BEFORE THE MACKENZIE DISTRICT COUNCIL

IN THE MATTER OF THE RESOURCE MANAGEMENT ACT 1991

AND

IN THE MATTER

OF PLAN CHANGE 13 TO THE OPERATIVE

DISTRICT PLAN

EVIDENCE OF CAREY VIVIAN (PLANNER) PART A
FOR FEDERATED FARMERS, FOUNTAINBLUE LIMITED AND RHOBOROUGH DOWNS

INTRODUCTION

- My name is Carey Vivian. I hold the qualification of Bachelor of Resource and Environmental Planning (Hons) from Massey University. I am a member of the New Zealand Planning Institute. I am a director of Vivian+Espie Limited (VEL), a resource management and landscape planning consultancy based in Queenstown. I have been practicing as a resource manager in for fourteen years, having held positions with the Queenstown Lakes District Council (QLDC), CivicCorp (regulatory contractor to the QLDC), Clark Fortune McDonald and Associates (CFMA) and Woodlot Properties Limited. Whilst working for the QLDC I was heavily involved in the final resolution of appeals before the Environment Court on the rural development and subdivision standards. This process resulted in the identification of a tri-partite distinction in landscape categories and a discretionary activity regime for all rural development and subdivision.
- I have read the Code of Conduct for Expert Witnesses that took effect on 31 March 2005, and agree to comply with it. This evidence is within my area of expertise and I confirm that I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in herein.

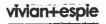
Summary of Evidence

- This evidence will address the policy planning issues relating to Plan Change 13 and the submissions by Fountainblue Limited (including Southern Serenity Limited and Pukaki Tourism Holdings Partnership), Federated Farmers and Rhoborough Downs. I note that in addition to this brief of evidence, I have also prepared evidence relating to site specific matters for Fountainblue Limited and Rhoborough Downs. These briefs are labelled Part B and C respectively, and will be presented subsequent to this brief in relation to the respective submitter.
- This brief of evidence (Part A) relates specifically to the general relief sought by Fountainblue, Federated Farmers and Rhoborough Downs regarding the withdrawal or rejection of the plan change on the basis of the fundamental flaws associated with Plan Change 13 and the adequacy of the Section 32 analysis. Specifically, this evidence will cover the following:
 - The flawed aspects of PC13;
 - The requirements of section 32 of the RMA and the failure of PC13 to meet these requirements;
 - Response to discussion in the Section 42A Report.

- 5 Overall this evidence concludes:
 - The landscape assessment that forms the basis to PC13 is flawed in failing to apply principles, theory and practice that characterise rigorous and technically defensible landscape assessments undertaken for the purposes of the protection of Outstanding Natural Landscapes in accordance with section 6(b) of the RMA.
 - Aspects of Plan Change 13 that are premised upon the findings of the landscape assessment that identifies the entire Mackenzie Basin as an ONL are flawed. In particular, the rules governing the development of nodes are arbitrary, unnecessarily restrictive and difficult to interpret.
 - The section 32 analysis is inadequate and fails to:
 - (a) Have sufficient regard to the effectiveness and efficiency of the new objectives, policies and rules and whether they are the most appropriate method.
 - (b) Provide an adequate risk assessment.
 - (c) Adequately analyse whether PC13 is the most appropriate method to achieve the purpose of the RMA.
 - PC13 should be withdrawn or rejected.

SECTION 32 REQUIREMENTS

- The section 32 analysis does not explain or explicitly identify the relevant legislative framework that governs changes to district plans. Accordingly, I consider it useful to do so.
- District Plans are the tool provided in the RMA for Territorial Authorities to carry out their functions to achieve the purpose of the RMA. The purpose of the Act is set out in Part 2, section 5 and provides:
 - 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 wellbeing 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
 - Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.
- Case law has established that in accordance with section 5, the RMA has a single purpose the promotion of the sustainable management of natural and physical resources, and allows for a comparison of conflicting considerations, their scale or degree, and their relative significance or proportion, in relation to achieving this purpose (*North Shore City Council v Auckland Regional Council* [1997] NZRMA 59).
- It appears to me that a shared criticism of PC13 is that its does not take into account conflicting considerations at all, rather its focus is inappropriately skewed in favour of protection. This is not, in my opinion, sustainable management.
- Of particular importance to PC13, is the requirement in section 6(b) to recognise and provide for the protection of outstanding natural features and landscapes from inappropriate subdivision use and development. I note that case law has established that section 6 matters, although nationally important, do not override other considerations required by the purpose of the Act. Section 6 matters need to be recognised and provided for in conjunction with the many other considerations contemplated by the legislation. In relation to determining the content of district plans, it is a matter of weighing all relevant matters and incorporating them within the plan's framework in order to produce a carefully analysed and well balanced document for achieving the RMA's purpose (see *Minister of Conservation v Western Bay of Plenty District Council* A071/01).
- In order to achieve the Act's purpose through the preparation of District Plans, section 32 of the RMA requires:
 - 32 Consideration of alternatives, benefits, and costs



(1) In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—

. . .

(c) the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part 2 of Schedule 1); or

. . .

- (2) A further evaluation must also be made by-
 - (a) a local authority before making a decision under clause 10 or clause 29(4) of the Schedule 1; and

. . .

- (3) An evaluation must examine-
 - the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and
 - (b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

. . .

- (4) For the purposes of the examinations referred to in subsections (3) and (3A), an evaluation must take into account—
 - (a) the benefits and costs of policies, rules, or other methods; and
 - (b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.
- Essentially, section 32 of the Act sets out the process within which Council's test the extent to which proposed plan rules are necessary and appropriate within the context of the Act. It requires a broad range of policies, objectives and methods to be achieved and requires a robust analysis to be undertaken in terms of environmental, social and economic costs and benefits. It is important that such analyses are transparent, well documented and justified. From a broad policy perspective, the section 32 process helps ensure that decision makers base resource management decisions on sound policy analysis and overall that good environmental outcomes are achieved at the lowest cost to individuals and the community.

In all cases, compliance with the requirements of section 32 of the Act is integral to the plan change process. However, I note that these provisions are particularly important where Council's propose to restrict or significantly alter development rights previously provided for in an operative district plan. In such cases it is particularly important that Council's undertake a robust and defensible analysis required by section 32 to justify restricted zoning. In my opinion, the section 32 analysis undertaken for PC13 falls well short of these requirements.

PURPOSE OF PC13 AND COMPLIANCE WITH SECTION 32 REQUIREMENTS

The purpose of PC13 is not clearly expressed in the section 32 report however I note the following paragraph at page 1 of the report:

... Plan Change 13 has been prepared in response to development pressure within the Mackenzie Basin, and in particular pressure for residential development and subdivision.

15 I also note the comment at page 10 of the report that:

... the main issue to be addressed by Council is to achieve robust provisions to manage the outstanding natural landscape of the Mackenzie Basin ...

- It is apparent that the overall intention or purpose of Plan Change 13 is the protection of Outstanding Natural Landscapes in the Mackenzie District from in appropriate subdivision, use and development required by section 6(b) of the Act. I reiterate the discussion in paragraph 8 above that section 6 matters do not override or take precedence over other matters that fall to be considered in the context of the purpose of the Act expressed in section 5.
- Integral to this purpose of PC13 is the landscape report undertaken Mr. Graham Densem that was notified with the plan change and referred to in both the section 32 analysis and the new plan provisions proposed.
- As discussed in the evidence of my colleague Dr. Steven, there are a number of issues with the landscape report relied on in the section 32 analysis regarding the assessment and classification of landscapes in the Mackenzie Basin. In particular the identification of the entire Mackenzie Basin as an Outstanding Natural Landscape for the purposes of section 6(b) of the RMA. I note the conclusion in Dr. Steven's evidence that Proposed Plan Change 13 is premised on the findings of a landscape assessment that is fundamentally flawed and deficient in relation to:



- The misinterpretation of the Densem landscape assessment which finds that the Basin is an outstanding working landscape not an outstanding natural landscape;
- The failure to independently assess the landscapes of the Basin according to widely accepted criteria, or in a manner that meets standard tests of reliability, validity and sensitivity; inconsistency with the manner in which landscape values are recognised and managed within a district characterised by pastoral farming;
- PC13 seeks to preserve a status quo that is characterised by unsustainable landscape management and farming practises.
- The identification of areas suitable for cluster development should be based on a transparent and technically robust methodology that responds to landscape characteristics and values at a finer grain of analysis than is evident in Map 8 of Mr Densem's report.
- Policies for approved building nodes should permit greater flexibility in the identification and planning of nodes, according to the characteristics of the landscape and the values associated with particular areas.
- To the extent that the section 32 Report relies on the landscape assessment and classification contained in the Densem analysis, it too is flawed. The particular implications for the section 32 analysis as a result of the flaws in the landscape assessment flow from the failure to adequately identify the location of outstanding natural landscapes in the Mackenzie District and the particular qualities of those landscapes that make them "outstanding natural" landscapes for the purpose of section 6(b). Without a clear understanding of the where those landscapes are and the particular qualities that separate them from other landscapes within the Mackenzie Basin it is impossible to have sufficient regard to the new objectives, policies and methods; adequately assess the risks of acting or not acting; and adequately assess whether the proposed methods are the most effective in achieving the purpose of the Act.
- Given that PC13 is expressed as an initiative to manage the effects of subdivision in outstanding natural landscapes. The need to adequately assess and identify these landscapes is rudimentary and the failure to do so is fatal to compliance with the section 32 methodology. In my opinion, the absence of a robust and defensible landscape assessment makes it impossible



to determine with any degree of certainty or to quantify, the extent of the benefits or costs of PC13 and accordingly, the plan change should be withdrawn or rejected in its entirety.

COMPLIANCE WITH SECTION 32 - OTHER MATTERS

- In addition to the inherent flaws with the landscape assessment provided with PC13, I wish to comment on the following additional flaws with the section 32 analysis:
 - The misunderstanding and misrepresentation of the implications of the tenure review process in relation to rural development in the Mackenzie district;
 - The failure to adequately consider the economic realities of rural land use in the Mackenzie Basin;
 - The overall failure to recognise that Section 6(b) is subordinate to the overriding purpose
 of sustainable management of resources required by section 5 of the RMA.

Implications of tenure review

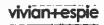
- The section 32 analysis alludes to the effect of tenure review and "land being released from pastoral lease to freehold" as justification for the need to place further restrictions on subdivision and development in the rural areas (see page 2). This reference to tenure review as justification for increased controls over rural development in the Mackenzie shows a clear misunderstanding of the nature and impact of the tenure review process on rural land ownership and farming activities.
- Firstly it is important to acknowledge that the tenure review process requires the protection of areas of "significant inherent value" including landscape value through crown ownership, private covenants and access easements. Thus to suggest that the freeholding of land as a result of the tenure review process is going to lead to a situation where valued landscapes are vulnerable to degradation via residential subdivision and development is an overstatement as many of the landscapes within the basin may have already been protected through alternate methods.
- Secondly, the section 32 analysis fails to acknowledge the extent of land that as a result of tenure review has become part of the conservation estate and is therefore no longer available for

productive farming use. The reality is that the tenure review process has altered the economic landscape of traditional farming activities in the basin. Tenure review results in less land being available for farming use and therefore less land being available for economic production. Furthermore, land owners that have been through the tenure review process often find themselves in significant debt as a result of the requirement to purchase the available freehold title.

- I understand that many run holders in the Mackenzie entered tenure review for reasons of succession. In particular the intention that free holding would enable and provide opportunities for debt reduction and non traditional developments that allow children and grandchildren remain involved with the farm in both and farming or alternative capacity.
- Accordingly, the implications of the tenure review process are absolutely relevant to the purpose of PC13 in terms of the protection of Outstanding Natural Landscapes and the overall purpose of the Act regarding the sustainable management of natural and physical resources. This relevance however extends beyond that alluded to in the section analysis regarding the freeholding of land, it has implications in relation to both the need for landscape protection measures in the district plan and the economic landscape of rural activities in the basin.

Economic realities of rural land use in the Mackenzie Basin

- The section 32 analysis fails to provide a robust and thorough analysis regarding the economic realities of rural land use activities in the basin. In the context of a plan change that seeks to significantly alter an operative planning regime in relation to the status of rural subdivision and land use activities such as PC13, a thorough economic analysis is considered crucial.
- On this point, I refer to a study titled "The Socio-economic Status of the South Island High Country" produced by the Agribusiness and Economics Research Unit at Lincoln University in May 2008. A copy of this report is **attached** to this evidence and marked 'A'.
- The discussion in this report concludes that many high country farmers are in financial difficulty after years of low incomes, stable working costs and recently, rising debt servicing costs. Development and diversification is required for rural farming operations to continue. PC13 fails to acknowledge these challenges. In particular, PC13 fails to acknowledge the extent to which farmers have been and still are stewards of the landscape that Council is trying to protect. In



order to adequately assess the impact of PC13 in the context of principles of sustainable management, some attempt must be made to quantify and consider the economic realities of rural land use activities and the extent to which flexibility in planning provisions is needed to allow for future development and diversification of rural land holdings.

The primacy of section 5 of the RMA

- Overall, the section 32 analysis fails to ensure that the protection of outstanding natural landscapes required by section 6(b) of the Act remains subordinate to the overall purpose of the sustainable management of natural and physical resources. The classification of the entire Mackenzie Basin as an outstanding natural landscape without adequate and robust justification is indicative of this. This is also clearly illustrated by the content of the supplementary landscape report that appears to make overall recommendations in relation to the acceptance or rejection of submissions a task that should be undertaken by the reporting planning officer not a landscape architect.
- This failure is fundamental to the adequacy of the section 32 analysis. Section 32(3) requires the Council to consider the extent to which the planning framework is the best method to achieve the purpose of the Act, not the best method to protect the landscapes of the basin from further development. PC13 fails to meet the requirements of section 32(3) in this regard.

