



South Island high country: let's get it right this time

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Abstract: New Zealand has a unique opportunity to reshape the future of 1.2 million hectares, or 5% of the country. Since 1990, land clearance and development in the South Island high country have removed large areas of native vegetation, destroying already tenuous endemic species populations, and rare and threatened ecosystems. Important ecosystems and ecological values have been subtly or dramatically degraded through tenure review, discretionary consents, and invasions of plant and animal pests. Natural heritage has been transferred from public to private ownership, and a pest management burden created for future generations. Here, we argue that high country land administration has followed the ‘give-hope-defend’ model of governance. For 25 years, successive governments gave decision-making power to officials in Land Information New Zealand and Department of Conservation. Governments then hoped officials would follow ambiguous statutory direction. All the while, governments ignored their governance responsibilities by assiduously defending officials’ freedom from public accountability for decisions that the public found nonsensical. Indeed the Commissioner of Crown Lands, with whom the proverbial buck stops, is accountable to neither the Minister nor the public. We conclude that if the government wants enduring stewardship in the high country, revised legislation needs clarity of purpose and accountability to the public.

Keywords: agriculture, conservation, drylands, grassland, high country, land tenure, land reform, New Zealand, pastoralism

Introduction

Ecological loss and modification in the South Island high country over the last three decades have been extensive and irreversible. Land clearance and development have removed indigenous vegetation across substantial areas, destroying many endemic species populations, and rare and threatened ecosystems. Important remaining ecosystems and ecological values have also been degraded under pastoral land use both subtly and dramatically, and invasions of plant and animal pests have created a major conservation burden for future generations (see Appendices). Much of the land-use change and neglect that led to this loss and degradation was enabled and fostered by a mix of active decisions and laissez-faire administration by officials in Land Information New Zealand (LINZ) and Department of Conservation (DOC); but ultimately it was sanctioned, whether directly or tacitly, by successive governments.

The tenure review of 2.4 million hectares of ‘Crown pastoral lease land’ along the eastern side of the South Island’s main divide (Fig. 1) began seven years before the passage of the Crown Pastoral Land Act 1998 (CPLA). Through this still ongoing process, to date 371 842 hectares of Crown

pastoral lease land have been retained in Crown ownership and transferred to the public conservation estate, and 436 652 hectares have been privatised (LINZ 2019a). On the new freehold land, district plans have become the primary, albeit ineffective, safeguard against clearance and development of land with ecological value.

Over the same period, hundreds of permits, known as discretionary consents, were granted by the Commissioner of Crown Lands (CCL) to develop remaining pastoral lease land in ways inconsistent with protection of the inherent values of the land. Many of these consents allowed clearance and destruction of significant and threatened indigenous vegetation and habitats of indigenous species. Perhaps inadvertently, these discretionary consents to develop or ‘improve’ land have pre-privatised the Crown pastoral land because, by law, the leaseholder owns all ‘improvements’. The Crown has lost twice in this process: it has lost the inherent natural values destroyed by the improvements; and must also now purchase these improvements to regain full ownership of the improved land through tenure review. Figure 2 shows the extent of improvements permitted through discretionary consents in the Mackenzie Basin.

