment, 1995: 37).

3.2.3 Hieracium

Hieracium has become the most serious weed problem in the Mackenzie/Waitaki Basin. Hieracium was present in the high country by the 1940s and by the late 1970s had spread over large areas, increasing both in abundance and geographical range. In some areas of the Basin hieracium is now the dominant plant species. Local landholders say that in the last ten years hieracium has got out of control.

There are various ideas about the causes of the spread of hieracium. One theory is that hieracium species are “aggressive weeds which ‘knocked out’ healthy native tussock and introduced pasture grasses” (Parliamentary Commissioner for the Environment, 1991: 19). Another, more widely held theory, is that hieracium species have spread as other plants such as native tussocks and introduced grasses, more desirable from a farming point of view, have been knocked back by drought, declining soil fertility, grazing (by both rabbits and stock) and burning. Hieracium is very competitive in short and sparse vegetation environments and rapidly colonises bare ground (Parliamentary Commissioner for the Environment, 1991: 19). The Working Party on Sustainable Land Management noted that “if the pressures which have caused change in the grasslands of the high country are maintained, hieracium species will persist or continue to increase” (Working Party on Sustainable Land Management, 1994: vi).

The spread of hieracium has a serious impact on the financial viability of some farms, as well as on farm management practices, through the reduction of the amount of feed available for stock.18 To date the only means available of controlling hieracium is oversowing and topdressing, but this is not a possible strategy on all areas of land, on account of rainfall, topography and the economic costs of establishment and maintenance of new pastures. Recently the possibility of the deliberate spread of a rust, found naturally on hieracium plants, has been raised. However, monocultures, such as hieracium is in some areas, are more prone to collapse than ecosystems with diverse species, and could easily be destroyed by the introduction of disease, parasites or the advent of adverse ecological conditions. Because of this there is concern in some quarters that the deliberate removal of hieracium (where it is the only plant cover) without the introduction of other plant cover could result in erosion and further degradation of the land. Various other introduced plants have also become a nuisance when uncontrolled, including gorse, broom, thistles, willows, lupins and briar for example.

3.2.4 Rabbits and Rabbit Control

The environmental problems considered above are very important, but important also, especially in the minds of landholders, are issues associated with rabbits and rabbit control. The detailed coverage provided in this section reflects the topic’s concern to landholders.

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18 The spread of hieracium is not such a serious problem for tourism (except eco-tourism) and recreation interests, but is a problem from conservation and landscape perspectives.
“... high country dwellers as well as soil erosion experts regard the rabbit as a major cause of land denudation” (Vance, 1980: 100-101).

“Rabbits have taken the country over on several occasions, and it’s normally when there’s a deficiency of capital to control them and a deficiency of manpower. .. It’s caused major ecological damage”. (Landholder.)

Rabbits were introduced into the Mackenzie Basin in the early 1860s. Apparently 12 rabbits were brought by Alexander Begg to Benmore Station (Vance 1980: 101). At first the rabbits were welcomed and were established on islands in the lakes and rivers for their protection - the owners of Haldon Station apparently offered a reward for information leading to the conviction of any person who killed their rabbits (Vance, 1980: 101). By 1882, however, the rabbit had become a pest causing devastation in some regions. The first rabbiters in the Basin were employed on Haldon Station in 1878 (Vance, 1980: 102). By 1888 rabbits had become a pest across the entire Basin.

In 1882 the Rabbit Nuisance Act was passed, which enabled the Crown to force runholders to control the rabbits on their property. There was some opposition to this act, as they felt that the rabbits could be controlled through sport shooting. But by the 1880s many runs employed rabbiters as part of their permanent staff. Runholders initially used oats poisoned with phosphorus to kill rabbits, but the bait also killed many native and introduced birds. This practice declined as rabbiters were employed. The rabbiters used strychnine and trapping so that they could harvest the skins.

Another method of control was the rabbit fence. The rabbit problem was greater in Otago than in the Basin, and to stop the spread the government constructed a rabbit fence running “from the Waitaki river, opposite Kurow, up the Hakataramea Valley and over Grays Hills to the Tekapo River; across country to Lake Pukaki; then for 32 kilometres up the eastern side of Tasman Valley, terminating at Rock Etam, six kilometres beyond Mount Cook Station Homestead” (Vance, 1980: 102). However, it proved impossible to maintain the fence and the rabbits got through.

Ferrets, stoats and weasels were also introduced in the 1880s in an attempt to reduce rabbit populations. However, they appeared to prefer bird eggs and babies to rabbits, and had more of an impact on both native and introduced birds (including domestic poultry) than they did on rabbits. The first attempt to introduce a biological control for rabbit control occurred in the early 1880s when it was mooted that a virus causing “liver rot” be introduced. However, this was rejected by the government on account of public concern about the introduction of diseases into the country (Vance, 1980: 102). Some of the public pressure against rabbit control was because of the money earned from the sale of their meat and skins. In 1895, for example, New Zealand earned £150,432 from the export of rabbit products (Gillespie, 1958: 353). Despite this, the government continued to try to control rabbits and prosecuted landholders for failing to control rabbits.

The Government set up the Rabbit Destruction Council in 1948, and later passed legislation in 1957 which outlawed the sale of rabbit skins and rabbit meat. Section 121 of the Agricultural Pests Destruction Act 1967 prohibits sale of fur or meat from rabbits. The aim of the act was to promote eradication rather than farming of rabbits. As one landholder noted,

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19 By 1878 the rabbit problem had forced some Otago runholders off their farms (Livingstone, 1993: 1).
"In the 1940s many landholders made more out of rabbits than they did out of sheep". Under the Biosecurity Act 1993 re-commercialisation of rabbits is possible. This worries some observers, who are afraid that this will encourage landholders not to control rabbit populations and furthermore that there will be increased resistance to the introduction of biological rabbit controls from commercial rabbit interests (Working Party on Sustainable Land Management, 1994: 50).

The Mackenzie Rabbit Board was established in 1949, and worked to control rabbits using rabbitters and drops of carrots poisoned with arsenic. The success of measures to control the post-war explosion in the rabbit population led to a decline in the number of skins exported from 13,471,298 in 1948 to 662,238 in 1955 (Gillespie, 1958: 353). Gillespie wrote in 1958 that "the controlled destruction of rabbits has so reduced them that in a whole day's journey through formerly infested areas, one is rarely seen" (Gillespie, 1958: 353). By the late 1950s the rabbit problem was largely under control.

"During the 1940s there was a great struggle on this land with rabbits. Rabbits were completely out of control, rabbits did tremendous damage to the land. The land was absolutely devastated by 1949, and at that stage Rabbit Boards were established and rabbits were progressively brought under control during the 1950s. It really took the land 25-30 years to recover from the devastation caused by the rabbits. It was the establishment of the Rabbit Boards and the decommercialisation of rabbits which led to a very level of control though the 1950s. It was only after that that it was possible for landholders to make progress with the establishment of pasture, with aerial oversowing, with topdressing".

In the 1980s rabbit control assistance was removed in line with the general removal of subsidies to farming. The result of this was a reduction in the amount of rabbit control done by landholders:

"Slowly over the years the cost of pest control increased, and returns from farming decreased so by the 1970s, the late 1970s, the rabbits were again out of control. ... Then we had a change of government and SMPs became a thing of the past, so then we were left with no subsidies and the need to control rabbits, and in many cases without the capital to do it. Landholders were unable to control rabbits. On this property we borrowed money to control rabbits".

Rabbit numbers exploded in the 1980s across the basin:

"I estimated we were carrying somewhere in the vicinity of between 200,000 to 250,000 rabbits at that stage, which equates to about 20,000 stock units of rabbits, and about 4,700 domestic stock units to create the income".

Landholders say that one reason that the rabbit population explosion was the gap between the dismantling of the Rabbit Boards and the establishment of Regional Council systems:

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Under the Biosecurity Act, Regional Councils are responsible for ensuring rabbit control, and have the ability to enforce control on landholders.
"To get their plans and computerised ideas and inspectors up to speed assessing it took three years. That three years was the explosion years. For instance the X block ... should have been poisoned at a six year period. From the time the Rabbit Board amalgamated and went to the Regional Council it didn’t get it for ten years and therefore we had those extra breeding seasons and they were good breeding seasons, and we just had to destock”.

The explosion in rabbit numbers had serious consequences for farm management. Some landholders had to reduce stock numbers and it became clear that the costs of rabbit control on some properties was unsustainable:

“Our land cannot sustain the cost to kill the rabbit. We are running about one stock unit per five hectares. At best you’re looking at $45.00 return off that stock unit. It’s costing from memory $30.00 a hectare or thereabouts to kill the rabbits. We’re getting $9.00 a hectare at best from the stock off it, so we’ve got a shortfall of about $20.00 a hectare”.

“...then we had the rabbit plague come on us... we tried to do as much as we could except that the wool prices went below $9.00 and it wasn’t viable”.

Landholders failed to control rabbits for two reasons: first, they simply were unable to afford it, and second, they were not used to taking responsibility for rabbit control and saw it as a government obligation. The Commissioner also noted in 1991 that many landholders did not wish to change their farming systems, but wanted a method of rabbit control that enabled them to continue traditional pastoral farming (Parliamentary Commissioner for the Environment, 1991: 25).

The Rabbit and Land Management Programme (RLMP) was established by the government in 1989 with a budget of $16.4 million. Regional councils, district councils and landholders contributed $10 million. The programme ended in 1995. One of the aims of the programme was the encouragement of more sustainable land uses. The responsibility for implementing the RLMP stood with the regional councils, which had inherited the responsibility for rabbit control from Pest Control Boards.

The programme was established by the Government to help landholders with the costs of conventional control methods for rabbits for a period of five years after the application to introduce myxomatosis was refused. The idea was that within that five year time span landholders would develop alternatives in land management that would make the costs of rabbit control on their properties sustainable in the longer term:

“The idea behind the Programme was to provide a ‘window of opportunity’ for necessary changes in land management through taxpayer and ratepayer subsidy of conventional rabbit controls, so that land use in the marginal lands could move toward a more sustainable form” (Parliamentary Commissioner for the Environment, 1991: 23).

In the first year of the programme the aim was to kill as many rabbits as possible, to reduce population levels to an extent that pastoral farming and other land uses would be possible. This was reasonably successful. On the other hand the property plans which were designed to lead to sustainable farms were less successful, on account of the limited time available and caution on the part of landholders, who were reluctant to commit themselves to plans which

“We couldn’t put our own input into it [the RLMP] even though it was subsidised, we couldn’t even afford to put our own input into what Regional Council wanted us to do”.

The programme succeeded in reducing rabbit numbers, but was less successful in creating sustainable land management. For some of the most rabbit-prone properties there may be no effective management strategies that are financially viable:

“For Central Otago and the Mackenzie Basin nearly half the landholders in the Programme considered the costs were not financially viable for their properties, and detailed economic analysis in the Mackenzie Basin indicated that about 65 percent of the landholders would not be able to afford the total cost of their Programme share over the five years” (Parliamentary Commissioner for the Environment, 1991: 27).

One area in which the RLMP was successful was in persuading landholders that rabbit control was an integral part of managing high country land, rather than an external problem that hindered management. On many properties the farming system to some extent is organised around rabbit control:

“The farming operation has hinged around the infestation of rabbits and hieracium, and the management is closely linked to both those problems. ... Over the last number of years the surplus funds, cash generated, has been going into fighting the rabbits and to a lesser extent the hieracium. So development wise we’ve been pretty much restricted”.

“In the day to day management I spend a third of my time on rabbits, at least a third of my time. So day to day management is basically hinged around rabbits”.

In general though, from a landholder perspective, though the financial assistance was very useful in undertaking primary poisonings or in the construction of rabbit fencing, the RLMP did nothing to address the longer term problems of rabbit control for landholders:

“It was only a stop-gap measure run by bureaucrats”.

“The government have walked away from any responsibility that they think they had in it, leaving the total cost to the runholder”.

In the Basin poisoning (with 1080, Pindone and burrow fumigating) and shooting are the two forms of rabbit control currently available. The problem with reliance on one or two methods over an extended period of time is the development of resistance, exemplified by bait shy and gun shy populations. 1080 is the most commonly used poison for large-scale poisoning operations. Usually it is applied either to carrots or oats, and is generally very effective (Livingstone, 1993: 6) as the table below demonstrates:
Secondary control operations (shooting, burrow fumigation and pindone poisoning) are needed after poison drops, to make the most of the operation and to guard against the development of poison shy populations. Rabbit control costs are high: hunting operations cost between $25-$30/ha, while aerially applied 1080 poison drops cost between $14-$23/ha (Livingstone, 1993: 5), and impose a considerable burden on the farmer.

Biological controls on rabbits have been advocated several times. Last century the introduction of liver-rot was promoted and rejected. Myxomatosis has been advocated by landholders as the solution to the rabbit problem several times, but has proven to be unacceptable to the wider public, to a large extent on animal welfare grounds. The Working Party on Sustainable Land Management state that “urban people” did not understand the devastation rabbits caused, and that this lack of understanding of the farmer’s perspective was exacerbated by the place of the rabbit in the New Zealand psyche: “The image of the rabbit in our culture (Easter Bunny, Watership Down, Beatrix Potter) is believed to make it difficult for those who have not experienced at first hand the devastation these creatures can cause” (Working Party on Sustainable Land Management, 1994: 76). However, there is opinion among landholders that the public opposition to myxomatosis was the result of incorrect information about the virus:

“There was a PR campaign against it, and there was a lot of mis-information floating around out there. The media did a really bad job of it. They did a good job as far as they were concerned. They obviously didn’t want it in. The perception that it is cruel is quite wrong. The public got up in arms and the public stopped it. It was political pressure”.

Currently an application for the introduction of rabbit calicivirus (RCD) is being processed, and many landholders in the Basin are pinning their hopes on its success. Landholders fear for the future of farming if calicivirus is not introduced:

“The great tragedy if this happens is that the land again will be destroyed by rabbits. If rabbits make it uneconomic to farm the area and landholders leave the land it won’t solve the rabbit problem, it’ll only make it worse. Within time the government will be obliged to take action because under the GATT agreement if New Zealand’s environment is perceived by our trading partners overseas to be deteriorating these trading partners will use that as a reason for excluding New Zealand produce”.

There is a feeling amongst landholders that calicivirus will arrive in New Zealand, either deliberately or accidentally:
"I think it will probably come accidentally or through a controlled introduction. A controlled introduction is obviously the best scenario."

"It will either be released correctly or it will eventually appear anyway. But there's no choice now."

However, while RCD would present a window of opportunity for land recovery by decimating rabbit populations, it would not eradicate the rabbit completely, and follow-up controls would still be needed:

"It won't solve it [the rabbit problem], it's just another tool that we desperately need. All the tools we use at the moment are very expensive ones. This one is a cheap way of perhaps getting rid of some of our costs, but there will still be costs associated with rabbits."

There is opposition to the introduction of calicivirus, on animal welfare grounds, on the grounds of unintended consequences (that the virus may end up causing more problems than it solves), and on the damage to New Zealand's clean, green image. There is concern amongst landholders that the application to introduce calicivirus will be declined, as was the earlier application to introduce myxomatosis, because of public opposition. From a high country farmer perspective this is one more instance of the way in which outsiders who do not understand or appreciate their situation are able to determine what happens to them:

"I feel that the politicians will try to delay the introduction [of calicivirus] until there is sufficient public opinion against it, and they will then use public opinion as the reason for not introducing it."

Currently rabbit numbers in the Basin are increasing on many properties, primarily because landholders are unable to afford the costs of control (and for some because they are pinning their hopes on the success of the application to introduce RCD):

"We've got another explosion on the way at the moment. We've been averaging $20,000 a year in the last three years on rabbits alone. That's money we can't afford to put into anything else."

Soil degradation, erosion, hieracium and rabbits pose serious challenges and limit land use options in the Basin, particularly for farming.

### 3.3 The Land Tenure System and Tenure Review

There have been changes in the way leasehold lands have been administered, and these changes have influenced land use, although the extent to which leasehold tenure has restricted land use change is not clear. In 1877 a Land Act replaced 56 previous statutes relating to land that had been issued by both the Central Government and the Canterbury Regional Government, and was designed to achieve a universal set of rules and regulations for administering Crown Land. Further legislation was enacted in 1892, 1908 and 1924, and again in 1948, the Act under which current leases are held.  

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21 There was a further amendment to the 1948 Land Act in 1979.
Originally leases on runs were auctioned off to the highest bidder for a set period, and on the expiry of the lease were again put up for public auction or, in some cases, ballot. When the Mackenzie Country leases expired in 1912 the government realised that insecure tenure discouraged lessees from improving their runs and encouraged them to extract every last ounce of production from the land during the period of their tenure. So in 1913 the Land Laws Amendment Act was passed which gave the lessee the right to renew the lease at the end of the current term. In this century there has only rarely been the opportunity for leaseholders to freehold land, and very few have taken up the option when it was available.