DISCUSSION IN THE SECTION 42A REPORT

- I have read the section 42A report prepared in relation submissions on PC13. Section 2 of this report deals with what is described as "Whole of Plan Submissions" including submissions that challenge PC13 on the grounds of the adequacy of the section 32 analysis. I note that the discussions in this section of the report does not expressly consider or make recommendations in relation to the specific submissions that raise issues in this regard. While some of the general points regarding flaws in PC13 and the section 32 analysis are discussed, the report does not actually identify the requirements of section 32 nor provide any justification as to why or how the section 32 analysis satisfies these requirements. For this reason, the section 42A report is of no assistance to the hearings panel in relation to decisions on this issue.
- Furthermore, discussion in the section 42A report in relation to reasons for challenging the "whole of the plan change" are cursory and anecdotal. In relation to the Outstanding Natural



Landscape classification of the basin, the Officer's Report and the supplementary landscape assessment both fail to address the ultimate question in terms of the justification of the classification of the entire basin in this way. The only justification given in this regard is that:

The approach of identifying specific outstanding natural landscape and features within a large landscape was considered, however the large-scale landform(s) of the Mackenzie Basin do not lend themselves to easy identification and separation into discrete landscapes. Even if this were done the areas covered would be so substantial as to be little different than determining that the Basin is an outstanding landscape in its own right as well as containing outstanding landscapes within it.

The ease with which a landscape can be identified and separated into a discrete landscape is not at all determinative in terms of whether or not that landscape is an outstanding natural landscape. I also note that these comments are somewhat at odds with the discussion in the section 32 analysis that (see page 18):

Any approach involving generalised landscape compartments and "lines on maps" could be expected to be subject to considerable debate based on the Council's own experience and the experience in other districts. The scale of the Mackenzie Basin is such that a very detailed study would be both costly and time consuming.

- Neither of these comments provide any logical or defensible rationale for the identification of the entire Mackenzie Basin as an Outstanding Natural Landscape. In fact, these comments suggest that the rationale for the broad brush sub-zone approach is that the identification of specific Outstanding Natural Landscapes within the basin would be difficult, costly and time consuming. None of these factors have anything to do with whether or not the basin is in fact an Outstanding Natural Landscape for the purposes of the District Plan and the RMA.
- The discussion regarding the acknowledgement of the basin as a "working landscape" is contradictory. It appears to suggest that a working landscape can still be a natural landscape but the working landscape terminology was changed to avoid legal challenge. If a working landscape is still clearly a natural landscape then the risk of legal challenge is illusory. Clearly Council's own consultants are uncertain over landscape status of the basin.
- In relation to economic costs, the section 42A report fails provide any real or substantive analysis regarding the economic implications of PC13. Furthermore, as discussed above, the recommendations in the supplementary landscape assessment regarding the acceptance or rejection of submissions are unusual and unhelpful. It is not the job of a landscape architect to determine whether or not various methods are effective, efficient and the most appropriate

means to achieve the purpose of the Act. This requires a broad overall judgement under Part 2 and section 5 in particular. A landscape architect is not qualified to assess the various elements of sustainable management as defined in section 5. The very fact that this task has been delegated to Mr Densem underlies the extent to which the Council (or its consultants) has elevated landscape values as its sole matter of concern.

I also wish to comment briefly on the issue of deferred submissions. I refer to page 1 of the report which notes that submissions relating to land in the immediate vicinity of Twizel have been deferred due to an overlap between PC13 and a future Twizel plan change. This deferral seems to anticipate a future variation to PC13 regarding the edge of the sub-zone on the outskirts of Twizel and changes to the location of the Twizel urban fringe. I note the discussion at page 2 of the Section 32 analysis which provides:

... the majority of new residential development in the Rural Zone is within the Mackenzie Basin. Most of this appears to be for a second home or retirement where the need to commute is limited. The area of choice to date have been around Twizel, both on the immediate boundary of town and further afield (Glen Lyon Road and Manuka Terrace areas).

While the section 32 analysis identifies Twizel as a problem area in terms of rural development, Council now appears to be suggesting the issue of rural development on the periphery of Twizel can and should be dealt with via a separate plan change process. While the deferral of submissions relating to development on the periphery of Twizel is unsatisfactory in terms of creating significant uncertainty for the affected land owners and submitters, it also arguably undermines the need for a plan change relating to the entire Mackenzie Basin. If development pressure in the vicinity of Twizel is the catalyst for the increased restrictions proposed by PC13, the removal of this area from the Mackenzie Basin Sub-zone and the effect of PC13 does not make sense.

For these reasons, I reiterate that in my opinion the section 42A report is of no assistance in terms of the issues to be considered by the hearings panel in relation to the adequacy of the section 32 analysis that underpins PC13.

GROUNDS FOR WITHDRAWAL OF PC13

In my opinion the flaws in PC13 outlined above cannot be rectified within the scope of PC13 as notified. A robust and defensible district wide landscape analysis is required. A robust and



thorough economic analysis is required. The issued regarding the Twizel urban fringe and wider rural residential limits needs to be resolved.

- I note that while the section 32 process is iterative in that it applies throughout plan preparation, from issue identification to decision release and follows a process that allows for review of earlier steps and conclusions when necessary, the flaws outlined above in relation to PC13 are fundamental and cannot be rectified through this iterative process.
- As discussed by my colleague Dr. Steven, the purpose of PC13 requires an independent, technically defensible, <u>district-wide</u> landscape assessment to be undertaken. Thus the areas beyond the boundary of the Mackenzie Basin sub-zone must also be included. The scope of PC13 as notified is limited to the geographic locality of the Mackenzie basin. In order to rectify this particular flaw, PC13 needs to be reconsidered and renotified to enable district wide consideration and participation in this process.
- In addition, given the extent of the rural zone within the Mackenzie district extending beyond the Mackenzie basin, over Burkes Pass and into the Fairlie area, a robust and technically defensible district wide economic analysis must also be undertaken. This analysis needs to address: the economic realities of rural land use practices on a district wide basis; and consider the needs of the rural community in terms of the need to provide for their economic wellbeing.
- Indeed, if increased pressure for rural development in the immediate vicinity of Twizel in particular has been the catalyst to PC13 as suggested in the section 32 analysis, it makes strategic sense for the location of the Twizel urban fringe and wider rural residential development limits to be resolved prior to, or simultaneous with, any change in the planning framework for the wider rural area. From a public policy perspective the current deferral situation is unsatisfactory. Deferred submitters are faced with significant uncertainty regarding how they are affected by the deferral in terms of land use regulation as a consequence of both PC13 and a future changes to controls that apply to the Twizel township. Secondly, submitters and land owners in the wider rural area appear to be facing increased land use restrictions as a consequence of rural development that is specific to the Twizel surrounds and that is now going to be dealt with via a separate plan change process.
- Overall, PC13 has resulted in a planning framework that fails to respond to the wider imperatives of economic, social and environmentally sustainable land use in the Mackenzie District as a

vivian+espie

whole. This framework is justified on a flawed section 32 analysis and classification of the entire Mackenzie Basin as an outstanding natural landscape. For this reason, PC13 cannot be considered to promote the sustainable management of natural and physical resources. Furthermore, general policy alternatives to those proposed simply cannot be considered or formulated until a thorough district wide landscape assessment and economic analysis has been undertaken. If further protection of Outstanding Natural Landscapes within the district is necessary via increased planning controls, it is impossible to determine the appropriate nature and form of those controls until the relevant landscapes and special qualities of those landscapes have been clearly identified; <u>and</u> the need for protection of these landscapes has been subject to assessment in terms of principles of sustainable management in accord with the purpose of the RMA.

CONCLUSION

- Thus for the reasons set out above, it is my opinion that Council has failed to comply with its duties under section 32 of the Act, specifically Council has failed to:
 - Have sufficient regard to the effectiveness and efficiency of the new objectives, policies and rules and whether they are the most appropriate method.
 - Provide an adequate risk assessment.
 - Adequately analyse whether PC13 is the most appropriate method to achieve the purpose of the RMA.
- Accordingly, PC13 should be rejected or withdrawn.

Carey Vivian

Vivian & Espie Ltd



The Socio-Economic Status of the South Island High Country

Glen Greer

Research Report No. 306 May 2008



CHRISTCHURCH NEW ZEALAND www.lincoln.ac.nz



Research to improve decisions and outcomes in agribusiness, resource, environmental, and social issues.

The Agribusiness and Economics Research Unit (AERU) operates from Lincoln University providing research expertise for a wide range of organisations. AERU research focuses on agribusiness, resource, environment, and social issues.

Founded as the Agricultural Economics Research Unit in 1962 the AERU has evolved to become an independent, major source of business and economic research expertise.

The Agribusiness and Economics Research Unit (AERU) has four main areas of focus. These areas are trade and environment; economic development; non-market valuation, and social research.

Research clients include Government Departments, both within New Zealand and from other countries, international agencies, New Zealand companies and organisations, individuals and farmers.

Two publication series are supported from the AERU Research Reports and Discussion Papers.

DISCLAIMER

While every effort has been made to ensure that the information herein is accurate, the AERU does not accept any liability for error of fact or opinion which may be present, nor for the consequences of any decision based on this information.

A summary of AERU Research Reports, beginning with #235, are available at the AERU website www.lincoln.ac.nz/aeru

Printed copies of AERU Research Reports are available from the Secretary.

Information contained in AERU Research Reports may be reproduced, providing credit is given and a copy of the reproduced text is sent to the AERU.

The Socio-Economic Status of the South Island High Country

Glen Greer

May 2008

Research Report No. 306

Agribusiness & Economics Research Unit, Lincoln University
PO Box 84
Lincoln University
Lincoln 7647
New Zealand

Ph: (64)(3) 325-2811 Fax: (64)(3) 325-3679 www.lincoln.ac.nz/aeru

ISSN 1170-7682 ISBN 978-909042-94-3

7/		

Contents

LIST OF T	ΓABL	ES	I
LIST OF I	r IGU I	RES	I
ACKNOW	/LED	GEMENTS	ш
EXECUTI	VE S	UMMARY	v
СНАРТЕ	R 1	INTRODUCTION AND OUTLINE OF THE REPORT	1
1.1 1.2 1.3	The s	groundtudy methodologynisation of the report	2
CHAPTEI	R 2	ECONOMIC PERFORMANCE OF THE HIGH COUNTRY 1997/98 TO 2007/08	3
2.1	Farm 2.1.1 2.1.2 2.1.3	incomes, expenses and net returns Farm incomes and product prices Farm expenditure Conclusions	5 6
CHAPTEI	3	RESULTS OF THE SURVEY OF HIGH COUNTRY FARMERS	11
3.2 3.3 3.4 3.5 3.6 3.7 3.8	3.1.1 3.1.2 3.1.3 Opera Invol Recei Futur Way High	physical information Size, location and stocking Land type and land use Tenure ating constraints and farm viability. vement with tenure review at developments and impacts be development, opportunities, constraints and impacts of life and future on farm country farming communities ographics of interviewees	
CHAPTEI	R 4	THE STRUCTURE OF HIGH COUNTRY COMMUNITIES	21
4.1	4.1.1 4.1.2 4.1.3 4.1.4	us data 1996-2006	21 23 23
CHAPTEH	_	DISCUSSION	
REFEREN	ICES.		33
APPENDI	X 1	HIGH COUNTRY MESHBLOCKS	35
A DDENINI	v a	DATA TADI ES	37

List of Tables

Table 2.1: Main financial parameters for high country and hill country merino	
properties 2006/07 and 2007/08 (forecast)	3
Table 3.1: Total area ranges of survey farms	11
Table 3.2: Land use on survey farms	12
Table 3.3: Medium term viability of survey farms	13
Table 3.4: Stage of involvement with tenure review	
Table 3.5: Reasons for involvement/lack of involvement with tenure review	15
Table 3.6: Infrastructure developments during the last five years	16
Table 3.7: Reasons potential developments not yet undertaken	18
Table 3.8: Respondents' age groups	

List of Figures

Figure 2.1: Financial parameters for South Island high country farms	
(MWNZ) 1998/99 - 2007/08f in real (2007) terms	4
Figure 2.2: Financial parameters for South Island merino properties (MAF)	
1998/99 – 2007/08f in real (2007) terms	4
Figure 2.3: Composition of gross farm income 2000/01 – 2007/08 (forecast)	5
Figure 2.4: Real (\$2007 terms) lamb and wool prices 1998/99-2007/08	6
Figure 2.5: Farm cash expenditure and farm working expenses as a percentage	
of gross farm income 1998/99-2007/08f	7
Figure 2.6: Composition of cash farm expenses (MWNZ Class 1)	8
Figure 2.7: Composition of cash farm expenses (MAF)	8
Figure 4.1: Population growth in the high country meshblocks and New Zealand	21
Figure 4.2: Age distribution of usually resident high country and national	
populations (%)	22
Figure 4.3: Highest qualification achieved by the usually resident high	
country and national populations over 15 years of age (%)	23
Figure 4.4: Personal incomes of the usually resident high country and	
national populations over 15 years of age (%)	24
Figure 4.5: Household incomes of the usually resident high country and	
national populations over 15 years of age (%)	25
Figure 4.6: Occupations of usually resident high country and national	
populations over 15 years of age, in employment	26

-

ii

Acknowledgements

The author is grateful to MAF Policy for funding this study and to Meat and Wool New Zealand for providing unpublished statistical data. The help provided by John Aspinall, Ben Todhunter and MAF Regional staff who assisted in identifying farmer interviewees and provided helpful comments on the report is much appreciated as is the willingness of District Council members and staff in the Mackenzie, Central Otago and Queenstown Lakes Districts to discuss community changes in their Districts.

Above all the hospitality of the high country farmers involved in the study, and their willingness to share their experiences and opinions has been invaluable - meeting them and visiting their homes has been both a pleasure and a privilege.



