

Crown Pastoral Land Tenure Review

Lease name : MARYBURN

Lease number : PT 041

Public Submissions Part 14

These submissions were received as a result of the public advertising of the Preliminary Proposal for Tenure Review.

These submissions are released under the Official Information Act 1982.

August

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Tony Sharpe

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From: Sent: To: Subject: Attachments: Jan Finlayson [janfinlayson@farmside.co.nz] Tuesday, 15 March 2011 4:43 p.m. Tony Sharpe Maryburn tenure review Maryburn tenure review.doc

Dear Mr Sharpe,

Please find attached the Canterbury-Aoraki Conservation Board's response to the Maryburn tenure review preliminary proposal.

Yours sincerely, J. R. Finlayson.



Tony Sharpe Project Manager, Tenure Review Darroch Valuations.

15 March 2011.

Dear Mr Sharpe,

Re: Preliminary Proposal for Maryburn Crown Pastoral Land Tenure Review

The Canterbury-Aoraki Conservation Board is pleased to have the chance to comment on this preliminary proposal. Maryburn, in the Mackenzie Basin, is a large and prominent Crown property at relatively low elevation, with significant natural features. The board is aware that strong public interest in land in this region and of this type has led to high-level political involvement with a view to integrated land and water policy-building.

Policy context

The proposal's resource and environmental policy context is presently very uncertain. There is a wide variety of demands on and aspirations for Mackenzie area land and central government has established a forum to draw consensus from the range of perspectives, which includes interests as diverse as tourism, power generation and carbon farming, in a 'vision' for the region.

The vision will have to achieve a fit with the government-endorsed Canterbury Water Management Strategy and also with the overarching national Land and Water Forum outcomes. This forum was commissioned by the Ministers for the Environment and of Agriculture to establish consensus around expectations and limits for land and water use. Its recommendations are yet to be ratified in any form and will likely need to incorporate a national policy statement for freshwater. A current draft freshwater policy statement, commissioned by the Ministry for the Environment, is seen as a starting point.

There is considerable public investment in the development of coherent policies for land and water management. They will be relevant to Maryburn's natural features and future management.

Notwithstanding the direction that collaboratively-built policies may give, the 1998 Crown Pastoral Land Act is concerned with environmental outcomes for land under review, with Section 24's Objects being, for example, to 'promote the management of reviewable land in a way that is ecologically sustainable', 'to enable the protection of the significant inherent values of reviewable land' and 'the securing of public access to and enjoyment of reviewable land'. It is expected that policies to emerge from the above processes will work in harmony with this Act.

Board expectations

The board feels that it is reasonable that the following considerations be part of a preliminary proposal for Maryburn. Though they are already enabled by various legislation, we regard it as likely that they will be further supported by a Mackenzie vision:

as the property is Crown land in a location that is significant in terms of culture, landscape, biodiversity and
potential for recreation, there is a need for an outcome that, in those terms, is fair and meaningful for the

public.

- the property is a stronghold for high numbers of nationally threatened fauna and flora species and ecosystems. It has nationally significant landscapes and provides critically important 'depleted' habitats. All these exist within the property, and as components of the larger Mackenzie scenario. Their protection is a serious matter.
- a Mackenzie Basin Drylands Park that meets core principles for ecological sustainability has been proposed. The outstanding natural features of the region would receive appropriate protection in its large protected areas, ecological sequences, corridors and connectivity. It would include parts of Maryburn and of three neighbouring properties. This well-researched proposal should be part of planning for this part of the Mackenzie.
- New Zealand is committed, under the Nagoya Protocol, to at least halving or reducing to zero, its loss of
 native habitats. Crown property with conservatively managed significant natural assets should be substantially
 instrumental in the fulfilment of this commitment.
- sustainable management of such a property is complex and spans many disciplines. A fully-developed range
 of options for the careful future management of Maryburn is a reasonable expectation.

Recommendations

Development of consistent, comprehensive policies for land and water management is presently ongoing, at national and local levels. It is occurring within a context that is drawn to some degree by the Crown Pastoral Land Act, which broadly supports protection of conservation values and has particular significance in the Mackenzie area.

- The board recommends deferring Maryburn's preliminary proposal until a vision for the Mackenzie has been achieved, to ensure that the land will be managed in accordance with relevant policy.
- We consider it likely that this vision will strengthen existing provision for the expectations we state above. These expectations should be represented in the Maryburn proposal.

Prepared by: J. R. Finlayson Canterbury-Aoraki Conservation Board

Contact: Brenda Preston (bpreston@doc.govt.nz) Board Liaison Officer Private Bag 4715 Christchurch 8011 (03) 371 3756.