Currently, sheep runs in the Basin are generally held as Crown Pastoral Leases under the Land Act (1948), which was enacted to control erosion and degradation in Crown lands. Some are held as university endowment leases, and a few are freehold properties. Under the provisions of the Land Act (1948) the lessee has many of the same rights as a freeholder: trespass rights (which means that the public does not have right of access to Crown Pastoral Lease land), and rights of exclusive occupation - “in effect the lessee is the owner of the land during the chunk of time during which the lease runs” (Corry, 1989: 14). Leaseholders also own all improvements. These leases also contain a 33 year right of renewal, with a rent review every 11 years. Annual rents are set as a percentage of the unimproved value of the land. The conditions of the leases aim to give the runholder security of tenure, in order to encourage good husbandry (Land Settlement Board, 1980: 13).

There are also conditions to the leases: while lessees have the right of pasturage, they do not have rights to soil or water, and must apply to the Commissioner for Crown Lands for permission to disturb these (e.g. activities such as dams, tracking, firebreaks etc). They are also subject to restrictions on grazing, burning, development and change of land use. Basically the lease is a pastoral lease, and any activities aside from pastoral farming need to be approved by the Commissioner of Crown Lands. The aim of these restrictions is to protect soil and vegetation values. There is also a “good husbandry” clause which requires lessees to manage their property well.

Pastoral Occupation Licences are given for land where renewable leases are unsuitable, for example where land is being surrendered for soil and water conservation purposes. These licences can be for up to 21 years, but are often only issued for five year terms, with no right of renewal or freehold (Land Settlement Board, 1980: 13).

Tenure systems have had considerable impact on land use. The earliest non-renewable short term leases disposed lease holders to exploit the land, while the Land Act (1948), with its emphasis on pastoralism, may have contributed to the promotion of what the Commissioner of Crown Lands called a “pastoral monoculture” (1994: 20), a system which proved to be vulnerable to less favourable conditions, both ecologic and economic.

It has been said that the aims of the leases, in terms of environmental protection, have failed, as evidenced by the extent of ecological degradation described earlier. The Parliamentary Commissioner for the Environment has stated that:

“The current management framework for Crown pastoral lease lands, although well intentioned and successful in encouraging pastoral development, has nonetheless been unable to protect the Crown land resource from degradation
over many thousands of hectares” (Parliamentary Commissioner for the Environment, 1991: 33).22

“There is a clear need to allow greater flexibility in the land uses permissible under pastoral leases and licenses. Decisions on, for example, agroforestry or plantation forestry could be a matter for the lessee and Regional Council planners rather than the Commissioner of Crown Lands” (Parliamentary Commissioner for the Environment, 1991: 53).

Leasehold has, according to some, hampered the development of alternative land uses:

“Pastoral leasehold tenure, established under the Land Act 1948, has impeded the development of alternative land uses, it has fixed the boundaries of properties and has blurred the accountability for resource management despite the requirement to maintain good husbandry under pastoral leases. Without the restriction of pastoral leasehold tenure, existing businesses could restructure, new land-uses could be adopted more freely, and landowners, be they public or private, would be fully accountable for maintaining the resources in their care” (Working Party on Sustainable Land Management, 1994: vi).

Moreover, leasehold tenure may have contributed to the expression of conflict of interests between farming, conservation and recreation groups; perhaps if the land were freehold non-farming interests would not have the same power to challenge farmer control over the land? One landholder said that he freeholded his property because

“we could see that we were going to be masters of our own destiny if we were freehold. We could farm free of some of the restrictions that applied to leasehold land”.

There is also a broader policy perspective which holds that operation of the market would lead to sustainable land use, and that leasehold tenure is preventing this. The Working Party on Sustainable Land Management stated: “The market process is prevented from finding the best land-uses, or supplying the sizes of enterprises best able to maintain the condition of land resources in the long-term (a situation of market imperfection caused by the pastoral leasehold tenure and the Land Act 1948)” (Working Party on Sustainable Land Management, 1994: 11). The Working Party also noted that tenure reviews “will not necessarily give ecological sustainability or economic viability but they will increase the options for their achievement” (1994: 89). These views are consistent with current government’s views on the role of the state in New Zealand society, where “the government’s stated economic policy has been to release the state’s productive assets for what has been seen to be their more efficient use by the private sector (Commissioner for Crown Lands, 1994: 25).

Some landholders perceive that they would have much greater freedom under freehold and that this would lead to better management:

“The development must leave the land in better shape than it was before we started, so that’s the way we work. We feel that being freehold has allowed us to do that”.

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22 This view is also held by the Commissioner of Crown Lands (1994: 19-21).
On the other hand, other landholders say that they have not really been stopped from doing things they want to do under the terms of their leases:

"Under Landcorp we could apply for it. A field officer would come and inspect it and at the end of the day he'd go back and the Commissioner of Crown Lands would approve it. It's never very difficult that way".

Land use has not been entirely static under existing legislation. There are examples of landholders in the Basin who have planted considerable amounts of forestry, and installed deer farms and irrigation systems, as well as developed tourist ventures (e.g. Glentanner Park) under the provisions of the Land Act (1948). Furthermore, the Land Settlement Board stated in 1980 that it would "give sympathetic consideration to proposals for diversification both in stocking and land use in the high country which are compatible with wise land use (Land Settlement Board, 1980:31). Conservation and recreation sources argue that landholders have not been constrained in their management by the Act at all, and that the provisions of "good husbandry" have not been enforced. A report from the Commissioner of Crown Lands also states that legal opinion is that the Commissioner may be constrained in restricting burning and cultivation as the stated intent of the Land Act (1948) is that the land is to be used for farming and that there are really few restrictions to alternative land uses (Commissioner of Crown Lands, 1994: 20-22). The extent to which leasehold tenure has in reality restricted land use change therefore remains unclear.

Currently a process of land tenure review is under way. This review is being carried out under the provisions of the Land Act (1948). Land tenure review can be initiated either by the runholder or the Crown. As a result of the 1982 Clayton Report Crown Pastoral Lease land was categorised for tenure review purposes into three types: farmland, which could be freeholded, conservation land, which would become part of the conservation estate, and restricted use land, which would be retained by the Crown and leased out for a variety of uses. Following this report a procedure was developed to review the tenure of particular properties. The procedure is essentially a series of negotiations between the Crown and lessees, and other interested parties (such as Kai Tahu, conservation and recreation groups) through which the land is divided into the categories described above. Tenure review is a complex and lengthy process and to date no tenure reviews have been completed in the Basin, though many landholders have applied. One of the reasons that landholders are applying for tenure review is that there is a feeling that their control over leasehold land is not as secure as it once was:

"There's a sense of insecurity on crown land now, where there never was before, because it has always been recognised as good as freehold".

There is also a view among landholders that the aim of the government in instituting the tenure review process is to "get out of the pastoral leases because the administration cost far exceeds what they get in revenue". Among landholders there are differing views, both positive and negative, about leasehold land tenure:

"There's a mixed feeling of who wants the right to freehold land. You get the landowner in the real gorge run country. They aren't concerned about freeholding because if they get the right to freehold they'd have to give a fair bit away to conservation. A fellow further out on the Eastern part of the basin, he could freehold the lot. There's differing opinion, even in the landowners".
“On some properties what they’ve got [leasehold tenure] will be better than a freehold option and DOC taking over large chunks of their farm”.

The review of the land tenure system is considered by many in the Basin to be one of the key factors that will influence land use in the future:

“Land tenure or land administration will be one of the biggest things. It’s going to cover a broad spectrum of bodies, local government, conservation, whatever... people who have an interest in it. I think that will be one of the big issues”.

“Land ownership is going to be the biggest factor [in land use change], when they get that resolved. It’s restrictive at the moment, well, not so much restrictive, but it’s impeding any real changes. Until it’s sorted out you won’t get the forestry growth...”.

It is considered by the Crown and by lessees that land tenure review, under which landholders will acquire freehold of parts of their runs in return for surrendering other parts to conservation and recreation interests, will provide flexibility in managing their properties, as it would allow an expansion of land uses into other forms of primary production as well as tourism. Furthermore, and perhaps most importantly, it would allow subdivision. Some landholders are pinning their hopes on tenure review and freeholding:

“If it was freeholded you could go to the bank and they’d be quite happy because if the bank said, well, you’re not doing a good job, you’re going to go bankrupt, they can go and put it on the open market whereas they cannot do that with pastoral leases”.

The tenure review process is also supported by DOC and recreation interests, as they consider that it will ensure access to the high country and appropriate management. There is, however, a problem with the future of land that is neither suitable for farming or for conservation, because it has been so degraded. DOC is concerned that they will acquire responsibility for these lands without adequate funding for management.

New land legislation (the Crown Pastoral Land Bill, 11) designed to replace the Land Act (1984) has been introduced into parliament. The aim of the Bill is to facilitate the tenure review process. Under the terms of the Bill “land capable of productive use” will be available for freeholding. The Federated Mountain Clubs oppose Clause 20 of the Bill which allows the freeholding of productive land, rather than farmland as is the case in current law. This opens the way for land with other than farming uses to be freeholded, land that may have high values for tourism for instance. FMC is concerned that this will lead to the development of exclusive hunting and fishing ventures which will limit public access to these resources. The bill also contains clauses which seek to safeguard public interest in the high country in terms of access and conservation.

3.4 The Planning Framework

The opportunities and constraints to land use and land use change are structured by changing government organisation, policies and legislation among other factors. In recent years fundamental changes have been made to the context in which land use planning occurs. The
most important pieces of legislation were the Resource Management Act (1991), which placed “sustainable management” firmly at the centre of planning and development, and the Local Government Amendment Act (1989) under which districts and regions acquired greater responsibility for land use planning. Currently Councils are producing plans which will determine the possibilities and opportunities for land use change for the next ten years. The Biosecurity Act 1993 which controls pest management also has implications for land use in the Basin.

3.4.1 Local Government

In 1989 legislation was passed which radically altered the way local government was structured and redefined its aims, responsibilities and operating methods.

The number of regional councils was reduced from 22 to 14. The boundaries of the original councils related to water catchment areas and their major role was in resource management. Under the restructuring the Regional Councils are required to manage the regions’ natural and physical resources in an integrated way, with particular attention being paid to soil conservation and water management. They are responsible for regional planning, civil defence and maritime planning, and they took over the functions of the former Catchment Boards, Pest Destruction Boards and Noxious Plant Boards. The Basin now comes under the jurisdiction of the Canterbury Regional Council.

The number of territorial authorities was reduced from 204 to 73, in a series of amalgamations which were bitterly opposed in many cases. The new territorial authorities were responsible for many of the functions formerly attended to by local councils, including roading, water supply, sewage and rubbish disposal, parks and reserves, building inspection, land use planning and subdivision of land. There are two district councils which have jurisdiction in the Basin, the Mackenzie District Council and the Waitaki District Council. The boundary between the councils is the Ohau river, just south of Twizel. This division goes back to earliest Pakeha settlement when the Ohau River was the boundary between Canterbury and Otago. Under local government restructuring in 1981, the Mackenzie District Council was one of the few councils that retained its former boundaries. The Waitaki District Council was created through the amalgamation of Waitaki County, Waihemo County, Oamaru Borough and part of the Silver Peaks County.

The Mackenzie District Council area covers the area around Fairlie as well as the Northern portion of the Basin. The two areas are regarded by people in both areas as being quite distinct, with different interests:

“There’s the Opua Dam, of course. That’ll be a big effect on that part of the district. I don’t tend to think of them as the district, that side of the [Burkes] Pass is their bit”.

The situation is similar, though more difficult, in the Waitaki District Council; people have a sense of attachment and belonging to their old county and there is suspicion and concern that their interests will be overlooked or ignored:

“That’s where I think a lot of local governments have difficulty because that guy on the other side of the table has his little patch, doesn’t know anything about the other patch, and doesn’t want to know about it”.

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District councils have a very important role to play in changing land use, as their District plans determine to a considerable extent how land is used locally. Currently both councils are writing their first plans under the Resource Management Act 1991.

3.4.2 The Resource Management Act and District Plans

Up until 1991 land use was controlled at local level by District Councils using the rules and regulations of the Town and Country Planning Act 1977. This act focused on regulating and/or promoting particular activities, with zoning as the key method of regulating land use. The Resource Management Act (the RMA91) was passed in 1991, and aimed to integrate the management of New Zealand's natural and physical resources. The Act was designed to promote sustainable management. The focus of the RMA91 is on the effects of certain activities, rather than on activities themselves. The responsibility for the implementation of the RMA91 has largely been devolved to regional and local authorities. Regional and District plans are the local expressions of the RMA91, and are required to promote sustainable management of resources, including land. Land use, or more specifically, the effects of land use, are primarily the focus of district plans. The plans are also expected to reflect local, or community, aspirations and councils are required to go through an extensive consultation process to meet their statutory obligations. The process of writing a plan is thus lengthy and complicated.

Section 5 of the RMA91 outlines the purpose of the act, and provides the definition of sustainable management:

"5. Purpose

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

(2) In this Act, "sustainable management" means managing the use, development, and protection of natural 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;

(c) Avoiding, remedying, or mitigating any adverse effects on the environment."

Under Section 6, planning authorities, must also "recognise and provide for" the following:

"(a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;

(b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;

(c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;"
(d) The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers;
(e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.”

Under Section 7 of the Act, they also must pay “particular regard” to the following:

“(a) Kaitiakitanga (exercise of guardianship);
(b) The efficient use and development of natural and physical resources;
(c) The maintenance and enhancement of amenity values;
(d) Intrinsic values of ecosystems;
(e) Recognition and protection of the heritage value of sites, buildings, places, or areas;
(f) Maintenance and enhancement of the quality of the environment;
(g) Any finite characteristics of natural and physical resources;
(h) The protection of the habitat of trout and salmon”.

Under the Resource Management Act 1991 District Councils are required to prepare a district plan. The aim of the district plan is to enable the council to fulfil its obligations under the Act and thus to accomplish the objectives of the RMA.

District plans are typically based around issues statements, which address the key resource management questions in certain areas or associated with particular activities in the district. For each issue there are objectives, which are the desired results for that area or activity; policies, which describe the ways in which the objectives will be accomplished; and rules, which is how the policy goals are achieved.

Under Section 8 of the RMA91 councils are required to take into account the principles of the Treaty of Waitangi. Particularly the council must:

“recognise and provide for ... the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga”(s.6(e))

“have particular regard to ... kaitiakitanga (the exercise of guardianship, including the ethic of stewardship based on the nature of the resource itself)” (s.7(a)).

Activities are classified under the Act as being: permitted; controlled; discretionary; non-complying; or prohibited.

Permitted activities are allowed without a resource consent, providing they comply in all respects with the conditions specified in a district plan.

Controlled activities require a resource consent. They must comply with any standards and terms specified in a district plan and will be assessed according to those matters in the district plan over which a council has reserved control. The council must grant its consent to a controlled activity, but in granting its consent may impose conditions relating to those matters specified.
Discretionary activities require a resource consent, and may be subject to standards and terms specified in a district plan. Activities may be designated as "discretionary" where there is potential that they may not be suitable in all locations; or where the effects of the activity on its environment are so variable that it is not possible to prescribe appropriate standards and terms to cover all circumstances in advance of an application. Alternatively, activities may be listed as permitted activities, but cannot meet all the conditions specified in a district plan, in which case they become discretionary activities. District plans may indicate matters over which a council will limit its discretion in considering a discretionary activity. The council may grant or refuse consent to a discretionary activity and, if granting consent, may impose conditions.

Non-complying activities are those which contravene a rule in the district plan. A resource consent is required for a non-complying activity. The council may grant or refuse consent to a non-complying activity and, if granting consent, may impose conditions.

Prohibited activities are those which a rule in the Plan expressly prohibits in the District or a particular zone. No application may be made for such activities and no resource consent will be granted.

Resource consents are required for any activity that is controlled, discretionary, or non-complying. Application procedures are specified in the RMA91, and include the possible requirement for public notification, and public hearings. The requirements for application for consents, and the costs involved, have become the focus of much critical comment.

There are constraints to the potential achievement of sustainable land use under the RMA91. First, existing use rights make it difficult for councils to change current practices, even if those practices are non sustainable and have deleterious impacts on conservation. Section 10 of the RMA allows for land uses that contravene rules in district plans if that use was established and legal prior to the advent of the plan. Second, given local control over the writing of district plans, there is the possibility that councils will be unable or unwilling to make rules that would be unacceptable at local level. The Working Party on Sustainable Land Management notes that this is a potential problem. Councils may be "vulnerable to threats from a small group of ratepayers", and that as a result may avoid "tackling contentious issues" (Working Party on Sustainable Land Management, 1994: 80).

Furthermore, Cocklin and Fureseth (1995) in their examination of the policy statements of regional councils under the RMA, note that the West Coast Regional Council which represents an area with difficult and pressing social and economic problems in terms of employment, population decline, income levels and so on, places much more importance on community and social factors than do councils in richer areas. In this situation, given community control, there is the possibility that longer term ecological sustainability may be sacrificed for shorter term economic goals. The wording of the purpose of the RMA91 is ambiguous in the relative priority it assigns to different factors.

