

Crown Pastoral Land Tenure Review

Lease name: Ben Ohau

Lease number: Pt 028

Public submissions

These submissions were received as a result of the public advertising of the preliminary proposal for tenure review.

APPENDICES

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- 1. Copies of submissions with numbered points annotated.
- 2. Copy of advertisement.

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25 August 2000

Commissioner of Crown Lands Attn: Ray Ward Smith Knight Frank Ltd PO Box 564 Timani

Dear Ray Ward Smith

Re: Ben Ohau Preliminary Proposal - The Pyramid and Ben Ohau Swamp

In the light of further information about wetland sequences on Ben Ohau Forest and Bird seeks restoration of the following areas to full Crown ownership and control as conservation land;

- all of Darts Bush catchment on the true right of the stream.
- all of The Pyramid including its lower slopes to the east and south.
- the Mossy Hollow.
- The wetland on the true right of Dry Stream.

Any freeholding of these areas is opposed:

Two maps are enclosed.

Map IA is Forest and Bird's revised submission identifying new boundaries for conservation land and the amendments we seek to the preliminary proposal. The revised boundaries try to make the best use of existing fencelines.

Map 2 is from the wetland database which is part of "Canterbury Region Wetlands – Report and Preliminary Inventory" (October 1999). The solid blue areas (such as Ben Ohau swamp) are discrete wetlands, the blue stippled areas contain wetlands which are too numerous or difficult to map at 1:50,000. The database identifies wetland areas on the true left of Darts Bush Stream, on the Pyramid and close to Ben Ohau Swamp. It indicates obvious hydrological connections between the tributary of Darts Bush Stream at the base of the Pyramid on its south- western slopes, and also between the unnamed streams and seeps draining the southern and eastern slopes of the Pyramid and Fraser Stream and Ben Ohau Swamp.

Wetlands in the regional council database have been identified using colour aerial photographs at 1:10.000 scale. The report includes a caveat that information has not been checked on the ground and may be unreliable. The report's author, Mark Davis, is confident that the wetland information in Map 2 is reliable because it is based on recent aerial photographs (1995/96) at a detailed scale of 1:10,000 and his personal knowledge of the Ben Ohau property.

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From the vague and diffuse information in DoC's Conservation Resource Report it was not clear whether the Department had investigated these wetland patterns or whether it was even aware of all of them and the hydrological connections between areas of cushion bog in fescue tussock grasslands and Fraser Stream and Darts Bush Stream. These wetland areas deserve further investigation. As well as having high ecological values generally, cushion bogs are likely to provide important invertebrate habitat. The presence of bogs in grasslands and shublands also provides many ecotones, increasing biological values still further.

The wetland areas to the south and west of Ben Ohau Swamp occur in grazed and heavily rabbit damaged areas. Nevertheless, as wetlands they have important biological and hydrological values.

The preliminary proposal offers some protection for semi-deep water wetlands and their margins such as Ben Ohau Swamp. It should also recognise the ecological and hydrological values of cushion bogs, stream flushes and seepages and similar wetlands. Such areas are within widely used definitions of wetland i.e.:

"Wetland includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to living in wet condition." (RMA, section 2)

"A collective term for permanently or temporarily wet areas, shallow water or land-margins. Wetlands may be fresh, brackish or saline, and are characterised in their natural state by plants and animals that are adapted to living in wet conditions" (Stephenson, 1983).

The Ministry for the Environment's comprehensive 1997 State of the Environment report highlighted the extensive loss of wetlands with its conclusions:

"Biodiversity decline is New Zealand's most pervasive environmental issue with 85% of lowland forests and wetlands now gone..." and

"The main pressures on indigenous biodiversity today are insufficient habitat in lowland areas, declining quality of many of the remaining land and freshwater habitats, the impacts of pest and weeds...."

An as the Environment Canterbury wetland inventory notes: "In Canterbury, most of the original wetlands have been lost, and those remaining therefore assume greater importance." (Davis for CRC, 1999). The attached extract from that report Appendix 1) highlights the biological and hydrological functions and value of wetlands.

Forest and Bird believes the preliminary proposal for Ben Ohau pays insufficient attention to these values. The huge loss and degradation of freshwater wetlands in New Zealand, including in the high country, means that remaining wetlands have high inherent values which deserve recognition under section 24 of the CPLA.

The small size of individual wetlands, and the mosaic and often cryptic nature of wetland sequences means they are can be overlooked in assessing conservation values. Their hydrological linkages to other water bodies may also not be investigated adequately. Forest and Bird encourages both the Commissioner and DoC to devote more resources to investigating, assessing, and describing wetland areas such as cushion bogs, seeps, flushes, and areas of red tussock and to ensuring these areas are restored to full Crown ownership and

control. Use of the regional council wetland inventory and database may assist the preparation of conservation resource reports.

Map 2 also highlights the need for adjacent properties to be considered together. The pattern of wetlands on Omahau has an obvious hydrological connection to Ben Ohau Swamp. This should be recognised in drafting a preliminary proposal for Omahau.

I apologise for the fact that the information is being provided after submissions have closed. It was requested some time ago from Environment Canterbury but was only provided on 23 August 2000. The Society would greatly appreciate the Commissioner and his agents accepting an amended submission and considering this new information.