The natural ecosystems that sustained the greatest losses

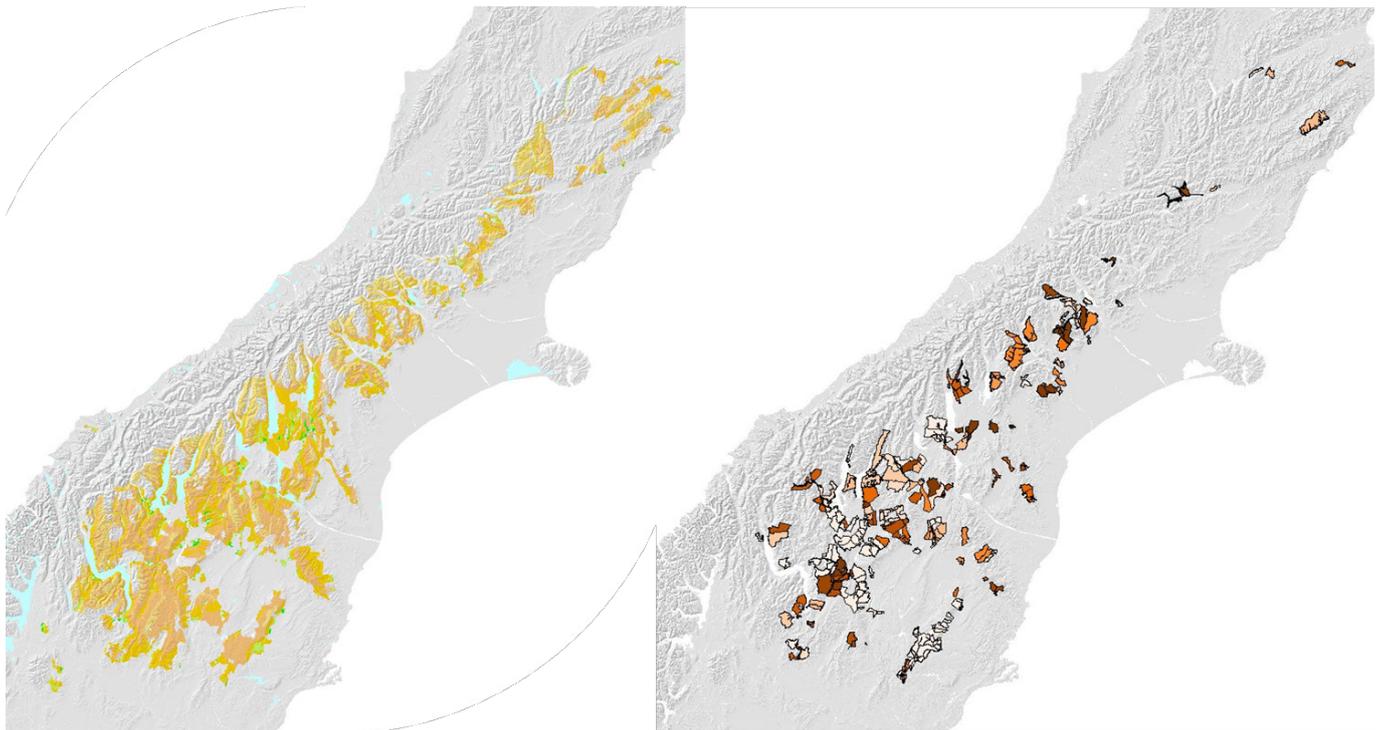


Figure 1. Crown pastoral land in New Zealand’s South Island in 1992 (left, approximately 350 properties covering 2.4 million hectares), and (right) the 0.7 million hectares of land that had completed tenure review by May 2015 (Source: Department of Conservation).

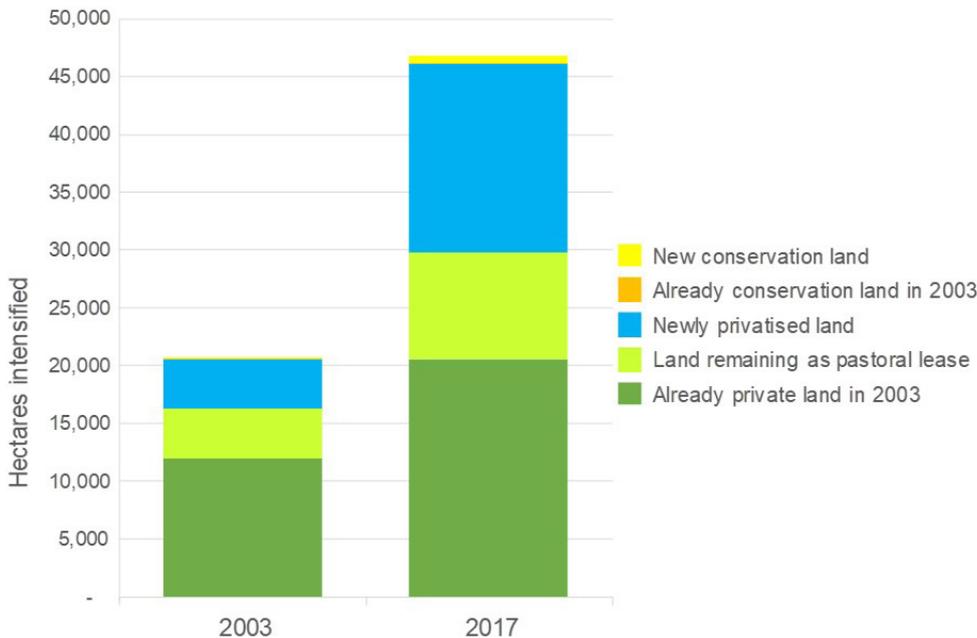


Figure 2. Number of hectares intensified in the Mackenzie Basin on land under different types of tenure, in 2003 and in 2017.

to development through tenure review and discretionary consents were those that were already significantly reduced in extent and poorly protected, and supported the rarest and most threatened indigenous species (Walker et al. 2009). The rarer the ecological values, the more likely the land was to be privatised in tenure review because the rarest values are often in the most developable land (Walker et al. 2008; Brower & Page 2017). Loss and depletion of the high country’s remaining ecological values have been so extensive and widespread that very little, if any, additional Crown pastoral land can now be developed without significant and permanent loss of ecological

values. Further development would also compromise ecological sustainability, natural landscapes, soil conservation and water quality, and carbon sequestration capacity.

The Government is now proposing to reform the Crown pastoral land legislative and regulatory system for the first time in over 20 years (Barton 2006; CBC 2019; LINZ 2019a,b). It has proposed to end tenure review, and has committed to being a long-term landlord on the remaining Crown pastoral land. Government is also proposing changes to the law governing discretionary consents (LINZ 2019a). These reforms are a once-in-a-generation opportunity to influence ecological

outcomes on the 1.2 million hectares of Crown pastoral land that have not yet gone through tenure review. Getting it right this time is critically important for ecosystem protection and biodiversity conservation.

Here, we review the high country problem, its regulatory and legislative causes, and suggest the Government's proposal does not address the causes and so cannot fix the problem. We then suggest some solutions.

Two high country institutional problems

Since 1991, two institutional features of high country land administration appear to have fostered a 'give-hope-defend' governance model. Successive governments "gave" decision-making power to officials, "hoped" they would follow ambiguous statutory direction, while ignoring governance by assiduously "defending" officials' freedom from public accountability for decisions that the public found nonsensical (Mitchell 2018). These institutional features are ambiguity in statutory direction and lack of accountability in decision-making.