Executive Summary

- During 2007 the AERU at Lincoln University was commissioned by MAF Policy to investigate aspects of the Socio-Economic Status of the South Island High Country. The research involved analysis of secondary data on farm viability, personal interviews of 36 high country farmers, analysis of census data, and discussion with farmers and community representatives about change in high country communities.
- Data from the Meat and Wool New Zealand survey of Class 1 High Country farms and from the MAF Farm Monitoring South Island Merino model were reviewed to examine the financial position of high country farms during the last decade. These showed that low real wool prices for most of the period, and in the last two seasons low lamb prices, combined with stable, and more recently increasing, real farm costs, have meant that real cash farm surpluses have been at or lower than \$100,000 since 2003/04. This level is unlikely to be sufficient to meet the costs of taxation, principal repayment, development, net capital purchases and personal drawings, which leads to the conclusion that the average South Island high country farm is not economically viable without outside injection of capital.
- Income from wool remains the major source of income on these farms although there has been a move toward lamb finishing since the previous decade, which has reduced the reliance on wool on the average farm (approximately 53 percent on average during the last decade compared with 60 percent during the period 1990/01). As farms with major diversification away from traditional pastoral enterprises are excluded from the surveys it is not possible to determine how much alternative enterprises are contributing to the viability of these.
- It appears that high country farmers have exhausted their traditional capacity to reduce farm operating costs in times of low incomes. This may be due in part to the length of the period during which incomes have been low, and in part to the fact that many are now locked into more intensive production systems, which have less flexibility of input use than the extensive systems of the past. The costs of debts servicing (interest and rent) have risen significantly in recent years, despite the fact that for most farms, rental increases have yet to be implemented for Crown Pastoral Lease (CPL) land.
- Thirty six properties, located in Otago, the Mackenzie Basin, Canterbury and Marlborough, were visited during the survey. Their owners were interviewed about a range of issues including farm performance and viability, present and future development activity and opportunities and the constraints on these, their involvement with tenure review, and their views about community and lifestyle. These properties were diverse in size (2,000 to 40,000 hectares), stock policies and the intensity of farming systems.
- Almost a third of the properties surveyed are in freehold tenure as a result of tenure review or earlier initiatives. Most of the remainder are a combination of CPL land with at least a small proportion of freehold. Twenty two percent of surveyed CPL farms have undergone tenure review, or accepted the substantive proposal to do so, 26 percent have been withdrawn from tenure review by the Crown, 18 percent have chosen not to enter tenure review, and the remainder are working through the process. This is consistent with the wider LINZ data on the status of tenure review.

- Succession appears to be the key driver for participation in tenure review followed by a
 desire to end the uncertainty associated with rental reviews or with the CPL system in
 general. Many considered that the CPL system is the most appropriate manner for New
 Zealand to manage most of the high country. Those who had not entered tenure review
 were those for whom the balance of the property would be destroyed, who saw no
 advantages in tenure review and/or had serious concerns about the management of
 vulnerable land returned to conservation.
- The main operating constraint for high country farmers has been sustained low incomes followed by the physical and climatic constraints imposed by the environment in which they farm. These are the traditional constraints of high country farming, but more recently tenure review and compliance issues have also been identified as constraints by some. Compliance issues are a particular concern of those in Queenstown Lakes District, although farmers in other districts perceive them to be inevitable in future. More than a third of those interviewed consider the financial viability of their properties to be at considerable risk and are concerned about survival. Of the 22 percent who consider their viability to be totally secure, many attributed this to their debt-free situation. The remainder felt only somewhat vulnerable, or believe that they will be able to survive.
- Most high country farmers have undertaken some land or infrastructural development in the past five years in order to improve farm returns or the returns from earlier development, but this has been relatively small-scale on most farms. The majority have also undertaken some change in management systems with 36 percent reporting increased emphasis on lamb finishing, and almost a third have significantly reduced or got rid of wether flocks. While the impacts of development and management changes on farm viability have been positive, for many it has not offset the impacts of low product prices. The main factor taken into account in development decisions is return on investment but the limitations of the land and farming environment is also of importance, as are personal and family preferences.
- While the majority of respondents have not explored opportunities for development in the medium term in detail, most consider that their properties do have such opportunities. Three quarters believe that their properties have potential for commercial development of tourism/active recreation because of their location and/or natural attributes and almost a third are involved in these activities to some extent at present. Half reported that there remain opportunities for significant intensification or development of pastoral agriculture, although only four of these saw this as the only feasible option, and a third had identified some potential for viticultural or horticultural development. A diverse range of other opportunities were also identified. To date only five have firm plans for comparatively large scale tourism developments in the near future, and only three had seriously considered viticultural development as an option for themselves or for their families in the medium term. Most of those interviewed are over fifty years of age and are pastoral farmers by inclination and experience. They generally consider larger-scale nontraditional activities as opportunities for the next generation. Succession and improved farm viability were each cited as the main drivers of future development by 60 percent of those interviewed. The main constraint on development identified by the largest group (52 percent) was the availability of funding, and the next largest group (34 percent) reported that they were still developing and had yet to get to these options.
- Despite the pressures reported, the majority of farmers are positive about their way of life, although many spoke of the increasing workload and stress levels. Most plan and/or hope that their families' involvement with their properties (on average properties had been farmed by the family for 53 years) will continue.

- High country farmers define their communities in a diverse range of ways but for most it is a relatively small local area comprising local high country farmers and often a local township. The sense of community differs between localities. The only change in local community that has affected many farm families is sense of the growing urban/rural divide, and a considerable number feel increasingly alienated from their immediate urban/semi-urban neighbours and from the wider New Zealand community.
- Recent census data show that the high country population (as defined in Appendix 1) has grown more rapidly than the national population during the five years from 2001 to 2006. This growth, however, has been concentrated in relatively small areas of lifestyle and residential development round Lakes Dunstan, Hawea, Te Anau and Wakatipu, while other areas have had stable or declining populations. The population now includes more people in the 60 plus age group as there has been some reversal of the trend toward people moving out of the high country as they reach retirement age, with the development of lifestyle blocks and rural residential developments.
- Agricultural and fisheries workers still comprise the largest proportion of the population (32 percent) but the proportion of tradespeople in particular has increased significantly in response to large-scale development in areas such as Queenstown, Wanaka and Cromwell. This is reflected in the area's education profile which shows that the high country has a lower proportion of unqualified people in its work force than nationally, but a much higher proportion of people who received a formal but non-university qualification after leaving school. The income data available on the high country excludes meshblocks with small populations and consequently, almost certainly, many high country farmers. The remainder of the high country population now receives higher personal incomes on average than the national average, although the converse was true in 1996. While the median household income in the high country is similar to the national average, the proportion of high country households with household incomes over \$100,000 is slightly lower than the national proportion, and the proportion in the lowest income group slightly higher. This gap has closed considerably over the last ten years.
- The farmer and stakeholder interviews found that a number of towns, townships and localities in or near the high country are experiencing significant social change as a result of lifestyle, vineyard and commuter developments. While this trend is sustaining the total population levels, many of the new residents have limited contact and empathy with pastoral farming. The extent of high country farmers' participation in these new community structures varies considerably and they participate as individuals, not as a major community group.



Chapter 1 Introduction and Outline of the Report

1.1 Background

The New Zealand Government has developed over time a set of High Country Objectives, which were consolidated in 2003. These objectives set out the wide range of things that Government wants to achieve in the South Island high country. These include the economically and environmentally sustainable management of publicly owned high country land by means both of the protection of significant inherent values and the removal of constraints on productive land so that it can be put to the most profitable use (Parker, 2006). Specifically the objectives are:

- a. To promote the management of the Crown's high country land in a way that is ecologically sustainable.
- b. To enable reviewable land that is capable of economic use to be freed of current management constraints.
- c. To protect significant inherent values of reviewable land by the creation of protective measures; or preferably by restoration of the land concerned to full Crown ownership and control.
- d. To secure public access to enjoyment of high country land.
- e. To take into account the principles of the Treaty of Waitangi.
- f. To take into account any particular purpose for which the Crown uses, or intends to use, the land.
- g. To ensure that conservation outcomes for the high country are consistent with the New Zealand Biodiversity Strategy.
- h. To progressively establish a network of high country parks and reserves.
- i. To foster sustainability of communities, infrastructure and economic growth and the contribution of the high country to the economy of New Zealand.
- j. To obtain a fair financial return to the Crown on its high country land assets.

MAF Policy is responsible for reporting to Government on progress towards achievement of the High Country Objectives, and specifically to provide sound information on the impacts of the Government's major high country policy initiative, land tenure review. This research project was commissioned to aid in this reporting.

The report provides information on the socio-economic changes in the high country during the last decade. It also examines the drivers of change and their impacts on the on-going economic and social viability of high country farms and the communities of which they are part.

Its specific objectives were to:

- Investigate factors affecting farm viability.
- Examine high country community structure.

1.2 The study methodology

The study comprised three parts. In the first, earlier work by Greer (2004) was updated to provide a picture of the viability of high country farms on average by analysing data available from secondary sources. The second comprised a series of structured interviews that was carried out with 36 high country farmers during 2007. The sample of farmers was not randomly drawn, as no complete listing of high country properties exists and because there are a number of logistical difficulties in conducting interviews where properties are spaced throughout such a large area. Consequently, the properties visited were selected from names provided by MAF staff and high country leaders in order to cover a cross-section of types of farm with respect to stage of involvement with tenure review, farming styles, degree of isolation, length of time on the property, etc. To some extent selection was influenced by the budgetary constraints which required that two and preferably three interviews were carried out per day. Regional stratification was based roughly on the proportions of Crown Pastoral Lease (CPL) properties in each region. In total 20 Otago farms, eight from the Mackenzie Basin, six from Canterbury and two from Marlborough were included.

A structured interview format was designed that covered decisions relating to the maintainance or improvement farm viability by means of development, intensification or diversification into different farming enterprises (e.g. changes in breed, management, or species of livestock, horticulture, etc.) and non-farm enterprises based on the property (e.g. tourism, contracting, etc.). The constraints on, and impacts of, development and diversification were examined. Although land tenure review was not the focus of the reseach, its opportunities and impacts were discussed with Crown Pastoral lessees in the sample. Thirty one personal interviews were carried out during farm visits by the researcher and five by telephone.

In addition, census data on high country communities from 1996 to 2006 were reviewed and discussions were held with representatives of District Councils in Queenstown Lakes District, Central Otago District and the Mackenzie District to gain an understanding of how they viewed changes in high country communities in recent years.

1.3 Organisation of the report

Section 2 of this contains a review of secondary data on high country farm viability and Section 3 presents the results of the farmer interviews. High country community structures are discussed in Section 4 and a discussion of the study's conclusions comprises Section 5.

Chapter 2 Economic Performance of the High Country 1997/98 to 2007/08

2.1 Farm incomes, expenses and net returns

New Zealand has two published sources of data on the financial and physical performance of high country properties; the Economic Service of Meat and Wool New Zealand (MWNZ) "Annual Survey of Sheep and Beef Farms" and the Ministry of Agriculture and Forestry (MAF) Sheep and Beef Farm Monitoring Reports. The MWNZ Economic Service has gathered data on its "Class 1 South Island High Country" survey farms for almost sixty years and reports average survey results. MAF policy has monitored the physical and financial performance of hill and high country South Island merino farms since 1996/97 and has recorded some parameters for the years 1993/94 to 1995/96 in order to model a "typical" farm of this type. Since 2006/07 MWNZ data has been used as the basis of calculation for the MAF farm monitoring models and some changes occurred in this year. The MWNZ Class 1 survey farm represents approximately 240 high country properties throughout the South Island, while the monitor farm represents 220 hill and high country merino properties running more than 3000 stock units. In recent years the MWNZ Class 1 farm has carried more stock and generated a higher value of production per head and per hectare than the monitor farm, probably reflecting the degree of sheep breed change and higher cattle:sheep ratios in the broader high country than on exclusively merino properties. Table 2.1 shows the main production parameters of the Class 1 farm and the South Island Merino monitor farm as estimated for the 2006/07 year and forecast for the 2007/08 year. It should be noted that as estimates for 2007/08 were updated before the extent of the drought and subsequent low store stock prices, and increased feed costs were fully apparent, the positive divergence between costs and returns forecast of 2007/08 seems unlikely to be realised.

Table 2.1: Main financial parameters for high country and hill country merino properties 2006/07 and 2007/08 (forecast)

	MWNZ SI High Country Class 1 Farm		MAF SI Merino Model	
	2006/07	2007/08 f	2006/07	2007/08 f
Effective Area (ha)	10508	10508	10,508	10,508
Opening Sheep Stock units	8,942	9,049	7,614	7,719
Opening Cattle Stock Units	2,193	2,212	1,400	1,309
Opening Deer Stock Units	148	150	-	-
Total Stock Units	11,283	11,411	9,013	9,028
Total Wool Sold (kg)	43,329	45,346	36,593	37626

Figures 2.1 and 2.2 show the main financial parameters for both models calculated in real terms using the Consumer Price Index (Statistics New Zealand, various years) to convert actual income and cost estimates to 2007 dollars.