Yours sincerely

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Eugenie Sage

Regional field officer

Cc Regional Conservator, DoC Canterbury Commissioner of Crown Lands, Wellington appindix 1 - Extract from "Canterbury Region wetto Freliminary Report & Inventory " Rart-1 24 Functioning (anterbury Regional Council)

Wetlands perform a number of functions, which are summarised below:
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Biological
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- Wetlands provide habitat for a high diversity of plants and animals. Seasonal wetlands are important for part of the life cycle of waterfowl, as they provide food sources at different times of the year (Robinson, 1995). Wetlands along the coastal fringe of the Canterbury Plains are part of an important chain of coastal wetlands used by waterfowl and waders along the South Island's east coast. Wetlands are important for the life cycle of many fishes, eg, inanga spawning in estuaries.
- Riparian vegetation is important for providing habitat and shelter for fauna, and effectively acts as a transition between wetland communities and adjacent dryland communities. These transitions are known as ecotones, and are very important as they contain a high species diversity comprising representatives from each community type. Riparian vegetation also acts as a buffer for animals living within a wetland.

Hydrology Based on Carter (no date), except for the last bullet, which is based on Cunningham (1980).

- Wetlands function as sponges and are important for flood storage and absorbing run-off during storms. The greater the storage, the less flooding is likely. In Canterbury this may only be significant in parts of the high country, where wetlands can comprise substantial portions of some catchments.
- Wetlands tend to maintain steady water flows in streams and rivers, and maintain flows during drier periods. There has been considerable debate about this issue, but Campbell (1998) states: "it is a common misconception that vegetated wetlands have very high evaporation losses: in many cases actual evaporation rates are far below open water rates." Again, this function is most likely to be evident in the high country where there is a higher density of wetlands, and where many of them are interconnected. Sphagnum bogs may be particularly important in this regard as this moss can absorb up to 26 times its own weight in water (Buxton 1991).

- Wetlands provide for groundwater recharge and discharge, depending on the locality of the wetland. In the upper parts of catchments, discharge of the occurs, while recharge tends to occur lower down.

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- Wetlands effectively function as sinks and reflect the processes and activities that
 occur in their wider catchments. This is an important concept when considering
 their management.

Water Quality Based on Carter (no date), and Johnson and Brooke (1989).

- Wetlands maintain and improve water quality by trapping, precipitating and transforming sediments and nutrients. Wetland plants contribute to water quality by adding oxygen and taking up nutrients.
- Wetland plants buffer wetlands from incoming sediments and nutrients, though topography and substrate can also provide buffering effects.
- Wetlands reduce shoreline erosion by reducing water speed and absorbing wave energy.

2.5 Importance

Wetlands are widely acknowledged as important ecosystems that have many values and uses. In Canterbury, most of the original wetlands have been lost, and those remaining therefore assume a greater importance. The values of wetlands are summarised as follows:

Ecological

Wetlands are highly productive ecosystems, which support a high diversity of indigenous plants and animals. Their proximity to each other means that their collective value is often greater, as it increases the range of habitats available at different times of the year, eg, for bird feeding. Wetlands often contain a mosaic of communities, which further adds to their overall value. Many wetland biota are highly specialised and adapted to living in wet conditions, and do not occur in other ecosystems.

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Cultural

Wetlands are important to Maori, having been traditionally used for a long period of time as a source of food and other resources. Water has a special significance, and discharges of human waste into water bodies are of particular concern. Concerns have also been expressed about the effects of water abstraction and the effects of uses on the habitat of traditional fish species (CRC 1998).

Scientific/Educational

Wetlands are places where ecological processes such as plant succession and hydrology can be studied. Water quality and specific biota are often of interest, and less modified wetlands serve as important benchmarks for assessing the effects of changes in other wetlands. Wetlands sometimes contain evidence of past conditions in the form of fossils and pollen.

Economic

Wetlands are often important areas for farming. Their soils are usually fertile and when drained, they often provide fertile soils for farm production. In drier periods, they are usually important for grazing, enabling the removal of stock from areas where there is less feed available. They are also used for stock watering and sometimes for water abstraction. Wetlands have other economic uses such as commercial fishing and tourism.

Landscape

Wetlands often contribute to wider landscape values as they provide visual diversity and interest. This is particularly so in less developed areas, but even in modified farmland and urban areas, they add interest to the landscape and provide examples of formerly widespread landscape types.

Recreation

Wetlands provide for a number of recreational uses including boating, swimming, fishing, bird watching and waterfowl shooting.

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representative areas to be identified, and there is also likely to be a terrestriction emphasis. For these reasons, it is clear that some wetlands would not have been visited or assessed.

- Tenure review surveys have tended to be relatively comprehensive and detailed in Canterbury, but there is not a particular focus on wetlands and it is inevitable that some parts of a property will not have been visited. The issue of naturalness also arises, such that more-modified wetlands at lower altitudes may not be identified.
- Parts of the region have not been assessed from aerial photos, and other parts have been assessed using different methods. In finalising the wetland database, some sites were cross-checked while others were not. This does not mean that the database is not a useful record of wetlands. It is the only composite one available in the region, but it does have limitations which reinforce the need to undertake field verification to ensure the data is as accurate and up to date as possible.

