

# Managing Land use Change in the High Country

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The South Island High country once extensively farmed under Crown owned pastoral leases is undergoing a huge transformation largely as a consequence of the last major allocation of crown land, known as tenure review.

This is transforming the land uses, biodiversity and high country landscapes on a vast and rapid scale, yet our legislation and plans are poorly equipped to deal with the new threats to our natural biodiversity and our landscapes that are the foundation of a sustainable green economy. Changing government high country policies are likely to exacerbate this change. Today I will look at the importance of the high country for New Zealand, how tenure review is driving high country land use change and biodiversity loss generally and more specifically in the Mackenzie country. I will suggest that the pastoral lease tenure offers opportunities to manage whole catchments and landscapes in a more ecologically sustainable way that provides for farming, improves ecosystem services, and maintains biodiversity and iconic landscapes, and our cultural heritage. I will suggest that parts of the Mackenzie Country deserve to be a dry lands conservation park in public ownership.

### **Why is the South Island High Country Important?**

Images of the South Island high country are embedded in our national psyche, even if not all of us get there, we are all familiar with photographs, paintings, films, that celebrate the spaciousness and vastness of huge expanses of tawny tussock grasslands meeting the snowy southern alps.

These images help us market New Zealand to the world, sell our specialized merino clothing, and attract the film industry.

“It is thanks to our 100% pure positioning that New Zealand is recognized as one of the most beautiful, un-spoilt scenic places on earth.” (Tourism Industry Association NZ submission to ECAN Upper Waitaki Hearings 2009). Over 70% of our international visitors are drawn to New Zealand by our remarkable landscapes and as the latest Speight’s add proclaims we are proud of our views.

Yet these unspoiled vast expanses of tussock grasslands are now becoming so scarce that we need to duplicate the image to recreate the experience.

### **HC land reform begins**

Just over a decade ago the Government, then keen to shed its responsibilities as an owner of nearly 2 million hectares of South Island High country embarked on a process of voluntary negotiations with willing lessees to freehold land capable of economic use and protect land with significant conservation and landscape values

either through covenants over newly freeholded land or preferably by transferring them to the Department of Conservation.

### **Outcomes**

As of May 2009 71 of the remaining 303 leases have completed tenure review. This has freeholded some 183,000 ha, mostly below 1000m and added 125,800ha mostly above 1000m to the public conservation estate.

Significant areas of formerly extensively grazed pastoral lease land has undergone subdivision, intensive development including into vineyards, and now most recently dairying. More than 27% of indigenous vegetation on newly free holded land has been cleared and 20% of the new freehold land has been sold. The once large leases with mean size of nearly 6,000ha are now divided into 865 parcels with a mean size of 334ha. Now there are at least 550 life style block parcels with a mean size of 11ha on former pastoral lease hold land.<sup>1</sup>

Tenure review has privatized thousands of ha of indigenous vegetation in the highest categories of risk, much of which has since been cleared.

A Landcare Research study<sup>2</sup> predicted that if patterns of land allocation continue, if past land use patterns continue, and all current leases complete Tenure Review this would remove 65% of native basin and valley floor habitats at greatest risk of biodiversity loss.” This rate of loss is not a good look for New Zealand if we want to maintain the integrity of our environmental and sustainable brand.

Tenure Review has also privatized hundreds of ha of prime lake frontage, leading to widespread public concern and a new policy to with draw lake side leases from tenure review.

Around nine new high country conservation parks have been created, but most of this land is above 1000m, and is in the least lowest risk category. The new conservation areas have attracted a host of new recreational activities and commercial opportunities which are transforming small rural communities. The new protected areas provide important ecosystem services. For example Te Papanui Conservation Park in Otago contributes an estimated \$136 million in water services for commercial, domestic, and industrial water for Dunedin City, hydro electricity generation and irrigation.

### **A Different Direction**

Tenure reviews are political. In 2009 the current Government rescinded the previous Government’s high country objectives, including the lake side policy and announced an “End Outcome” for the Strategic Direction being that “Crown pastoral land is put to the best use for New Zealand” with three-Objectives - effective stewardship, better

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<sup>1</sup> Swaffield, Simon, Brower, Ann. 2009. Danish Journal of geography 109 (1): 1-6.