Ironically, the RMA91 is now perceived by many landholders in the basin to be a significant obstacle to land use change. A great many negative comments about the RMA91 were made. There is suspicion amongst landholders that the RMA91 is being used by "bureaucrats" for their own interests:

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23 Regional Councils have a greater ability to restrict existing land uses than District Councils.
"It's not as hard as it's made out to be. Some people, especially bureaucrats will use it to their advantage because of the basic layman's ignorance of it... it keeps the bureaucrats in jobs doesn't it?".

Consultants and lawyers are also considered to be taking advantage of the RMA91 to some extent:

"I think they tend to use it [the RMA91] to make it harder. They can streamline it and they have parts of the Act that will allow you to do it, but the consultants and the legal aids tend to make it a wee bit harder, and draw it out a bit further so there's more hours or whatever".  

Though most people said that the intent of the RMA91 was good, many also thought that there were problems with aspects of it. A common criticism and concern was that one objector, often characterised as someone who was an outsider and did not know the true facts of the situation, could object to an application and hold up the process:

"Some things will need to be changed because they'll never be common sense, they'll never work. ... Like if I wanted to go out and put a well down on my property and there was no-one within five kilometres of my property, I'd still need a consent for it. What I find objectionable is that someone in Twizel here can object just for whatever reason and then I would have to go through a hearing process, sitting at a table, explaining why I need the well, what it's for, and having a geological survey".  

"You'll get little Joe Bloggs the tramper at Mt Cook coming up the road and saying "what an ugly looking helicopter and building they've put there". So he'll have a go".  

Some organisations are said to automatically put in objections in given circumstances:

"You'll get objections for setting up on the main highway, Transit New Zealand immediately do it. Just automatically. Because they don't want anything on the main highways...that's going to distract the driver of a vehicle going down the road. If they class it as a distraction therefore it's an accident prone thing. They'll object straight away".  

The costs and time involved in obtaining resource consents are another bugbear for landholders:

"It normally takes 12 months"

There is a perception that it is very difficult for a landholder to obtain a consent alone. The costs of employing consultants and lawyers are perceived as another barrier to applying for consents:

"You'll need to get some legal aid because if you don't have some legal aid it's pretty hard to do it yourself. You seem to have to end up with some legal aid and a consultant every time and they're both expensive people".
3.5 Conclusion

This chapter has documented how soil degradation and erosion, hieracium and rabbits in particular are posing serious challenges to landholders and limit their land use options. Rabbits have again become a particularly severe problem after there were changes in who was responsible for their control. At present there is strong feeling and hope attached by landholders to calicivirus, and they see opposition to it as a further example of outsiders not understanding their situation. The chapter has also considered land tenure, showing that leaseholders, while having considerable rights, also face growing uncertainties, exacerbated by the fact that their land is not freehold. Land tenure review is presently occurring and landholders have diverse views on its merits. To some extent the review process is creating uncertainty and is inhibiting land use change. Notwithstanding the overall stability in land use there have been some notable exceptions. Also inhibiting change, at least from the point of view landholders, is the RMA91. They see the Act as empowering bureaucrats and outsiders who have the potential to object to resource consent applications, and require time-consuming and expensive applications.

This chapter has included landholders’ viewpoints on some of the factors influencing land use and they suggest that insider/outsider dynamics will play an important role in the conflicts associated with land use change, topics to be considered in more detail in a later chapter, after attention is given to landholders’ attitudes towards land.
CHAPTER 4

ATTITUDES TOWARDS LAND MANAGEMENT
AND LAND USE CHANGE

4.1 Introduction

In any attempt to understand the social dynamics among the different groups with interests in land use change in the Basin it is first necessary to understand what landholders are doing by way of land management and in changing their management practices. Landholders in the Basin have distinctive attitudes towards land use and are interested in making changes that they believe are reasonable and possible. A number of changes are being tried, including farming intensification and diversification beyond farming. This chapter reports on landholder attitudes before considering the prospects for land use change.

4.2 Landholders’ Attitudes Towards Farming

There is a variety of aims and objectives amongst the landholders, but the overarching aim of them all is to be able to stay on their land and to continue to farm and live in the high country. Living and farming in the high country is highly valued in its own right as a tradition that ought to continue and be preserved. Most would also prefer to continue the high-country tradition of (comparatively) extensive farming of fine woolled sheep. Amongst landholders merino farming is the most highly valued and desired land use, and new landholders in the area say that they chose to buy properties in the Basin because of the high country system of extensive sheep farming:

“One or two [non high-country farmers] have had sons at Lincoln College and they’ve worked on high country runs as part of their learning curve, and they’ve said, I wouldn’t mind having one of those places. They like the feel of wool, that seems to drag people into merino wool. It’s such beautiful stuff to handle, and if you grow it well it gives you that little adrenalin flow that you’ve done a good job.”

“It’s a very good way of life, it’s quite relaxed. You work hard for short periods of time and then have your lax times as well. ...It’s certainly a marvellous way of life”.

“Pastoral farming on the stations, it’s a way of life, a tradition”.

There is a feeling that the traditional ways of farming were the best ways:

“I think the old Scots shepherd idea of managing and stocking the country wasn’t far out. Very conservative, made a living out of it, weren’t greedy, a bit slow in technology, but they didn’t push it”.

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However, in the current economic and conservation management climate maintaining this tradition is not possible for many landholders and they are being forced to look at alternatives:

"I think most pastoral farmers would wish to continue as pastoral farmers but improve on what they've been doing, produce better quality, improve the land, continue to have more cover on the land, so it would only be economics that would lead us to change course. In fact it seems that we may have to change course."

The ability of some landholders to retain their runs is in question, and this situation will arise for more as returns remain low and costs increase. The ability of many others to make an adequate income from farming wool is under threat:

"With the rabbits building up and the stock going down, you couldn't see the light at the end of the tunnel. No money going into the bank. We'd never worked in overdraft, bar a very small one, for years up until 1990 and then we started getting into substantial overdrafts every year. We couldn't get on top of it. ... We managed it very well until those years and all of a sudden it just fell to bits. There was nothing really we could do about it”.

It was difficult to ascertain exactly how many landholders were threatened with bankruptcy, but several stated that they were under a great deal of pressure from the banks who were suggesting that they ought to sell up. There have been reports of increased pressure from banks, and increased anxiety in the banking sector about the viability of the farming sector. Several farmers said that one of the banks was restructuring and the control of rural accounts was being removed from managers in the local area “who know people and their situations” to outsiders “who don’t understand farming”:

"The banks are putting pressure on, the banks themselves are having pressures put on them. The National Bank has been through a major reconstruction of its rural sector, staff numbers have been slashed. We're now having to deal with bank managers who live further afield, and that doesn’t help because the whole thing becomes impersonal”.

The exact number of farms under threat from bank foreclosure is unknown, but there is a widespread perception that there are a significant number, and people stated that there have been farm sales, which while not mortgagee sales, have occurred because the farmer “could not hold on any longer”:

"Over the last three years there have been several farms sold, and it is believed that some of them were sold because they were under increasing economic pressure”.

Landholders also say that the incidence of this will increase:

"A lot of people will end up walking off properties, it hasn’t been seen yet”.

The decline in returns for wool is perhaps the single most important factor promoting land use change among landholders in the basin, but there are other causes, notably the challenge to the farming status quo from the environmental lobby and the state bureaucracy (in the form of the RMA91 as expressed in Regional and District plans) in response to the environmental
degradation of the high country. Landholders perceive that they will have to respond in some way to the challenges from those groups, and see pre-emptive action as being the most sensible option.

There is acknowledgement among landholders that environmental degradation has occurred as a result of farming practices:

“...the development that was going on, especially in the high country, of people working ground or disturbing soils or planting trees for whatever reason on the better soils and upsetting the aesthetic value of all the fragile country by doing it. Ploughing up soils and then seeing a nor’wester come along and picking a whole paddock up and dumping in down on the east coast. Whether the end justified the means who will ever know”.

But there is also a prevailing view that landholders are essentially environmentalists in practice:

“New Zealand is very lucky with the type of runholder who owns the land, traditional families who have owned the land for centuries and settled there. Managed to make a living out of it and retain it in the health it is today. There are some isolated pockets where developers tend to think, oh well, I’ll put a paddock of wheat in there rather than quietly oversow it or put a patch of trees right in front of someone else’s view. It makes it a bit disturbing but I think 90% of all runholders would be people who are very very land conscious. They have to, they’ve got no option. If they don’t look after the land it won’t look after them”.

Note that according to this landholder those who do not take care of the land are “developers” while those who do are “runholders”, indicating perhaps that by definition runholders are people who take care of the land and those who are perceived not to look after the land are outsiders in some way. Note also that landholders are perceived to own their land.

While the retention of farms and a preference for farming merino sheep are common aims amongst landholders there is a considerable variety in the methods preferred and/or chosen by individual landholders to achieve this aim. The two key strategies are increasing the efficiency of the sheep operation, primarily through intensification, and diversification into other productive uses. Many landholders are in fact doing (or attempting to do) both.

4.3 Land Use Intensification

Landholders are attempting to change their land uses in a number of ways, including intensification and diversification within farming. Intensification is part of the long-term process that began in 1945.

A common response to the economic problems besetting high country sheep farming, and one that almost all (if not all) landholders are doing to a greater or lesser extent is intensifying their sheep operations. In general there has been a move to a more downland style sheep farming. The aim is to increase the efficiency of the farming operation.
Some farmers have put in irrigation schemes (on-farm storage dams and accessing water from hydro canals) which enable them to farm much more intensively on smaller areas of land, and thus concentrate their farming efforts. This leads to savings in terms of labour and of input costs. There is considerable potential for irrigation in the basin and it is seen as one way of staying on the land. However landholders are constrained by the costs of installation:

"There is irrigation potential on the Omarama plains... quite good soils down there... we're probably going to have to look at it if we're to carry on farming. It's certainly proved that irrigation is the way to go. The biggest problem holding it back nowadays is the capital in setting it up. This is virtually why it's dried up, there's no development".

Intensification programmes include selective breeding to improve wool quality and quantity (the aim for many farmers being to produce very fine wool of around or under 20 microns), pasture development, subdivision and topdressing. In addition, there is greater attention to stock management. A couple of farmers are scanning their ewes this year, for example, and a few also grow fat lambs. Many high country properties also have cattle operations. However, returns from beef are very low and have been for several years. Currently, beef operations do not contribute greatly to income. Some landholders are now planting crops. These include oats, grass seed and sunflowers.

"We work about 150 acres a year, and we undersow a cash crop of oats with grasses and clovers, so we get a cash crop of grain and have the pasture coming away underneath".

One landholder said that he was considering growing barley because demand would increase with the number of down-country properties being converted to dairying. Other land uses tried include deer and goats.

However, there are constraints to landholders increasing the efficiency of their operations. Most of these constraints are economic, with the capital costs of equipment hindering development:

"My equipment is very old, I would like to renew it... but at the moment we just hope that it lasts. I would like to have a tractor with a cab on it, it would make working conditions much more pleasant if it had a cab on it... We have to do a lot more work by hand that could be done by machinery, like cleaning water races. The capital is not there to make our farming operations efficient and they really need to be made much more efficient".

Some landholders are also forced to farm less efficiently than they might like to (or are not managing their properties in the way they would really like to) because they cannot afford to employ the labour necessary to get jobs done:

"A lot of stock work is labour intensive and it would involve the employment of shepherds, musters. Drenching stock on time, that's a typical example, shifting stock on time, all these things make the farm much more efficient, but because we are obliged to operate on a shoe-string, we try and do more work ourselves. ... On this farm I mostly do the work myself and we always seem to be running behind time. Some work isn't done when it should be done and the property is perhaps less efficient because of this. Jobs don't get done, stock
health suffers, and we can see the problem. We can see that the farm is not being run as efficiently as it should be, but economic conditions prevent us from resolving the problem”.

Farming tradition and the high value placed on tradition in the basin is also a significant constraint on intensification. As Hatch (1992) noted, status in high country counties is frequently linked to perceptions of whether landholders uphold longstanding traditions and values. This can inhibit willingness to innovate. Access to information and technical expertise may also be a constraint in terms of new crops like sunflowers. Distance to markets and market uncertainty may be other factors. One landholder said that basin properties are too large to manage with maximum efficiency. Another said that the current focus on diversification misses the point and takes attention away from the fact that many of the farmers who are diversifying, or looking to diversify, are not managing their current operations efficiently anyhow. In effect, they are looking for an easy fix, and a fix from the outside not from them. With the precarious financial state of many farms, landholders cannot afford to make the wrong decision. New land uses are considered in greater depth in Section 4.5 but in the meantime we consider other opportunities available to landowners.

4.4 Diversification Beyond Farming

Diversification is the other main response to the current economic and ecological state of farming in the Basin. Most landholders are trying to think of ways in which they could diversify so that they are not so reliant on the wool cheque for their income:

“The property’s not viable in its existing right just growing wool. It’s viable when wool’s $9.00 a kilo. If we get $9.00 a kilo for every kilo of wool we grow on the place it’s viable. It will pay a wage to me, we can oversow and topdress, keep the rabbits under control and perhaps employ a man... If it’s below $9.00 it’s just not viable so we’ve got to diversify”.

“We’ve just got to keep thinking laterally all the time rather than just thinking sheep, horses and cows all day. Let’s get into the markets kind of thing, try and keep an income coming in”.

The two forms of diversification considered by farmers to have the greatest potential are forestry and tourism. Landholders are understandably wary of undertaking new ventures:

“After experience in recent years people want to be sure that what they’re going into is going to be sure. We went through the goat business, we went through deer, which have been more successful, we went through the blackcurrant boom which was shortlived. The current flavours of the year are ostriches and llamas and alpacas, but we want to see if they have a long term future”.

4.4.1 Forestry

Forestry development in the Mackenzie/Waitaki basin is promoted by landholders, by the Ministry of Forestry (MOF) and by the New Zealand Forestry Research Institute (NZFRI). Forestry development is also supported by the District Council, in that the Council is one of the major forest developers in the area. The New Zealand Forestry Research Institute has
done a great deal of work on forestry in the Basin over time and has trial plots on Ribbonwood Station. Landholders report that it is comparatively easy to access NZFRI research and knowledge.

Proponents of forestry argue that development will provide employment in the district and bring in money. They also argue that it will contribute to the solution of ecological problems in the basin:

“We have on Ribbonwood Station a FRI experimental block of Douglas fir, and work on this block suggests that the ground improves with forestry, nutrients are actually added to the soil, so forestry has a large contribution to make to the restoration of depleted soils”.

“...it’s to enhance the environment we live in, to help build the soils again, and to rejuvenate some of the degraded land”.

Some landholders say that forestry has the potential to provide a solution to the economic problems of the basin:

“I think long term the problems may be solved with forestry, mainly because wood is a more versatile product. Wood, a bit like milk, is a versatile product, a versatile commodity, much more so than wool. Wool is very much at the mercy of fashion”.

“We feel that forestry combined with farming or agroforestry can be a very positive force for rural communities, the creation of employment. It will give an added economic dimension that this country needs to move into the future”.

The benefits of forestry tend to be expressed in terms of what will be good for the land or what will be good for the Basin, not in terms of what will be good for the particular farmer:

“I think forestry’s going to be increasingly important for the economic future of this area, for the future of towns like Twizel. Twizel certainly has tourism, but forestry certainly could add another dimension to a town like Twizel, and it’s going to be important from an employment aspect, and long term from the social aspect as well”.

Note that what landholders typically advocate is agroforestry, not commercial forestry. There is generally agreement among all groups in the Basin that while some forestry is acceptable there should not be “too much”. In particular, there are suspicions about commercial forestry, and some landholders say that the best way to keep commercial interests out is to develop agroforestry:

“Of course if the farmers go that’s [commercial forestry] much more likely to happen. One of the best ways of preventing blanket forestry is probably to promote agroforestry where you have livestock and trees, have everything in balance and harmony”.

Several farmers in the basin have planted trees, though generally only on a small scale, planting small plantations and shelter belts. There are three landholders in the basin who have sizeable forestry developments or are planning them. For most farmers forestry must have ongoing
benefits in terms of income and/or production, as they cannot afford to wait for returns. As a result many farmers plant shelter belts rather than plantations:

“We’re putting up shelter belts and that prevents evapotranspiration, and we’ve actually improved grass cover on areas because of that”.

“Quite a few people are putting in small amounts, shelter belts, the odd small plantation. Forestry on a farm has got to be productive”.

“Trees can also help. Some people put sheep in a plantation of trees after shearing so they have added protection from the weather. With agroforestry with the trees being widely spaced you get good grass growth underneath the trees and this helps the pastoral production as well”.

“You can get an immediate benefit through the shelter belts. It also helps control wind erosion and helps the soil”.

Forestry is also planned by some farmers to provide retirement income in later years, and to increase the value and therefore the viability of the property in the longer term:

“Traditional families will probably do it for a long term thing, for the great grandchildren who are hopefully going to take it on”.