Figure 2.1: Financial parameters for South Island high country farms (MWNZ) 1998/99 - 2007/08f in real (2007) terms

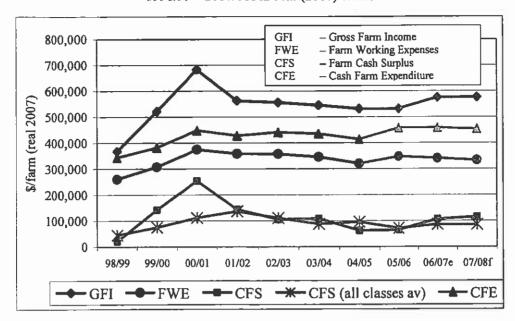
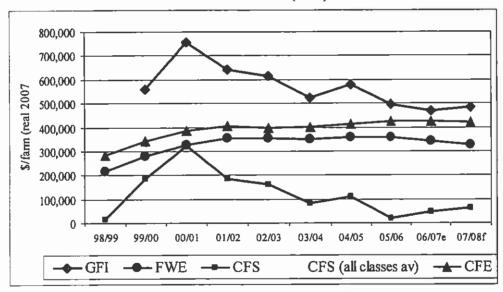


Figure 2.2: Financial parameters for South Island merino properties (MAF) 1998/99 - 2007/08f in real (2007) terms



On the MWNZ Class 1 farm the net financial position deteriorated between 2001/02 and 2005/06, with a gradual decline in Gross Farm Income (GFI – cash income plus inventory change values) and fluctuating Farm Working Expenses (FWE –operating costs) that increased sharply in 2005/06. Real Cash Farm Expenditure (CFE – FWE plus the costs of interest and rent) has been increasing since 2003/04, and Cash Farm Surplus (CFS – surplus available after operating costs have been met to meet the costs of capital development and purchases, taxation, principal repayment and personal drawings) declined over the period. The forecast lift in income and decline in costs for 07/08 is unlikely to have been achieved in the face of recent drought in many high country areas (resulting in lower lamb returns, poor store stock prices and increased costs of supplementary feed) and increasing costs (e.g. fuel,

fertiliser and rates) in the latter half of the season. The specifications of the farms differ to some extent and in the MAF model Real GFI and CFS have been declining more severely in the face of stable operating costs. However, the conclusions to be drawn from the two datasets over the past decade are similar although the financial viability of merino properties appears more tenuous than that of the high country as a whole.

Cash farm surpluses, the funds available to allocate to taxation, principal repayment, development, net capital purchases and personal drawings (which in the case of high country farms frequently includes school boarding fees for several children) have been at, or lower than, \$100,000 in real terms per year since 2003/04. With depreciation (and therefore, the need for capital replacement in the longer term) estimated to be approximately one third of that surplus, and the fact that proposed rental increases for CPL properties have yet to be implemented in most cases, the average high country farms described by the available data are not economically viable without outside injection of funds.

2.1.1 Farm incomes and product prices

The composition of gross farm revenues from 2000/01 to 2007/08 (forecast) for the MWNZ Class 1 survey and the MAF model are shown in Figure 2.3. Throughout the period wool revenue has remained the major component of farm income averaging 53 percent in the MWNZ survey (down from 60 percent on average in the previous decade) and 52 percent in the MAF model. Net revenue from sheep sales has averaged approximately 30 percent in both models (21 percent from 1990/01 to 1999/00) reflecting a shift toward fattening lambs rather than store sales, and reliance on income from beef cattle has remained at approximately 14 percent.

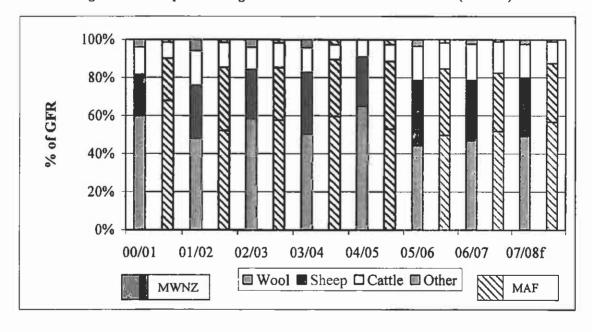


Figure 2.3: Composition of gross farm income 2000/01 - 2007/08 (forecast).

Sources of income other than wool, sheep and cattle sales account for only two to three percent of gross revenue in both models. It should be noted that both surveys specifically exclude properties where there has been significant landuse change that means criteria for inclusion are no longer met. Consequently properties converted to large-scale tourist operations are not captured in the data available. On properties that do meet the criteria for

inclusion in the surveys, newer enterprises such as farm tourism appear to be of comparatively little significance on average.

Lower real farm incomes in the last four years reflect both declining real wool prices and, with the exception of 2004/05, declining real lamb prices (Figure 2.4). The increase in lamb prices in 2007/08 is not expected to be as significant as the forecast values, because of the drought conditions that have prevailed over much of the South Island high country until mid-February 2008.

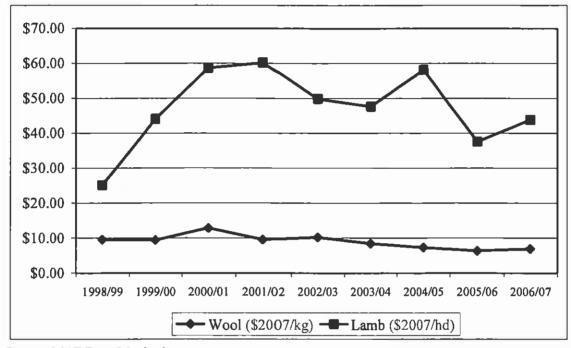


Figure 2.4: Real (\$2007 terms) lamb and wool prices 1998/99-2007/08

Source: MAF Farm Monitoring

2.1.2 Farm expenditure

Farm working expenses have remained relatively steady in real terms at an average of \$322,000 in the MAF model and \$347,000 for the MWNZ survey farm as Figures 2.1 and 2.2 show. During the previous decade they had increased markedly from \$247,000 to \$307,000 on the MWNZ survey farm, with most of the increase occurring during the last three years as the industry moved toward more intensive production systems, particularly lamb fattening.

As a percentage of GFI, however, FWE and CFE generally declined from 1998/99 to 2000/01, but have trended up since then, as reductions in incomes have not been matched by the reductions in working expenses. The reductions in these ratios forecast for 2007/08 are not likely to occur as drought is expected to have led to both lower farm incomes and higher costs of supplementary feed. Figure 2.5 shows the ratios of CFE and FWE to GFI. Farm management guidelines suggest that the FWE:GFI should be 50 percent or less, but the figure for high country properties has always been in excess of this level. Annual client surveys conducted by Ibbotson Cooney Ltd show that even the top 25 percent of farmers from hill and high country areas achieve FWE:GFI ratios lower than 50 percent in only a few years, and the average over all hill and high country farms exceeds this level in all years (Greer 2004). Consequently the margin available to high country farmers to absorb the impacts of low product prices or adverse climatic conditions is comparatively low. While high country

farmers have traditionally shown themselves able to reduce operating costs dramatically, for at least one season, in times of low income (Greer 2004), this does not appear to have occurred recently, probably as more intensive farming systems have locked farmers into higher operating costs.

100.0% 80.0% 60.0% % of GFI 40.0% 20.0% 0.0% 98/99 99/00 00/01 01/02 02/03 03/04 04/05 05/06 06/07 07/08f · CFE:GFI (MAF) -- FWE:GFI (MAF) CFE:GFI (MWI) -FWE:GFI (MWI)

Figure 2.5: Farm cash expenditure and farm working expenses as a percentage of gross farm income 1998/99-2007/08f

In 2004 Greer reported that the sustained effort to increase animal performance and overall productivity by the merino industry was reflected in the increased contribution to total cash expenditure of costs directly related to performance and productivity (animal health and breeding and fertiliser and feed). In recent seasons, however, total expenditure on these performance-related areas combined has declined both in real terms and as a percentage of total expenditure. In 2006/07 fertiliser and feed expenditure as modelled by MAF had declined to 84 percent of the 2003/04 level in real terms and to 75 percent on the Class 1 survey farm. As a percentage of CFE it had declined from 21 to 16.7 percent in the MBAF model and from 18.8 to 15.2 percent of CFE on Class 1 farms. Animal performance (animal health and breeding) costs had increased slightly both in real terms and as a percentage of CFE in the MAF model but in the MWNZ farm were 79 percent of 2003/04 levels and had declined from 7.2 to 6.7 percent of CFE. In contrast, debt servicing (interest and rent) had increased by 48 percent (MWNZ=30 percent) in real terms in the MAF model and from 11.8 to 16.4 percent of CFE (MWNZ=14 to 20 percent). Labour costs declined very slightly in real terms in both models. Figures 2.6 and 2.7 show the composition of GFI in the two models.

Figure 2.6: Composition of cash farm expenses (MWNZ Class 1)

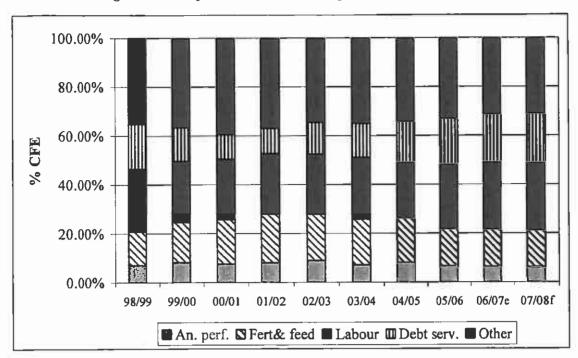
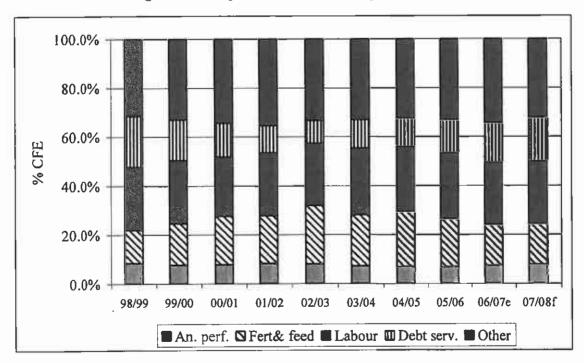


Figure 2.7: Composition of cash farm expenses (MAF)



Greer (2004) reported that the real value of FWE per kilogram of wool in the Class 1 model, which had declined from 1993/94 to 1996/97, had increased steadily since that time. She argued that while this appeared "to suggest that while profitability has increased, efficiency has not,... the improvements in the quality of the wool produced, although resulting in higher costs, may have moved the product into a higher price bracket so that a simple comparison of output and cost levels cannot be used to investigate efficiency." Since that time the real costs of production per kilogram of wool have stabilised in the MAF model and trended slightly down on the MWNZ Class 1 farm. In the MAF model the costs per stock unit also declined from 2002/03, while on the Class 1 farm they continued to rise until 04/05 before declining.

2.1.3 Conclusions

Even before MAF adopted the MWNZ dataset for use in farm monitoring, the trends evident in the two data sources were very similar.

South Island high country farms, on average, have been facing low (stable or slightly declining) real farm incomes for most of the last decade and real farm operating costs have remained relatively stable. This has meant that for a number of years cash farm surpluses have been insufficient to meet the needs of farm families and farming investment. MAF data has shown deficits in the disposable surplus of the South Island Merino model farm since 2003/04.

Although real farm working expenses have been relatively stable since 2000/01, total cash expenditure has risen, reflecting increasing costs of debt servicing (interest and rent). It is important to note that these costs will continue to increase in future if proposed increases in CPL rents are implemented. High country farmers appear to have less capacity to reduce operating costs in the face of low incomes than has been traditionally the case. This may reflect the long period for which incomes have been low and/or the fact that many are now locked into more intensive production systems that have less flexibility of input use than the more extensive systems of the past.

The average high country farm as described by the economic data available must be judged to be financially vulnerable, particularly in the face of poorer-than-forecast net returns as a consequence of recent drought and proposed increases in rentals for CPL land.

Chapter 3 Results of the Survey of High Country Farmers

3.1 Farm physical information

3.1.1 Size, location and stocking

In total, 20 Otago farmers, eight from the Mackenzie Basin, six from Canterbury and two from Marlborough were interviewed. The average area of surveyed properties was 10,471 hectares of which an estimated 8,166 were judged by farmers to be effective. Largely freehold farms are, on average approximately half the size (5,886 hectares) of those which are more than 80 percent CPL (12,290 hectares). The range in total area of farms surveyed is shown in Table 3.1.

Table 3.1:	Total	area	ranges	٥f	SHIPVEV	farms
TADIC J.J.	LVIAL	aiva	I AHECS	v	Jul vev	101 1113

	· · · · · · · · · · · · · · · · · · ·
Size range	% of farms
2,000 - 4,000 ha	22.2%
4,001 - 6,000 ha	8.3%
6,001- 8,000 ha	11.1%
8,001-10,000 ha	27.8%
> 10,000 ha	30.6%

Two thirds of the properties visited run merino breeding flocks, although three of these are moving toward a proportion of crossbred ewes. While a third of the survey farms still have merino wether flocks, several noted that these were considerably smaller than in the past, and three are in the process of phasing out wethers altogether as a consequence of the loss of summer country following tenure review. A third of farmers in total had phased out or significantly reduced merino wether flocks during the last five years. Approximately 60 percent try to finish a high proportion of lambs, but this has been more difficult in some areas during recent dry seasons and the proportions sold store have risen again. Roughly half of the merino growers now use a terminal sire over ewes not required to breed replacements.

All but two interviewees run cattle as well as sheep and almost a third also run deer. The average stocking rate per effective hectare in 2006/07 was estimated to be 1.7 stock units, considerably higher than the 1.1 reported by MWNZ for that year.

¹ While this appears to be significantly smaller than the average effective area of the MWNZ Class 1 farm in 2006/07 (10,580 effective hectares in 2006/07), the very large variation in size of high country properties (farms in this survey ranged from approximately 2,000 to 40,000 hectares) means that a small change in sample composition has a significant impact on average size and stock numbers. MWNZ experienced a large increase in the average size of their surveyed farms between 2004/05 and 2005/06, primarily as the result of the inclusion of one very large property in the sample.

3.1.2 Land type and land use

Most farmers (75 percent) classified their properties as "summer dry", 17 percent as "summer moist" and the remainder noted that the range of altitude covered by their farms means that some areas receive considerably more, or more reliable, rainfall than others.

Some farmers, particularly those on larger properties, had difficulty in estimating the proportions of their farms under different cover, or in different stages of land development. Table 3.2, which reports their best estimates, suggests that almost 80 percent of the total area of the farms visited is grazed to some extent, although this varied from 23 percent to almost 100 percent on individual properties. Eighty percent have some area, other than areas devoted to buildings, tracks, etc, that is not grazed. Almost all high country properties now have some cultivated land, although this is only a small proportion of most, and a high proportion (61 percent) have completed at least small areas of irrigation development. High altitude tussock country (defined as being above the snowline or outside the snowline fences) is grazed to some extent on 47 percent of properties in the sample.