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Tony Sharpe

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From:Lindsey [Tiakuri@xtra.co.nz]Sent:Wednesday, 16 March 2011 7:35 a.m.To:Tony SharpeSubject:Land Tenure Review SubmissionsAttachments:Maryburn Submission March 2011.doc; Wolds Submission March 2011.doc

Please accept the attached proposals in opposition to the above preliminary proposals.

Thank you Lindsey Britton 11 Phillips Road RD 5 Papakura 2585 Auckland

Commissioner of Crown Lands C/ Darroch Ltd PO Box 143 Christchurch Lindsey Britton 11 Phillips Road RD 5 Papakura 2585

15 March 20011

While not drafted by myself this submission expresses in its entirety my position in this matter. The Maryburn forms part of the unique Mackenzie basin, this proposal allows for its further serious compromise, it is also entirely unacceptable that our Government should be considering allowing the further degradation of this 'publically' owned ecologically significant land area.

Submission To: Maryburn Preliminary Proposal

The Preliminary Proposal needs to be withdrawn

This submission requests that the Preliminary Proposal for Maryburn be withdrawn as it fails to protect the extensive Maryburn outwash plain, the moraines between Lake Pukaki and Mary Range, the eastern slopes of Mary Range, Mary Burn Stream and wetlands, and the Northern wetland which have been identified by expert botanists, entomologists, ecologists and Department of Conservation Staff as having outstanding significant inherent values (siv's) that warrant protection as public conservation land (or covenant) under the objects of the Crown Pastoral Lands Act, (CPLA).

The specific aspects of the proposed preliminary proposal that do not meet the objects of the Crown Pastoral Lands Act include:

Maryburn outwash plain – Conservation Area

The triangle of land between SH8 and Tekapo River warrants protection as Conservation land to protect the full range of significant species occurring on the nationally rare basin floor and its significant landscape. The area proposed for a Sustainable Management Covenant (SMC) should be included as Public Conservation Land as it contains dryland species and systems that compliment the adjoining area.

Lake Pukaki and crest of Mary Range – including Pukaki lateral moraine – Conservation Area

This 1,293ha area of moraine warrants protection as public conservation land for its important values including the nationally significant terminal moraine site, threatened plants and remnant shrublands on low hill country, stony fans and terraces, kettle holes and turf communities.

Eastern Slopes Mary Range – Landscape Covenant

This area requires a landscape covenant to protect the outstanding landscapes as it is relatively unmodified with few structures and is a significant feature when viewed from the SH8.

Mary Burn Stream and wetlands

This area requires protection as a conservation area as it is habitat for threatened long finned eel, koaro, black fronted tern, black stilt, and banded dotterels.

Northern wetland

This site of special wildlife interest for birds warrants protection by a covenant to ensure ecologically sustainable management. Ongoing grazing will result in continued degradation.

Yours sincerely

Lindsey Britton

097

Tony Sharpe

From:Paul & Isobel Mosley [p.mosley@xtra.co.nz]Sent:Monday, 21 March 2011 1:42 p.m.To:Tony SharpeCc:coleman.raymond@xtra.co.nzSubject:Wolds and Maryburn Pastoral LeasesAttachments:Wolds tenure review-F&B submission.doc; Maryburn tenure review-F&B submission.doc

Dear Tony - please find attached submissions on the above, on behalf of the committee of North Canterbury Branch, Forest & Bird.

Sincerely - Paul Mosley (Secretary)

SUBMISSION ON PRELIMINARY PROPOSAL FOR TENURE REVIEW OF MARYBURN PASTORAL LEASE

Dr. M P Mosley, Secretary, North Canterbury Branch, Forest & Bird Submitter:

Email: p.mosley@xtra.co.nz

Address for correspondence: The Secretary, Forest & Bird (North Canterbury Branch), P O Box 2389, Christchurch 8140

SUBMISSION

I make this submission on behalf of the Committee of North Canterbury Branch, Forest & Bird. This submission is based on the objects of the Crown Pastoral Lands Act (sec. 24) and the purpose of the Conservation Act.

1. We oppose the preliminary proposal, as it fails to protect the extensive areas of land that have significant, inherent conservation/natural values, including Maryburn Stream and wetlands, regionally and nationally significant tussocklands and other indigenous vegetation communities, and glacial and fluvio-glacial landforms that have significant scientific and scenic values. We request that the proposal be renegotiated to ensure protection of the significant inherent values of the property, or withdrawn to enable it to be dealt with under the collaborative planning process that has been initiated recently.