There is opposition to forestry development in the basin, primarily on environmental impact and landscape impact grounds. This includes opposition to agroforestry development. These concerns parallel opposition to afforestation expressed more generally in regard to the high country (see Swaffield (1994)). On the other hand, landholders interested in forestry development argue that the benefits of forestry outweigh the costs and tend to reject the concerns of opposing groups, claiming that forestry developments deal adequately with those issues:

“There have been instances where forestry proposals have been opposed by DOC, by Forest and Bird Society and by the so-called Resource Centre, opposed on grounds that wilding spread hasn’t been adequately catered for, that landscape values would be affected... I feel that [the positive aspects of forestry] have to be weighed against the environmental considerations that are being used to oppose it. Most forestry development takes into consideration wilding spread, it also takes into consideration landscape values”.

“Because there are no forestry programmes in the basin now, they see development like that as being alien to the basin”.

“...a lot of it’s misinformed information that they feel that the forest will be taking over from something that’s already there. They really need to have a look at what’s already there, maybe it’s just hundreds of acres of hieracium which doesn’t really contribute much to the country ecologically”.

Wilding control is one of the central concerns of opponents of forestry. Proponents of forestry are concerned about wilding spread as well, but argue that controlled development of forestry in conjunction with farming is the best solution to the problem of wilding spread.
“Forestry itself can be a very important element in the prevention of wilding spread because if we don’t have forestry in the Mackenzie Basin and we don’t have farming we’re going to end up with a massive forest of the very worst kind. It’ll be a forest of *pinus contorta* and that’ll be a very volatile forest”.

The development of forestry is constrained primarily by the costs of development and the length of time before there are any cash returns. There is also a perception that there are environmental constraints to forestry development:

“Forestry will have its place, but it won’t be the boom thing we have in the North Island. The biggest thing with forestry in the high country ... is the rainfall. There’s not enough water. There is a formula I’ve seen just recently of areas that would be suitable, about a third of the Mackenzie Basin soil types. They are all in the high rainfall area where when the trees grow up they would be aesthetically upsetting to a lot of people because they are going to hide the mountains. The other thing is there is a 60 year cycle for a crop”.

Forestry is thus seen by some landholders as a solution to the economic and environmental problems facing the basin, but not by all. Many believe that there will not be a huge amount of forestry development. One reason for this is that landholders tend to want to farm, not to be foresters and there is a widespread belief that commercial forestry will not become established because of leasehold land tenure and the length of time it takes for trees to reach maturity.

### 4.4.2 Tourism

The development of tourist ventures is an option only available to some landholders. The opportunities are greatest for those located on State Highway 8, the main tourist route linking Christchurch with Mt. Cook, Wanaka and Queenstown.

The most common type of tourism on farms is accommodation, including homestays and backpackers, where shearers quarters are often utilised. One high country station, Glentanner, has taken advantage of its position on the boundaries of Mt Cook National Park to develop a sizeable tourist complex incorporating accommodation, flightseeing, horse trekking and farm tours. Some farmers also benefit from providing helicopter landing sites.

Tourist ventures are seen as only a partial solution to the economic problems of landholders. In terms of the overall deficit in farm income, the income from operations like backpackers is “only a drop in the bucket”. Often the backpackers operations are the responsibility of farm women and they have control of the money earned. Usually this money is used to provide “extras” for the household, and/or used to develop and upgrade the tourist accommodation. Many of the women say that backpacker operations “are not really worth it” when the income is compared to the amount of labour expended. Backpackers are only viable because the labour involved does not constitute an outgoing or expense and is in some sense “free”. However, in the basin, where job opportunities are limited and women’s work is often needed on the farm, and the basic facilities are already established, providing backpacker accommodation is one way of bringing in some extra income. At this level of operation tourism will not solve the economic problems of a farm, and will not solve the ecological and economic problems of the basin as a whole.

*Interviewer: “Is there potential for tourism to solve the economic problems of the farm?”*
Landholder: “It may not solve it completely, but it may help. But only on State Highway 8. Any of the properties away from State Highway 8 are too remote”.

Interviewer: “On this property will it solve the fundamental economic problems?”

Landholder: “It will help, but no, it won’t solve the problem. I think the long term problems may be solved with forestry”.

There are constraints to the development of tourism aside from aspects of location. Not all people want to deal with tourists:

“That’s a personal thing. Unless you’re cut out to deal with people then don’t go into tourism”.

Further, the costs (in terms of capital and labour) of tourist development beyond a very basic level for a particular landholder are considerable. Moreover, the tourist industry can be as fickle as farming in terms of returns.

4.5 Prospects for Land Use Change

Many landholders do not believe that there will be any radical change in land use in the basin in the foreseeable future. This is because most landholders do not really want to change what they are doing in any fundamental way. In general they consider that they are being compelled towards change by forces (economic and bureaucratic) outside their control. What they would most like to do is to continue to farm merino sheep as efficiently and as well as they can. Landholders are also very constrained in their ability to change their use of the land by their current financial problems:

“The market will dictate. Wool prices and ewe prices are depressed. Virtually no confidence in the near future. It will tend to continue farming traditionally as we are”.

“I don’t think there will be a great deal of change to what we are doing now”.

“Change will be slow. I don’t see a vast change although I think that they are getting into a financial position where they will demand it. There will probably be a change of landowner. Where traditionally the run country has stayed in a family for quite a few generations, I think that’s changing a wee bit. Change of owners, you get a change of farming practices. But I think economics will demand it. Something has to change because their land isn’t productive enough to give them a return”.

Hence, while the dire economic circumstances of many landholders and challenges from non-farming interests are prompting them to look for alternative ways of using their land, lack of money and lack of faith in the future mean that while many consider changing they are unable and/or reluctant to take significant action to achieve change.

As a result many landholders are still farming the way they have always done and there has not been a great deal of change in land use over the basin as a whole. Landholders in general say that there is a future for pastoral farming in the high country, if only because they can see no other choice.
One landholder suggested that one of the ways in which high country sheep farming might continue, is as lifestyle blocks (very large ones) for retiring low country farmers:

"With the dairy farming boom a lot of people who have sold their farms into the dairy business suddenly had nothing to do, and a high country farm with a few thousand sheep on it ... I feel the high country could change around a little bit in that way, that the down country farmer who has done well, sold his farm off for a reasonably good price, and deciding I'm not going to sit in Christchurch looking at people going up and down in cars all day, they want to get out and so something. So a high country run would probably be viable for them, something to do".

Another factor in prompting change, albeit unwelcome, is the difficulty perceived by many landholders in transferring high country runs to the next generation. While many sons would perhaps like to take over family properties in many cases it may not be viable given the dire economic straits of many properties (particularly as the older generation need money out of the properties for retirement income). As a result a number of properties in the Basin are on the market.

In some cases sons do not wish to take the property over, seeing greater opportunities in other areas:

"It's a change of generations. The excellent schooling, and technology the way it is, there are so many other opportunities out there for people, who, rather than dag sheep or drive tractors all day, would rather be in the corporate body putting their brains to work".

There is clearly considerable variety of opinion among the runholders on what direction land use ought to and will take, resulting in different decisions by different runholders. Further, different landholders face different constraints and opportunities.

There are patterns among the attitudes of farmers generally (Fairweather and Keating, 1994) and recent research in Geraldine and Temuka has found that farmers have orienting principles that guide how they respond to innovations (Morris, Loveridge and Fairweather, 1995: 23). For example, sheep/beef farmers emphasised profitability and the need to control risk and farm safety. Dairy farmers emphasised increased production, increased efficiency and control by monitoring productions. It is likely that groups of runholders in the Basin also have orienting principles, similarly reflecting to a considerable extent the structure and state of the agricultural sector of which they are part, which influences their responses to innovation and the adoption of new farming systems. A very high value is placed on traditional ways of farming and the traditional high country farming lifestyles in ways that may make innovation unlikely. In contrast, incomer farmers are generally more innovative than some, but not all, of the established Basin farmers. Those farmers who are very interested in farming for its own sake and who enjoy the challenge (for example, two farmers who sold properties they had already developed and moved to the Basin specifically because the land was undeveloped - the frontier approach) seem more able to cope with the situation in the Basin.

There is not much formal information exchanged among Basin farmers. There are occasional field days on farms, organised through the Landcare groups, but these seem to look at particular and unusual things, such as the sunflowers or forestry, not looking at the whole farm operation or at the sheep or cattle operations. In contrast to other farming regions, there
appear to be few discussion groups where the focus is on the farm and its problems, with all the farmers having a visit in turn and all the farmers talking about what that particular farmer could do to improve things on his farm. Basin landholders explain this by saying they are individualists and like to do their own thing. One or two are more outgoing and may serve as sources of information but it is not a general feature and there are few structures to facilitate the process. In fact, as the next chapter will show, the nature of community in the Basin precludes the development of collective problem solving typical of other farming areas in New Zealand.

Traditional conservative farming practices are not a long term option at the moment in the Basin, because of the environmental and economic problem surrounding land use. This is in contrast to farmers in other areas who may have the option of being ‘successful’ non-innovators; that is they can maintain their traditional approach and achieve sufficient financial returns to stay in business. Ironically, it may well be that tradition is actually reinforced when current farming systems are in a state of crisis, when the sector is performing very poorly, and the status quo is known to be unsustainable. There appears to be a significant tendency for landholders under crisis to ‘retreat’ into the apparent security of familiar practices, even when they are aware of the fact that they cannot be sustained.

4.6 Conclusion

This chapter has examined landholders’ attitudes towards land management to show that they emphasise living and farming in the high country while appreciating that economic and ecological changes are forcing them to look at alternatives. These alternatives include intensifying their sheep operations by, for example, using irrigation, pregnancy scanning, selective breeding and cropping. However, intensification is constrained by lack of capital. Diversification typically includes forestry and tourism, the former favourably seen by some landholders although they tend to emphasise agroforestry. Only a few landholders have actually planted significant numbers of trees, and some do not accept that it is a solution to their problems. Tourism is an option for those landholders on tourist routes but it is not likely to significantly affect landholders’ financial situation. Generally, the prospects for widespread change in land use in the Basin are not great. Available options require capital and economic difficulties make it less likely that significant land use change will occur. Landholders’ attitudes toward land use appear to be distinctively conservative. Perhaps most fundamentally, most landholders appear to be traditional sheep farmers who would prefer to retain their lifestyle if at all possible rather than change it radically.
CHAPTER 5
LAND USE DYNAMICS,
CONFLICTS AND COMMUNITY

5.1 Introduction

This chapter of the report describes the major groups involved in or with an interest in land use in the Mackenzie/Waitaki Basin and identifies the nature of community in the Basin. The groups include: landholders (i.e. runholders/farmers), environmental interests, tourism interests, town dwellers, the District Council, the Regional Council, Kai Tahu and Electricity Corporation of New Zealand (ECNZ). Each group will be dealt with in turn. The analysis is weighted heavily in favour of the landholders who number around 60 in the Basin. They are the key stakeholder group in terms of land use change, as they are the people who will ultimately make the decisions about what to do on the land they control and manage. The Department of Conservation is the other major landholder in the Basin, but their aims and land uses (conservation and protection of the natural environment) are clearly defined and are not about to change. Other groups (including DOC) when it comes to land not vested in the Department have an input into land use decisions, but their roles are generally restricted to reacting and responding to landholder decisions and initiatives, and/or developing structures and rules which seek to channel change in certain ways. However, before considering group dynamics and the nature of community it is relevant to consider the sense of belonging to the area that landholders display. Landholders within the Basin consider themselves to be a group with common aims and interests generated from a common history and heritage. However, this belonging does not neatly map onto the area as a whole and there are regional divisions with the Basin.

5.2 Landholder Identity

Perhaps the most central (and obvious) way in which the landholders define themselves as a group and assert that they have interests in common is by their shared farming experience - extensive farming of merino sheep on large isolated properties, most of which are leasehold:

“The only thing that brings the Mackenzie farmers together, [is] we’re mostly merino farmers....”

Landholders also emphasise their unique history and heritage within the high country of New Zealand, including the idea that families give long-term commitment to this kind of farming so that one measure of success is the length of time that a family has maintained its presence in the Basin.

The history of the basin and of families, the pioneering heritage, and a very strong identification with the land and its continuity within a family, are key aspects of high country farmer identity.
“Trying to keep the place in better order than when we inherited it, I guess that’s the ultimate aim. We’re custodians of this land and we derive a living from it. If we look after the land, the better living you will achieve, I believe. It’s better for the next generation”.

Landholders also consider that there are behaviours and attitudes that have developed in response to their history which are appropriate for high country landholders. One aspect of this identity is hospitality:

“Runholders are very friendly people. Because they live in isolation they tend to leave the doors unlocked and the kettle on the bench. Anyone could walk in the door in the early days and have a cup of tea and a feed and a bed, no one thought anything about it. They were quite welcome and that feeling still comes through”.

Another facet of high country landholder identity is the common experience of attending boarding school, which generally occurs at the same few schools in Christchurch, Timaru, Oamaru or Dunedin. Most children of landholders go to boarding school for their secondary education, and some go from age 10 or so. There are very few exceptions to the boarding school rule. Children tend to go to the same schools that their parents did. Boarding school is another aspect of the self-conscious expression of tradition and heritage which is such an important part of runholder identity.

Being your own boss and having control over your own destiny is an important part of the high country farmer identity, but it is a goal that is increasingly difficult to achieve as choice and autonomy are constrained or removed by economic and political circumstances:

“One it [wool] goes out the farm gate you’ve got no control over that anyway. That’s the difficulty of it. ... the decisions you make yourself are either right or wrong. You can moan and grizzle about it, especially something that happens outside the farm gate that affects the decision, but personally you get up in the morning [and say] I’m going to do this or that today. And it won’t be an eight hour day for sure. If it’s a busy time of the year it will be daylight to dark. If it’s a slack time of the year it might be 10 in the morning to about 4.30pm. You make your own decision to suit the occasion”.

Landholders are thus also united by their common experiences of the current farming downturn. All are facing declining incomes, rising costs, and decreased state support. This unity (and a promotion of the feeling that they have to rely on their own resources) was further encouraged by the establishment of Landcare groups under the RLMP. In Landcare groups landholders and other interested parties are encouraged to take group action over their common problems. The prominence given to the potential role of Landcare groups in sustainable land management, in some contexts, suggests that they are expected to provide an important focus for landholder interactions with neighbours, which may in turn contribute to a sense of common identity. Somewhat surprisingly however, the role of Landcare groups did not emerge in this study as a significant element in landholders’ discussions of sustainability. This may be because membership is voluntary and not all landholders are involved. Landholders also focus more on the feeling of unity created by a common sense and a history of isolation. There is also a perception that the district (or districts) are less cohesive than they once were, as a result of increasing individual mobility. Landholders point to the decline in district social life as evidence of this:
“There’s not a great deal of social contact in the district, not like 30 or 40 years ago where there were balls and dances. Most social contact today is probably centred around school activities. It’s probably only on field days that they get together”.

Hence, while the physical isolation of basin dwellers has been diminished by improvements in communications, and the influx of new residents (originally associated with hydro-electric development and the creation of Twizel and now with the tourist industry) among landholders there is a growing sense of social and political isolation in relation to the rest of New Zealand. Landholders have lost their political power and access to resources at the same time as they are under increasing pressure from environmental interest expressed through DOC, the RMA91 and Regional and District Councils. The sense of isolation is currently expressed in the siege mentality talk about bureaucrats. Isolation and a sense of struggle against odds are thus still very important parts of landholder identity, but they are now expressed more as political isolation and struggle against bureaucracy and less (or as well as) as physical isolation and a struggle against nature.

Landholders also recognise that they have commonalities with neighbouring high country landholders:

“We also have a similar community of interest with farmers from the upper Clutha. So in many respects it would make sense for the Upper Waitaki, the Upper Clutha and the Mackenzie Country all to be in the same region. The three districts all have a great deal in common. We’re all major hydro-electricity generation areas, we’re all major tourist areas with Wanaka, Queenstown, Omarama, Twizel, Tekapo, Mt. Cook, and we’re all producers of superfine merino wool”.

This group extends beyond the basin, and includes all of the high country of the South Island.

An interesting insight into changing attitudes is the name used to refer to the people doing the farming in the Basin. Traditionally, the appropriate label was ‘runholder’ but there is a change by some people to ‘farmer’. (In this report we have used ‘landholder’ as an alternative to refer to both labels.) The traditional runholder title provided for a distinction from farmers who were perceived by some as small-scale operators who did much of the physical work themselves. Thus, the runholder title evoked higher status and, historically, greater political involvement and influence. Use of the newer word ‘farmer’ perhaps is gaining popularity because it locates landholders with a broader constituency of other farmers, all of whom have lost access to government. It may also be used to support the idea that landholders are responsible users of land: a way of distancing themselves from association with biological degradation of the high country. If this is true it may well correspond to a change to development of better quality land for more intensive use. However, while some landholders see themselves as farmers, others still see themselves as runholders and value their use of large areas of land, seeing any reduction in occupied area as a challenge to their status.

The Mackenzie Branch of the High Country Committee of the Federated Farmers is the major site where the landholders meet as a group and articulate ‘high country farmer’ responses and attitudes. The Committee presents a high country perspective to outsiders and advocates high country farmer interests in various contexts. Recently the Committee released a promotional

24 The idea of struggle against natural forces is still a very strong theme, nonetheless.
book entitled “Spirit of the High Country: The Search for Wise Land Use” and a video in response to publicity about the degradation of the high country emphasising “the good things that are happening”. The video and book are aimed at secondary school students. The High Country Committee also makes submissions on behalf of landholders at such venues as the Waitangi Tribunal hearings and works to contest the views of environmental and recreational groups. The publications and presentations of the Committee present the high country to outsiders but also support to those within the group by reinforcing their unique identity.