Table 3.2: Land use on survey farms

Land use	Average ha	Average % of area	% of farms
Grazed tussock above the snowline	2,044	14.8%	47%
Medium altitude tussock	2,681	23.4%	72%
Oversown and top-dressed	2,762	35.3%	94%
Cultivated, not irrigated	304	6.0%	86%
Irrigated	92	1.8%	61%
Forestry	35	0.6%	28%
Ungrazed	2306	18.2%	81%

Note: Small differences between total of land use areas and average total farm area are due to farmer rounding

Over 60 percent of the properties visited have potential for future irrigation development, with an estimated average area on those farms of 282 hectares, or 180 hectares on the "average farm". Half of those interviewed believe that there is potential for further oversowing and topdressing (2070 or 1035 hectares) and almost half reported potential for additional cultivation (337 or 168 hectares).

3.1.3 Tenure

Farmers were asked to rate the medium term viability of their properties at the present stage of development and identify the factors likely to have the biggest influence on this. More than a third of those interviewed believe that the viability of their properties is at considerable risk and that they do not know whether they can survive. Almost a quarter of those interviewed believed farm viability was very strong, although a number of these acknowledged that if they were not in a "no or low-debt position" or did not have other business activities, that would not be the case. The lack of indebtedness was, for most in this position, associated with having been through tenure review or with families that had been on the property for several generations, although a number of long-time farm families were also financially vulnerable.

Table 3.3: Medium term viability of survey farms

Vulnerability level	% of farms
Very vulnerable	36%
Slightly vulnerable	19%
Able to survive	22%
Very strong	22%

3.2 Operating constraints and farm viability

Low income as a result of low wool prices for a number of years and low lamb prices more recently, as well as recent droughts in many areas, is one of the major constraints on the operation of their farms in their present state of development for 56 percent of high country farmers. The climate and other rigours of the production environment in which they farm is also recognised as a major constraint by many (39 percent). These factors have constrained high country farming since its beginnings.

However, some of the constraints identified are of more recent origin. Nineteen percent of interviewees, when asked to identify major constraints, listed the stresses and pressures on time arising from their involvement with tenure review and a further 17 percent identified the demands of Resource Management Act 1991 (RMA) compliance, and in a number of cases, the limitations compliance places on farming practices. Vegetation control restrictions make the costs of maintaining new developments in the face of regenerating scrub, and of maintenance weed control, very difficult on a number of farms. A conversation between one interviewee and his adult sons highlighted the changes that have occurred within a generation. "When [Dad came home he] was only limited by prices, time and energy and what was best for the land....we still have all of that plus we need to be lawyers, planners and [diplomats]!" These views were echoed throughout the interviews by many others who had not specifically identified them as constraints when asked, having concentrated more on physical constraints. A Queenstown Lakes District farmer noted that where burning consents used to be handled by a ... "one stop shop and pretty much rolled over from year to year, we now have to go to four separate places, and two of which are within the District Council."

Water availability and the availability of both permanent and good casual labour were each cited as major constraints by 13 percent of interviewees. There is comparatively little permanent labour outside the farm family employed on high country farms today, and much farm labour accommodation has been converted to tourist accommodation. The labour that is employed is usually a single shepherd(s) with only two properties still employing married couples. On average the farmers visited employ 2.8 full-time labour units including themselves and their families and additional one part-time labour unit, often the interviewee's partner.

Farmers were asked to rate the medium term viability of their properties at the present stage of development and identify the factors likely to have the biggest influence on this. More than a third (36 percent) of those interviewed believe that the viability of their properties is at considerable risk and that they do not know whether they can survive. Twenty two percent of those interviewed believed farm viability was very strong, although a number of these acknowledged that if they were not in a "no or low-debt position" or did not have other business activities, that would not be the case. The lack of indebtedness was, for most in this position, associated with having been through tenure review or with families that had been on

the property for several generations, although a number of long-time farm families were also financially vulnerable. A further 22 percent believed that farm viability was such that they would be able to survive and 19 percent felt vulnerable but not severely so as yet.

Most farmers expect that the biggest influence on future farm viability will be future product prices followed, for a number, by the outcomes of tenure review and its impacts on debt levels and succession planning. A number discussed the fact that they feel vulnerable because of their "dependence on political issues". These include rental reviews and the growing urban/rural divide, which they consider to be creating pressures for the imposition of restrictions on normal farming practices, without any understanding of the impacts of the restrictions. Other issues discussed included the "compliance industry" and drought.

When asked how they felt about off-farm investment as a strategy for increasing farm viability 63 percent believed it should not be used for this purpose and that the farm needed to pay its way and support the farm family. Interviewees were not asked about their own off-farm investment strategies but anecdotal evidence, and MAF farm monitoring, suggest that a number have relied on introduced funds in recent years. It was regarded as a valuable succession tool by a number, allowing parents to retire without relying solely on income generated by the farm.

3.3 Involvement with tenure review

Thirty six percent of the farms visited are currently in tenure review or have completed the process as Table 3.4 shows.

Stage of involvement	% all farms	% CPL farms
Accepted/implemented	18%	22%
Awaiting responses to preliminary proposal	5%	6%
Consultation re preliminary proposal	13%	16%
Information gathering for preliminary proposal	3%	3%
Not in tenure review	18%	22%
Withdrawn from tenure review by the Crown	26%	31%
Not Applicable	17%	

Table 3.4: Stage of involvement with tenure review

Eighteen percent of farms in the sample (22 percent of CPL farmers) have accepted the substantive proposal for tenure review or have had their lease disposal completed, compared with 20 percent of all CPL farms (LINZ, 2007). Six percent of CPL properties have had preliminary proposals advertised (six percent of all CPL farms) and 19 percent are in the process of information gathering for, or consultation about, the preliminary proposal (25 percent). Of the 53 percent of CPL farms not in tenure review (44 percent of all CPL farms) almost 60 percent were withdrawn from the process by the Crown in 2007 because they are within five kilometres of, and visible from, a lake greater than five square kilometres in area. Of these ten properties two had not entered tenure review, two were in the very early stages, two were nearing the end of the process and the remainder were in the consultation stages. Two had already made significant changes to their farming operations in the expectation that tenure review would proceed as set out in the proposals for their properties.

Succession appears to be the key driver for participation in tenure review and is the most frequently cited reason (61 percent of those in or through tenure review) for entering tenure review amongst survey farmers. The manner in which this has, or is expected to, occur varies amongst farms. On some, relinquishing part of the property would free up assets that could be used to buy out members of the family who did not intend to continue farming, or to purchase additional land that would make it possible for more than one sibling to farm. On others, funding for development, or simply debt reduction, would enable more than one sibling to continue on the farm or to ensure that the farm could support parents in retirement. Others considered that free-holding would provide opportunities for non-traditional on-farm developments that would give the next generation the opportunity to live on, or remain involved with, the farm in a capacity other than farming.

The next most frequently cited reason was to relieve the uncertainty associated with the likelihood of large increases in CPL rentals (52 percent of those involved). Many of these consider that the pastoral lease system is the best way for New Zealand to operate much of the high country. However, as they believe that large rental increases would make their farms unviable, they intended to proceed with tenure review. The third most important reason for entering tenure review was that freeholding would give farmers both the security and the motivation required to undertake significant development programmes. Table 3.5 summarises these reasons, which include reasons given by farmers involved in tenure review at the time of the interviews but subsequently withdrawn by the Crown.

Table 3.5: Reasons for involvement/lack of involvement with tenure review

Reasons for involvement/lack of involvement	% of farms				
Farmers who have entered and remained in Tenure Review					
To reduce uncertainty now associated with CPL	52%				
To facilitate succession	61%				
Security and motivation to develop	30%				
Other	30%				
Farmers who have not entered/withdrawn from Tenure Review					
TR would destroy balance of farm	56%				
Lack of confidence in land mgt after TR	22%				
No advantages	44%				

Amongst those not proceeding with tenure review at this stage, the most commonly cited reasons are that the balance of the property would be destroyed, or that the proposal has no benefits for them. Twenty two percent said that they had decided not to proceed because of concerns about the way in which vulnerable land, looked after by their families for many years, would be managed if it was returned to conservation use. Several others, although intending to proceed, also expressed strong concerns about the risks of poor weed control or of fire in remote areas if unrestricted public access were to be allowed, either on land they surrendered or on adjacent land surrendered by neighbours.

3.4 Recent developments and impacts

The majority of those interviewed had undertaken at least some infrastructural development on their properties in the last five years, although in most cases this involved minor work only.

Those who had done no development felt that their properties were fully developed and only maintenance was required. Over half of the survey respondents had undertaken further paddock subdivision and a quarter had cultivated additional land. Table 3.6 summarises the extent of infrastructural development undertaken on survey farms during the last five years.

Table 3.6: Infrastructure developments during the last five years

Land and Infrastructural Improvements	% of farms
Paddock subdivision and fencing	47%
Land subdivision	19%
Irrigation	17%
Scrub clearing	11%
Additional cultivation	31%
Building	19%
Forestry development	6%
Other	53%
None	11%

Note: Other includes construction of yards, modification of buildings for tourist accommodation and additional land purchase as well as "one-off" activities

Changes to livestock management systems have also been made by the majority of farmers. Greater emphasis on finishing young stock rather than selling them store, as was traditional in the high country, was reported by 36 percent. Many of these discussed the fact that recent investment in lamb fattening (cultivation, irrigation, etc.) has not had the desired impact on farm returns as yet because of drought and/or the low lamb prices of the past two seasons. Reduction in merino wether flocks was reported by a third, and a partial or total change from merino ewes to Perendale and other cross breeds by 25 percent. The introduction of terminal sires over ewes not required to breed replacements and an increase in the ratio of cattle to sheep were each reported by 14 percent, and a diverse range of other changes by 44 percent.

The dominant reason for making both infrastructural and management changes was to get higher returns from farm production (58 percent), and a further 17 percent said that they were flow-on changes from previous developments. Other reasons cited were risk reduction, farm succession and responses to tenure review.

On almost 70 percent of farms the impacts of these developments on farm viability has already been positive, but for a third of these the impacts are not sufficient to offset low product prices, and farm profitability is lower than before development. For the remainder the impacts are not yet visible, or have reduced risk rather than resulted immediately in improved annual profitability.

When asked without prompting to identify the main factors influencing their decisions on development options at present most farmers (72 percent) cited the expected return on investment and the impact on farm viability, while only 39 percent mentioned factors related to the farm environment. However, throughout most of the interviews it was clear that almost all respondents evaluate all farming activities in terms of the particular characteristics of the environment in which they farm, and their concern for its care and maintenance was a recurring theme. Personal preferences and family preferences were identified as major factors by almost half of all respondents. A number of those over 50 years of age said that they were still in the

high country, despite the difficulties, because they love traditional high country farming and that for them, although probably not for their children, only pastoral development options would be considered. Issues relating to the RMA, risk reduction and succession planning were each identified by fewer than 20 percent of respondents, although for a number of others, it was clear that a major reason for needing increased viability was to secure succession.

In order to offset declining wool prices, 31 percent reported that they had diversified into other enterprises, 28 percent had moved more resources into lamb fattening, 22 percent had increased the ratio of cattle to sheep and 14 percent had made a partial or total breed change. Twenty eight percent, predominantly those with diverse enterprises on their properties, had not made changes specifically for this reason.

3.5 Future development, opportunities, constraints and impacts

When farmers were asked what they considered to be the potential medium term developments feasible for their properties irrespective of their own personal preferences, it was clear that this was not an issue the majority had explored in any detail as yet. Approximately three quarters considered that there was potential for some level of tourist development and 13 of those interviewed are already operating, or providing facilities for other operators of, tourism or recreational businesses. These include accommodation businesses using existing farm-buildings, horse-trekking, four-wheeled driving, garden tourism, heli-skiing, function venue provision, and wine-tasting. For five, these are major business ventures and four have plans for further development in the short term. For the rest they are at present only a small part of the overall farm business. Most of those with relatively large scale tourism and hospitality ventures have partners with skills and previous experience in this area.

Those who included tourism and recreation as a feasible future development generally saw potential for the commercialisation of active recreational pursuits such as hunting, fishing, walking, four-wheeled driving and horse-trekking, because of the natural attributes of their properties, and in a number of cases, proximity to tourist centres or other recreational developments.

Over half considered significant intensification or improvement of pastoral agriculture as a potential development and half of these regarded irrigation as part of a strategy for achieving this. Only four farmers regarded "doing what we do better" as the only option for the future, because their properties and farm locations are not suited to any other purpose.

Although a third of interviewees identified orchard or viticultural development as a future option for their properties, only three had definite plans to do so or had considered this option seriously as a possibility for themselves or another family member. The others are in areas adjacent to development of this type or have areas of the farm they believe have suitable soils or microclimates, and included these options as something possible but not likely. The most frequently mentioned "other options" were power generation (wind or hydro-electric), land subdivision and dairy grazing.

In total, only five interviewees had definite plans for significant developments in business areas other than those related to pastoral agriculture on their properties in the next five to ten years. Two reported imminent farm sales. Most high-countries farmers are "here because we love this place and what we do" and see major change as providing options for the next generation. The small number planning, or who have already undertaken, larger scale non-traditional activities are generally those who have relatively recently taken over management of their properties.

When asked what they consider to be the major impacts of future developments on their families and farming operations, almost 60 percent considered them to be a tool that would, or may, facilitate farm succession in future. An equal number cited improving farm viability as the main impact and a third listed a range of impacts including risk reduction, opportunities for non-farming members of the family to continue involvement with the farm, and personal satisfaction. Throughout the interviews a number of interviewees spoke of a desire "to make my mark on this place" or of already having done so, in the sense of leaving the property in some way better than it had been when they took over. These improvements were often environmental improvements – river protection, covenanting areas of significant inherent value, and erosion control, as well as raising the productive values.