(1) Ambiguity

Crown pastoral lease land was intentionally not alienated by the Crown in the privatisation reforms of the 1980s because of its high inherent vulnerability to extractive and exploitative use, and its importance for providing ecological services (especially water yield and soil retention). The Land Act (1948) recognised the land's susceptibility to overgrazing and, as a solution, gave leaseholders the right to perpetually renew their tenure. The CPLA (1998) recognised the land's ecological fragility, and made 'ecological sustainability' the primary objective of tenure review.

Yet ecological sustainability has remained undefined and ambiguous in law and in practice. Ambiguity is rarely good for the environment, but is useful for those in power. Ambiguity "yields statutes and regulations obscure enough to please all parties, vague enough to be unenforceable, and so ill-defined that failures to implement the policy will be difficult to detect and impossible to litigate. Ambiguous policies sound lofty but may accomplish little" (Walker et al. 2009). In administering tenure review, officials have adopted their own interpretations of ecological sustainability, which have included increasing the ground cover of exotic pasture species, and growing exotic conifers.

There is also no shortage of ambiguity in making decisions on discretionary consents. The CCL has only to weigh "(a) the desirability of protecting the inherent values of the land concerned (other than attributes and characteristics of a recreational value only), and in particular the inherent values of indigenous plants and animals, and natural ecosystems and landscapes"; against "(b) the desirability of making it easier to use the land concerned for farming purposes" (CPLA 1998 S18(2)).

(2) Lack of accountability in decision-making

Crown pastoral land is held in trust for New Zealanders with only a narrow set of rights alienated. By law, vegetation can be grazed within stocking limits, and the leaseholder can renew their lease on that right in perpetuity; otherwise natural heritage on Crown pastoral land is the property of the Crown and should be managed on behalf of all New Zealanders.

Tangata whenua (the iwi, or hapū, that holds mana whenua - customary authority - over that area) and the general public therefore have a strong, legitimate, and unalienated interest in decisions that affect natural heritage on pastoral leases. This, we argue, means that those decisions warrant a high level of public accountability.

Yet there is no such public accountability. And officials can sacrifice important natural values with little scrutiny. Currently the public does not know what the CCL is doing, cannot appeal their decisions, and has no formal or meaningful avenues to raise concerns. By LINZ's own admission (LINZ 2019b), they have done little or no monitoring to determine adherence to lease conditions by leaseholders, nor of consent conditions (Williams 2019). Neither has there been systematic monitoring of vegetation and ecology, or of land use change (e.g. Weeks et al. 2013). Ecological monitoring has been minimal. We know of a set of permanently marked 100 m transects established by the Department of Lands & Survey on Canterbury and Otago properties between 1982 and 1986. Researchers at Lincoln University initiated re-measurement of 142 of these transects on 33 properties between 1993 and 1998 (Duncan et al. 2001), and 123 of the transects on 27 properties between 2005 and 2007 (Day & Buckley 2013). In tenure review, the Commissioner must consider submissions on preliminary proposals but is not obliged to give them any hearing or any weight (CPLA S47), and has often not done so. And, unlike under the Resource Management Act (RMA) 1991, there is no provision for tangata whenua input into discretionary consent decisions, nor is there provision for public input or appeals.

Information asymmetry and slack

The present combination of ambiguity and limited accountability creates information asymmetry in which the public has neither information on the state of natural heritage on Crown pastoral land, nor ability to influence its stewardship. Only lessees and a few officials in LINZ and DOC know what land-use change on Crown pastoral land is proposed and consented. This asymmetry leads to slack, or "a zone of freedom of action for regulators ... in which they can operate with lessened fear of punishment by the polity for decisions that deviate from those the polity would adopt on its own" (Levine 1998). Slack gives power to officials to make decisions with impunity, with freedom from accountability to a clear legislated direction or to the public.

During 25 years of slack created by give-hope-defend, a personal or institutional sense of 'appropriate compromise' has superseded statutory direction as the chief guide to the multiple decisions and inactions of Crown officials. We say this for three reasons:

(1) Using remote sensing to quantify the outcomes of tenure review, Brower and Page (2017) concluded that "Tenure review implements secondary statutory goals – of freeing land [from the strictures of Crown ownership] – assiduously. But it implements primary goals – of sustaining and protecting ecological values – half-heartedly."

(2) Despite the NZ Cabinet's repeated instruction to obtain a 'fair financial return' in tenure review, the Commissioner and LINZ officials "always told us [contracted tenure review negotiators] that money should not be a constraint" (contract negotiators quoted in Brower et al. 2010). True to officials'

directions and ministers' lack of oversight over 25 years, the Crown sold freehold title to 436 652 hectares for \$65.2 million (average \$176 ha⁻¹). One-fifth of that has since on-sold for \$275 million, with a median on-selling price about 500 times the Crown selling price (e.g. Mitchell 2018). At the same time, the Crown bought pastoral rights to 371 842 hectares of generally higher, colder, steeper land for \$116.8 million (average \$353 ha⁻¹) (Brower et al 2017).

(3) The Government's proposed change includes a suggestion to "support officials and leaseholders to understand and comply with legislative requirements" (LINZ 2019a). One would expect that public officials would be required to comply with the law no matter what, with or without support.

Ecological results of institutional problems

The results of the regulatory and bureaucratic regime have been severe and permanent loss of the high country's natural heritage and of the opportunity for New Zealanders to protect and enjoy that heritage in the future. Table 1 summarises, and Appendix S1 in Supplementary Materials documents, ecological losses incurred in a selection of 15 CPLA discretionary consents granted by the CCL.