4.2 Wetland distribution in the region

When reviewing the distribution of wetlands in the region, it is important to consider them in the context of their ecological districts. The following information is based on the wetland database and my general impressions of wetland distribution in the region:

- The highest density and number of wetlands are found in the high country, particularly in the intermontane basins. This reflects a number of factors including higher precipitation, variations in landform and topography, the influence of glaciation and the inherent difficulties of developing land in an area with climatic and soil limitations. There are many large wetlands associated with river floodplains and terraces, fans and basins receiving drainage from adjacent hillslopes. Flushes and seepages are very widespread, typically occurring at breaks in slope; while some are substantial, most are small. Many occur at higher altitudes and are often associated with tarns in basins, though these areas were not assessed by the study as they were considered to be under less threat than lower altitude areas (see 3.3.2).
- Wetlands are reasonably common in the foothills of the high country, but they are
 less common than further inland. This probably reflects less topographic variation,
 less glaciation, lower precipitation and more intensive land use. It is

acknowledged, however, that the foothills were only partly assessed by this study and the situation could prove to be less clear than indicated. Despite this, it is quite obvious that flushes and seeps are common in the foothills, particularly on footslopes.

- Wetlands are sparsely scattered in lowlands, though there are concentrations in certain areas. In general, the plains, downlands, coastal hills, and Banks Peninsula are not notable for their wetlands. The coastal fringe of the plains is the most obvious exception here. There are major wetlands associated with Te Waihora (Lake Ellesmere) and Wainono Lagoon, and there are a number of other lagoons and estuaries. Lagoons are typically associated with the river mouths. A reasonable number of smaller wetlands are present, though they are much reduced from their original extent.
- There is a tendency for people to underrate the value of smaller and modified wetlands (Robinson 1995), but it is important to consider them in a wider ecological context. Many of them occur in areas that have been subjected to burning, vegetation clearance, drainage, oversowing and topdressing and grazing for a long period of time. For these reasons, most wetlands remaining in such areas are very modified and restricted in their distribution. They do, however, contain remnants of the indigenous flora and fauna of the ecological districts in which they occur and thus the genetic materials for future restoration initiatives. It is not appropriate to compare the condition and value of wetlands between ecological districts, as the history of wetland formation and land use is likely to be quite different. On this basis, when assessing the significance of wetlands, the threshold of wetland modification will be very much lower for the plains than for the Heron Basin, for example.

4.3 Ecological health of wetlands

While field verification was not undertaken, comments can be provided about wetland health in the region based on past survey experience, the identification of wetlands through air photo interpretation and the application of ecological principles. The term wetland health broadly refers to the ecological functioning of a wetland. A healthy one functions relatively naturally and is self-sustaining in the long term under current use or management. With increasing modification, exotic plants become more prominent and the vegetation structure alters. An unhealthy wetland will not function naturally, is

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most likely to have a disrupted water supply and will not be self-sustaining. If tent use and management continues and the water supply is not reinstated, the wetland will eventually cease to exist. On this basis the following observations are made about wetlands in the region:

- Many wetlands are in a poor or deteriorating state of health. This is particularly so in lowland areas, but it also applies throughout much of the high country, except for those which are larger, wetter or at higher altitude. The main reasons for this include a reduction in water supply, increasing physical isolation, an increase in exotic plants, accelerated eutrophication and the effects of on-going grazing.
- As wetlands become more isolated and reduced in size, they become increasingly
 vulnerable to outside influences through increased edge effects. The reason for
 this is that edge effects, such as those from grazing, tend to extend further into
 smaller wetlands than larger ones, as they have a relatively small area.
- Numerous wetlands that were observed in earlier photos or on maps, were much reduced in recent photos or had clearly deteriorated over time. Some examples are shown below in Figure 4 to illustrate this trend.
- Even in more natural wetlands, degradation trends are still likely to be occurring, particularly through the influence of grazing. These changes are most evident around the edges of a wetland or within drier parts of a wetland, where grazing impacts are greater and exotic plants are more prominent. Alpine wetlands are perhaps least likely to be degrading where they are not subjected to grazing, though hare browsing may still be significant.

4.4 Wetland threats

Many wetland threats were observed from aerial photos, and others such as burning, grazing, oversowing and topdressing are known to be widespread. These threats are expected to be impacting on many wetlands or are likely to do so in the future. The main threats are discussed below, with less common ones being listed in the database key in Appendix 4.

Drainage

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Drainage alters natural water levels, the most extreme effect being complete destruction of a wetland. Usually, the effect will be more subtle, and over time it is likely to occur in combination with other threats such as stopbanking and grazing. Typically its effect will be a reduced water table adjacent to a drain, and an associated reduction in wetland vegetation there. Exotic plants are likely to become increasingly prevalent as the wetland dries out, and soil shrinkage is also likely. Grazing pressure is likely to increase as the wetland dries out. The release of sediments and organic compounds is likely to have downstream water quality effects. Wetlands can also be drained through the diversion of inflows.

Stopbanking

Stopbanks are usually found adjacent to rivers, river mouths or along low-lying parts of the coast. Their purpose is to prevent flooding, erosion and the natural meandering of watercourses. They frequently prevent the natural development of wetlands in these localities, thus reducing wetlands generally. Existing wetlands may also deteriorate where stopbanks disrupt water flows. Other river control works can have similar effects.

Grazing

Grazing is probably the most widespread and pervasive threat to wetlands in the region. Few wetlands are protected from grazing animals through formal protection or fencing, except on conservation land. Even there, grazing animals can still be present as areas may not be fenced or fences may not effectively exclude the animals.