When those who identified potential future developments for their properties were asked to identify the major factor(s) that had constrained them from undertaking them to date, the majority (52 percent in total) responded that they were limited by lack of available finance or by low product prices. The next largest group are still working through farm developments (34 percent) and almost as many were aware of alternative developments but their experience and interests lie in pastoral farming. The skills required for major non-pastoral enterprises will be for the next generation to develop. Table 3.7 shows the major constraining factors identified by respondents initially, and their responses when they were next asked whether some of the factors they had not mentioned had had any impact.

Table 3.7: Reasons potential developments not yet undertaken (% of farms with identified potential developments)

Constraint or reason not undertaken	Major constraint % of farms	Other constraint % of farms
Have been working through development - not got there yet	34%	-
Finance	31%	24%
Product prices low for sector/viability	21%	10%
Personal preference for pastoral farming	28%	-
Ownership structure re CPL	24%	14%
Planning processes too difficult or may preclude	21%	21%
Other .	38%	24%

3.6 Way of life and future on farm

It was surprising that, despite the very real difficulties many interviewees are confronting at present and the stresses they report as a result of very low product prices, tenure review and other issues, high country farmers remain remarkably positive about their way of life. Only 11 percent of those interviewed considered that the viability issues and stresses have seriously eroded this in recent years, while over 60 percent rate quality of life as very good to excellent and 25 percent as "still good". Many who rated the lifestyle very highly did, however, speak of increasing work loads as the farm workforce has declined due primarily to financial pressures, and in part to difficulties in obtaining good permanent and casual labour in some areas. For a number the growing urban-rural divide (see Section 3.7) is eroding their satisfaction with their way of life to some extent.

When asked what comments they had to make about the future of their family's involvement with their properties, 45 percent said they have plans currently in place to enable family members to take over management of the farm (although not all were sure that this would happen) and an additional 36 percent hope that their families will continue to be involved.

Forty five percent were certain that the property would remain in the family for at least the next generation, although over a third of these had secured family ownership but did not expect that their children would farm. Twenty two percent hoped that their families would stay but did not yet know whether children would decide to return to the farm, and a further 14 percent said they hoped the family would remain but had very real concerns about the financial feasibility of this. Three farms are to be sold in the near future and the remainder of the interviewees said that they did not know or that they are unconcerned.

3.7 High country farming communities

There is considerable variation in the way in which high country farmers define the communities in which they live and work, and a number consider themselves to be part of two and sometimes three distinct communities. The largest group, over half, consider that their community is a local farming area, a gorge or valley, including local towns although the size of the defined area and associated towns varies according to the farm's location. Children and a local school provide a community of interest that includes both the farming and non-farming communities. Several feel that they are part of a small rural community not including a township, and a small group that they are only part of a small local farming community such as the Rakaia Valley and three that they are not part of any community for varying reasons.

Five farmers reported that as well as local community membership they are also part of the farming community in a broader area such as the Upper Clutha Valley, and four that they are part of the broader South Island High Country Community.

Their views on the impacts of changes in local communities on their own families and on high country farmers in general are also highly variable, even within quite small geographic areas. Most of those interviewed in the Queenstown Lakes District and some of those in the Mackenzie Basin, as well as a few others, feel marginalised in communities of which they were once part. Only three from these areas spoke of valuing the growth in local services and infrastructure and the greater diversity of the community. One said he and his wife "feel like dinosaurs in our own community" and that Wanaka is "no longer a rural community and we miss it". A Mackenzie farmer reflected on the "huge mental shift from the concept that this is our place to a situation where someone tells us that our way of life doesn't fit here" and another that "it's amazing that in one generation we've gone from being the backbone of the country to the bad guys". Many interviewees in other regions also spoke of the growing rural/urban divide, which several attributed in no small part to publicity around public access issues and tenure review. There is a strong perception that lack of understanding of property rights and farming practices amongst urban people is creating an image of farmers as exploiters rather than stewards of the land. They see this to be a major threat to high country farming operations.

Many of the farmers interviewed in Queenstown Lakes and several in the Mackenzie District feel under constant scrutiny from newcomers to communities such as Queenstown and Wanaka, and to a lesser extent Tekapo, and concerned that normal farming operations such as vegetation control with appropriate consents are reported to authorities, and about unnecessary fire services call-outs. Two spoke of being verbally abused by members of the public while burning with consents. A few observed that objectors to new developments have little to lose except money they can afford if they are unsuccessful, while farmers can ill afford to pursue their cases, and

suffer both financially and in terms of stress from the delays in development, even where objections are eventually overturned. Central Otago District, Canterbury and Marlborough farmers generally felt much less constrained by environmental pressures, as yet, than those in the Queenstown Lakes District but several noted that they expected that these would intensify in time throughout the high country and that they are likely to become a significant impediment to farming.

Several of the Central Otago interviewees live in, or adjacent to, wine-growing and horticultural areas and most, although not all, felt that there is little common interest between these groups, and that the communities do not mix. The remainder enjoy the greater diversity of people in the area.

Loss of services was an issue for only three of those interviewed. Two properties are no longer serviced by school buses, which is a significant issue in recruiting and keeping good farm labour, and one regretted that a local bank had closed. Several Otago respondents acknowledged that the growth associated with tourism and other developments has led to increased availability of services in local towns, more cultural and sporting opportunities, particularly for farm children, as well as off-farm career opportunities for the partners of sons and daughters returning to the farm.

3.8 Demographics of interviewees

Table 3.8 shows the age groups of farmer interviewees. Most (almost 70 percent) of those interviewed were over 50 years of age and still actively involved in management of the farm although two farmers had sons in the process of assuming this role and 36 percent have family members on the farm.

ranie 5.0. Kespondeni	rs age groups
Age group	% of farmers
21-30 years	6%
31-40 years	19%
41-50 years	11%
51-60 years	42%
60+ years	22%

Table 3.8: Respondents' age groups

Thirty six percent of those interviewed have a partner and at least one post-school age child working on the property while 17 percent have post-school age children all away from the farm at present although six percent anticipate the return of a son in the next few years. Thirty percent have only pre-school or school age children and 17 percent are childless.

Long family involvement with the same property characterises the South Island high country and the average time that survey farm families have been associated with the properties visited is 53 years. Over a quarter bought their properties more than 80 years ago and all except 17 percent have owned or leased them for more than twenty years.

Chapter 4 The Structure of High Country Communities

4.1 Census data 1996-2006

Statistics New Zealand has supplied MAF Policy with census data related to the population of the South Island high country, excluding major urban centres particularly tourist centres, which are deemed to be completely independent of farming influences, from the dataset. These include Queenstown, Wanaka, Cromwell, Alexandra, Twizel, and Hanmer. Appendix 1 includes notes provided by Parnell Trost (Senior Policy Analyst, MAF Policy, Dunedin) on the selection of meshblocks included in the analysis and a map of the area included. Appendix 2 contains the data tables from which the bar charts in this section are derived. A meshblock is a defined geographic area, varying in size and population from a part of a city block to a large area of rural land and is the smallest geographic unit for which statistical data is collected and processed by Statistics New Zealand. General population data has been taken from census data available on the Statistics New Zealand website.

4.1.1 Population profile

The population of the South Island high country (excluding the major urban centres listed above) has grown rapidly between 2001 and 2006 from 10,407 to 11,757, an increase of 13 percent compared with the national population increase of 7.8 percent. However, during the previous five-year period the high country population had been almost stable (declining by 0.2 percent) while the national population grew by 3.3 percent. Population growth over the decade as shown in Figure 4.1 was, therefore, 12.8 percent in the high country and 11.3 percent nationally.

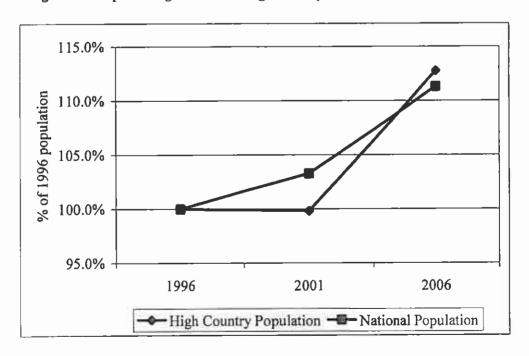


Figure 4.1: Population growth in the high country meshblocks and New Zealand

Analysis of within-high country mesh blocks has been undertaken by Parnell Trost (MAF Policy) who has also provided some of the commentary on census trends. This shows that while the total high country population grew by 12.8 percent over the decade, the pattern of growth was not constant over the area. Small-farm, lifestyle and residential subdivision in the areas surrounding Lakes Dunstan, Hawea, Te Anau, and Wakatipu, regarded as favoured lifestyle areas, has seen a total population increase in these areas that is 123 percent of the total population growth in the region over the decade (1,659 compared with 1,350 in total). These areas comprise only 28 of the 352 area meshblocks included in the high country and now contain 33 percent of the high country population in total (up from 21 percent in 1996). Census 2006 information shows that much of the incoming population to these areas over the preceding five years had come from elsewhere in New Zealand and from overseas. The more traditional rural areas throughout the rest of the high country have experienced stable or declining population over the decade as residents move to other areas for education, employment and social reasons.

The high country differs from the rest of New Zealand in that it has a higher proportion of males to females (53:47 compared with 49:51), as has been traditional in many rural communities, particularly more isolated ones. Nationally and in the high country the proportion of males in the population has declined by less than one percent during the decade.

The high country population has, throughout the decade, been home to a proportionately lower population of people older than 60 years of age than the country as a whole, reflecting a movement out of the area as people near retirement age. This effect is less marked in the 2006 census data, perhaps because of the greater numbers of lifestyle blocks and/or as the age of retirement increases. The population of younger people (in the 15 to 29 year age groups) is also proportionally lower in the high country community as young people are drawn out of the region for education, employment and social opportunities. Conversely, the region has a higher proportion of its population in the 30 to 60 age groups than the national average. The proportion of children under ten in the population is similar to that of the wider population in 2006 but has declined over the decade from 16.1 to 14.9 percent.

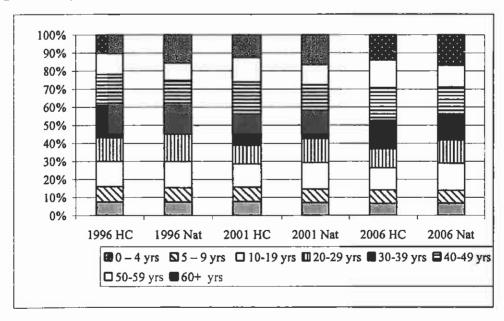


Figure 4.2: Age distribution of usually resident high country and national populations (%)

4.1.2 Education profile

High country residents are more likely to obtain a formal qualification at school or after leaving school than the wider population (18.5 of high country residents compared with 22.4 percent of New Zealand residents had no formal qualification in 2006), but are less likely to have a university qualification (13.8 percent compared with 14.6 percent). The rate of increase in university qualification has been faster amongst high country residents than others as Figure 4.3 shows (138 percent increase between 1996 and 2006 compared with 76 percent) and the decrease in the population with no qualification has been greater (38 compared with 40 percent). They are slightly more likely to have a secondary school qualification (32.9 percent compared with 31.4 percent) but are considerably more likely have acquired formal non-university qualifications since leaving school (27.2 percent compared with 21.6 percent), reflecting the increase in tradespeople, and technicians and associated professions (see Section 4.1.4).

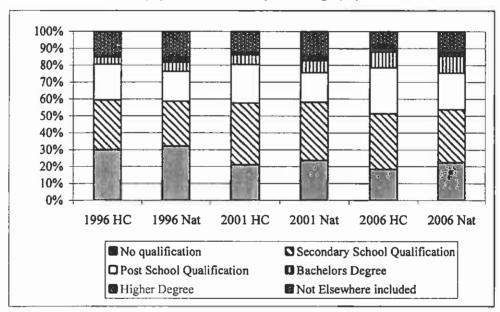


Figure 4.3: Highest qualification achieved by the usually resident high country and national populations over 15 years of age (%)

4.1.3 Income profit

The confidentiality rules employed by SNZ have limited the availability of income data. No income data can be released for any geographic area if the total un-rounded population is 40 or fewer individuals, or 20 or fewer families or dwellings. This means the following results are derived from a sub-set of the high country meshblocks that included between 56 and 63 percent of respondents to the census question on personal income in different years, and almost certainly excluded many high country farm families.

Changes in the proportions of the population in specific income groups tell us comparatively little, since incomes in general have risen significantly over the period. The median annual personal income from all sources for people who were aged 15 years and over and living in New Zealand on census night was \$15,600 in 1996, \$18,500 in 2001, and \$24,400 in 2006 (Statistics New Zealand, 2007). Rather it is the relationship of high country and national incomes that is important. Figure 4.4 shows the proportions of high country and national residents by income categories in each census year.

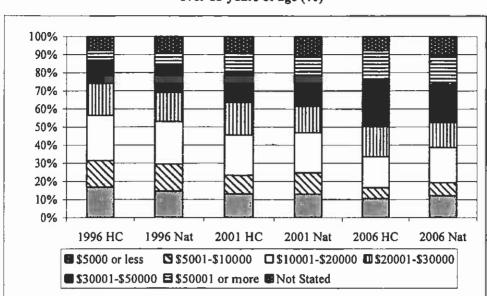


Figure 4.4: Personal incomes of the usually resident high country and national populations over 15 years of age (%)

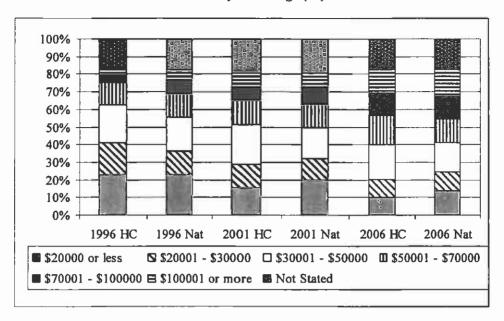
In 1996, a higher proportion of high country residents had personal incomes of less than \$10,000 than nationally (31.5 percent compared with 29.5 percent) but by 2006 this situation was reversed with only 16.6 percent of high country residents reporting incomes in the lowest groupings compared with 19.3 percent nationally.