We can also quantify some of the larger scale, cumulative consequences of the high country's administration. Brower et al (2018) used satellite images to track the intensification of land use across Crown pastoral land and existing freehold land in the Mackenzie Basin between 2003 and 2017 (Fig. 2). In 2003, a clear majority of intensification was on private land, but by 2017, intensified land newly privatised by tenure review (c. 16 300 hectares) and authorised by discretionary consents on remaining pastoral leases (c. 9 200 hectares), exceeded the area intensified on land that had been in private hands all along (c. 20 500 hectares). This scale of intensification represents a particularly significant and serious loss because it removed and depleted ecosystems that were already threatened and naturally uncommon and were habitats of threatened species.

A stark indicator of the outcomes for native species of habitat loss to agricultural intensification and modification across the high country is a rapidly growing number of threatened and declining plant species. Across Southland,

Otago, and Canterbury, the number of plant species recognised as 'threatened' has increased by 56% (from 50 to 78) and the number 'declining' has doubled (from 32 to 64) in assessments since 2008 (Fig. 3).

LINZ (2019a) and Government (CBC 2019) have admitted that the ecological outcomes of tenure review and discretionary consents have not met the public's expectations. However, they have also fallen short of measuring or documenting the ecological costs; and it is unclear that any meaningful change to sustain the high country's ecology is on the way.

Two missing ingredients – Clarity and Accountability

We think that Crown pastoral land will require a new and different regulatory system if the high country's ecology is to be sustained. We argue that there are two essential ingredients of this system:

(1) **Clarity:** a clear purpose and desired outcome set out in legislation that would avoid both ambiguity in government's priorities on safeguarding and sustaining natural heritage in decisions, and a 'balancing' approach to decision making.

(2) **Accountability:** tangata whenua input, and public participation and appeals enabled through a public notification and hearing process consistent with the RMA 1991. Ultimate decision-making authority is vested in the Environment Court.

We argue further that adopting one ingredient without the other will perpetuate the loss and degradation of natural heritage of recent decades, for two reasons:

(1) without public notification and appeal rights, tangata whenua and the wider public will be unable to ensure a new purpose and statutory outcome are accomplished, and there is little incentive for officials to accomplish them,

(2) it will be futile to vest final decision-making authority in the Court without providing an unambiguous legislated purpose to direct their decisions.

However, the Minister of Land Information and Conservation has proposed neither clarity nor accountability in her recent

Table 1. National priority indigenous vegetation (MfE 2007) cleared with CPLA discretionary consent on a subset of 15 pastoral lease properties.

Pastoral lease	Priority 1	Priority 2	Priority 3	Priority 4
Otamatapaio Station	1	1	1	1
Simons Pass Station		1	1	1
Omahau Hill		1	1	1
Sawdon	1	1	1	1
Arrowsmith Station		1	1	1
Mt Oakden	1		1	1
Mt Algidus	1	1		1
Glenthorne Station			1	1
Mt White	1	1	1	1
Inverary Station	1			1
Balmoral Station (Tekapo)	1		1	1
Lake Taylor Station and Lakes Station				2
Glynn Wye Station		1	1	1
Glenrock Station		1	1	1
Total	7	9	11	15
Percent of consents	47%	60%	73%	100%

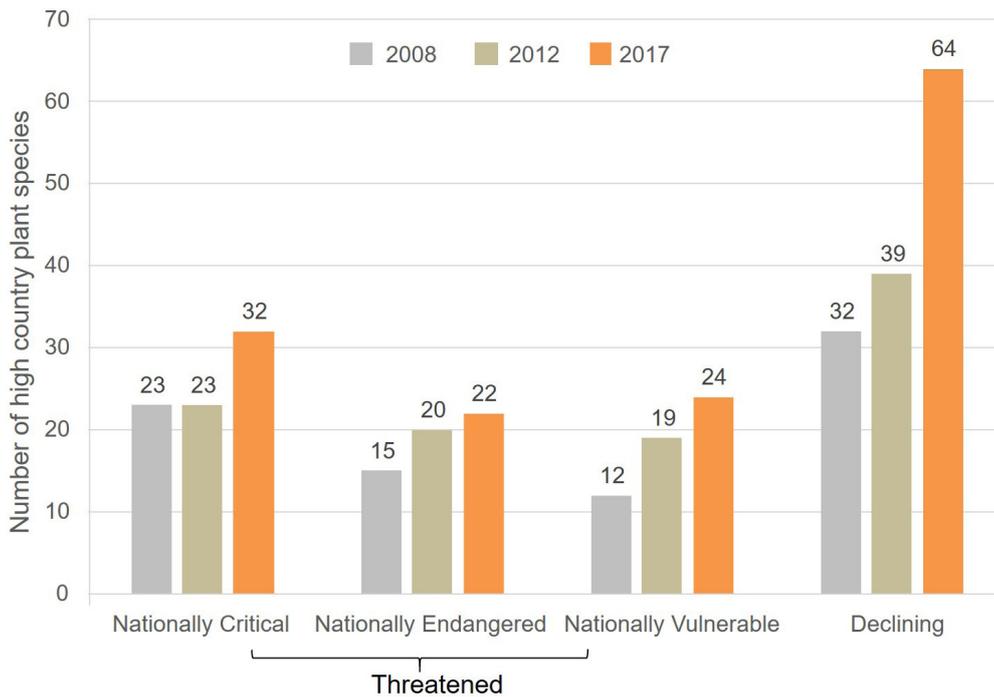


Figure 3. Numbers of high country plant species in Southland, Otago and Canterbury that were listed as ‘threatened’ and ‘declining’ across three recent assessments (2008: de Lange et al. 2009; 2012: de Lange et al. 2012; 2017: de Lange et al. 2018).