Despite the presentation of the ‘high country farmer’ ideal there is a distinctive tension between individualism and neighbourliness that is part of landholder identity. Landholders do not mix that often, or in many locations. They meet at the Federated Farmers Meetings which are held three times a year, and that is about all. They do not meet very often because of the distance that divides them and because of the lack of a central meeting place. They regard themselves as individualists and tend to keep themselves to themselves:

“They’re very individualistic people, they’re very stubborn and I don’t say that in a bad way”.

On the one hand the landholders state strongly that they are individualists and independence is a highly valued characteristic, on the other, landholders admit to a need to work in together and to support each other to survive. Neighbourliness and helping each other are very important aspects of high country landholder identity. Landholders will work in together on certain projects and in times of crisis such as death or scrub fires, landholders rally round. They consider that they can always rely on each other:

“We try and work together as neighbours, we do musters and when we go past a block we always ring up and say ‘I see there’s half a dozen sheep up there, you must have missed them the other day, do you want a hand to get them’ or something. We work in quite well like that, we have good neighbourly relations. They [people in the old days] had to work together to survive. We still work that way”.

The extent to which landholders work together varies throughout the Basin and is probably more common among “one-man” farmers than among those with staff.

5.3 Regional Distinctions in the Basin

The runholders of the Basin, though they regard themselves as a group in some ways and for some purposes, and act as a group at various times, also express and acknowledge important distinctions within such a group.

One of the major distinctions amongst runholders is by locality. Groups of landholders can see themselves as belonging to different districts: either Omarama, Tekapo or Twizel. Though the Twizel area is now called Twizel it is really from a landholder perspective the Pukaki district. In response to the question, “How many people were in the basin at that stage?”, one landholder replied, “Just five runholders basically” and went on to list them, indicating that for him, “the basin” was in fact the Pukaki area.

There is also division of the basin into “North of the Ohau” and “South of the Ohau”, the Ohau River being the demarcation between the Mackenzie District Council and the Waitaki
District Council, and this division is a very important way in which landholders talk about the basin. People from south of the Ohau ("Omarama farmers") talk about people from north of the Ohau ("Mackenzie farmers") as if they are from a very different place, and in practice have little to do with them - and vice versa:

“They were quite different, quite different attitudes in Canterbury as opposed to Otago”.

Each group regards the other as being in some way from somewhere else. One Omarama landholder said that the basis for the distinction is the old boundary between Otago and Canterbury, and that the differences between the districts result from the different settlement histories. According to this theory the Mackenzie end of the Basin was colonised by people from the Canterbury settlement, people from English backgrounds who had a strong sense of class. In Canterbury a person’s worth was (and is) judged on who they were and who they were related to: "If you’re descended from somebody who arrived on the first four ships you have a social status that other people don’t appear to have". The Waitaki end of the basin, south of the Ohau, by comparison, was settled by people from Otago. The settlers here were either “original settlers” or descendants of people involved in the gold rush and tended to come from Scotland. Among these settlers “what you do is more important that who you’re descended from, what you do with your life is more important”. The distinction is reinforced by patterns of boarding school attendance:

“A lot of it may go back to where they went to school, whether it was Oamaru or Dunedin as opposed to Christchurch”.

Geographical distinctions are used by some landholders to account for perceived differences in farming style and approach that are considered to be prevalent in each area. According to this theory the landholders south of the Ohau are more farmer-like while the Mackenzie farmers are more runholder-like.

Landholders south of the Ohau still consider very strongly that they are from Otago, not from Canterbury. The currency of this view is demonstrated clearly in the discourse surrounding the attempt by Waitaki residents to move the upper Waitaki district (Omarama, Kurow and Otematata) from the jurisdiction of the Canterbury Regional Council to the Otago Regional Council:

“Otago was always our community of interest, we sell our wool in Dunedin, our children were educated in Dunedin, all our business is done through Oamaru. So we do have a community of interest with Otago and I felt it was an artificial division when we were put with Canterbury. ... People in Christchurch really know very little about this area, we almost feel we’re being represented by a foreign power. They’re only too happy to tax us without knowing too much about us”.

In newspaper reports one of the promoters of this change stated that “Waitaki residents felt Otago was their ‘community of interest’” (The Timaru Herald, 4-9-1996) and that the proposed change “recognised historic and continuing communities of interest” (The Timaru Herald, 5-9-1996. The Waitaki District Council supports the proposal (The Timaru Herald, 4-9-1996). Presently the Waitaki District is split between Otago and Canterbury Regional Councils which poses considerable problems in writing the district plan and in making it compatible with both Regional Council plans.
The secession proposal has emerged because landholders are unhappy about the Canterbury Regional Council (CRC) pest rating system proposals which, under the rules of the Biosecurities Act, shifts payment for monitoring and inspection from the general rate to individual landholders. Mackenzie landholders too are unhappy with the CRC system, and the Mackenzie Branch of the Federated Farmers have voted to boycott the monitoring and inspection costs and refuse to pay that portion of their rates. Waitaki landholders did not support the boycott, instead seeking to escape from the CRC. One farmer though said that the secession proposal is stupid, as the Otago Regional Council (ORC) will have to institute a similar system, it is just that CRC has moved faster than the ORC. Geographical distinctions between north and south have also broken down to some extent in more recent times in relation to service provision. The advent of Twizel, which provides services that Omarama does not, means that landholders from south of the Ohau now go north:

"...people round the board table ... on the other side of Burke’s Pass tended to think that the Mackenzie was not that important”.

Other interests will unite particular landholders across this boundary, e.g. common interests in forestry between Ribbonwood and Balmoral.

Note, however that the landholders of the Basin did not join over the succession proposal. The geographical Basin as a whole is not really a local category, and when Mackenzie landholders and residents talk about the Basin they really mean the Mackenzie District Council area. One farm woman said that it really annoys her when people talk about the Mackenzie Basin as a whole. She is from a gorge run, and gorge run people apparently consider the Basin to mean the flat bit in the middle of the hills.

Another distinction relevant to the Basin is how landholders relate to “the other side of Burke’s Pass”. This is a common idiom in which landholders in the Basin talk about difficulties they have with the Mackenzie District Council. These difficulties are blamed on either ignorance of the situation of the Basin by the Council and/or on the perception that more power in the council is held by Fairlie (outside the Basin) councillors/staff and that therefore Mackenzie Basin interests take second place to interests on the Fairlie side of Burkes Pass. Landholders in the Basin indicated that they felt that the Mackenzie District Council was not always responsive to their needs. In the context of rabbit control one landholder stated:

"20 years ago we probably wouldn’t venture north of the Ohau unless we were going to Christchurch”.

Although different types of country present landholders with differing constraints and opportunities, they are all to some extent united by a common experience of burgeoning ecological problems (rabbits and hieracium) and serious economic problems. As one
landholder said: “really farmers problems are the same today whether you live in Omarama or the Mackenzie Basin”.

This section has shown that landholders are linked in various cross-cutting ways. However, except for the case of specific interests, these aspects of social organisation do not tend to manifest themselves in particular groups taking particular actions on a regular basis. Further, landholders do not regularly identify with the Basin as a whole, except when defining themselves as locals in distinction to income.

5.4 Landholders’ Perception of Conflict

There are many groups that impinge on farming, and landholders feel that they are affected in particular by government, environmentalists and the Electricity Corporation of New Zealand (ECNZ).

5.4.1 Bureaucracy and Government

From a landholder perspective “bureaucracy” and “bureaucrats” present a major difficulty. Bureaucrats cause problems for landholders because they do not understand the conditions under which landholders operate, and they neither understand nor care about the realities of farming life. Bureaucracies, it seems to landholders, are increasing in number and complexity. Furthermore in these days of user pays the economic costs of bureaucratic decisions for landholders are increasing:

“We feel that bureaucracy grows like topsy, it grows very quickly. It’s an advantage to bureaucracy to grow because if you are a head of a department with a certain number of office staff underneath you its an opportunity for promotion. Because of the bureaucratic nature of Regional Councils I feel that it’s inevitable that these costs will escalate very quickly. We as farmers on reduced incomes will have to spend more and more money on bureaucracy and less and less money on the essential elements or reinvestment in our farm properties, investment in safety procedures on farms, investment in creation of employment on farms. All these are absolutely essential, but I feel the cost of bureaucracy is not essential”.

Bureaucrats are considered to make bureaucracy more complex because it suits their needs:

“Let’s face it, the people who administer it [the RMA], that’s what they do for their livelihoods. We are farmers first and foremost, and are not trained to steer our way through the minefield that’s been created”.

Furthermore, while they are quick to impose and enforce rules and regulations on farmers, bureaucracies are loathe to accept responsibility:

“It takes several years for the likes of the Commissioner for Crown Lands or government departments or corporate bodies or whoever, like the Regional Council for that matter, to find out who’s going to be responsible for it [rabbit control]. When you want to get money out of them for the likes of rabbit work nobody wants to know about it. But I’ve got to do it under the pastoral lease”.

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The time it takes for things to make their way through bureaucratic channels is also a concern to landholders:

“I guess the problem we see is the slowness of the application, the red tape. Everyone wants to have their say, and rightly so, I have no problem about that. But it’s the time they take to have their say”.

“We also have a bureaucracy problem which seems to be very time consuming to go through, and very involved”.

The costs of dealing with bureaucracy are a major concern:

“It’s beyond a lot of us to be able to fund our way through the maze they poke up in front of us, especially through things we have to go through because of the Resource Management Act”.

There is also a strong feeling amongst landholders that bureaucracies charge too much money for their services, services which landholders feel are unnecessary:

“They charge a fee for administrating. They charge for a chap to come up and inspect. Say I want to oversow and topdress 500 hectares on the hill, he would come up and inspect it, and say how are you going to fence it off, and I’ve got to pay his travelling costs”.

Bureaucrats are also considered to have complicated things:

“In the old days a handshake and a nod was a contract. Nowadays it’s all down in writing and legalese and lot of us don’t understand unless we’re a solicitor or trained as a lawyer. That tends to make us uptight as well, the paperwork. If they can get away with it they put out-clauses in it. We tend to, if we’re going into a contract, take it to our solicitor. Whereas the old days a handshake and a nod, yep, we’ll do that, and get stuck in and do it”.

Basically bureaucrats and bureaucracies are resented because they have (from a landholder perspective) undermined control over their lives and farms: “You aren’t the master of your own destiny”. Bureaucrats and bureaucracies are symbols and demonstrations of the loss of landholder autonomy and of the increasing ability of “outsiders” to impose their views onto the basin:

“They [farmers] have a right to feel the way they feel on some issues too, because they haven’t been listened to. The general public out there I think have tried to impose their values on people in the basin”.

On the other hand some landholders do accept that other groups have a valid interest in the basin and are prepared to accept their input:

“I think everyone has an interest in land use, and rightfully so. Whether it’s people who live in Tekapo, they live there for a reason. Some of it’s to do with their employment, other people just like the environment that they live in. So we have to involve those people and ask them to have some input into how
they would like to see the land utilised as well, and take that into account when we do diversify into other land use options”.

“We’ve got to change our approach also and become aware of other people’s needs and wants. There’s a big learning curve”.

The Canterbury Regional Council (CRC) is the focus of much resentment amongst landholders. It is regarded as one of those bureaucracies who create difficulties, economic and otherwise, for farmers. One of the key areas of conflict between the CRC and landholders in the Basin is rating. Landholders consider that the cost of the rates is too high:

“To give an indication of how it’s affecting this property, in 1995 the general rate applied to this property was $322.00. With the new rates added to it this year it’ll be $1040.00. It’s a very big increase. We feel that it could be the thin end of the wedge. This happened with the pest rates, they escalated very quickly”.

Furthermore they consider that the bureaucratic structure of inspecting and monitoring associated with the pest and weed rate is unnecessary:

“I believe environmental policies are absolutely essential, but it’s the way Regional Councils are using environmental policy to substantiate the build up of bureaucracy. For example, at the moment the CRC is introducing a whole raft of new rates which are aimed at substantiating the bureaucracy. They’re bringing in a weed monitoring rate, a pest monitoring rate, a weed and pest inspection rate, and a bovine TB monitoring rate. These rates cover the cost of bureaucrats coming onto farms and inspecting farms. We feel there’s no need to be told we have a rabbit and weed problem because we already know it. We spend tens of thousands of dollars a year on controlling these things every year”.

When the CRC took over responsibility for rabbit control they rated land according to the level of rabbit proneness: extreme, high, medium, low and negligible. Properties designated as being extremely rabbit prone faced huge pest control rates. After two or three years there was a change to a user pays system where farmers paid the actual costs of pest control:

“Under the rating system farmers paid the CRC administration costs as well as the actual costs of pest control, so by changing to a user pays system they only paid for what was actually done on the property”.

The CRC and their policies are seen by some landholders as contributing factors in the economic crisis some properties face:

“Since the administration of the CRC the property has only shown a profit once, and it has shown some massive losses. I feel they are responsible for the financial base of the property being undermined”.

Landholders at the southern end of the basin in particular seem to feel very negatively towards the CRC and compare the policies of the Otago Regional Council (ORC) with the policies of the CRC. From their perspective the ORC has better policies. They say that this is because
there is little rural representation on the CRC and that the council is dominated by Christchurch interests:

"In Canterbury we have two elements in the region. We have the city of Christchurch, which has a majority of councillors, and we have the rest which is country area. The people from the city of Christchurch see things very much from the point of view of the urban resident, and they feel that the costs should be borne by the rural sector and the costs should be lessened for the urban dweller".

In the Otago region by comparison, landholders considered that rural and urban interests were more evenly balanced:

"The city councillors on the ORC have a much more balanced attitude. They adopt a very realistic attitude. They adopt a very harmonious attitude that we all have to live in this region together and we’ve all got to thrive and prosper together. There’s none of this them and us attitude, and I feel that’s a much healthier attitude".

Landholders south of the Ohau consider that they ought to belong in the Otago region and are currently attempting to secede from the CRC area. This is supported by the Waitaki District Council, as under the current system their district is split between both regional councils.

Once governments, and the National Party in particular, were perceived as the farmer’s friend. This is no longer so, and landholders recognise this:

"I know that in the early 50s and 60s the farmers held a lot of political power in those years, and even in the early 70s. That power has shifted and we no longer hold that power, so to get our point of view across we have to attack it a wee bit differently, and start to position ourselves a wee bit better and enhance our PR image a hell of a lot more than we have in the past".

"Farmers themselves don’t have that political influence any longer. Farmers in the past tended to support the National Party, but that’s no longer the case. I don’t think there will be a uniform farmer vote this election [1996]. The National Party thinks that it has the farmer vote in the bag, it’ll be sadly disillusioned".

Landholders see that successive Governments have passed “bad” legislation, “bad” because it impacts negatively and unfairly on farmers:

"It seems that a lot of legislation that has been passed in recent years has been passed in haste. Well, hasty legislation is often bad legislation, and legislation that can be interpreted in many ways. If there’s ambiguity in legislation it only needs a good lawyer to be able to pinpoint the farmer as being the culprit”.

Farmers state that many of their current economic woes are the result of government economic policy:

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25 In the 1996 general election a member of the Labour Party won the Aoraki seat.
"The economic pressure is partly caused by the high cost of pest control, but partly because all meat and wool farmers are under pressure at the moment because of reserve bank monetary policy and government economic policy. Everything the government does seems to impact on farmers. The tax cuts, for example. Because farmers don't make profits these days, they didn't benefit from the tax cuts. But the government increased interest rates to soak up the inflationary pressures that were created by the tax cuts. The farmers on one hand were paying more in interest, on the other hand the increased interest rates pushed the value of the New Zealand currency up because it attracted capital from abroad and this reduced the value of our commodities on the international market. So farmers had their income reduced and their costs increased by government economic policy. All of the policies of the Reserve Bank and the current government over the last twelve months have impacted against farmers".

There is a feeling that economic policy is designed to benefit "people in Auckland", and does not support farmers and other exporters:

"I feel that the Government sooner or later has to adopt a more realistic monetary and economic policy. It's not only farmers that are being affected by present policy, it's foresters, it's industry, and the tourist industry as well. Some of our major export earners are being hit, the whole export industry, not only farmers".

In line with current political thinking, farmers do not argue that they should get subsidies, (in fact, there is a widespread attitude that subsidies are bad) but that the Government should provide an economic environment in which it is possible for farming to prosper:

"We don't expect cash handouts or subsidies, we've been through that period in the past and subsidies can distort things. All we want is a reasonable economic climate that we can thrive under, that is very very important to us. ... The future of farming has to fit in with the future of the country. We don't expect special privileges for farmers, but we expect an environment that farming will be able to thrive in".

Landholders say that government policy is to some extent responsible for the ecological problems current in the Basin:

"You don't overstock and you keep pests under control to the best of your abilities given the resources that are available to you. I believe we've been denied a lot of them over recent years. We've been denied a lot of the resources that might have made it a lot easier for the land".