Figure 5 is a generalised model that illustrates degradation in a red tussock wetland, partly caused by grazing (though such changes usually result from a combination of factors—refer to 4.5). Similar structural changes also occur in other wetland types in response to disturbances such as grazing and burning.

The effects of grazing include reduced vegetation statute and density, and the spread of exotic plants through seeds in dung, on hooves and opening of the indigenous vegetation to give exotic plants a competitive advantage. Other effects are more subtle and insidious because they cannot be seen. Desiccation is likely to increase as vegetation density and statute decreases, due to an increase in air circulation and exposure to sunlight. Pugging and compaction of the soil surface, and the breaking up

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of turf and cushion vegetation exacerbates the desiccation process. Grazing Leyond immediate wetland and around feeder streams and flushes potentially reduces water supply to the wetland through similar mechanisms.

Another effect is an increase in nutrients from dung and urine, which favours planand animals tolerant of higher nutrient levels. Where open water or watercourses a present, the effect of increased nutrients can be obvious through algal grown increased nutrient levels are associated with increased sedimentation, resulting from trampling and reduced sediment trapping as the vegetation becomes less dense.

Oversowing and topdressing exacerbates these changes by increasing introduce plants, which attract grazing animals, thereby accelerating the changes. The increas in nutrients through fertiliser can be through direct application to the wetland, c indirectly through streams and run-off.

As a wetland dries out, structural changes are likely to occur in the vegetation, the general tendency being the development of earlier successional stages in the vegetation and a reduction in height.

While the above effects are common to sheep and cattle, there are differences reflecting their behaviour and different body weights. Cattle have a particular liking for wetlands and will often congregate in the wettest parts. By virtue of their weight, they cause severe soil pugging and damage to stream banks, and thus increased sedimentation. They produce substantial volumes of waste and a corresponding increase in nutrients. Despite their smaller size, sheep cause considerable damage to wetlands. With rotational grazing, their numbers can be high and in these circumstances, their impacts on wetlands can be severe, particularly in dry periods. Sheep can break the surface of fragile turf and cushion vegetation, directly exposing water to evaporation. Even when stocking rates are not high, sheep often congregate in wetlands, directly depositing waste into them and causing soil compaction.

Burning

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The burning of wetlands was more common in the past than it is now. It does however, still occur, particularly in red tussock wetlands or where flushes are burnt within a targeted tussockland. Fires can also be accidental. Burning has the effect of reducing vegetation stature and density, increasing the proportion of exotic plants (through the creation of more open habitats and the ingress of seeds), encouraging grazing and contributing to the drying out of a wetland. It can also cause an increase in nutrients through ash deposition. Burning of surrounding vegetation can contribute to the drying out of a wetland by reducing soil moisture levels over time. The contribution of burning to wetland degradation is partly illustrated by Figure 4.

Cultivation

Cultivation within a wetland has the obvious effect of destroying at least part of the wetland. When it occurs beyond wetland boundaries its effects are more indirect, but they may still be very damaging. The cultivation of inlet streams (eg, Lake Denny, Ashburton Lakes) is likely to result in an influx of sediments and nutrients, leading to accelerated eutrophication, especially if the water body is small or shallow. Cultivation of adjacent land or land more distant in the catchment can have a similar effect depending on the topography, drainage pattern, vegetation type and the occurrence of significant rainfall events afterwards.

Farming

Farming can be broadly categorised into intensive and pastoral farming. The former typically involves regular application of fertiliser and lime, cultivation, intensive grazing and sometimes cropping and irrigation. Pastoral farming involves extensive sheep-grazing with more intensive grazing in localised areas where soil types and topography are suitable. Oversowing and topdressing is undertaken on favourable sites, but over large areas it is not affordable or there are soil and climatic limitations, which work against this practice. With both types of farming, there is generally a combination of threats that impact on wetlands and which often have a cumulative effect.

Exotic plants

In the context of retaining the natural character and functioning of wetlands, many exotic plants such as grasses and herbs are considered to be weeds as they contribute

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to the degradation of wetlands. This occurs primarily through the displacement of native plants and their indirect effect of attracting grazing animals. Examples of troublesome weeds affecting wetlands include broom, gorse, and willows. The latter are a major problem in wetlands because of their ability to establish and spread from vegetative portions that break off from parent plants. They frequently block waterways, thereby altering water levels, and they can also alter faunal habitat by colonising the edges of water bodies and watercourses. Some aquatic weeds are a problem as they can replace indigenous plants and reduce light penetration (Buxton 1991).