2. Maryburn Pastoral Lease has significant inherent values, as defined in section 2 of the CPLA, that justify retention in public ownership of a far greater area than the 42% of the lease that is proposed. The particular values are defined in depth in the Conservation Resources Report. We associate ourselves with the analysis carried out by the national office of Forest & Bird, in terms of the particular values that warrant retention in public ownership (CPLA section 24(b)(ii)). These include distinctive glacial and fluvio-glacial landforms with quasinatural vegetation cover; wetland/stream ecosystems; indigenous grassland ecosystems that are representative of a drastically reduced area of such ecosystems; indigenous fish, bird and other vertebrate species (some threatened) that depend on these ecosystems for survival; highly erodible soils; and water bodies/ resources that are nationally significant (as eventual contributors to the Waitaki River system). In particular, we seek comprehensive protection as public conservation land/scenic or scientific reserves of the whole of the following features that have significant inherent values:

Maryburn outwash plain: a classic fluvio-glacial landform feature that supports distinctive vegetation communities and species.

Crest and slopes of the Mary Range: includes classic lateral and terminal moraines, alluvial fans and terraces, and kettleholes, as well as associated tussock grassland and remnant shrubland communities.

Maryburn Stream and wetlands: this system supports threatened fish and bird species, and is itself a remnant of formerly much more extensive hydrological systems.

Northern wetland: this site has particular significance as wildlife (bird) habitat.

3. It is inappropriate for this pastoral lease to be considered in isolation from neighbouring properties, because a viable scenic/scientific reserve would take in parts of approximately seven properties. The core area of such a reserve has been defined in particular by the work of Landcare Research scientists, and full account of this work should be taken.

4. Freehold tenure would set the stage for intensive development for agriculture that would destroy for all time the most distinctive features of this leasehold land. In particular the wetlands, kettle holes, and streams are at risk; these are a remnant of such features that formerly existed far more extensively in this locality and elsewhere in the Province, and they are of critical importance in terms of "ecosystem services".

5. History has shown that sustainable management of these soils and landforms is extraordinarily difficult because they are highly erodible and infertile. Soil loss by, in particular, wind and sheet erosion and impoverishment of the vegetative soil cover – not to mention the issue of invasive plant species and herbivores – are such a threat that retention in public ownership for conservation purposes is in the national interest.

6. Steps are being taken to develop a Basin-wide approach to sustainable management of the Basin's natural resources, through the Mackenzie Sustainable Futures Trust. It is completely inappropriate for this tenure review to proceed, for the benefit principally of one leaseholder, thereby ignoring the interests of the community at large.

CONCLUSION

The Committee opposes the preliminary proposal on the grounds that it fails to achieve the objects of the CPLA Section 24, by failing to protect extensive areas that have significant inherent values and that would be better held in public ownership for conservation purposes. We request that the proposal should be withdrawn until the collaborative planning process being initiated through the Mackenzie Sustainable Futures Trust has been completed, and in particular until the opportunities for a viable scientific reserve (or other form of conservation estate) have been fully considered.

Wanthosey

Secretary, North Canterbury Branch, Forest & Bird 21 March 2011

25 D'Achiac Drive Po Box 82, Lake Tekapo 16 Feb. 11

The Commissioner of Crown Lands C/O Mr T. Sharpe Po Box 142, Christchurch

Reference; Maryburn Station Tenure Review

Dear Sir,

having had read the document outlining the review of the Maryburn lease I would like to register my support for the proposal.

The Murrays have shown themselves to be astute managers of their leasehold land and as the Dept of Conservation have indicated; there is substantial benefit in preserving part of the lease (CA1) in the crown estate for future generations of New Zealanders. That this land still holds significant value to conservation is indicative of the Murrays careful management. This, in spite of the ravages of rabbits, drought, introduced weeds, and other pests.

My only concern would be that the Dept of Conservation are resourced adequately for the future management of CA1 and if not; that the Murrays should be insulated from the effect that would result from that inadequacy. Given that the Crown is under no legal obligation to adhere to pest management strategies and other land management obligations; there is a substantial threat to neighbouring property and that should be addressed as part of this review. I note that 15.1c places responsibilities on the Murrays that the Crown, as the new "owner" of the area CA1, is under no obligation to comply with.

It is important that any review take into consideration the viability of the land to be retained in Freehold Title by the Murrays. It is essential that they are able to irrigate their land so as to maintain or enhance the productivity of the property and thus provide fiscal opportunity for the enhancement of those areas that require considerable management effort. For example; wilding trees at the Dover Pass area of the proposed Freehold land pose considerable risk to the property's viability and the Murrays have in the past put in significant effort to control these. While the seed source remains on public land adjacent to theirs; this risk will not diminish.