Another aspect of government policy causing concern amongst farmers (and one that demonstrates to them clearly that "bureaucrats in Wellington" neither know nor care about the realities of farming), is the Health and Safety in Employment Act (1992). Several farmers talked about the Bendigo Station case where a farmer was fined under the Occupational Health and Safety Act after a child was injured in his shearing shed. This case is the only one where "a high country farmer has been hit, so far" (in the words of one landholder), but there is a great deal of anxiety among landholders about the Act, and as a result they say that they have/or will consider denying access to their land:
“Farmers are very much aware of the dangers of the Health and Safety Act in that unbeknown to farmers people can come onto their properties and have an accident resulting from an unmarked or unknown hazard and the farmer can be liable. This is a great fear of farmers, and because of this farmers tend to deny access to people. People are very nervous about it”.

The difficult economic circumstances under which farmers are operating means that many have old, and potentially unsafe, equipment and machinery, and they say that this means that the Health and Safety in Employment Act (1992) poses a greater potential threat to them:

“A lot of farmers are now working with old equipment, old machinery, and using methods that are now outdated, but they have no option. This also raises the question of how farmers are affected with regard to the Health and Safety Act. If they are being forced to use old equipment which has a problem of breaking down or is less safe, it raises those issues as well. ... Again the problem of the economics of farming comes into it. New machinery, modern equipment is often very much safer, but farmers are prevented from putting this new equipment in place because of the present economic situation”.

Landholders point to the decline in rural services to demonstrate that successive governments do not take rural interests seriously. The loss of rural population and the subsequent decline in services are signs to local people that all is not well in rural New Zealand, and are pointed to as important indicators of Government attitude towards rural areas and that power has shifted to the cities:

“You only need to look at rural towns to see how run down many are becoming, where the general store has closed, where the garage has closed, where the school is in jeopardy, because people are moving away from the district. Where a district may have had a rugby team ten years ago it no longer has a rugby team. These are all indicators of rural regression. Hospitals are being closed down or downgraded. It seems that the only centres in New Zealand that are really making progress these days are Auckland and Christchurch, and that’s only because of capital coming in from abroad”.

Government policy (both at central level and as funnelled through local authorities) is seen as the key factor that will influence the future of land use in the Mackenzie/Waitaki basin:

“I think the future depends very much on government and regional policies. If these policies are harsh there won’t be a future for farming. If these policies are reasonable and progressive there will be a future for farming”.

If the economics of farming improve, farmers have options; they can then improve their farming operations, making them more efficient and more environmentally sustainable; they can then diversify into forestry or tourism or some other venture. The control of rabbits, for example, is an integral part of farming in the high country, and to some extent control is only a problem when there is not enough money to do it.

Note that the opposite of harsh is reasonable and progressive, and that by definition a reasonable and progressive policy is one that will be good for farming.
5.4.2 Environmentalists

Environmental groups take a strong interest in the Basin and are perceived by landholders as outsiders, and often ignorant outsiders at that. Like bureaucrats, environmentalists are regarded as being unaware of, uninterested in, and/or unconcerned with the landholders' interests:

"When they're fully informed of the facts they become increasingly reasonable. It's usually younger, inexperienced people representing these organisations who are not familiar with all the facts".

Members of the Royal Forest and Bird Society in particular are regarded as ignorant outsiders, whose input is ill-informed and inappropriate. In the context of a discussion about barriers to forestry development one landholder said:

"...it's the obstacles put forward... from uninformed opposition such as Forest and Bird. Forest and Bird will attend a site meeting, then they go and put the case to their members, who might be in Auckland. Really, why should people in Auckland make the decision about a farm in the Mackenzie Basin, surely there are people much closer at hand who can make a sound decision. After all, if people in Auckland decide to develop we don't make that decision for them. It becomes totally unrealistic".

"I think there's a lot more agreement out there than people realise. It's only the NGOs that are the sticking point in a lot of cases".

"...it's mainly through Forest and Bird or Maruia Society and all those mountain lands clubs and all those sorts of people. They're the ones that antagonise both groups and polarise both groups".

Furthermore, opposition from such groups costs landholders money:

"Often it costs the runholder considerable amounts, and that's what we find very objectionable".

The Department of Conservation (DOC) is the focus of much landholder resentment both towards "environmentalists" (because of their conservation mandate) and towards what they classify as bureaucracies. Being the focus of environmental issues DOC is often in conflict with farmers. From the landholder point of view this conflict arises because DOC personnel are not able to understand the landholder point of view about various situations (regarded of course by landholders as "the truth" or reality).

Landholder: "We do welcome an input from those groups as long as they're reasonable. It's when they're unreasonable that we get very annoyed".

Interviewer: "Are they generally reasonable or unreasonable?"

Landholder: "I think when they're fully informed with the facts they become increasingly reasonable".

"The guy I was dealing with really got me uptight about it. He started threatening me that I wasn't doing my share of the weeds and the pests and starting silly little arguments like that. I got round it by going over his head and talking to other people. What I was annoyed about was losing
grazing...that affects my viability because I’ve got to find that grazing elsewhere on the property. Where consent has to come in between the two of us is if you are going to take that off me where else can I get some grazing to cover that. He didn’t understand that”.

DOC are regarded as being biased and only able to see things from one point of view:

“We find some personnel in DOC a little bit narrow minded, not broad enough in their thinking, can’t think laterally. The younger ones who come down and think, this is my project and that’s what I’m going to do, and can’t think laterally, that’s the difficult one. Difficult to deal with, tend to upset things by being narrow minded. They tend to try to bully, and go on the property without telling you, that sort of thing. You find something in a report and you know damn well they’ve been on the property to find out about it”.

While the DOC organisation itself is often regarded negatively, at times there is a distinction made between DOC personnel and DOC itself. Some personnel are regarded as good people, some are not:

“There are people in the Department we can deal with, there are people we can’t deal with. But there are certainly also people we can deal with”.

There is also a distinction made between local DOC personnel and DOC personnel from the Regional conservancy, head office and the government. Local DOC personnel are generally (though not always and not by all) seen to be good people, doing their job in difficult circumstances:

“We do get on with the local people, but I think further afield in Christchurch there are certain individuals we can deal with and certain people we can’t deal with. We can deal with people of goodwill who are looking for solutions. We can’t deal with people who have an agenda that is not in the best interests of the country27. So individuals are very important”.

“The great tragedy is that it impacts severely on the good work that a lot of the locals do. I know quite a few people in the Twizel office and get along well with them. ... The problem was with Christchurch. It was the Christchurch office, and there were two individuals in Christchurch who really have a lot to answer for. We used to get along pretty well until this [Sites of Natural Significance controversy] happened, and then suddenly things changed and it wasn’t [Twizel office’s] fault, it was the fault of the people in the office in Christchurch”.

Further, while DOC as an institution remains, individual DOC personnel change. Landholders therefore perceive that particular DOC officers are not accountable for their actions:

“The thing that annoys you is that it’s not a long term thing. He came and did that contract and now he’s... [gone]. Now that fellow cannot be accountable, he’s gone. If I get angry about something now and go and see another fellow he doesn’t know what I’m talking about, that’s where we get uptight about it”.

27 Note here that benefits accrue to the country not individuals.
The Department of Conservation is the organisation through which key government policy which landholders consider inimical to their interests is expressed. In some ways DOC and the environmental lobby stand for or encapsulate the changes of the last 15 or so years. DOC and their activities demonstrate clearly to landholders that they have lost their power.

"Probably the people in the upper Basin are having the most difficulty with conservation demands, understanding and accepting it. And I can understand their concerns, because it's really taking away a lot of their rights to make decisions about how they use their land, and that's difficult for anyone. The biggest infringement imposed on them is conservation demands on land that they've had complete control over for a lifetime".

Landholders consider themselves to be environmentalists, and many do in fact do things to protect or to maintain aspects of the natural environment on their properties. It is probably a truism that no one (or almost no one) perceives and/or admits that their activities are not environmentally sound, in the same way that people tend to consider that their farming activities are sustainable. The landholder argument is that in the fragile high country environment they would not be able to farm and to have continued to farm if they were not conservationists. They further argue that many of their farming activities contribute to the protection of the environment:

"A lot of the things that DOC were trying to protect were there as the result of good farming practice. A lot of the wildlife habitat was there because of good farming practice. Where black stilts had nested for years and years, they were there because the farmer had encouraged or had developed the site to incorporate the nesting sites of black stilts. So to suddenly say that what you have cared for over the last 50 years you no longer are capable of caring for, we’re going to put it under some sort of protection order, was an insult to a lot of farmers".

Landholders say that environmental and farming interests are compatible, and that with goodwill on both sides compromises can be reached which meet the needs of both parties:

"We want to resolve it so that we can get the best for both parties. We can get the conservation values acknowledged and we can give the farmers the freedom to farm in the best interests of the environment".

"Our aims are really compatible and that’s the great tragedy, this quibbling over certain things when we should be looking at the wider issues. I feel there’s room in this environment for wildlife and for farming. We shouldn’t be at loggerheads, we should all be heading in the same direction".

"Really our goals are very similar. We sometimes have different ways of getting there. Everyone agrees that conservation issues are paramount and sustainable land use is what we’ve got to achieve".

Not all landholders have difficulty dealing with DOC or in appreciating environmental concerns and interests:

"I respect their judgement and hope they respect mine, and I believe they do. I don’t find it an issue. I appreciate there’s guys that have got a problem, just
where they lie in the equation it’s hard to say, but a lot of it’s been brought on their own back because there is fault on both sides”.

While DOC is at the forefront of tension between landholders and conservation, other environmental groups (such as the Royal Forest and Bird Society) are also part of this tension. They are not based in the Basin and only turn up at hearings, and make submissions on things like myxomatosis. These other groups are seen as outsiders sticking their (ignorant and ill-informed) noses in farmer business. There is also conflict with people like landscape architects/consultants who appear at hearings “against” the farmers. DOC is the major focus of protest, being local and visible, but outsiders are increasingly perceived as a menace.

Rabbit control is one specific issue over which DOC and landholders are sometimes in conflict. DOC has the responsibility for the control of rabbits on Crown land, but, as one landholder said, “the Department of Conservation weren’t getting any money to do follow up work. They [Government] handed it to them to look after without any money”.

One important dimension to environmentalist-landholder conflict is the extent to which landholders and others agree on what conservation is. Many landholders say they think farming and environmental protection is compatible, the problem is that DOC goes silly and wants too much. There is a perception that DOC is “landgrabbing” with the Sites of Natural Significance (SONS) and tenure review, to strengthen the position of their department and to safeguard their jobs. Though farmers say that the aims of both groups are compatible it is likely that in practice they may not be, as they appear to have very different ideas about what conservation actually involves. At the SONS meeting there were lots of comments and suggestions to the effect that DOC should conserve wetlands, but on someone else’s property - each landholder had a perfectly valid reason as to why his wetland did not need to be designated a site of natural significance.

It is in the controversy over the designation of sites of natural significance for the draft district plan that the conflicts between landholders and DOC are concentrated. It came to be seen as a landholder versus DOC conflict, despite the fact that it was the District Councils who instigated the process and used DOC information (gathered by DOC for other purposes, a fact which annoyed landholders considerably) to meet their environmental protection obligations in the preparation of their district plans.

The Mackenzie District Council set up a meeting between landholders and DOC in order to resolve the conflicts over the designations of particular areas of land as sites of natural significance before the draft district plan was notified. The aim was to reduce the number of submissions after notification. At the meeting each landholder in turn talked about the land on their property which had been designated as a site of natural significance, about the designations agreed with and those rejected, and then DOC representatives presented their case to the council.

From a landholder perspective much of the information given by DOC to the Councils was incorrect. Landholders cite examples where areas including homesteads and developed farmland were designated as having conservation values:

“The Department has taken a broad-brush approach in that it has identified large areas of so-called wetlands when in many instances these wetlands have been developed farmland for many years. ... At one stage these areas included homesteads and paddocks around homesteads”.

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Landholders were concerned that the designation of an area as a site of natural significance would interfere with their farm management practices:

"We’ve got a manuka stand out there at the foot of the hill, and it covers probably 200 hectares. It’s right in a place where we need to take stock backwards and forwards through it. That’s where the holding paddock is. It’s has got excellent grazing surrounding it. ... Like if I wanted to put in forestry, or oversow or topdress I cannot. I’m restricted from running cattle on it and I’ve got good cattle country alongside it. Therefore I’ve got to fence it off or whatever and that restricts me for water supplies for stock because we rely on spring creeks in there”.

As a result of this conflict, where landholders felt that they were not consulted properly, quite a few have since denied DOC access to their properties.

Another area of conflict with ‘environmentalists’ and ‘outsiders’ is the Resource Management Act 1991 (RMA91). The RMA91 is both a symbol to landholders of bureaucratic interference and control in their affairs (evidence of the decline in their economic and political power), and a discourse and setting through which conflicts amongst parties with an interest in land use are played out.

Many farmers state that they think that the intention of the RMA91 is good and right and that environmental policy is needed. They also think that there are many problems in the way in which the RMA91 is applied:

"I feel that the RMA if it is applied the way it was intended is a very positive force. It’s environmental legislation that was badly needed. But it’s important that it be applied in that spirit”.

"I think the principles of the Resource Management Act are excellent, but I’m not sure the total outcomes are good”.

The spirit in which they think it ought to be applied is a spirit that supports the development of farming. For landholders sustainability means sustainable farming:

"We feel that the purpose of the RMA should not necessarily be sustainable management, but it should be sustainable development. We feel that the country should not be left in a time warp. If we have proposed development on the farm that can improve the environment it should be allowed to take place, rather than say, you can’t do this. It should be said you can do this provided the environmental outcome will be as good or better than it is now. ... So it should be sustainable development rather than sustainable management”.

"...the present methods of farming, is it sustainable?

Many of the criticisms of bureaucracy and government noted earlier in this chapter became manifest when discussing the RMA91. There is a suspicion among some landholders that “bureaucracies” are using the RMA91 for their own ends and that once again farmers are affected negatively by this:
"I feel more and more it's being applied to support a bureaucracy, and that's the very worst thing that could happen, because it means that we're going to pay more and more and get less and less from it".

"It's a paradise for legal work and consulting work".

Landholders also object to the way in which objectors (or even a single objector) can hold up or stop a project:

"Sometimes people ask questions that have already been answered and that just holds up the process, and that is very annoying for us. We find that just so frustrating, that the whole progress of a project has been held up for 12 months because someone has opposed it without going to the trouble of actually reading about the project and understanding that this question had been raised previously and had been answered".

The financial costs and time involved in "jumping through the hoops" of the RMA91 are also a concern to farmers, and for some it may be a disincentive to development:

"It's bogging us down in the consulting process, mainly through paper. Taking up a lot of time and expense".

There is also a concern, particularly with tourist developments, that some companies are using the Act to try to stop competition:

"People are using the process, and you'll never eliminate commercial competitors use of the consent process".

The way in which the RMA91 is interpreted and applied is considered by landholders to be a key factor in the future of land use in the Basin. As with the Occupational Health and Safety Act (1992), very few farmers have yet to be affected by the RMA91, but there is a suspicion that it will be used against them and that the outcomes for them will be negative.

5.4.3 Maori/Kai Tahu

In contrast to the high profile given to conflicts with bureaucracy or environmental 'outsiders' there was very little talk among landholders interviewed about Maori claims on the land. It seems that at the time of the interviews (1996) Maori were considered to be a remote threat to landholder control over the land compared to state bureaucracies and policies, and the environmental lobby. Nevertheless, as noted in Chapter 2 there is an underlying concern that Kai Tahu may act as another 'outside' group, in seeking to influence land use practice.

5.4.4 Electricity Corporation of New Zealand (ECNZ)

During the construction of the hydro-electricity schemes there was a great deal of conflict between leaseholders and ECNZ over land. Currently there is little conflict between the two groups. A few landholders said that there was potential for conflict to develop with ECNZ over access to water as more forestry is planted:

"It [the water] is really tied up in electricity generation. Supplying a nation with electricity and the ability to get water rights to irrigate will be fairly
difficult. You're fighting ECNZ and they'd be very loathe to lose any water because Tekapo and Pukaki are the reservoir for generation in New Zealand”

“They believe that forests use a lot of moisture that would otherwise drain down and got into the lake so they can make power out of it. ... They're doing a fair bit of imagination there, I can assure you. 99% of the water that fills their lakes comes off the main divide, well, 95% of it. You're only playing with 5% of their water and out of that you might lose 10% of the 5% so it's pretty minimal”.

In terms of access to water for irrigation one landholder said that he had had no trouble at all accessing water from hydro canals and that ECNZ were very co-operative.