<sup>2</sup> Walker, S., Price,R., Stephens, R.T., 2008. An Index of Risk as a Measure of Biodiversity Conservation Achieved through Land Reform. Conservation Biology, Vol. 22, No. 1, 48-59

economic use and improved relationships with lessees and high country communities.  
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Government has abandoned the policy of creating a network of parks, and instead prefers much greater use of private covenants. The rental system will be changed to one based on the earning capacity of a property, which removes the possibility of using rent reductions to obtain improved ecological sustainability, conservation and public access outcomes on pastoral leases.

These new policies are driven by the belief that “DOC has too much land”, can’t look after it and the farmers can do a better job of looking after the conservation values. Farmers are good at looking after the agricultural values of the land, but not necessarily the conservation values.

### **Ecologically Sustainable Management**

The strategic direction has not yet addressed how the Crown will promote ecologically sustainable management on Crown pastoral leases. Woody weeds especially broom and wilding trees are the worst conservation weeds in the high country. While there are a few leasee’s who have made a significant effort to control these weeds, many do not.

Wildland Consultants in their report to the PCE stated: *‘Sustainability of current pastoral use is in doubt over much of the unimproved high country land, particularly in the dry and semi-arid areas’*.

Crown pastoral lease land includes significant areas with threatened ecosystems, and threatened species, many of which require specific conservation management, and removal of grazing if they are to be ecologically sustained.

However there is little evidence that lessee’s have voluntarily fenced off and actively protected or restored conservation values, other than some minute areas.

### **Economic Policy**

The Government’s policy in relation to economic use has not been fleshed out, but most of the commentary focuses on increasing agricultural production.

The Crown’s pastoral leases contribute to the New Zealand economy not only through agriculture.

The PCE’s report<sup>4</sup> observed that the value of high country tourism to the national economy appears to be considerably more than that of high country sheep farming.

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<sup>3</sup> <http://www.linz.govt.nz/docs/crownproperty/highcountry/2009-and-beyond-minute-of-decision.PDF>

<sup>4</sup> [http://www.pce.parliament.nz/reports\\_by\\_subject/all\\_reports/land\\_use/change\\_in\\_the\\_high\\_country\\_environmental\\_stewardship\\_and\\_tenure\\_review](http://www.pce.parliament.nz/reports_by_subject/all_reports/land_use/change_in_the_high_country_environmental_stewardship_and_tenure_review)

Other economic values include provision of ecosystem services, carbon storage, and film location and as David Norton said recently in the CHCH press “ ..ensuring the sustainability of native biodiversity is also an important marketing tool for selling meat and wool.”

Pastoral leases could be managed to contribute much more to a green economy, which embraces the conservation of ecosystems and biodiversity as part of ecological sustainable management.

As recognised by the PCE Pastoral leases provide the opportunity for the Crown to control intensive development, and to provide incentives for the provision of environmental services and penalties for non performance.

The Crown's pastoral leases cover approximately 1.6million ha. This provides opportunity at a large scale for the Crown to work with lessee's and the wider national community to develop a strategic vision and policy for a green high country economy, that would consider the collective management of pastoral leases on a catchment wide basis or landscape scale, not just for their agricultural values.

The Crown could require and assist with whole property sustainable management plans that consider all the economic values, including ecosystem services and conservation and cultural values and could offer rent reductions as incentives.

Once freeholded the Crown loses ability to manage whole catchments, and the ability to securely protect biodiversity and landscape values, or require protection and maintenance of ecosystem services. Options for creating incentives are reduced.

Some would argue that the same can be achieved by freeholding with covenants. Covenants are inferior tools, it is inherently difficult to establish robust and measurable goals, they are legally difficult to enforce, are not necessarily secure, expensive to monitor, and have insufficient public accountability mechanisms.

For some pastoral leases tenure reviews may still provide the best conservation and economic outcomes. However if the reforms lead to the freeholding of large areas with outstanding national biodiversity, and landscape values, and ecosystem services, then they are unlikely to contribute to a truly sustainable economy.

### **Case Study Mackenzie Basin**

It is New Zealand's largest intermontane basin, and although it has been extensively grazed much of it retains the natural character observed by the first Europeans. About 20% of the basin has been intensively developed since 1990, mostly south and

west of Twizel. According to Dr Susan Walker of Landcare Research<sup>5</sup> this is probably the most rapid rate of indigenous ecosystem loss and landscape transformation within any single ecological region of New Zealand in modern times.

You will all be familiar with the recent controversy surrounding applications for the development of cow cubicles and the applications to take more than 90 million cubic metres of water to irrigate over 27,000ha.