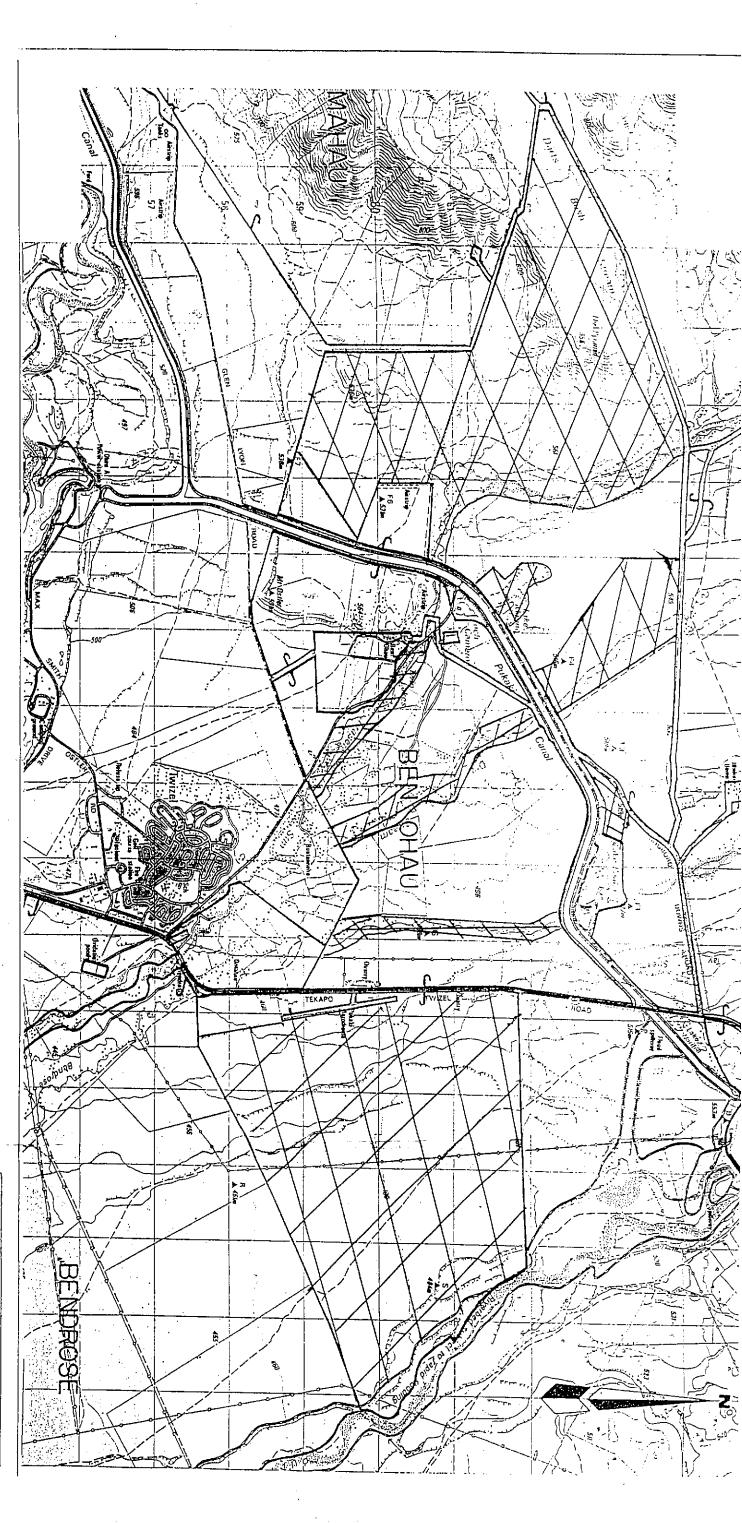
Forestry

Commercial forestry, woodlots and shelterbelts can have major impacts on wetlands. Microclimatic changes can result from a reduction in sunlight and the alteration of wind circulation patterns, which in turn can alter plant distribution. The most severe effect (other than direct replacement of a wetland) can be a reduction in the water table. This effect has been identified in New Zealand and overseas, and can cause reduced stream flows and discrete water bodies to dry up more frequently. Site preparation, roading and harvesting can also impact on wetlands through effects such as increased sedimentation and the ingress of exotic plants.

A related problem with forestry is the potential spread of wilding trees, though these can also spread from shelter belts and amenity plantings. They are primarily a problem in the high country where strong winds spread the seeds, and grazing levels are often insufficient to control the seedlings. This is a concern in retired lands now administered by DoC. Wilding trees tend not to be such a problem in lowland areas, as more intensive grazing prevents their establishment. Wilding trees can have similar effects to planted forests, especially where they have a high density.

Effluent disposal

Wetlands have often been used in the past to dispose of effluent, and this practice still occurs. This may include chemical waste, animal waste, warm water from industrial use, and human sewage. Discharges can be from point or non-point sources. There may be different levels of treatment or none at all. Effects can range from the killing of fish and other fauna, to altering nutrients and water temperature, which in turn can alter the distribution and dominance of plants and animals.