Whenever I have asked for access to Maryburn Station property for recreational purposes, they have been most helpful and have never denied



access where farm activities have allowed. I would not expect that attitude to change; however, they must have the ability to ensure that public access does not compromise farming operations.

Thank you for the opportunity to comment on the Maryburn Proposal

Samuel Phillip STALEY

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25 D'Achiac Drive Po Box 82, Lake Tekapo 16 Feb. 11

The Commissioner of Crown Lands C/O Mr T. Sharpe Po Box 142, Christchurch

Reference; Maryburn Station Tenure Review

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Thank you for the opportunity to comment on the Maryburn Proposal

Jane Ellen STALEY

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25 D'Achiac Drive Po Box 82, Lake Tekapo 18 Feb. 11

The Commissioner of Crown Lands C/O Mr T. Sharpe Po Box 142, Christchurch



Reference: <u>Maryburn Station Tenure Review</u>

Dear Sir,

I have read the document outlining the review of the Maryburn lease I would like to register my <u>support</u> for the proposal.

Bradley Alexander Jack Staley

127 097

25 D'Achiac Drive Po Box 82, Lake Tekapo 18 Feb. 11

RECEIVED

18 FEB 2011

The Commissioner of Crown Lands C/O Mr T. Sharpe Po Box 142, Christchurch

Reference: Maryburn Station Tenure Review

Dear Sir,

I have read the document outlining the review of the Maryburn lease I would like to register my <u>support</u> for the proposal.

Gregor Robert Charles Staley

099

Tony Sharpe

From: Sent: To: Cc: Subject: Attachments: Alice Doughty [Alice.Doughty@vuw.ac.nz] Friday, 25 March 2011 10:17 a.m. Tony Sharpe Andrew Mackintosh; Brian Anderson Maryburn Public Submission Maryburn Submission.pdf

Dear Tony Sharpe,

Please find the attached submission regarding the Maryburn property tenure review.

Sincerely, Alice Doughty

Submission for the Tenure Review of the Maryburn Property

Submission by: Alice Doughty, Brian Anderson, and Andrew Mackintosh Victoria University of Wellington PO Box 600, Wellington

I. Introduction

P1 The glacial moraine systems that have been preserved in the Maryburn pastoral lease are of international scientific significance. These moraines, which are long, narrow ridges of rock and sand (figure 1), were deposited by a glacier that filled Lake Pukaki during the last ice age (70,000 to 18,000 years ago). The importance of the moraines is that they mark the past positions of the margins of the Pukaki Glacier. When moraines can also be dated they provide a record through time of past glacier fluctuations, from which past climatic fluctuations can be inferred. We are opposed to the preliminary proposal because it fails to acknowledge the importance of these natural features and does not state any specific conditions to assure continued preservation of these geomorphic phenomena.



Figure 1 – Lake Pukaki on the left, view looking north, Mt Mary on the right. This image shows the moraines (narrow ridges) on the Maryburn land with their evening shadows. Each moraine is an event in past climate where the glacier remained stable while depositing boulders and sand. Photo by George Denton.

P2 The Pukaki moraines are the centrepiece of a decade-long project involving GNS Sciences mapping and dating the glacial geomorphology of the central Southern Alps of New Zealand (Andersen *et al.* (in prep), preview at: <u>http://maps.gns.cri.nz/website/csigg/</u> and figure 2). These moraines are of intense scientific value for three reasons: (a) they are extraordinarily well-preserved, (b) they are particularly amenable to an absolute age dating technique called cosmogenic dating and (c) their location in the mid-latitudes of the Southern Hemisphere mean that they provide an unique

opportunity to help us understand the fundamental driver of the ice-age cycles – which remains one of earth science's great problems.

P3 The phenomenal preservation and extent of the moraines is unlike anywhere in the world. The gently dipping eastern slope allowed the Pukaki Glacier to spread laterally and deposit over twenty moraines that are distinct. Each moraine represents a different time and climate during the last ice age (figure 1). It is a rarity to see so many moraines built next to one another, as is seen across the Maryburn land. During deglaciation (melting of the glacier and a return to present-day temperatures) the majority of the melt water from the large Pukaki Glacier flowed south and eroded moraines to the south of Lake Pukaki. Fortunately, the melt water did not destroy the moraines east of Lake Pukaki. There has been limited damage to the moraines by humans because of its status as Crown Land.