Cabinet Paper (CBC 2019) and Discussion Document (LINZ 2019a). Instead, the Government proposed a new, but still ambiguous, statutory outcome, and little meaningful change in the system of behind-closed-doors decision-making. The Government’s proposed outcome is: “The Crown will ensure that the natural landscapes, indigenous biodiversity and cultural and heritage values of this land are secured and safeguarded for present and future generations” (LINZ 2019a). To achieve this, Crown pastoral land will be managed to maintain and enhance natural capital, and cultural and heritage values; and subject to this:

- “(1) provide for pastoral and appropriate non-pastoral activities that support economic resilience and foster the sustainability of communities,
- (2) enable the Crown to obtain a fair financial return.
- (3) The Crown’s management of this land will take into account the principles of the Treaty of Waitangi.”

This outcome statement has the obvious problem that, although natural landscapes and indigenous biodiversity are mentioned first, it is “natural capital” that must be managed; thus, natural heritage is framed as a resource for human use and exploitation. We think that if nature is not safeguarded for its own sake, ambiguity will enable use and development to predominate, as they inevitably do (Olson 1965; Brower 2008). And taking account of the Treaty of Waitangi (rather than giving it effect) makes no commitment to Māori interests in this land.

The Minister (CBC 2019) and LINZ (2019a) are not proposing to improve accountability to, and transparency for, public stakeholders in the high country. A new statement of performance expectations for the Commissioner of Crown Land (CCL), which the Minister must approve, will not provide these. Nor will the guidance proposed to “assist officials and leaseholders to understand and comply with legislative requirements”. It has been proposed that the CCL would be

required to give effect to a set of outcomes in any discretionary consent decisions. However, the ambiguity of the proposed natural capital goal makes it unclear how the requirement would be implemented, monitored, and enforced. Uncertainty is further enhanced by giving officials the discretion and liberty to approve non-pastoral activities that they consider “do not result in an overall reduction of the natural capital in the land.”

The reforms propose to retain the Commissioner of Crown Land (CCL), whose role the LINZ discussion document endorses as “independent”, “essential” and “critical” (LINZ 2019a). Yet we think there is ample evidence that successive Commissioners have failed the public as a landlord of Crown pastoral land and kaitiaki of its natural heritage in the last 2 to 3 decades (see Appendices S1 & S2 in Supplementary Materials; Figs 2, 3) and that the benefits of the CCL’s decisions have been captured by a few, with strong vested interests.

Together three features of the government’s proposal provide little prospect of change: its unmeasurable goal, its absence of transparency, and its steadfast defence of officials’ freedom to do deals they think right to “enable leaseholders to continue to make economic use of their land by providing for pastoral farming and appropriate non-pastoral activities” (LINZ 2019a). The two key ingredients we identify (clear direction and public accountability) are absent from the Government’s proposal. Rather than substantive policy change, the proposed reform looks like that classical political stratagem: a symbolic gesture giving “the rhetoric to one side and the decision to the other” (Edelman 1960).

Five proposed changes

We suggest five changes to the Government’s proposal: a revised legislative purpose; and four further changes to give effect to the strong legitimate interest of the public in decisions affecting Crown pastoral land.

(1) Clear statutory purpose

We suggest a clear purpose and outcome for legislation, which is to secure and safeguard natural heritage for its own sake. Our suggested wording defines natural heritage, and clarifies what it excludes and which activities are not appropriate:

(a) *The purpose of the legislation is enduring stewardship.*

(i) Enduring stewardship means securing and safeguarding natural heritage in perpetuity.

(ii) Natural heritage means natural landscapes and indigenous biodiversity, including but not limited to natural landforms, indigenous ecosystems, communities, vegetation, species, the habitats of indigenous flora and fauna, and the natural physical and ecological processes that sustain these.

(b) *Natural heritage excludes instrumental and use values, such as:*

(i) ecosystem services other than those arising inherently from natural heritage

(ii) recreation

(iii) minerals, energy and tourism resources

(iv) cultural and pastoral heritage.

(v) activities and uses that conflict with enduring stewardship do not achieve the purpose, and are therefore not appropriate.

(vi) in addition, our purpose and outcome would give effect to the Treaty of Waitangi, instead of merely taking it into account as in Government's proposal.

(2) Discontinue the CCL role

The current CCL role should be abolished, and replaced by publicly accountable institutions. Government has not explained why the role still exists, nor have they suggested new safeguards to stop capture of public wealth by private interests, which the CCL has facilitated in the past.

(3) Transform discretionary consent decision making

Responsibility for decision-making on discretionary consents should be given to independent commissioners, with public appeal rights to the Environment Court. This change would retain the advantage of the decision-maker being independent of the government of the day. The critical changes would be that the decision-maker would be bound by legislation with a prescriptive purpose and outcome, and required to consider submissions, and appeals, from a wide range of interested parties.

We suggest that new and renewed discretionary consents on Crown pastoral land should be publicly notified as a matter of course. Since even recreational discretionary consents risk alienating public values to private interests, exceptions to public notification should be few. New legislation should recognise, and include a statutory obligation to avoid, long-term alienation of public values through the granting of private property rights.