While the proportion in the highest reporting category (more than \$50,000 per year) is still marginally lower in the high country (16.0 percent compared with 16.9 percent), there has been greater growth in this category in the high country than nationally (up from 5.3 percent compared with 6.6 percent). The decline in the proportions of high country residents reporting incomes in all groupings lower than \$30,000 per year has been greater than the national decline while increases in those reporting incomes in each grouping over \$30,000 are greater. The median high country income of \$15,400 in 1996 was 98.7 percent of the national medium income. In 2001 it was 106 percent of the national median (\$19,600) and 109 percent in 2006 (\$26,700). On average, high country residents in the meshblocks that meet the confidentiality criteria are receiving higher personal incomes than New Zealand residents as a whole and incomes are increasing more rapidly.

The median high country household income has remained at or about the national level. In 1996 the median high country household income was \$31,100 compared with the national median of \$30,910, while in 2006 both had reached \$54,000. These data are based on between 57 and 61 percent of the households for which this census question was answered. Differences exist in the proportions of households in individual income categories, although these are diminishing (see Figure 4.5).

In 1996, 41 percent of high country households reported incomes lower than \$30,000 while only 36 percent of all households did so. Incomes of \$100,000 or more were reported by 4.4 percent of high country households and 6.2 percent of households nationally at that time. By 2006 the proportion of high country households in the lowest incomes groups had halved (20.1 percent) while nationally the proportion declined to 24.7 percent. Incomes of \$100,000 or more were reported by 14.1 percent of high country households and 16 percent of national households.

Figure 4.5: Household incomes of the usually resident high country and national populations over 15 years of age (%)



4.1.4 Employment profile

Figure 4.6 shows the employment categories of the high country and national populations in 2001 and 2006. Comparison with 1996 is not possible because of changes in the classification system since that time.

Agricultural workers continue to comprise the largest group of high country employees (32 percent), although the proportion has declined by 21 percent from 39 percent in 2001, a slightly smaller percentage reduction than has occurred nationally (22 percent). It is not surprising that the decline has a much more marked effect on overall workforce structure in the high country than at the national level where agriculture and fisheries workers are the smallest group in the workforce (6.5 percent). Increases in the high country labour force have been greatest in the proportions of Trade workers (4.4 to 7.1 percent) with smaller increases in the proportions of Technicians and Associated Professionals (5.25 to 6.77 percent) and Managers, Administrators and Legislators (10.86 to 12.08 percent). Plant and machine assemblers and those in elementary occupations have declined as a proportion of the work force in the high country, although the latter group increased slightly nationally.

Other employment data produced by Statistics New Zealand show that the major contributors to high country employment are the tourism-related areas of accommodation and food services, in which there is significant growth, as well as education, health, administration and the financial sector. Retailing and wholesaling contributes less to high country employment than to employment nationally.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2006 HC 2006 Nat 2001 HC 2001 Nat Serv./sales ☐ Mgmt/Admin/Leg. Ag/Fish ■ Trade ■ Elementary Prof. B Plant&mach ■ Tech &Ass profs □ Clerks

Figure 4.6: Occupations of usually resident high country and national populations over 15 years of age, in employment

4.2 High country farmers and rural communities

The issue of change in high country communities was discussed with representatives of the Mackenzie, Central Otago and Queenstown Lakes District Councils. These discussions confirmed the conclusions drawn from the discussions of community with the farmer interviewees. Truly high country communities are generally relatively small groupings of farmers in defined locations, who socialise together and assist each other as they have always done, and whose main formal linkage is likely to be the local dog trials. In some areas, such as the Waimakariri Basin, those social linkages have grown to encompass tourism operators and those who work for them. In the communities that provide services to those living in the high country, high country farmers are a very small section of the community.

In Central Otago District the rural areas generally have a much greater sense of community than the urban areas and a number are now using the guiding principles established for the district to draw up community plans setting out community objectives and values and strategies for achieving these. While the populations of many small communities are being maintained or growing, it is not the farming community, particularly the high country farming community, which is contributing to growth. Rather, lifestylers, weekly commuters to Dunedin or Wanaka, and those involved in tourism developments such as the Maniototo Rail Trail have contributed to population growth and have provided opportunities for spill-over farm tourism ventures, or prevented population decline in many areas. In many of these communities high country farmers are actively involved as individuals, but they cannot be defined as "high country" communities in any sense other than physical location. The larger towns in Central Otago that have grown, such as Cromwell, Alexandra, Ranfurly, have done so in response to tourism developments and/or as spill-over from the growth of Queenstown and Wanaka. While, on the one hand, these changes are independent of high country farming and are resulting in rural communities likely to have less empathy with farming generally than in the past, increased populations do mean that services in areas adjacent to high country farming areas are more likely to be maintained or increased. The population of Inland Otago may in time be greater than the population of Coastal Otago, presently dominated by Dunedin and Oamaru (Matthew Begg, Community Development Manager; Jonathan Gadd, Business Development Manager, Central Otago District Council).

In the Mackenzie District also, population change has been concentrated around towns and lifestyle development blocks, while the high country retains the same small communities that have existed traditionally. Population expansion has occurred in and around both Twizel and Tekapo but this has not resulted in much increase in services as yet. In Fairlie, traditionally the farming service centre of the area, there has been little expansion or change. The District Council, however, works closely with high country farmers on a range of District Plan issues such as landscape issues (Glen Innes, Chief Executive Officer; John O'Neill, Mayor, Mackenzie District Council).

In Oueenstown Lakes District there are many community development activities including financial assistance and support for community associations and community events in small towns. However, in the main these are townships whose populations are dominated by those who work in the large centres, lifestylers, people who have retired to the area and in communities such as Gibbston, the vineyard community. Like most of the townships of the other districts they are high country communities by virtue of physical location, not a community of high country farming interest. (Jan Maxwell, Community Events Team, Queenstown Lakes District Council). Like the Mackenzie District Council, the Queenstown Lakes District Council liaises regularly with groups of high country farmers regarding district plan changes and reports that the rules pertaining to indigenous vegetation control were formally signed off by the Council and an Upper Clutha landuser group. However, over the last 10 to 15 years there have been significant changes in the way that the wider population of the District views some traditional farming practices, and an acknowledgement that some of these practices do not contribute positively to the stewardship of the high country (Clive Geddes, Mayor Queenstown Lakes District). It is the Council's intention to create opportunities for groups within the community that hold opposing views on environmental issues, such as farmers, local environmental groups and NGOs, to participate in workshops and other forums in the hope that a greater understanding can be developed amongst them.

Chapter 5 Discussion

Both the secondary data and the results of the farmer survey indicate clearly that many high country farmers are in financial difficulty after years of low incomes, stable working costs and, recently, rising debt servicing costs. For the many CPL farms not in tenure review, whether by their own choice or the Crown's, the prospect of large rental increases appears unsustainable. Over a third consider that the financial viability of their properties is under threat.

Despite the depressed farming economy in which they operate, most farmers have continued to develop both their properties and farming systems in recent years in order to improve farm returns, although many admit that they have not been able to offset the low product prices received recently. This is particularly so as the largest group have developed and/or altered management systems in order to place more emphasis on lamb finishing in the face of declining real wool prices, only to experience a decline in real lamb prices. Development has, however, been constrained by low farm incomes and the harsh environment in which many farm, and on most properties only comparatively small-scale development has occurred recently. On over a third of surveyed properties, some form of tourism/hospitality/active recreation enterprise provides a diversified income stream, most frequently accommodation in renovated farm-worker or shearers' quarters.

Although income and environmental constraints have always governed development rates in the high country, more recently significant groups of high country farmers have felt constrained by pressures on time and energy associated with their efforts to complete the tenure review process, and with the demands of the RMA. Only 17 percent of interviewees identified RMA compliance issues as a major constraint, but the impacts, or expected future impacts, were discussed by the majority. In Queenstown Lakes District, in particular, many farmers consider that the lack of understanding of farming by urban and lifestyle newcomers to the district is leading to increased pressure on authorities to constrain farming practices, such as vegetation control, to a level that is not consistent with maintaining farm development or, necessarily, with good environmental management practice. Many spoke of difficulties relating to burning as a method of scrub control, even with the required permits. Farm building projects are also becoming increasingly difficult to implement as a consequence of objections from the general public. In other districts, where public scrutiny is not yet as intense, district council regulations are less stringent, but many farmers spoke of increased difficulty with compliance issues as inevitable in the future, and feared the impact of these on high country farming.

Tenure review of Crown Pastoral Lease Land has been a major focus for many farmers in recent years. A number of those who became involved in the process early, have now acquired freehold title to part of their original properties and returned the rest to conservation uses. For them, surrendering pastoral land in order to obtain freehold title to a smaller area, has been a valuable tool to enable farm succession, or a pathway to non-traditional developments. Succession is the main driver for participation in tenure review amongst farmers but for the majority of those who have entered tenure review and intended to proceed (although some of these have subsequently been withdrawn by the Crown), reducing the uncertainty associated with rental reviews was a major factor in their decision to proceed. This is despite the fact that many believe that the pastoral lease system is the most appropriate way to manage the high country. While some farmers had proceeded comparatively easily through the tenure review process and believed that this had been facilitated by having a clear plan, being well-informed, and developing appropriate relationships, for others it had been, or is still, a period of immense

personal stress. Several, who had been in negotiation for a number of years, spoke of the frustration of apparent rule changes, and of having believed agreement reached only to find that this was not the case. Some had conceded far more than they believed to be in the best interests of their farms simply to complete the process as rapidly as possible. Of those who have declined to enter tenure review over half believe that the balance of the farm would be destroyed, and almost as many consider that tenure review would offer them no advantages. A significant group reported that lack of confidence in the way in which sensitive areas (particularly with respect to weed and pest invasion) would be managed if surrendered to conservation uses was a significant factor in their decision not to enter tenure review, and many of those who had entered also expressed concern over this issue.

High country farmers believe that there are future development options, both in pastoral farming and in non-traditional areas such as tourism, recreation, viticulture, even power generation, and many others. These were seen as a tool to facilitate succession and improve farm viability but were at present constrained by low incomes and the availability of finance, or simply by the stage of development at which the farm was presently. For many older farmers, the non-traditional activities were seen as opportunities for the next generation to increase farm viability or to allow family members other than farmers to make a career on the land.

"Community" is defined by high country farmers in diverse ways, which differ significantly by location. The common thread amongst them was that many whose community centred around a town or township felt, at best, that they had little common interest with the growing populations of commuters, retired people and viticulturalists in many areas. At worst they felt that there is active animosity toward high country farmers who are seen as damaging the environment and restricting public access to publicly owned land. High country farmers, as a group, are not important parts of communities outside the small local areas of high country farming, although as individuals they may be important through their involvement with schools and other institutions within local and wider communities. A number of older interviewees felt that there had been considerable change in community attitudes towards those farming the high country during their lifetimes. The "Southern Man" and the high country farming culture is a valuable marketing icon both domestically and internationally, but in many cases the "real thing" is feeling very undervalued at present.

The statistical area defined as "high country" by MAF (excluding major urban or tourism development areas of Queenstown, Wanaka, Twizel, Cromwell, Alexandra and Hanmer) has experienced greater growth in total population than New Zealand as a whole during the five years from 2001 to 2006 following a period of stable population during the previous five years. The nature of the population is also changing, with most of the growth arising from new residents in areas concentrated in lifestyle and rural residential developments round Lakes Dunstan, Hawea, Te Anau and Wakatipu, and a stable or declining population in other areas. Incomes and the educational qualifications of high country residents have, on average, risen relative to the national average. Agricultural workers as a proportion of the population have declined and there has been an increase in other groups, particularly tradespeople, to meet the demands of housing and tourism developments. These growing communities have little in common with traditional high country communities, and high country farmers are, as many of the farmer interviewees reported, becoming a less important part of the communities physically located in the high country.

Despite the undoubted pressures and the real threat to farm viability in many cases, high country farmers as a group remain remarkably positive about their way of life and about the future. They have continued to develop and improve their properties as finances and time permit and can see opportunities for development and greater viability, even though they are constrained in acting on these at present. They link what they consider to be the privilege of living and

working in the high country environment with a strong sense of responsibility for the stewardship of the land, and the majority hope to continue their families' long involvement with the high country.

References

- Greer, Glen (2004). The Impact of Tenure Review on the Economic Output of CPL Land. A Report to MAF Policy. Unpublished.
- Land Information New Zealand: (2007). CPL Activity Graph November 2007. Retrieved from the World Wide Web at:
 http://www.linz.govt.nz/core/crownproperty/tractivitygraph/index.html
- Land Information New Zealand: (2004). "The Government's Objectives for the South Island High Country: A Strategic Framework". Cabinet Policy Paper. Retrieved 20 October 2007 from the World Wide Web at: http://www.linz.govt.nz/docs/crownproperty/high-country-leases/govt-obj-strat-framework-june-04.pdf.
- Meat and Wool Economic Service of New Zealand. (1991-2000). "Sheep and Beef Farm Survey Various Years". Wellington, MWBES.
- Meat and Wool Innovation Economic Service. (2001-2004). "Sheep and Beef Farm Survey Various Years". Wellington, MWI Economic Service.
- Meat and Wool New Zealand Inc. (2003-2004). "Sheep and Beef Farm Survey Various Years". {Unpublished data Conway Williams pers. comm.).
- Ministry of Agriculture and Forestry (Various years). "Sheep and Beef Monitoring Report".