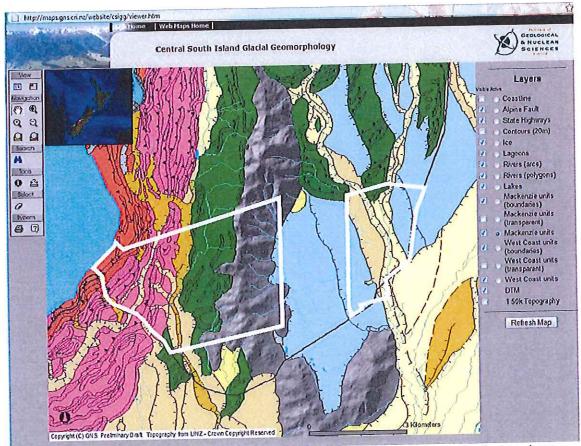


Figure 2 – Section of the Central South Island Glacial Geomorphology map with the Maryburn land outlined in white and pink (source: http://maps.gns.cri.nz/website/csigg/). Till and moraines are coloured according to age from oldest (green) to youngest (pink and coral).

P4 The glacial landforms on the Maryburn land are particularly well-suited for cosmogenic exposure age dating because of the size, extent, and preservation of the moraines. The exposure dating technique relies on the assumption that the boulders are in the same position that they were since deposition by the glacier. Boulders range in age from 70,000 years ago in the older (green) sequence to 30,000 and 18,000 years ago in the younger (coral and pink) sequences. Doughty and others sampled the top of many boulders that looked as if like they have not moved or eroded. Erosion due to river cutting, landform degradation, or boulder surface removal would have destroyed the potential to use this site for exposure dating. If the boulders are rotated, broken, or moved, they are useless for exposure dating.

P5 The leading theory of what causes ice ages requires the Northern and Southern Hemisphere climatic responses to be opposite, meaning when it is cold in the north, it is warm in the south and vice versa. New Zealand is the prime location to challenge this theory, being one of only three places to retrieve a glacial record from the Southern Hemisphere middle latitudes. Our preliminary results from this area show that the last glacial maximum occurred in two main pulses, similar to the Northern Hemisphere, but thousands of years earlier. This initial finding has huge implications for our understanding of how temperatures and signals are transferred around the world. As a result of a massive project, overseen by George Denton (University of Maine), David Barrell (GNS Sciences), and Joerg Schaefer (Lamont-Doherty Earth Observatory), New Zealand now has several of the best-dated moraine sequences in the world, but there is still research to do.

P6 At Victoria University of Wellington we have been collaborating with international researchers in studying these landforms. Only part of this work has been published to date, and Doughty and Mackintosh are co-authors on papers describing the climatic significance of nearby moraines in the journals Science (Schaefer *et al.*, 2009) and Nature Geoscience (Putnam *et al.*, 2010) – the two most prestigious scientific journals. Doughty, Mackintosh and Anderson are using the mapped moraines and exposure ages to provide constraints on their numerical modelling of New Zealand's ancient glaciers to estimate past climate. Our research leads to publications which promotes New Zealand institutions, draws in international attention and displays the prestige of research in this country.

II. Significant inherent values under the Crown Public Lands Act 1998

P7 In our opinion the glacial landforms in the Maryburn pastoral lease clearly fall within the definition of Significant inherent values (SIV) under the Crown Pastoral Lands Act 1998 (CPLA). The definition at s2 is:

"significant inherent value, in relation to any land, means inherent value of such importance, nature, quality, or rarity that the land deserves the protection of management under the Reserves Act 1977 or the Conservation Act 1987"

P8 Reserves Act 1977 s20(1) Nature reserves:

"It is hereby declared that the appropriate provisions of this Act shall have effect, in relation to reserves classified as nature reserves, for the purpose of protecting and preserving in perpetuity indigenous flora or fauna or natural features that are of such rarity, scientific interest or importance, or so unique that their protection and preservation are in the public interest."

P9 Relating to Reserves Act 1977 s20(1) – Each moraine is unique because it tells a different part of the climate story, no two moraines are the same. The preservation (as mentioned above) of so many adjacent moraines is truly a rare phenomenon. It is this combination of characteristics that draws in immense scientific interest and research projects. The general public are aware of glaciers and their relation to climate change. Educating the public about what these landforms represent leads to a greater respect and understanding of the land around them.

P10 Reserves Act 1977 s21(1) Scientific reserves:

"It is hereby declared that the appropriate provisions of this Act shall have effect, in relation to reserves classified as scientific reserves, for the purpose of protecting and preserving in perpetuity for scientific study, research, education, and the benefit of the country, ecological associations, plant or animal communities, types of soil, geomorphological phenomena, and like matters of special interest." P11 Relating to Reserve Act 1977 s21(1) - New Zealand institutions, including Victoria University of Wellington, Canterbury University and Otago University, visit the eastern slopes of Lake Pukaki annually to educate the students about glacial geomorphology, ice ages, sediment transport and other geologic processes. The moraines also draw international academic attention from universities from as far as the United States, the United Kingdom, and Austria to name a few. This scenic area has been and will continue to be used as a teaching tool for university students and potentially the public. In addition, moraines are valuable for the paleoclimate, geomorphic and scientific research and study mentioned earlier.