The Waitaki and Mackenzie District Councils granted non notified consents, and issued certificates of compliance for vegetation clearance to two applications.

Much of the basin remains in Crown owned pastoral leases. Over 9,600ha of the proposed irrigation occurs on pastoral lease land.

There are also not yet advertised plans to freehold more than 31,000 ha from five pastoral leases overlooking Lake Pukaki, which was being considered for a potential Mackenzie Drylands Park.

### **Simons Pas example - see Power Point maps**

Simons Pass station has applied to irrigate some 2,777ha of land which has been identified as having significant, conservation and landscape values, including providing habitat for severely threatened species. Much of this land was previously being considered for protection and allocation to the public conservation estate, through tenure review. However recent information shows that there are now as yet un advertised plans to freehold most of them some with a “sustainable’ landuse covenant that provides for irrigation, but no mention of protecting the threatened species. A somewhat strange idea of “sustainability’ I suggest.

The Waitaki District and the Mackenzie District Plans have poor vegetation clearance rules and few controls on subdivision. A Mackenzie plan change designed to give better protection to landscapes from subdivision has been rejected and even the new general rules have been appealed by Federated Farmers and high country lease holders. These are nationally important landscapes important for our national economy but no one is legally defending them.

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<sup>5</sup> Walker, S. 2009 Evidence presented to Environment Canterbury – Upper Waitaki Hearings Pannel.  
<http://www.ecan.govt.nz/publications/Consent%20Notifications/upper-waitaki-submitter-evidence-susan-walker.pdf>

## Whats at Stake

- The most extensive outstanding natural landscape in the region, valued for its openness, naturalness, the coherence of cover and underlying visible landforms.
- It has the highest density and area of naturally rare ecosystems of any region of New Zealand of similar size, moraines, inland outwash surfaces, sand dunes, kettle holes and wetlands and braided rivers.
- The basin is home to at least 68 rare and threatened plant species.
- It provides habitat for eight threatened bird species, including Black stilt (only 200 left).
- The rivers and streams provide habitat for the threatened Mackenzie endemic Bignose galaxias and New Zealand's most threatened fish the Lowland longjaw galaxias plus three other threatened fish.
- Nationally important lakes for their purity and clarity.
- Potential Tekapo-Aoraki/Mt Cook Night Sky World Heritage area – on a clear night can observe over 50 million stars.

## The Solutions

The basin's pastoral leases retain the most extensive and connected areas with outstanding natural landscapes and threatened ecosystems and biodiversity. There is an opportunity through tenure review and purchases to link these into a Mackenzie Drylands Park, which could connect with Mt Cook National Park.

The new policies favor freeholding the majority of leases in deals that the Department of Conservation advise will not meet the objectives of the Crown Pastoral Lands Act.

We expect the tenure reviews to be advertised with minimal and fragmented areas proposed for public conservation and significant areas to be freeholded with some QEII covenants, with inadequate protection and public access.

The Tekapo Scientific Reserve on the outskirts of Tekapo shows that conservation management can result in the restoration of depleted lands. Before it was protected, this land was almost completely denuded of tussock, with great stretches of bare ground and weeds. Over the 17 years since stock have been removed and rabbits controlled to very low levels, tussocks, native herbs and annuals have flourished.

If a drylands park cannot be achieved through tenure review then the science and current practice shows that the areas are more likely to be sustainably managed, and less intensively developed if they remain as pastoral leases.

This would provide an opportunity to develop an overall vision for the integrated management of all pastoral leases within the basin to achieve not just agricultural outcomes, but also protect the natural and cultural heritage associated with extensive pastoralism, ecosystem services and embrace better protection for valued landscapes and biodiversity.

Although the Mackenzie District Council has undertaken consultation to develop shared visions for Twizel and Lake Tekapo to my knowledge there has been no development of a national vision for the whole of the Mackenzie Basin. Given the significance of the Mackenzie Basin for the New Zealand economy, particularly for tourism, its outstanding natural and cultural heritage there is an urgent need to develop an overall strategy that considers all the values of the basin including all the ecosystem services and how best to sustainably manage the Mackenzie to contribute to a national green economy.

Without it, piece meal development will continue, and the cumulative effects of lots of individual decisions will result in a domesticated, irrigated and developed landscape with postage stamp reserves. The vast open tawny landscape will be forever lost, depriving the nation of the opportunity to create a more enduring and sustainable green economy.