5.5 The Views of Other Groups in the Basin

So far this chapter has considered the views that landholders have of other groups. But the other groups have their views of landholders. In the following sub-sections these are considered in turn. Because the focus of the study has been mainly on landholders, the following sections give a briefer account of viewpoints and there are fewer direct quotations. Exclusive quotes of non-landholders concerning high country in general is included in Swaffield (1991). Formal consideration and reporting of Kai Tahu views is not included. This reflects the difficulty of incorporating adequate consideration of the issues involved in a report of this kind. The overall position of Kai Tahu regarding high country has been extensively recorded in Waitangi Tribunal hearings, and in associated reports (e.g. O'Regan, 1989). These constitute a substantial formal statement and it is perhaps most appropriate to let this stand alone.

5.5.1 Environmentalists

Environmental interests include both DOC and groups such as the Royal Forest and Bird Society. DOC is the environmental group most prevalent in the basin, and has the most power. As such, DOC is the focus of most attention and protest. (This group also at times includes such people as landscape consultants and planners.)

The aim of the environmental lobby is to protect the indigenous ecological resources in the basin from degradation or destruction. They do not want to see changes to land use which cause degradation. In general they are nervous of large-scale forestry development, but many are not absolutely against forestry development if it is managed well and sited appropriately. They also do not like many current farming practices, such as burning. Agricultural intensification also causes concern, with draining of wetlands, etc.

Environmentalists have a variety of ways of achieving their aims. DOC is the government department responsible for the protection of the conservation estate and have direct control over large tracts of land, much of which was retired under the Catchment Board soil and water conservation plans. Also, Mt Cook National Park is included in their control. DOC also has the responsibility for trying to protect areas of land with conservation values held under crown pastoral lease or privately. They do this mainly through education, and through trying to work out management strategies with landowners that will work for both parties. DOC also is required to present the conservation perspective at RMA91 consent hearings. DOC has considerable power, being a government department, and though under-resourced, do have
the resources to challenge particular development plans (they have access to lawyers, landscape consultants etc.) as well as their own expertise.

The tenure review process is one area where conservation interests are working to achieve conservation goals - under tenure review DOC is in line to gain a considerable amount of the high country for the conservation estate. As noted above however, as a result some landholders think that DOC is involved in a landgrab.

DOC and conservation interests claim that what they do or seek is 'sustainable', to the exclusion of most if not all other groups. Sustainability has become associated almost exclusively with conservation goals. These conservation rhetorical strategies tie in with current government policy statements about the necessity of sustainable development etc. They also have ties to the green movement and green rhetorical strategies generally, which, in some quarters, have a certain moral ascendancy -- conservation of New Zealand's native flora and fauna is unarguably a good thing.

DOC personnel at Twizel in general claim to get on all right with farmers, tourism operators, recreation interests etc., but this somewhat tenuous and fraught amity tends to be on a personal basis - the relationships are individual. However, DOC people are a group through their work, and DOC remains a group even as personnel change. At the group level - DOC vs farmers for instance - there is conflict: - the "some-of-my-best-friends-are-greenies" syndrome. Personnel in Christchurch or in Wellington are blamed for the problems between DOC and others. (This is a common way for small districts to cope with conflict and maintain "community"- put the blame on outsiders). There is evidence of some siege mentality at DOC (reflecting pressures for restructuring from Wellington) and they have to tread very carefully as the landholders in particular are very sensitive to criticism and on the lookout for attacks on their autonomy.

There have been many particular instances of conflict. The key one recently has been the controversy over the sites of natural significance. Another is the spraying of the lupins and the removal of lupins and willows from the Ahuriri.

5.5.2 Recreationists

Recreation interests are a diffuse group. They are united through a common interest in access to the high country for recreational purposes. Some are more formally united through clubs and organisations like the Federation of Mountain Clubs (FMC) and Fish and Game Council, tramping clubs etc. Their key aim is generally the preservation and guarantee of access to the high country for recreational purposes.

Recreation interests seek to achieve their aims through advocacy (with submissions to commissions of inquiry, select committees, government departments etc). They are involved in the tenure review process, through which they seek to ensure access is maintained. In general they do not come into conflict with other groups. Occasionally there will be problems with a particular farmer over access, and at times they disagree with conservation interests (over introduced animals which they see as a resource not a pest) but most times their interests and conservation interests coincide. Recreational groups do not appear to have much power in terms of affecting change. However, they have been successful in influencing the tenure review process. They work more at National level than local level as a pressure group or lobby. Members of these groups are not locally resident, though many village dwellers pursue high country recreation.
5.5.3 Tourism Operators

Tourism interests are very varied and include the following:

- National tour bus companies
- Accommodation of various types (hotel, motel, B&B, backpackers, campgrounds)
- Aviation (flightseeing)
- Shops in the villages
- Fishing/hunting/climbing guiding
- Mountain biking
- Proposed ski field at Duncan basin.

Tourism is an increasingly important part of the basin economy and is one of the major sources of employment in the district.

"Tourism in the Mackenzie district is increasing, and it's going to increase. Everyone is probably benefiting from it. Even the farming community is having a spin-off. That's the biggest growth industry in this area. It's generating a lot of alternative businesses and that's where our population growth is going to come from. It won't be from farming."

Different operations make different use of the basin. Only at a very general level can tourist interests be described as a group. They do not unite and work together on issues at the local level. Indeed competition is more likely than co-operation within sectors of the tourist industry (aviation is the most obvious example, where Mt Cook are believed by some to be trying to keep competition out as much as possible, under the guise of safety concerns).

In general, tourism interests do not conflict with other land uses. Sometimes conflict occurs with DOC over such things as helicopter landing sites. Also, there are occasional access problems for fishing and hunting guiding. Some farms have tourist ventures (primarily accommodation). Any land use change short of total forestry would probably not impact on them very much at all. The main constraint on tourism development appears to be availability of development capital, and perhaps the RMA91 process.

There however is concern amongst Basin residents that too much tourist development has the potential to have a negative impact on the basin, in terms of both the landscape and environment:

"Pressure is going on the high country. It worries me a little bit, how easily accessible it's becoming. People want tar-sealed roads right to their little favourite picnic spot instead of getting on their bikes or getting their tramping boots out and enjoying it for the sheer value of being there. The accessibility of scenic flying, the helicopter. Are they picking up the rubbish?, the tourist takes an ice-cream with him and chucks the wrapping paper on the ground. If there's a disaster, fuel getting into the waterways. Picking up the weeds or pests and going into the very fragile environments. I think that's all got to be carefully looked at."

While there has been considerable development in the tourist industry, the growth in this area is probably limited and is unlikely to provide a total solution to the ecological and economic problems in the basin. The tourist industry is vulnerable to many of the same problems as
farming, having good and bad seasons and being influenced by the climate and the exchange rate:

"Tourism is a bit like farming anyway, you have your up years and down years. People tend to think, oh, tourism’s on the upswing so put in 500 beds. Then there’s a downswing and all this becomes a liability”.

There is some specific conflict between sectorial tourist and recreational interests. To a considerable extent tourists and recreational users of the high country are looking for the same thing and using the same resources. However recreational users complain about the intrusion in the wilderness caused by tourist ventures such as flightseeing. At Mt Cook, for example, where planes and helicopters are a constant presence, they not allowed to fly up the Hooker Valley so as to give trampers and walkers some peace:

“It’s starting to upset a lot of conservationists and recreational users, trampers. They [tourist industry] are upsetting the environment. Helicopters, planes, whatever, they are having an affect on some people. Where once it was nice and quiet it’s becoming an area where you hear a helicopter every quarter of an hour. But I don’t think it’s clashing with farming”.

Tourist interests also clash with environmental interests on occasion, primarily over resource consents where DOC and other environmental groups consider that the proposed tourist development is detrimental to conservation. Tourist operators tend to react in the same way as farmers to such challenges, resenting what they consider to be unnecessary constraints on their businesses. This conflict does not always arise though, for much of the tourist industry is based on the natural environment and it is very much in their interests to protect it.

The villages of Omarama, Twizel and Tekapo are to a considerable extent independent of the farming hinterland, their viability dependent on the tourist industry.

Landholder: “Omarama has perhaps gone against the trend [of rural decline] because it’s on the main tourist route, and the town has actually developed because of tourism. In that way it’s different from many other rural centres”.

Interviewer: “It’s the same with Twizel and Tekapo. They basically get their lifeblood from tourists not from the farming people”.

Landholder: “That’s right, and that’s enabled us farmers to diversify into backpackers”.

There are connections between landholders and the villages via the tourist industry and the villages provide for many farmer needs. However, villagers and farmers do not have much contact in general. One concern is to control tourist development so that the character of the villages is not destroyed for local residents (a lot of the houses are holiday homes and in Twizel there are a lot of retired people). This is particularly so for Tekapo where there is concern about the church. Lack of local employment opportunities is another concern. Tourism development is welcomed by most residents for the jobs that will be created, and forestry development for the same reason.
5.6 Discourses of Community and Sustainability

The detailed review of expressed landholder attitudes has revealed a coherent expression of identity. It is dominated by a sense of tradition, which is based upon the conventional attitudes of pastoral farming: continuity of occupancy, care for environment, love of wool, individualism, isolation, and community in adversity. Interpretations have changed: isolation, for example, is now defined less in terms of physical isolation, and more in terms of political isolation. There is a strong sense of ‘insider’ versus ‘outsider’. Landholders define their position by contrast to the impositions of ‘bureaucracy’, or ‘environmentalists’. However, there were important distinctions between landholders - for example, geographically, and in terms of their length of occupancy.

Other interest groups are less well defined. Staff of the Department of Conservation share a sense of unity in adversity, but the majority of other interests are relatively fragmented. There is a group sense of identity within the concentrated settlements, particularly Twizel and Tekapo, by virtue of proximity and use of shared facilities. Yet these appear rather disconnected from the landholders.

These findings raise serious questions about a number of assumptions upon which both current policy and the overall study (of which this report is part) were based. In particular, they raise the issue of the meaning of ‘community’ itself. In the remainder of this section ‘community’ is examined, together with the frequently associated term ‘sustainability’.

‘Community’ and ‘sustainability’ are key words in the current discourse about rural society in New Zealand. Sustainability and community are the desired outcomes of government rural policy, for example, MAF see one of their goals as creating sustainable communities. Furthermore, community is seen as one of the key means by which sustainability will be achieved. Community is currently a very powerful discourse in that it is not currently linked to ideas of romanticism, backwardness or resistance but ties in closely with current dominant political discourse, where community is posited as the solution to the problems that have arisen with the withdrawal of the state.

The early phases of the NZFRI programme of research in the Basin adopted the prevailing policy discourse of community and sustainability, and developed a methodology in which community featured significantly. In so doing, the study inherited the assumption that there was a fairly homogenous community which could participate in the research and, to which the results would be useful. Earlier histories of the Mackenzie Basin (Gillespie 1958, Vance 1980, Nordmeyer 1981) presented interpretations which reinforced the ideal of a distinctive ‘Basin’ community, available and waiting to fulfil such a role. However, our field research in the Mackenzie/Waitaki Basin shows that the social consensus implied by the term ‘community’ is either weak or non-existent at the scale of the overall Basin. If anything its use masks dissension and conflict by repressing or denying difference, and accusing those who seek to assert their difference (or different aims) to be working against the good of the community, and/or of not being part of the community. It is therefore important to look critically at the whole concept of community. Two studies (Whelan, 1989; Butcher, 1997) provide relevant supplementary evidence on the precise nature of community.

Chris Whelan (1989) examined the development of community in the Mackenzie Basin from 1850 to 1950. In that historical study a variety of data sources were used (including other historical accounts and official statistics, among others) to interpret historical development, and to assess the question of the development of community, using dimensions of territory,
economy, the social and the cultural. Whelan's thesis is that community was poorly integrated through most of the period, contrary to the impressions developed by Vance (1980), Gillespie (1958) and Nordmeyer (1981). Thus the community never developed sufficient autonomy to provide its own psychological and social needs. Instead it relied on other communities external to the Basin for supplies of goods and services and was in fact part of the hinterland of Fairlie, Timaru and Christchurch. Whelan argues that being poorly integrated the community was consistently dependent on the rest of society for various economic and social advances.

Concerning the last of six periods considered (1911 to 1950), Whelan noted that there was gradual economic diversification to hydro-electric power industries, forestry and tourism but that none of these groups had much in common and there was little strengthening of community. He says: "...the communities which had no common interests occupied the same area spatially but were segregated socially. This situation continues to a lesser extent today" (p.276). Lack of community was, in part, derived from a highly fluid population, that is, there was considerable migration to and from the Basin. In addition, Whelan emphasises that the increased use of transport and communications technology in this century did not draw people together because those technologies fostered improved linkages to the rest of New Zealand society and therefore sustained the stratified and poorly developed community. Whelan thus advances both a description and an explanation for the lack of a well developed community, and suggests that it is very unlikely that there would be significant changes since 1950.

Butcher's (1997) analysis of the regional economic impacts of forestry development incidentally provides evidence to support the above claims. As part of the input-output method used, nine landholders were interviewed to learn about their purchasing of inputs. The relevant main points to emerge from the interviews were that:

- Virtually all freight services were based outside the Basin.
- All shearing contractors were located outside the Basin.
- Extensive use is made of vehicle and plant repair facilities in Tekapo, Twizel and Omarama.
- Consumption spending within the Basin was only around 25 per cent of residents' total household consumption spending. The majority of spending is done in Fairlie and the coastal towns, although there was evidence of increasing spending in Twizel.

These results are consistent with Whelan's thesis and suggest that the sense and practice of community in the Mackenzie Basin is of a very limited character. What community that may be developing in recent years is centred on the settlements of Twizel and other villages, and this is in large part independent of land use change in the Basin as a whole.

The research results of Whelan (1989) and Butcher (1997) are confirmed by the findings in this report. The present chapter has shown that while landholders share, to a greater or lesser degree, an identity as high country farmers, they do not adopt a singular community or locational label. In fact, there is a mosaic of geographical referents to which they can identify including: linkage to an area associated with the villages of Omarama, Tekapo and Twizel, gorge runs or centre of Basin, or north and south of the Ohau. Whilst landholders also espouse values of neighbourliness they are located on holdings that are large and therefore typically have isolated dwellings. Landcare groups and other activities associated with the RLMP present an anomaly in this context. They have clearly provided a significant focus of local political and practical activity in recent years, and are seen by some as providing evidence of continuing community among landholders in the Basin. However, as was noted earlier,
their role was by no means prominent in landholder discourse at the present time. Further, although Landcare groups are active they are by no means universal among all landholders. The one way in which a consistent identity is expressed is when landholders attack outsiders who are believed to be interfering in the autonomy of land use decision making. Thus community identity is most clearly expressed in relation to perceived interrelationships with others. It is not based upon any strong internal functions or patterns of communal activity.

"Outsider" as a category has wide currency amongst the landholders. In general, outsiders are resented if they "stick their noses in", by which landholders mean advocating any opinion or doing anything that the farmers disagree with. Outsiders include conservation interests, "greenies" and government bureaucrats, including planners at local council level. The general feeling is that outsiders are having more and more, and too much, influence on what happens in the Basin. Outsiders do not understand what the real issues are and what it is really like. If you are against what the farmers think, you are almost by definition an outsider, because if you were an insider you would be able to understand the farmers point of view and agree with it. Hence "community" for the landholders is defined by its absence, and its opposite.

An interesting observation here is that although government claims to have withdrawn from control of local events to a large extent, there is a widely experienced feeling amongst landholders that government (via bureaucratic structures to do with council, RMA, DOC, etc) is actually interfering more and more with on-farm activities. The plans required of subsidies did not feel like interference and control in the way that restrictions under the RMA91 do.

However, whether outsiders do have all this power to influence landholders is not clear. It seems that many farmers have not actually experienced what they would consider interference but expect that they will do so and that trouble is coming. This expectation is an important part of their world view. This interference is mostly perceived as coming through the RMA91. Many say that they agree with the ideas behind the RMA (again it is difficult to argue for unsustainable development) but that it goes too far and is not realistic.

While "community" does not have wide currency in the Basin, this is not true for "sustainability". In the last decade "sustainability" has become the central framework for the discussion of agriculture and land use, with 'sustainable management' being both the justification for and goal of government policy (demonstrated most obviously in the RMA91), as well as permeating the discussion of agriculture and development in academia. However, "sustainable", though universally considered to be a good thing, means very different things to different groups and individuals. As Redclift notes, what is often the bone of contention is exactly what it is that ought to be sustained (1993: 171). "Sustainable development' means different things to ecologists, environmental planners, economists and environmental activists, although the term is often used as if consensus exists concerning its desirability" (Redclift, 1993: 171). Though there probably is consensus that "sustainability" is desirable (indeed it would be difficult to argue successfully that non-sustainable management is the road to take), there is no agreement about what sustainable management actually comprises.

In the Basin, environmentalists want to sustain natural ecosystems, vegetation and fauna, in what they perceive as a 'natural' state. Environmentalists to a considerable extent have managed to capture the term 'sustainability' to describe what they do and its purpose. Landholders, wanting to sustain their farming operations and have their lifestyle, equating economic viability with sustainability. Ideologically their view is supported by the current economic policy in which market-led development will result in sustainable development, on the assumption that if an activity is ecologically unsustainable it will eventually be
economically unsustainable, and will therefore cease. There is also a view that it is high
country pastoral farming of fine-woolled sheep that ought to be sustained, because of its place
in the New Zealand identity. Landholders see themselves (or their lifestyle) as capturing the
essence of New Zealand in some way and take it as obvious that this farming style ought not
to disappear.