III. Areas which hold SIVs

P12 Mapping the moraines, outwash, terraces, till and other glacial features was a combined effort of Bjorn Andersen (Oslo, Norway), David Barrell (GNS Sciences, Dunedin) and George Denton (University of Maine, USA) with assistance by some of New Zealand's best glacial geomorphologists. The final map, after over a decade of work, is a masterpiece, with impeccable detail and accuracy. It will soon to be available to the public, Crown Royal Institutes and the Department of Conservation. The sample in Figure 3 and map available online are only samples and do not do the full map justice.

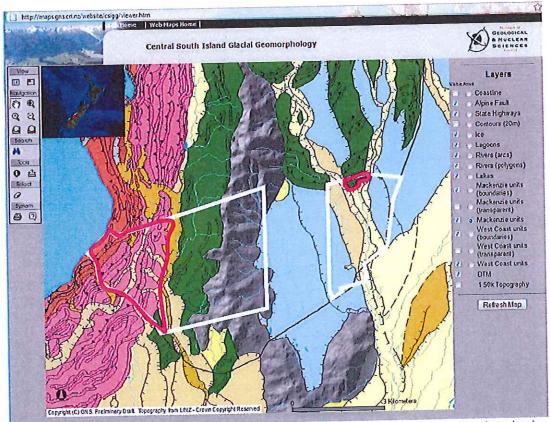


Figure 3 - Section of the Central South Island Glacial Geomorphology map with the Maryburn land outlined in white and pink (source: http://maps.gns.cri.nz/website/csigg/). Dark pink depicts the area containing SIVs and where the moraines are well preserved and deserve protection from development.

P13 These maps allow the delineation of the areas of moraines that have the values that meet the test for SIVs in the CPLA. They also serve as a guide to focus the exposure age dating projects, allowing geologists to pick areas of high moraine density and preservation. Initial, unpublished dates have been plotted on the maps for conference presentations, and this is when theories about New Zealand's climate during the last ice age begin to come together. It is the combination of the moraine map, the exposure ages, and the previous ideas being rejected that makes this work cutting-edge and exciting! Many research opportunities and geologic studies still exist in this area.

P14 More specifically, we consider the moraines east of Lake Pukaki and west of Mary Range (Figure 2, coral and pink features) and the moraines east of Mary Range and west of SH 8 (Figure 2, green features) to be SIVs for the scientific and geologic reasons stated above. Therefore, we propose the areas marked in Figure 3 by dark pink to be protected from development, either by going into DoC's possession or back to the Crown.

IV. Our Proposal

P15 We are opposed to the preliminary proposal because it fails to acknowledge the importance of most of the glacial landforms and does not state any specific conditions to assure continued preservation of these geomorphic phenomena. It would be a disaster to lose the landscape that is becoming a globally recognised significant site of paleoclimate and cosmogenic dating research in New Zealand. Each boulder removed, turned over, or blown up is a lost opportunity and resource, not only to the Department of Conservation and the scientific community, but to the public as a whole who are rapidly becoming concerned with climate change issues.

P16 We propose a covenant for the areas of hilly moraines (not very suitable for development or irrigation) with the objective that the land must be managed so as to preserve the SIVs.

A. The owner must not carry out or allow to be carried out on or in the land:

- 1. The erection of any fence, building, structure or other improvement for any prupose;
- 2. Any burning or chemical spraying;
- 3. Any cultivation, earthworks or other soil disturbances;
- 4. Any other activity which might have an adverse effect on the SIVs;
- Any prospecting or mining for Minerals, coal or other deposit or moving or removal of rock of any kind on or under the land;

B. The owner must:

- 1. If it is safe to do so, assist the Fire Authority to extinguish any wildfire upton or threatening the land;
- Keep the land free from rubbish or other unsightly or offensive material arising from the owner's use of the land;
- 3. Allow a right of access on to the land, with or without motor vehicles, machinery, and implements of any kind for the purpose of research, sampling, or study to the Crown Royal Institues and internationally recognised universities.

C. Description of Land

Moraines

All that piece of land approximately shown outlined in dark pink on figure 4.