Making the Environment Court the ultimate decision-maker on discretionary consents would be efficient as well as fair, and seen to be fair, because:

(a) the apparatus and process for public notification is established and in place under the RMA,

(b) RMA 1991, Land Act 1948 and CPLA 1998 consent applications will be bundled and therefore dealt with in a single process,

(c) this bundling will enable the full suite of potential effects of a proposed activity to be considered together,

(d) tangata whenua and the wider public have a greater interest in enduring stewardship on Crown land than on private land, so a high standard of outcome and scrutiny is appropriate,

(e) the Environment Court's function is to apply and uphold the law in an independent manner, and it has a track record that gives it credibility.

Independent decision-making on discretionary consents (by hearing commissioners, and ultimately, the Environment Court) would end the situation in which delegated agency officials (in LINZ and DOC) and contracted farm advisors are the High Country's de facto decision makers on discretionary consents; a situation that has led to loss of natural heritage of the highest significance (see Supplementary Materials Appendix S1). LINZ has had few, if any, staff with the qualifications to assess natural heritage values. Their external contractors have been drawn largely from farm property advisors with farm development perspectives (LINZ 2019b). Their tenure review negotiators come from firms that describe themselves as "global real estate advisors" and "international consultancy for infrastructure, ... construction, water, environment, [and] asset development" (Brower et al. 2010). Department of Conservation has increasingly asked its community relations staff, instead of its technical experts, for advice on impacts on ecological and landscape values. Not surprisingly, their advice has repeatedly underestimated the significance and extent of ecological and landscape values.

We suggest that LINZ and DOC input be restricted to technical advice to the decision-maker (ultimately the Environment Court, but initially a panel of commissioners). For each application:

(a) in LINZ, an expert planner should prepare an evaluation of the appropriateness of the proposal in achieving the purpose of the Crown Pastoral Land and Land Acts,

(b) in DOC, expert ecologists, landscape architects, recreation staff, and planners should prepare submissions on natural heritage values, planning matters, recreation and access.

Many existing discretionary consents will be causing ongoing loss of natural heritage, e.g. maintenance of tahr (*Hemitragus jemlahicus*) herds for commercial hunting. Therefore, there also needs to be a process to review existing consents, with public input, where they cause ongoing or cumulative damage.

(4) Formally protect inherent values on pastoral land

On parts of most pastoral leases, and across the whole area of some leases, ecological values require more protection than is offered by pastoral lease agreements. Government has proposed an end to tenure review, but there are many other ways to achieve protection. The Crown does not need to sell freehold title to land to protect its ecological values, and provide recreation access to them. For example, under the 2000–2009 Labour Government, the Nature Heritage Fund bought a number of pastoral leases for conservation (including Birchwood, Hakatere, and St James stations in Canterbury). Table 2 describes some options for protection of inherent natural heritage values.

Our preferred option is a 'buy and sell' model that involves outright purchase, for conservation, of the lessee's interest across whole pastoral leases. Following purchase, some land may be sold by the Crown so that it can be used for

Table 2. Options for protection of inherent natural heritage values on Crown pastoral land.**Favoured Options**

1. Buy and sell

We suggest that the government should sequentially purchase entire leases (and not only land with natural heritage values) on a willing buyer-willing seller basis. They should then identify and consult on natural heritage values, and transfer those to DOC administration and management.

Any remaining areas could be sold, creating a revolving fund for further purchases. After reserving some land under the administration of the Department of Conservation, the government could offer tangata whenua first right of refusal, then auction the remaining land. Revenue generated at auction would reflect the market value of disposed land, and create a revolving fund to partially or wholly fund future lease purchases. Protection as public conservation land would increase the likelihood that enduring stewardship would be achieved. If tenure review is 'replaced' in any form, this is the mechanism that should be used.

2. First right of refusal for the Crown

In association with the above, the government should legislate to ensure that first right of refusal on sale of a lease is given to the Crown, which could then treat it as a 'buy and sell' property. That is, the option to purchase the lease must be offered to the Crown before any other buyer.

As a transitional arrangement, the Crown must also have first option to purchase any lease offered for sale prior to the new legislation.

3. Use the Land Act to create reserves and easements

A third, less preferred option would be to use the Land Act provisions which allow government to create reserves on pastoral leases, and to create access easements across the pastoral land surrounding the reserves. Although the Land Act does not explicitly require compensation to the lessee for creation of the reserves, it is likely that compensation for the loss of pastoral grazing would be warranted. Thus, partial purchase of leases is also feasible.

OPTION NOT FAVOURED**Covenants**

Covenants are an inappropriate mechanism for the protection of natural heritage values on pastoral lease land. A pastoral lessee has no rights to natural heritage values except to the extent that the lessee's pasturage rights affect those values. Thus, covenants imply that a leaseholder will forgo rights to natural heritage that they do not actually hold. There is already a mechanism for addressing the effects of pasturage rights on natural heritage values, through a change in stocking limits (numbers or extent of grazing).

Although there are some exceptions, covenants provide ineffective protection for natural heritage in the high country. Covenant conditions are often weak and permissive. Compliance with conditions requires regular monitoring, and effective enforcement is constrained by the difficulty proving breaches (to the necessary legal standard) and limited resources for identifying and prosecuting breaches.

purposes other than conservation. We suggest that: (a) sales should occur only where there is no natural heritage value, and no potential that future land uses (on land to be sold) will have adverse offsite effects on natural heritage on other high country land; (b) sales revenue is put into a revolving fund for purchase of lessees' interest on other properties; and (c) the order of lease purchase (whether by Nature Heritage Fund or otherwise) should be determined by a rigorous and transparent prioritisation process involving technical experts in high country natural heritage.