 Retrieved 20 October 2007 from the World Wide Web at
 http://www.maf.govt.nz/mafnet/rural-nz/statistics-and-forecasts/farm-monitoring/fmsb00/httoc.htm.
- Parker, D. (2006). "Address to the South Island High Country Farmers". Speech notes from an address to the Federated Farmers High country Conference, Dunedin. Retrieved 18 June 2007 from the World Wide Web at: http://www.beehive.govt.nz/speech/address+south+island+high+country+farmers.
- Statistics New Zealand (2007). "Quick Stats About Incomes 2006 Census". Retrieved 23 February 2008 from the World Wide Web at http://www.stats.govt.nz/NR/rdonlyres/FC6F9795-A534-45BC-97DF-F95FBE2C26E9/0/quickstatsaboutincomes.pdf.

Appendix 1 High Country Meshblocks

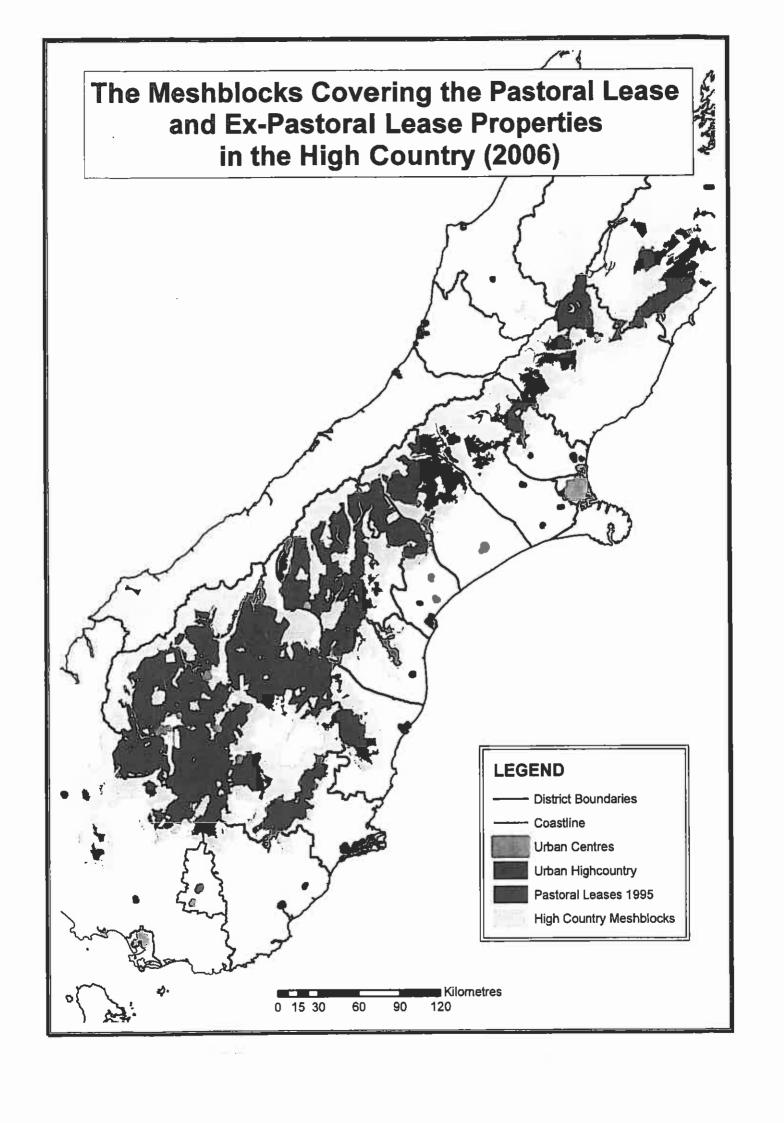
Meshblock selection

The following approach was taken to determine the base population for the high country assessment. The map on the following page should be viewed in conjunction with these notes.

- a. The pastoral lease boundary data (from 1995) was over-laid on the 2006 meshblock series. All meshblocks that contained, or intersected, pastoral leases were included in the initial survey area.
- b. This approach captured not only the pastoral lease estate, but the wider valleys, and catchments in which they operate. The total area captured was 5.9 million hectares covering 367 meshblocks.
- c. This approach was preferred over the use of a 600 metre contour line (as the basis for inclusion), as it is linked directly to high country farming activity. A 600 metre line has been used in the past, but the resulting data-file required considerable adjustment. The current approach captures not only the leasehold blocks but the majority of freehold properties in the high country. There are several omissions in the coverage area however (such as the Boddington Range north of Hanmer). These omissions should have a minimal affect on the profile results for the region.
- d. This approach excluded the major urban centres in the high country (particularly the tourist centres). As a double check, an 'urban area' dataset was overlaid on the initial set of meshblocks. This identified a further 15 meshblocks that could have some residential population. These 15 meshblocks (shown in red on the PDF file) were excluded from the assessment. The resulting file has 352 meshblocks, covering 5.75 million hectares.

Parnell Trost Senior Policy Analysis MAF Policy Dunedin

7 December 2007



Appendix 2 Data Tables

Age Distribution in Five Year Cohorts (%)							
	1996 HC	1996 Nat	2001 HC	2001 Nat	2006 HC	2006 Nat	
0 – 4	7.68	7.63	7.85	7.13	6.80	6.83	
5 – 9	8.40	7.86	7.85	7.52	7.26	7.11	
10 – 14	8.04	7.21	7.57	7.64	6.89	7.60	
15 – 19	6.00	7.24	5.34	7.08	5.50	7.45	
20 – 24	5.28	7.56	4.45	6.53	4.48	6.73	
25 – 29	7.72	7.63	5.81	6.72	5.99	6.02	
30 – 34	8.44	8.13	8.39	7.50	7.38	6.87	
35 – 39	9.55	7.86	8.75	7.92	8.41	7.49	
40 – 44	8.51	7.02	9.32	7.58	9.07	7.79	
45 – 49	8.58	6.66	8.61	6.70	9.07	7.28	
50 – 54	6.21	5.19	7.78	6.33	7.65	6.27	
55 – 59	5.39	4.44	5.92	4.95	7.74	5.80	
60 – 64	3.88	3.82	4.73	4.26	5.50	4.46	
65 and Over	6.32	11.75	7.64	12.14	8.26	12.30	

	· · · · · · · ·	_					
	Total 1	Total Personal Income-Usually Resident Population (%)					
	1996 HC	1996 Nat	2001 HC	2001 Nat	2006 HC	2006 Nat	
\$5000 or less	16.88	14.67	13.13	13.09	10.67	12.14	
\$5001-\$10000	14.62	14.88	10.27	11.68	5.91	7.18	
\$10001-\$20000	24.97	23.56	22.26	22.11	17.13	19.49	
\$20001-\$30000	17.75	16.01	17.95	14.66	16.67	13.76	
\$30001-\$50000	12.80	14.99	16.74	17.13	25.95	21.09	
\$50001 or more	5.33	6.59	10.46	10.19	16.00	16.19	
Not Stated	7.65	9.29	9.19	11.15	7.69	10.15	

	Total H	Total Household Income- Usually Resident Population (%)					
	1996 HC	1996 Nat	2001 HC	2001 Nat	2006 HC	2006 Nat	
\$20000 or less	22.88	22.79	15.73	19.79	9.90	13.88	
\$20001 - \$30000	18.08	13.63	13.31	12.48	10.23	10.77	
\$30001 - \$50000	21.37	19.31	22.04	17.36	19.91	16.42	
\$50001 - \$70000	13.15	13.14	14.25	13.30	16.79	13.56	
\$70001 - \$100000	4.25	7.84	7.26	9.18	12.92	12.95	
\$100001 or more	4.38	6.24	9.41	9.39	14.10	16.01	
Not Stated	15.89	17.05	18.01	18.49	16.15	16.40	

High	est Qualific	ation Usua	lly Residen	t Populatio	ns %	
	1996 HC	1996 Nat	2001 HC	2001 Nat	2006 HC	2006 Nat
No qualification	30.13	32.22	21.23	23.75	18.54	22.42
Secondary School Qualification	29.38	26.48	36.59	34.47	32.91	31.41
Post School Qualification	21.17	17.72	22.80	17.58	27.20	21.63
Bachelors Degree	4.13	5.38	5.64	6.92	9.40	9.99
Higher Degree	1.49	2.67	2.32	3.19	3.98	4.17
Not Elsewhere included	13.70	15.54	11.42	14.10	7.99	10.38

Year in Employment (%)								
	2001 HC	2001 Nat	2006 HC	2006 Nat				
Ag/Fish	39.20	7.96	32.44	6.53				
Serv./sales	11.98	14.04	12.13	13.56				
Mgmt/Admin/Leg.	10.86	12.53	12.08	14.26				
Elementary	10.19	11.28	9.95	11.83				
Prof.	6.05	13.87	7.28	14.71				
Trade	4.44	8.41	7.12	8.47				
Tech &Ass profs	5.25	11.04	6.77	12.11				
Clerks	6.11	12.53	6.82	10.98				
Plant&mach	5.93	8.34	5.41	7.57				

RESEARCH REPORTS

- 284 Agricultural Sector Adjustment Following Removal of Government Subsidies in New Zealand Gouin, Daniel-M 2006
- 285 Food Miles Comparative Energy/Emissions Performance of New Zealand's Agriculture Industry Saunders, Caroline, Barber, Andrew, and Taylor, Greg 2006
- 286 The Influence of Perceptions of New Zealand Identity on Attitudes to Biotechnology
 Hunt, Lesley and Fairweather, John 2006
- 287 New Zealander Reactions to the use of Biotechnology and Nanotechnology in Medicine, Farming and Food Cook, Andrew and Fairweather, John 2006
- 288 Forecast of Skills Demand in the High Tech Sector in Canterbury: Phase Two Dalziel, Paul, Saunders, Caroline and Zellman, Eva 2006
- 289 Nanotechnology Ethical and Social Issues: Results from a New Zealand Survey Cook, Andrew and Fairweather, John 2006
- 290 Single Farm Payment in the European Union and its Implications on New Zealand Dairy and Beef Trade Kogler, Klaus 2006
- 292 Operations at Risk: 2006: Findings from a Survey of Enterprise Risk in Australia and New Zealand Smallman, Clive 2007
- 293 Growing Organically? Human Networks and the Quest to Expand Organic Agriculture in New Zealand Reider, Rebecca 2007
- 294 EU Positions in WTO Impact on the EU, New Zealand and Australian Livestock Sectors Santiago Albuquerque, J.D. and Saunders, C.S. 2007

- 295 Why do Some of the Public Reject Novel Scientific Technologies? A synthesis of Results from the Fate of Biotechnology Research Programme Fairweather, John, Campbell, Hugh, Hunt, Lesley, and Cook, Andrew 2007
- 296 Preliminary Economic Evaluation of Biopharming in New Zealand Kaye-Blake, W., Saunders, C. and Ferguson, L. 2007
- 297 Comparative Energy and Greenhouse Gas
 Emissions of New Zealand's and the UK's Dairy
 Industry
 Saunders, Caroline and Barber, Andrew 2007
- 298 Amenity Values of Spring Fed Streams and Rivers in Canterbury, New Zealand: A Methodological Exploration Kerr, Geoffrey N. and Swaffield, Simon R. 2007
- 299 Air Freight Transport of Fresh Fruit and Vegetables Saunders, Caroline and Hayes, Peter 2007
- 300 Rural Population and Farm Labour Change Mulet-Marquis, Stephanie and Fairweather, John R. 2008
- 301 New Zealand Farm Structure Change and Intensification Mulet-Marquis, Stephanie and Fairweather, John R. 2008
- 302 A Bioeconomic Model of Californian Thistle in New Zealand Sheep Farming Kaye-Blake, W. and Bhubaneswor, D. 2008
- 303 The Impact of Wilding Trees on Indigenous Biodiversity: A Choice Modelling Study Kerr, Geoffrey N. and Sharp, Basil M.H. 2007
- 304 In progress.
- 305 Farmer Level Marketing: Case Studies in the South Island, of New Zealand Bowmar, Ross K. 2008

DISCUSSION PAPERS

- 145 Papers Presented at the 4th Annual Conference of the NZ Agricultural Economics Society. Blenheim 1997
- 146 Papers Presented at the 5th Annual Conference of the NZ Agricultural Economics Society. Blenheim 1998
- 147 Papers Presented at the 6th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2000
- 148 Papers Presented at the 7th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2001

- 149 Papers Presented at the 8th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2002
- 150 Papers Presented at the 9th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2003
- 151 Papers Presented at the 10th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2004
- 152 Papers Presented at the 11th Annual Conference of the NZ Agricultural Economics Society. Blenheim 2005



Mackenzie District Council General Property Information

Property

Valuation No.	25270 20100 : (GIS)
Location	KOORONG RD, OPUHA WARD
Legal Description	LOT 1 DP 77022 LOT 2 DP 22242 SECS 3 5 6B 163 ROSEWILL SETT BLK III OPAWA SD
Owner	AUSTIN WILLIAM ANDREW : AUSTIN JUDITH ANN & ANR
Owner Address	BANKSIDE : MT NESSING RD : RD 14 : CAVE
Area (hectares)	145.8101

Rates

Land	\$ 930,000 \$ 70,000
Improvements	\$ 70,000
L 1	
Capital Value	\$1,000,000
Current Rates Year 2008 to 2009	
Annual Rates	\$ 1,807.10
Current Instalment	\$ 451.70
Outstanding Balance	\$ 451.70
Arrears for Previous Years	
Next Instalment Date	20/09/08

Planning/Resource Management			
30/07/97 RESOURCE CONSENT 970022 : SUBDIVIDE 6 HA OFF EXISTING TITLE : Decision Notified 9/07/97			
Building			
Building Permit E024690 Install Magnum Freestanding Heater.			
Building Permit 1208 Erect dwelling.			
Licences			
No information located			
Sewer & Drainage			
No information located			
Land and Building Classifications			
No information located			
Transport			
No information located			
Special Land Features			
No information located			
Swimming Pools			
No information located			
Other			
3/09/08 LIM APPLICATION L20080111 : Land Information Memorandum			
** End of enquiry **			

Napier Computer Systems Limited. Copyright © 1997-2008, all rights reserved. Designed by: NCSWebTeam