D. Values of Land to be Preserved

Moraines

- The area supports numerous large erratic boulders which are uncommon habitats
- The area represents particularly good examples of this glacial landform
- The moraine surface and soil must not be disturbed
- The boulder surfaces and boulders themselves must not be disturbed or damaged
- These features are significant for education, scientific research, and geologic understanding
- The area supports highly diverse flora and fauna which should remain largely undisturbed

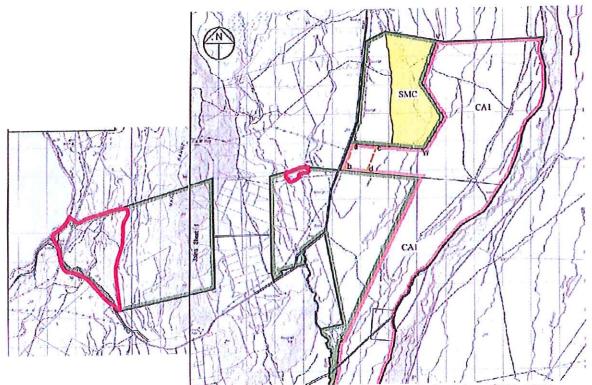


Figure 4 – Modified proposal for the Maryburn pastoral lease. Dark pink outlines areas containing SIVs including moraines, boulders, till, and outwash channels.

P17 We also recognise the landscape and ecological values of these moraine systems. While we are not qualified to provide expert evidence on those matters it is clear that the scientific values of the moraines would be greatly enhanced if they were protected as part of a continuous landscape. The value of that approach is that it allows future generations to have the opportunities to study the glacial geology of this area using techniques that have yet to be developed. We have concentrated on the boulders on the moraine ridges because they are most valuable for the dating technique that we have used. However future techniques may place greater importance on other parts of the landscape in ways that we cannot predict. What we can be sure of is that, if protected through appropriate land tenure, these moraine systems will remain perhaps the best-preserved midlatitude moraine systems on Earth, and hence a scientific treasure trove. If a covenant cannot be arranged, we urge that this land remain under the Crown or be considered for Department of Conservation ownership. Thank you for your time and consideration.

References

- Andersen, B., Barrell, D., Denton, G., Lowell, T., Almond, P., Suggate, P., Hendy, C., Vandergoes, M., Newnham, R., Schlüchter, C., Preusser, F., Schaefer, J., & Chinn, T. (Cartographer). (in prep). Central South Island glacial geomorphology maps.
- Putnam, A., Denton, G., Schaefer, J., Barrell, D., Andersen, B., Finkel, R., Schwartz, R., Doughty, A., Kaplan, M., & Schluchter, C. (2010). Glacier advance in southern middle-latitudes during the Antarctic Cold Reversal. *Nature Geoscience*, 3, 700-704.
- Schaefer, J., Denton, G., Kaplan, M., Putnam, A., Finkel, R., Barrell, D., Andersen, B., Schwartz, R., Mackintosh, A., Chinn, T., & Schlüchter, C. (2009). High-frequency Holocene glacier fluctuations in New Zealand differ from the northern signature. *Science*, 324, 622-625.

March 28th 2011

Liz Weir Lower High Street RD Coalgate 7673 03 318-2643 <u>liz.weir@paradise.net.nz</u>

Darroch Ltd PO Box 143 Christchurch Attn: Tony Sharpe Tony.Sharpe@darrochvaluations.co.nz

SUBMISSION ON PRELIMINARY TENURE REVIEW PROPOSAL FOR MARYBURN PASTORAL LEASE

Preliminary proposal summary

I understand the preliminary proposal to be:

a) 3,430 ha. of Tekapo River terraces to be restored or retained in full Crown ownership and control as conservation area (CA1 marked in pink) subject to an easement for farm management purposes "a-b" and "c-d". The concessionaire is able to install, maintain and repair a stock and irrigation water supply system over "c-d".

b) 4,946 ha. to be free-holded and disposed subject to a sustainable management covenant (SMC marked in yellow) over a portion of that land.

Submission

During a recent visit to the Mackenzie Basin, I was horrified to see the drastic changes that have marred that beautiful wide-open tussock landscape. Bright green, garish pastures for cows are ruining the natural golden, brown vista so reminiscent of that area. I have grave fears that the relatively clean waterways of the area will succumb to the pollution of dairy run-off and nitrate contamination and that the ecosytems in the waterways will suffer from over-abstraction. This is one area of New Zealand that should be spared the environmental disaster that dairy farming causes.

If 4,946 ha. of Maryburn is to be freeholded, there is nothing to stop the current lessees from converting to dairying or other damaging land practices that could be harmful to the basin's fragile ecosystems.