(5) Better manage pastoral land in perpetuity

Across many parts of the high country, sustaining ecological values on Crown pastoral lease land will require changes in management and regulation. These changes might involve retirement of some land from extensive pastoral grazing, or stock limitations, and on many leases will involve more active management of plant and animal pests. They have several components:

(a) Oversight

New legislation will need to direct and enable far more active oversight by LINZ of pastoral lease management, with a new focus on maintaining and enhancing natural heritage values. The design of oversight and management must ensure accountability of officials to public interests, and prevent capture by the regulated community of lessees. We suggest this might warrant an independent oversight body that is

external to the regulator (LINZ), with no 'revolving door' between them. The oversight body should have powers to direct LINZ to take action to achieve the legislated purpose and outcome, including:

- (i) responding to reported breaches of lease conditions with appropriate enforcement and remediation,
- (ii) addressing issues arising from lease monitoring reports (e.g. changing stock limits/retirement, requiring plant and animal pest control),
- (iii) reviewing and overturning decisions inconsistent with the purpose of the legislation,
- (iv) reviewing administrative procedures,
- (v) providing information.

The most appropriate oversight model for long-term pastoral lease management may be a new parliamentary commissioner's office, similar to the Parliamentary Commissioner for the Environment and answering to Parliament, not the Government of the day. One of the first actions needed from this office is to direct LINZ (or some other agency) to undertake a review of where natural heritage is, and is not, being sustained under current pastoral use and pest management practices, across all remaining Crown pastoral leases.

(b) Definitions

New definitions will be needed to direct lease administration under this oversight. For example, if "good husbandry"

remains in legislation, it needs to be defined so that native ecosystems, and not only soils and water, are maintained or enhanced. “Pasturage” needs to be defined as grazing undeveloped land within stock limits that are low enough to sustain native ecosystems, and to explicitly exclude pastoral intensification and agricultural conversion, and to exclude grazing by any stock other than sheep, or by any feral or commercially harvested animals (e.g. tahr, deer). A narrow definition of ‘developed land’, as land which has been mechanically cultivated, is needed to ensure that pastoral intensification, agricultural conversion, or grazing by stock other than sheep, does not compromise the natural values retained by most undeveloped high country land.

(c) Monitoring and enforcement

There is a clear need for LINZ to have, and use, more compliance monitoring and enforcement obligations and options, such as: obligation to record and respond to complaints from any party; inspection powers enabling officers to monitor compliance and investigate complaints; mechanisms to achieve cessation of breaches (e.g. enforcement orders) and require remedial actions; a regime of proportionate penalties for smaller and more moderate breaches of lease conditions; and lease forfeiture for major or repeated infringements (this already exists, but has been rarely used). Monitoring, independent audit systems for adherence to lease conditions, natural heritage values, and plant and animal pests, and independent enforcement officers, will be needed to support these functions.

(d) Public input and appeal rights

Ultimately, exposure to the sunshine of public scrutiny will be the most important aspect of a new system to manage pastoral leases. This scrutiny requires both a statutory obligation, and a new process, for LINZ to receive and take into account technical advice and advocacy from tangata whenua and the wider public, as well as agencies (e.g. DOC, Councils) for securing and safeguarding natural heritage, including on:

- (i) purchases of lessee’s interest for conservation (and on-selling by the Crown of land without natural heritage values, if relevant) (Table 2),
- (ii) compliance with and enforcement of lease conditions,
- (iii) natural heritage outcomes of pastoral lease management.

As we suggested for discretionary consents, we think the public should have the right to appeal LINZ’s decisions and actions on matters of long term pastoral lease management to the Environment Court.

(e) Limited official discretion

Even with strong oversight, clear definitions, new monitoring, audit and enforcement tools, and avenues for accountability to public interests, it will be important that everyday pastoral land decisions affecting natural heritage are not devolved to LINZ officials. In their discussion document, LINZ (2019b) suggested three processes that would preserve and perpetuate their discretion to make many lease management decisions in-house. These were: (i) offsetting in discretionary consents (p. 37); (ii) covenants as a protection mechanism on Crown pastoral land (pp. 20–21); and (iii) farm plans (p. 32). A crucial weakness of each of these three tools is the requirement for case-by-case assessment of values and then choice of appropriate compromise by officials. Each offset, covenant, or farm plan also requires ongoing and repeated case-specific compliance

monitoring, assessment, and enforcement over time, with compromise at each iteration. The high administrative and monitoring load would make it impractical for public interests to quality-check and have input into assessments, and to challenge and update them as new information comes to hand.

Conclusion

The South Island high country includes the most extensive areas of undeveloped montane glacial and alluvial landforms in New Zealand, and critical habitat for many of the country’s threatened and declining plant and animal species. These important ecological values have been lost or severely degraded on pastoral lease lands over the past three decades, through processes (tenure review and discretionary consents) allowed and fostered by officials in LINZ and DOC, consented by the Commissioner of Crown Lands, and enabled by successive Governments. Two decades of what we call the ‘give-hope-defend’ model of high-country governance has allowed loss and degradation of ecological values, and left a legacy of pest management problems.