Tourism interests want to sustain a ‘natural’ landscape, but, as noted in the Martin Report,
‘natural’ may mean wild and uninhabited and does not necessarily mean indigenous. On the
other hand, high country farming is part of the tourist scene too. Tourist operators want to
sustain their business and where their commercial interests might conflict with
ecological/environmental imperatives, as in the case of access, helicopter landing sites etc. they
are likely to attempt to override the environmental factors.

Recreation interests want to sustain a variety of things: trampers want a remote, wilderness
experience and access to the back country is a key concern for them; anglers and hunters want
to sustain fish and fauna resources, even though they are not indigenous species. Again access
is an issue.

The range of interpretations of “sustainability” and their possible origins are clearly
documented in earlier survey findings on attitudes to land use change in the Basin (Fairweather
and Swaffield, 1996).

5.7 Conclusion

This chapter has shown how landholders typically define themselves in terms of a unique
history and heritage emphasising both individualism and neighbourliness. They are united by
common experience of both declining incomes and political influence and see that they have
commonalities with other South Island high country farmers. Through the High Country
Committee of Federated Farmers they have worked collectively to promote a positive image
about high country farming. However, the collective representations are in contrast to the
day-to-day way of life where each landholder works in relative isolation. And because of this
it is possible for other sub-regional identifications to occur. For example, there are
associations made with particular localities within the Basin such as Omarama, Tekapo and
Twizel, or with the gorge runs being seen as distinctive from those runs in the middle of the
Basin. Despite varying geographical distinctions within the Basin, there are common problems
and opportunities for all landholders across the Basin. Importantly, there is no singular or
important grouping with which landholders identify. However, they all subscribe to and
promote a strong insider/outsider distinction.

Landholders have strong and distinctive views about bureaucracies and government, views
that echo those of farmers in other parts of New Zealand. Bureaucracies are seen as not
understanding farmers, imposing rules, costs, and undermining autonomy. Regional councils
are seen as charging high rates and, in general, government economic policy is oriented to non
farmers or leads to onerous requirements such as those in the Occupational Safety and Health
Act. Landholders also have strong views about environmentalists, typically seeing them as
meddling outsiders. DOC has a regional office in the Basin so it is the primary focus of
attention and reminder of landholders’ loss of influence. Other groups are seen even more as
outsiders. Two particular foci of tension are the designation of sites of natural significance
and the application of the RMA91.
The last section of this chapter have focused on the topics of community and discourses in the Basin and argued that there is absence of any single community. Even acknowledging that there may be diverse communities does not imply that there is well-developed practice of community in sub-regions of the Basin. While "community" is part of both Basin and wider discourses, its use is as a legitimating strategy developed in response to outside pressures and it is a word not typically used by landowners. Instead they emphasise their sense of self identity by contrast to the activities and influence of "outsiders". In a sense, community is defined implicitly by its opposite. "Sustainability" is more widely used, but has special connections for landholders who link it to economic viability and maintenance of their lifestyle, rather than for the natural environment (as do the 'environmental' groups).
CHAPTER SIX

CONCLUSION

6.1 Introduction

In this conclusion we provide a summary of the whole report before returning to the objectives of the research and considering how the research has addressed each one. Finally, the conclusion considers the potential implications for land use change policy in the Basin.

6.2 Summary

Chapter 2 briefly described the geographical factors affecting land use in the Basin, drawing attention to topography and soils, climate and water, and vegetation to argue that land uses are seriously affected by the biophysical environment. The chapter went on to briefly review Māori history and Pakeha alienation of land before analysing Pakeha history in terms of three main phases: extensive pastoralism (1855-1945) intensification to 1985, and restructuring and threats post 1985. In the present phase, landholders face acute financial pressures and ecological problems, such that current land use practices are being questioned by both landholders and many others.

Chapter 3 continued to background the current situation for landholders in the Basin by reviewing in detail the environmental problems and the political factors that constrain land use. Emphasis was placed upon the problems as perceived by landholders. Environmental problems they recognise include the presence of soil erosion and declining soil fertility, the latter due in large part to lowered returns which make fertiliser applications uneconomic. Other environmental problems include the relatively recent spread of hieracium and an ongoing problem with rabbits. This latter topic receives particular attention because it is a topical issue. Responsibility for rabbit control has changed in recent years and although the Rabbit and Land Management Programme was successful in reducing rabbit numbers it was less successful in creating sustainable land management. Landholders, having reluctantly accepted responsibility for rabbit management, would now prefer the introduction of calicivirus as a cost effective form of rabbit management.

Political factors constraining land use include the land tenure system, its review, and recent legislative changes relating to land use. Leasehold land ensures that landholders have considerable rights but they face growing uncertainties, exacerbated by the fact that their land is not freehold. Tenure review may result in freeholding but the process is political and involves input from a number of user groups. Recent legislative changes (Local Government Amendment Act, 1989 and RMA 91) combine to change the way land use planning and change occur. District councils are currently preparing their first district plans under the RMA91 which emphasises effects of activities and sustainable management. District plans emphasise issue statements, objectives, policies, and rules, and operate via resource consents for any activity which is controlled, discretionary or non-complying. Landholders see the RMA91 as a significant obstacle for land use change.
Chapter 4 changed the focus to the current attitudes of landholders towards land use change in response to their location within an environment that features a complex set of important constraining factors. That chapter examined landholders’ attitudes towards land management to show that they emphasise living and farming in the high country while appreciating that economic and ecological changes are forcing them to look at alternatives. These alternatives include intensifying their sheep operations by, for example, using irrigation, pregnancy scanning, selective breeding and cropping. However, intensification is constrained by lack of capital. Opportunities for diversification typically include forestry and tourism, the former favourably seen by some landholders (although they tend to emphasise agroforestry). Only a few landholders have actually planted significant numbers of trees, and some do not accept that it is a solution to their problems. Tourism is an option for those landholders on tourist routes but it is not likely to significantly affect the financial situation of landholders. Generally, the prospects for widespread change in land use in the Basin are not great. Available options require capital and economic difficulties make it less likely that significant land use change will occur. Perhaps most fundamentally, most landholders appear to be traditional sheep farmers who would prefer to retain their lifestyle rather than change it radically.

Chapter 5 examines land use dynamics, conflicts and community in the Basin. The chapter begins by describing landholders’ identity as featuring: a tradition of extensive farming of merino sheep, a combination of individualism and neighbourliness, a sense of unity borne of isolation and a growing sense of struggle against political isolation and bureaucracy but, curiously, with relatively little social cohesion on a day-to-day basis. This appears due to improved mobility, greater diversity in background, and possibly a sense of entrenchment and even denial of the need for change. This amalgam of distinctive characteristics is sustained by an isolated and sparsely populated location, sending children to boarding school and by declining political and economic fortunes. While there is a group identity as ‘high country farmers’ there are also major geographical distinctions within the Basin. However, there is little evidence that specific groups regularly take specific actions, nor do landholders typically identify themselves as belonging to the Basin as a whole. They only come close to this kind of general identification when they define themselves as locals in distinction to incomers.

Landholders perceive that they are in conflict with bureaucracy and government: rules and regulations require time and money, and, more importantly, exemplify loss of control over their farms. Government economic policies are seen as unsupportive of farming and compliance with the Occupational Health and Safety legislation is perceived to impose further burdens. Landholders see environmentalists as meddling and unsympathetic outsiders, and there are contested viewpoints about what is a good environmental policy, and its relationship to land use.

We then address the issue of the nature of ‘community’ in the Basin and supplement the findings of the earlier sections with data from two other researchers to argue that there is no well developed sense of community in the Basin, but only community identity expressed in response to outsiders’ interference. The way the words ‘community’ and ‘sustainability’ are used in everyday practices suggests that the social consensus implied by the term ‘community’ is non-existent, but is used as a rhetorical strategy for legitimating claims. The word ‘community’ is most typically used by Twizel and Tekapo residents but not by landholders, who emphasise individualism and resistance to outsiders. It is thus defined by its inverse. ‘Sustainability’ does have wide currency but variable meanings depending on the group espousing it. As a consequence, the widely used concept of ‘sustainable communities’ appears problematic in this setting.
6.3 Review of Research Objectives

**Objective 1:** Develop explanations, in historical and social terms, of the patterns of land use preferences found in earlier phases of the research.

Earlier research (Fairweather and Swaffield, 1996) has identified three main themes among the preferences for land use change among people who have an interest in land use change in the Basin. These stakeholders indicated preferences for one of the following themes, as taken from the summary of the earlier research.

In the plantations theme the important feature is the role of large plantations for production on the hills and lower slopes, and for conservation on the higher rainfall flats. In the grazing/trees theme the key element is the combination of trees and grazing for production, comprising plantations and grazing on the hills, and shelterbelts on the lower slopes and higher rainfall flats. Wilding management is an essential feature throughout the grazing/trees theme. The plantation and grazing/trees themes appear to place the greatest emphasis upon the productive enhancement of the land resource, either through tree planting or improved pasture.

In the conservation theme the essential features are small plantations and conservation on hills, larger plantations and conservation on lower slopes, and retention of views on the higher rainfall flats. For those supporting this theme conservation means destocking. Wilding management is an essential feature throughout the conservation theme. On the lower rainfall flats, these themes are modified significantly to become grazing/shelter, that emphasises the role of non-commercial plantations for shelter combined with grazing, and grazing only, maintained by wilding management.

The three themes are entirely consistent with the results reported here. The historical background presented in Chapter 2 showed that the dominant land use has been pastoral farming and that this has always had to grapple with severe environmental challenges, especially in recent years. There have been two main responses to these environmental problems: to change the basis of production or to avoid it and promote conservation. The history shows clearly that each contemporary response has some historical precedent. The major uses of land (sheep farming, tourism, conservation and recreation) were firmly established last century. Thus, pastoral and conservation land uses were found among contemporary preferences. What is missing from the history is forestry as a significant factor in land use. This has become a consideration in recent years both in response to growing environmental problems, and as a result of changing market conditions and knowledge of the potential productivity of high country sites.

Each of the three land use themes found in earlier research was referred to by landholders in this phase of the study. This is not surprising given their current situation. Faced with environmental and financial pressures they are seeking to change their land uses. The more optimistic see that a change in the productive base to grazing/trees or plantations is possible while those less optimistic prefer conservation with destocking. Chapter 4 showed that landholders were trying to intensify production (consistent with grazing/trees) or to diversify into forestry (consistent with grazing/trees or plantations) or tourism (consistent with conservation). Chapter 5 showed that there are other groups in the Basin who strongly support the conservation theme.
Objective 2: Observe and describe how technical and attitudinal information collected to date is incorporated into, and influences, community politics and land use decision making.

The field work results show that, to date, among landholders and others, little overt use has been made of the results of earlier research (preferences for land use options, preferences for scenarios and projections of social and economic effects of different land uses) even though these results were provided to participating stakeholders and others. Observations of hearings involving landholders at Mackenzie District Council meetings showed little or no reference to results of research. However, one significant exception to this has been that the individual farm level assessments of forestry developments were useful to a few landholders, especially those applying for resource consents. It is difficult to determine to what extent, if any, that earlier research has implicitly influenced current attitudes. It may be, for example, that the now widespread recognition of the potential use of forestry, and the issues associated with this, has been influenced in some way by the dissemination of earlier results, which have subsequently been internalised.

Objective 3: Analyse the social organisation and dynamics of the community within the Mackenzie/Waitaki Basin, including community politics that influence land use decision making, and

Objective 4: Analyse the respective roles and influence of the local community and “outsiders” on land use change in the Basin, and

Objective 5: Describe the meanings and importance of the biophysical, economic and social components of sustainable management as defined and practiced by different groups in the community.

Chapter 5 has focussed on the concept of community to argue that there is absence of community, as conventionally defined, amongst landholders in the Basin. Moreover, the word is used only occasionally by landholders. More typical is their reference to insider/outsider distinctions. They appear to define themselves mainly be reference to external threats. However, while landholders perceive that a host of outsiders are influencing and constraining them, much of this is anticipated rather than real. There is growing involvement of environmentalists in land use issues as expected under the RMA91, but this ‘power’ is perhaps not as dominant as landholders perceive it to be. However, there are some definite constraints to land use change brought about by the statutory processes.

Generally, the research policy of identifying a number of preferences and using these to develop a limited number of scenarios is well suited to the situation in the Basin where there are a variety of viewpoints held by ephemeral groupings of stakeholders generally and landholders in particular. This has important implications for planning. It is necessary for councils to accept a range of viewpoints and allow for them in their planning rather than plan for specific change.
6.4 Policy Implications

Opinion is very varied on the issue of what people think will happen with land use change in the Basin. Generally, landholders and others think that there will be a change and that there must be a change because of the problems (economic and ecological) of farming. Forestry and tourism are held up as the likely solutions. However, it seems that neither of these land uses will solve the problem of the degradation of the land or the marginal economics of pastoral farming. They will only happen on a small scale in the foreseeable future, both because of economic constraints and the preferences of landholders. What is more likely to happen is some intensification of sheep farming on better land, and withdrawal from marginal areas, but not much else. Most landholders think and hope that there is a definite future for pastoral farming, and that this is a very down period but that it will come back up.

If the economics of farming improve, landholders may have better options: they can then improve their farming operations, making them more efficient and more environmentally sustainable; they can then diversify into forestry or tourism or some other venture. The control of rabbits, for example, is an integral part of farming in the high country, and to some extent control is only a problem when there is not enough money to do it.

In addition to economics and landholder preferences it is clear from the analysis of the social context of land use change presented in this report that there are competing interests involved. The outcome of these competing interests is likely to be variable and piecemeal change. On the other hand, if the farming economy remains depressed for a long period, there may well be more obvious change brought about by ecological collapse and abandonment of properties. It is also possible that the factors currently inhibiting land use change could shift in some way to move the situation from one of slow or little change to one of significant change - to take off. For example, widespread land tenure change may release potential for new pastoral investment. However, although freeholding may be a decisive factor in encouraging new land uses it will still most likely take time to work through. Furthermore, the generally poor returns irrespective of tenure will dissuade investors. It is more likely that lack of significant change will continue.

Resistance to change also seems to be a product of the planning environment which paradoxically emphasises the ideals of community involvement and sustainability. The evidence of landholder perceptions presented in this report suggests that the processes needed to implement these ideals (under the RMA91) are significantly constraining land use change. Landholders seeking to develop forestry land uses bear a significant burden when seeking consents from councils, and there is suggestion that there is some duplication of effort by councils in reviewing consent applications. Further, different councils are interpreting and applying the RMA in different ways. These issues may be the subject of future research.

One issue arising from this study is landholder’ perception of Kai Tahu influence on their land use practices as minimal compared to other groups. Clearly, Kai Tahu are an important stakeholder group within the Basin. This apparent anomaly may be due to either or both of two factors. First, it may be that landholders see that growing Kai Tahu involvement and possible future administration of high country leasehold land as relative a non issue because such developments would be compatible with their interests. Second, it may be that other issues are more pressing, so that they are at the forefront of landholder’ attention at the present time. In future, Kai Tahu involvement may be a key issue of concern to landholders.
Two more general implications can be drawn from the study. First, government agencies and research providers need to balance political demands for greater "relevance" in research with a critical awareness of the operational limitations of terms such as community. Community participation in decision making about what ought to happen at the local level is now enshrined in both environmental and research funding policy. However, discussions of local participation are often "...predicated on the presence of a social consensus that, in practice, rarely exists" (Redclift, 1993: 183). As Redclift notes, "Unless we analyse specific power structures in relation to the environment, we are in danger of being far too sanguine about the potential of negotiation and agreement. We are in danger, in fact, of drowning in our own rhetoric rather than identifying the underlying political processes whose understanding would facilitate the formulation of better environmental policy" (1993: 184).

Ironically, community was largely jettisoned as a concept from social science discourse in the 1960s and community studies fell out of favour on account of a theoretical impasse arising from the difficulty of definition. Typical contemporary uses of the concept in social science relate to its political use. For example, Young (1986:23) notes: "I examine community specifically as a normative ideal designating how social relations ought to be organised". Thus, localism/community is a powerful rhetorical strategy in that it is linked to an unarguably moral good. For Nadel-Klein (1991) use of the word identifies three ways in which localism (or community) is represented: "one, the romantic glorification of localism as the authentic site of real humanity...; two, the dismissive association of localism with provincialism, narrowness, or backwardness; three, the characterisation of localism as a political site for resisting domination..." (Nadel-Klein, 1991: 503).

This critical awareness of the use of community as a rhetorical and legitimating strategy presents significant problems in the development of intellectually coherent but instrumentally relevant research. There is a challenge for research funders to acknowledge and support critical social research which may not in practice validate contemporary (politically driven) strategies or policy. There is also a challenge for providers to demonstrate how critical research can contribute constructively to contemporary planning and research strategy development. In that context, there are clear lessons from this study. Any grounded investigation into issues such as land use change should commence with an investigation of the activity of local social structures and processes, around which decision support based on acceptable compromises between different interests can then be better designed.
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