Maryburn sits in a central position in The Mackenzie Basin and is therefore strategic for a continual and contiguous experience of the Mackenzie Basin landscape. To 'divvy' it up so that some parts can be developed, would destroy that unique splendid wide-open expanse that the basin provides. The beauty of the basin is the expansive, relatively untouched landscape, which would be lost if unbridled transformations were to take place because of free-holding.

I am asking that the Preliminary Proposal for Maryburn be withdrawn as it fails to implement the objects of the Crown Pastoral Lands Act, (CPLA) 1998. It fails to protect extensive areas with significant inherent values including the extensive Maryburn outwash plain, the moraines between Lake Pukaki and the crest of the Mary Range, the eastern slopes of Mary Range, Mary Burn Stream and wetlands, and the northern wetland.

Expert botanists, entomologists, ecologists and Department of Conservation staff, have identified these areas as having outstanding significant inherent values (SIVs) that warrant protection as public conservation land under Part 2 of the CPLA.

New Zealanders and overseas visitors hold these unique and rare, iconic Mackenzie Basin landscapes in high esteem. Most New Zealanders are unaware of these current proposals and would be horrified to learn that nearly 5000 hectares of this land could be free-holded and developed in a way inconsistent with that landscape. We are already seeing wide-spread intensive farming development in the basin. The resultant drastic changes to landscape, ecosytems and waterways has already had a massive detrimental effect on the fragile ecosystems which have evolved in this harsh part of New Zealand. Once these ecosystems are destroyed, they can never be recovered. I am asking that this current proposal be withdrawn to ensure protection of the SIVs.

I oppose the preliminary Tenure Review proposal in its entirety because the proposal does not adequately recognise and provide protection for large areas of land with significant inherent values (SIVs). The proposal does not meet the provisions of the Crown Pastoral Lands Act (CPLA).

Under the CPLA Section 24 (b) (i) and (ii), significant inherent values must be protected by the creation of protective mechanisms with a preference to return to full Crown ownership and control.

These inherent values will be lost forever if the Maryburn land is free-holded and allowed to be developed.

Tenure Review should seek to enhance natural landscape values and protect significant native vegetation. Habitats for threatened species should be protected and enhanced. Tenure Review should provide outcomes that are in the wider public interest.

As the proposal does not substantially provide for landscape and ecological protection and recreational opportunities, tenure review should be halted and the property remain as a pastoral lease.

Yours sincerely,

Liz Weir

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Tony Sharpe

From: Sent: To: Subject: Attachments: H Frank [itod03@paradise.net.nz] Sunday, 27 March 2011 5:09 p.m. Tony Sharpe Fw: Maryburn pastoral lease Submission Maryburn.doc

Just resending in case the email got lost. H Frank

----- Original Message -----From: <u>H Frank</u> To: <u>tony.sharpe@darroch.co.nz</u> Sent: Monday, February 28, 2011 7:19 PM Subject: Maryburn pastoral lease

Dear Mr Sharpe Attached find my submission on the preliminary tenure proposal for Maryburn pastoral lease. Yours sincerely Hermann Frank

Hermann Frank 69 Fairview Road, RD 2 Timaru 7972 New Zealand

Phone/ Fax 0064 3 684 5399 e-mail: itod03@paradise.net.nz

26 February 2011

Darroch Ltd Attn Tony Sharpe PO Box 143 Christchurch

Re Submission on preliminary tenure review proposal for the Maryburn pastoral lease

This submission requests the Preliminary Proposal for Maryburn be withdrawn, because it fails to implement the Crown Pastoral Lands Act (CPLA) 1998.

Though the Proposal restores some areas into full Crown ownership, it is still unbalanced and fails to protect the areas of having significant natural values that warrant protection as public conservation land under the objectives of Part 2 of the CPLA. These areas include the Maryburn Stream and wetlands and the northern wetland, the Maryburn outwash plains, the moraines between Lake Pukaki and the Mary Range and the eastern slopes of the Mary Range. Though some areas are designated to come under a sustainable management covenant (SMC) this might not offer sufficient protection. Any areas transferred to freeholding without this type of covenant are in danger of developments which would degrade or destroy their values as has happened in other parts of the Mackenzie Basin.

The Proposal should be withdrawn and renegotiated to ensure the full protection of areas identified by experts as having significant natural values and to ensure full public access to all these areas and other areas of high public interest. For substantial parts of the freeholded land a sustainable management covenant is necessary to retain their ecological and landscape values.

However, the renegotiation should be put on hold until a final plan for the whole of the Mackenzie Basin by the Government in consultation with a wide range of groups has been agreed upon. A new proposal would need to be renotified.

Yours sincerely