Pastoral Lease Boundaries

Ben Ohau

for conservation land -marginal strip

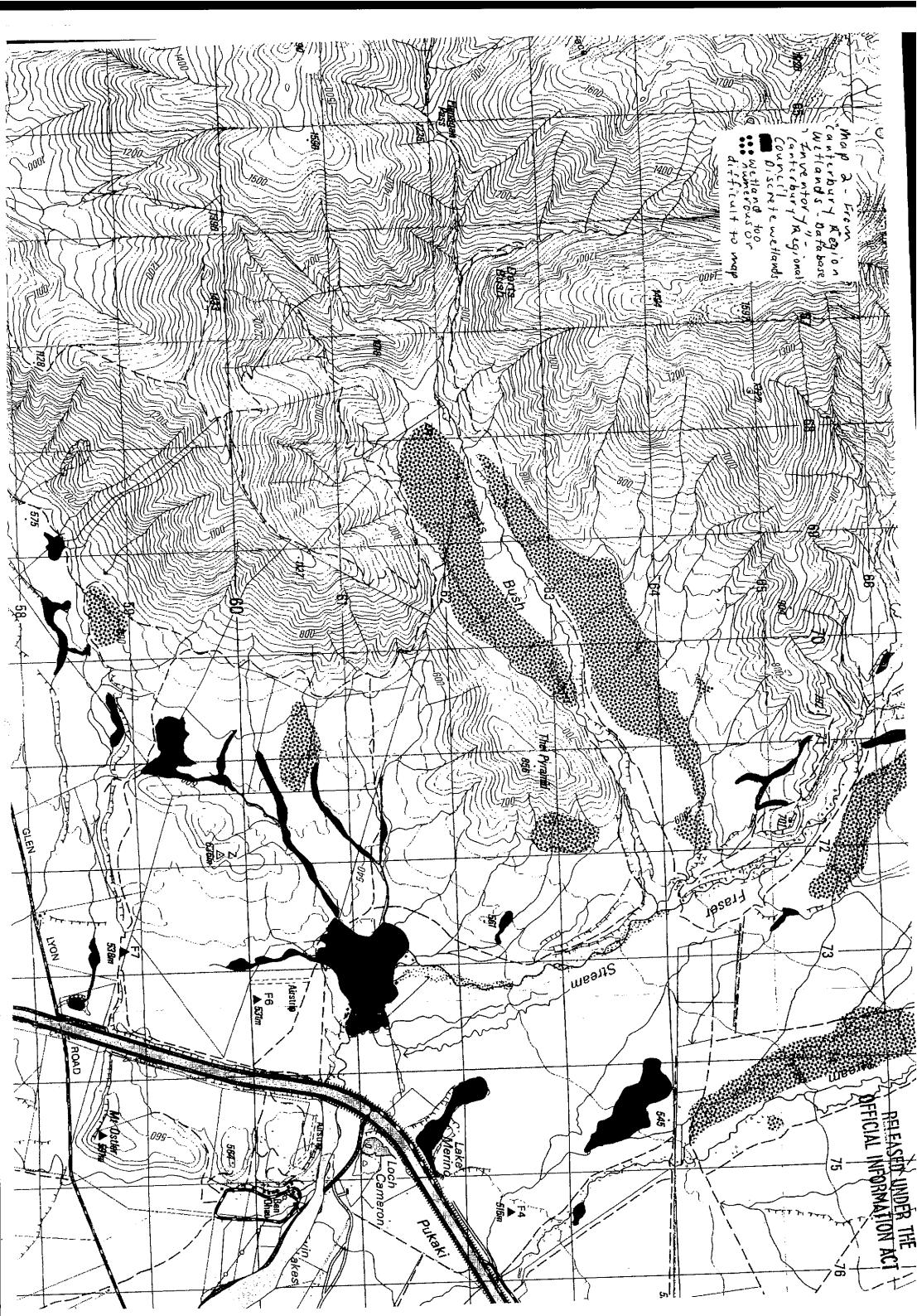
Key Run boundary

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Figure 5: Generalised model of red tussock wetland degradation

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hawkweed and a few scattered fescue tussocks. Few indigenous plants, generally much drier soil compared with 1.



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From: Eugenie Sage, Royal Forest and Bird Protection Society Inc. Regional field officer

Royal Forest and Bird Protection Society Inc Regional Office (Northern South Island) PO Box 2516 Christchurch Mail Centre ph (03) 3666 317 fax (03)3660 655 e-mail - sage@chc.forest-bird.org.nz

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OFFICIAL INFORMATION ACT SUBMISSION ON PRELIMINARY PROPOSAL FOR TENURE REVIEW OF BEN OHAU PASTORAL LEASE UNDER THE CROWN PASTORAL LAND ACT 1998

Commissioner of Crown Lands, via Knight Frank Ltd To: Attn Ray Ward Smith

From: Royal Forest and Bird Protection Society of New Zealand Inc. (Central Office), PO Box 2516, Christchurch Mail Centre

13 August 2000

STATEMENT OF SUBMISSION

Introduction

- 1. The Royal Forest and Bird Protection Society Inc. (Forest and Bird) has campaigned for the last 75 years for the protection of New Zealand's native species and the habitats on which they depend. Over 38,000 New Zealanders in 56 branches nation wide belong to Forest and Bird, supporting the Society's objectives of secure protection for native species, ecosystems, and landforms. This submission is on behalf of the Central Office of the Society.
- 2. Forest and Bird thanks Knight Frank for including the draft concession document, the easement maps, and fencing diagrams in the proposal document for public comment. This helps potential submitters better understand the proposal and assists the submission process. We hope it continues with future proposals and that the Department of Conservation resource report is also included as a matter of course.
- 3. A report and review of the proposal document by ecologist and conservation consultant, Mark Davis is attached as part of Forest and Bird's submission. It provides the ecological rationale for the changes sought to the proposal and highlights the under-statement of conservation values in the DoC resource report. The main recommendations in the Davis report are included in the submission. Any which are not should also be considered favourably by the Commissioner.
- 4. This submission opposes several elements of the preliminary proposal because it does not provide adequate recognition and protection for areas of significant inherent value. Changes sought to the proposal are set out below. The format follows that used in "Summary of the Preliminary Proposal for Temure Review of Ben Ohau Pastoral Lease under the Crown Pastoral Land Act 1998" (the proposal document).
- 5. Forest and Bird is disappointed in the minimalist approach to protection of inherent values in the preliminary proposal and that several sizeable areas with significant inherent values are proposed for freeholding. Irrelevant matters such as the proposed Pukaki Airport Zone appear to have been given greater weight than inherent values in drafting the proposal. With Ben Ohau being the first Canterbury property to go

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through tenure review under the new Crown Pastoral Lands Act this is particularly disappointing and a cause for concern.