Two key ingredients are required to slow this decline: (1) a clearly defined statutory purpose; and (2) public accountability. To achieve these, the primary purpose of new Crown pastoral lands legislation must be to secure and safeguard natural heritage for its own sake. Land administration and land use decisions must be open to public scrutiny; and ultimate responsibility for land use decisions must lie with an external publicly-accountable body such as the Environment Court. The alternative is continued loss and degradation of vulnerable indigenous species’ populations and rare ecosystems in the South Island high country.

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References

- Barton B 2006. Legal aspects of high country pastoral leases and the tenure review process: a background paper. Prepared for the Parliamentary Commissioner for the Environment. https://www.pce.parliament.nz/media/1346/legal_aspects_of_high_country_pastoral_leases_-_barton.pdf (Accessed 11 July 2019).
- Brower AL 2008. Who owns the high country? Nelson, Craig Potton Publishing. 199 p.
- Brower AL, Page J 2017. Freeing the land beyond the shadow of the law: 20 years of the Crown Pastoral Land Act 1998. *NZ Universities Law Review*. 27: 975-997.
- Brower AL, Meguire P, Monks A 2010. Closing the deal: Principals, agents, and subagents in NZ land reform. *Land Economics* 86: 467–492.
- Brower AL, Sprague R, Vernotte M, McNair H 2018. Agricultural intensification, ownership, and landscape

- change in the Mackenzie Basin. *Journal of New Zealand Grasslands* 80: 47–54.
- Cabinet Business Committee (CBC) 2019. Delivering better outcomes for Crown pastoral land. Minute of Decision, CBC–19–MIN–0001. 29 January 2019. www.linz.govt.nz/system/files_force/media/doc/cabinet_minute_cbc-19-min-0001.pdf?download=1 (Accessed 11 July 2019).
- Day NJ, Buckley HL 2013. Twenty-five years of plant community dynamics and invasion in New Zealand tussock grasslands. *Austral Ecology* 38: 688–699.
- de Lange PJ, Norton DA, Courtney SP, Heenan PB, Barkla JW, Cameron EK, Hitchmough R, Townsend AJ 2009. Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61–96.
- de Lange PJ, Rolfe JR, Champion PD, Courtney S, Heenan PB, Barkla JW, Cameron EK, Norton DA, Hitchmough R 2012. Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series 3*. Wellington, Department of Conservation. 70 p.
- De Lange PJ, Rolfe JR, Barkla JW, Champion PD, Courtney S, Barkla JW, Perrie LR, Beadel SM, Ford KA, Breitweiser I, Schonberger I, Hindmarsh-Walls R, Heenan PB, Ladley K 2018. Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Wellington, Department of Conservation. 82 p.
- Duncan RP, Webster RJ, Jensen CA 2001. Declining plant species richness in the tussock grasslands of Canterbury and Otago, South Island, New Zealand. *New Zealand Journal of Ecology* 25: 35–47.
- Edelman M 1960. Symbols and political quiescence. *American Political Science Review* 54: 695–704.
- Land Information New Zealand (LINZ) 2019a. Discussion Document - Enduring stewardship of Crown pastoral land. Land Information New Zealand, Wellington. Released 17 February 2019 (https://www.linz.govt.nz/system/files_force/media/doc/discussion-document_cplc.pdf?download=1) (Accessed 1 November 2019).
- Land Information New Zealand (LINZ) 2019b. Crown pastoral land regulatory system – regulatory system assessment. Land Information New Zealand, Wellington. www.linz.govt.nz/news/2019-02/managing-our-regulatory-systems (Accessed 11 July 2019).
- Levine M 1998. Regulatory capture. In: Newman P ed. *The Palgrave dictionary of economics and law*. London, Macmillan Reference Limited. P. 267.
- Mitchell C 2018. After taxpayers paid to get rid of it, farm sells for \$17.5m. *The Press*, Christchurch. 6 July 2018; Page 1, Column 1.
- Ministry for the Environment 2007. Protecting our Places - Information about the national priorities for protecting rare and threatened native biodiversity on private land. <https://www.mfe.govt.nz/publications/biodiversity/protecting-our-places-information-about-national-priorities-protecting> (Accessed 10 December 2019)
- Olson M 1965. *The logic of collective action: public goods and the theory of groups*. Cambridge, Harvard University Press. 186 p.
- Walker S, Price R, Stephens RTT 2008. An index of risk as a measure of biodiversity conservation achieved through land reform. *Conservation Biology* 22: 48–59.
- Walker S, Brower AL, Clarkson BD, Lee WG, Myers SC, Shaw WB, Stephens RTT 2009. Halting indigenous biodiversity decline: ambiguity, equity, and outcomes in RMA assessment of significance. *New Zealand Journal of Ecology* 32: 225–237.
- Weeks ES, Walker SF, Dymond JR, Shepherd JD, Clarkson BD 2013. Patterns of past and recent conversion of indigenous grasslands in the South Island, New Zealand. *New Zealand Journal of Ecology* 37: 127–138.
- Williams D 2019. Agency’s three-year gap in consent checks. *Newsroom* August 15, 2019 <https://www.newsroom.co.nz/2019/08/15/755430/agencys-three-year-gap-in-consent-checks> (Accessed 4 December 2019)

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Supplementary material

Additional supporting information may be found in the supplementary material file for this article:

Appendix S1. Selected examples of discretionary consents that have resulted in the loss of ecological values.

Appendix S2. Two case studies in Crown pastoral land management that are not ecologically sustainable.

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