Elements of the Preliminary Proposal

Proposal 3.1.1

(A) Ben Ohau Swamp and river margins (see also Diagram A)

The proposal does not adequately recognise the need to protect the swamp's catchment area and the waterways and seeps which feed it from continued stock grazing and farm development such as over sowing and top dressing. Fertiliser regimes which lead to nutrient enrichment will degrade wetland values. The 20 metre buffer proposed is extremely minimal. In other fora, the Department of Conservation advocates for at least a 50 metre and often a 100 metre buffer around wetlands to protect them from the impacts of development activities such as vegetation clearance and pasture development. Forest and Bird seeks at least a 100 metre buffer around the wetland.

The proposal not to fence and exclude stock from the southern part of this proposed conservation area is strongly opposed. The proposed fencing (Diagram A) would help to funnel stock into the wetland area and keep them there. With climate change and increasing periods of drought the swamp edges are likely to be particularly attractive to stock. There is little point in establishing conservation areas through tenure review if these are allowed to be degraded by continued grazing. The recent Environment Canterbury wetland inventory has highlighted the extent of wetland loss and degradation in the region. The comprehensive 1997 State of the Environment report has emphasised the seriousness of indigenous biodiversity loss and that the protection of lowland freshwater habitats deserved priority attention. Wetlands such as these on Ben Ohau are nationally important because of extensive wetland destruction and degradation elsewhere and because of their habitat values.

Amendment sought

- 1. Provide for at least a 100 metre buffer area around the outer margin of the Ben Ohau wetlands and swampy areas and/ or ensure that the conservation area is extended to include all seeps and wet areas which feed or have a hydrological connection to this wetland sequence.
- 2. Provide for fencing around the southern part of the Ben Ohau wetland area and its 100 metre buffer so that the entire wetland is protected from stock.

River margins

Darts Bush Stream and Fraser Stream

Red tussock grasslands and shrublands beside these streams have high inherent values and are not currently protected because of the narrow width of the marginal strip.

The DoC resource report identifies a red tussock grassland on a terrace on the true left of Lower Darts Bush Stream. This is a low altitude grassland which is not well represented in protected areas in the Mackenzie Ecological Region and the Pukaki

Ecological District. Freeholding this area is opposed, particularly as red tussock grasslands have been extensively depleted throughout the region and indeed New Zealand.

Indigenous shrubland communities along both streams contain a diverse range of species which is now uncommon at low altitude. Old man matagouri which has reached three metres in height is significant.

The proposal document only appears to involve a short length of new fencing on the true left of Fraser Stream close to the Rhobro Downs boundary (G to H) and on the same bank close to the canal (C to D). No existing fencing is obvious on any map. The absence of fencing along the rest of the marginal strip is opposed because, as the Davis report notes, continued grazing will degrade the values of the shrubland, wetland and riparian communities. Cattle grazing will be particularly damaging to wetland and seep areas, flushes, and riparian margins and is also likely to degrade water quality, cause pugging and erosion of banks.

The red tussock grassland and the shrublands both contribute to the natural character, ecological functioning and maintenance of the high inherent values of the waterways as habitat for a threatened species.

Both streams are important for indigenous fish such as the alpine galaxid (Fraser Stream and Twizel Rivers) and long jawed galaxid (Fraser Stream) which have a limited distribution. Fraser Stream and Darts Bush Stream contain koaro which is a Category C threatened species. The failure to provide an adequate riparian buffer for these streams and to exclude stock by fencing means the streams are vulnerable to water quality degradation, stock trampling and pugging banks, disturbing sediment and destroying aquatic habitat. This is strongly opposed.

The proposed boundaries appear to exclude the Twin Lakes areas which has important wetland values.

Widening and extending the marginal strip would protection conservation values and also improve public access along the streams.

Amendments sought

- 1. Provide for the widening of the marginal strips along both banks of both Darts Bush Stream and Fraser Stream along their entire length to the boundary of Rhobro Downs and Omahau to protect conservation values such as riparian shrublands and the red tussock grassland and its feeder flushes and seeps adjacent to Darts Bush Stream. The strips should be widened to include all of the riparian shrublands and the area of red tussock grassland as indicated in cross hatching on the attached Map I.
- 2. Provide for the boundaries of these widened marginal strips to be fenced to exclude stock for the entire length of the true right bank of Darts Bush stream on the property including the new conservation area proposed for the Pyramid.

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3. Provide for the boundary of the widened marginal strip along Fraser Stream to be fenced on both banks. The cost of fencing should be shared with the current lessee given the benefits for stock management.

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Dry Stream and Twizel River

The "Values" map in the conservation resources report outlines a significantly wider area on the banks of Dry Stream and the Twizel River as having ecological value. The marginal strips beside both waterways should be widened to include all of the area identified as being of ecological value in the "Values" map.

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Amendment sought

Increase the width of the marginal strip along the entire length of Dry Stream and the Twizel River on both banks as marked in cross hatching on the attached map.

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(B) Lake Poaka

The area marked as being returned to full Crown ownership and control in the map in Appendix 1 does not appear to cover all of the Lake Poaka wetland and areas with a hydrological connection to the lake. Half of the Lake Poaka area appears to have been excluded. The lake's shallow margins, the fact that it is adjacent to the river and its small islands and ponds mean it has wildlife values. The lake has been used for cross fostering of black stilt chicks. Accordingly excluding half of the Poaka lake and wetland sequence is opposed.

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Amendment sought

Increase the area that becomes conservation land to all of that highlighted on the attached map.

Additional areas of conservation value deserving protection as conservation land 1. Lake Merino

The inclusion of Lake Merino in the area proposed for freeholding is opposed. Despite being artificial and the presence of exotic vegetation on the fringes this small steep-sided lake is noted as a black stilt breeding area (SONs 14, Mackenzie District Plan). It and the associated spring fed streamlets and wet soakages are likely to have other wildlife habitat values and considerable restoration potential.

The lake is noted as an area of ecological value on the "Values" map in the conservation resources report.

Amendments sought

1. Include Lake Merino and inflowing streamlets and wet soakages and a 50-100 metre buffer area around the outer most wet margins in the area proposed as conservation land.

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- 2. Provide for the lake and the buffer area to be fenced from stock.
- 2. North and eastern slopes of The Pyramid and "Mossy Hollow"

The DoC resource report describes Mossy Hollow in the Pyramid dark face block as having similar species to Ben Ohau swamp without the Carex sectal component and having

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with cushion bogs. This is presumably the area identified on the "Values map" by a circle on the lower southern eastern slopes of the Pyramid. The report also notes the existence of a small area of snow tussock at the head of the valley above Mossy Hollow on the north face of the Pyramid. The omission of this area, Mossy Hollow and its feeder streams on this part of the Pyramid are opposed. No reasons are given as to why these areas with conservation value are proposed for freeholding.

The resource report also notes the visual prominence of The Pyramid as a landscape feature. It describes the hard tussock grasslands associated with matagouri and Cassinia shrublands, wetlands and flushes on the Pyramid and states that tussock health is good. Yet none of these values are recognised or provided for in the proposal document.

Freeholding all of the Pyramid without providing for protection of any representative areas is opposed. The failure to recognise and provide the connection between the flushes, seeps and small streams flowing off the Pyramid with Darts Bush Stream and Fraser Stream is also a major deficiency in the proposal. Continued development of these areas through oversowing and topdressing and intensified grazing is likely to change the flow regimes which sustain the streams and also lead to a drying up of the associated wetland communities.

Amendment sought

Provide for a new Pyramid conservation area which extends from the lower northern and eastern slopes of the Pyramid to the true right bank of Fraser Stream and which also includes the following:

- representative areas of hard tussock in good condition on the Pyramid.
- Shrublands on the northern slopes of the Pyramid in the Darts Bush catchment.
- the area of snow tussock at the head of the valley above Mossy Hollow,
- Mossy Hollow and the flushes and seeps which feed it.
- The hydrological connection between streams on the Pyramid (especially on the northern and eastern slopes) and Darts Bush and Fraser Streams.

See Map 1 for suggested boundaries.

3. Mountain beech remnant, Darts Bush Stream

The exact location of this mountain beech remnant is unclear. The absence of regeneration may be due to stock browse. It would be desirable if this could be included in conservation land given the scarcity of beech forest in the ecological district.

Amendment sought

Consider extending proposed new Pyramid Conservation Area to include mountain beech remnant or protecting it from stock grazing and trampling and clearance through a conservation covenant.

4. Cassinia leptophylla shrublands ??

The "Values Map" identifies a small area to the south of the Access easement B and the west of Ben Ohau Swamp as having ecological value. The vegetation communities here

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are not identified and have not been inspected by Forest and Bird. The proposed freeholding of this area is of concern.

Proposal 3.2.1

Proposed freeholding of part of Pukaki Block area

The proposed freeholding of 430 ha in the area between State Highway 8 and the proposed Pukaki Flat conservation area is opposed because it does not adequately recognise the high conservation values of this area. As the Davis report notes, neither the DoC resource report nor the proposal document (paragraphs 3.1.2 and 3.2.1) distinguish between the areas of the Pukaki Flat Block to become conservation land and the 430 ha, proposed to be freeholded in terms of their conservation values. Accordingly there is no justification for not protecting all of Pukaki Flat Block. As the Davis report notes all of the Pukaki block was recommended for protection by PASAC.

Further, all of the block including the area proposed for freeholding (except for the current aerodrome) is identified as a Site of Natural Significance (#16 Pukaki Flats) in the proposed Mackenzie District Plan in recognition that it represents "plant and animal communities and habitats which are representative, rare, or unique within the District, or otherwise considered to be significant in terms of section 6(c) of the Resource Management Act.." Additional conservation values outlined the Davis report which further justify protecting virtually all of Pukaki Flat (including most of the airport designation area) include:

- It is likely that the indigenous vegetation in the outwash "channels" is the original pre-European vegetation. These undeveloped soils are important given the extensive modification throughout the basin.
- The presence of intact full sequences of short tussock grasslands including the deeper soils of older terraces. Elsewhere these sequences have been lost because of direct drilling or other modification.
- The outwash plains of the block provide habitat for the endemic grasshopper Sigaus minutus which is only found in the Mackenzie and upper Waitaki Basins and several parts of Central Otago.
- Areas which are likely to have high invertebrate habitat values, given the high habitat values of other short tussock grasslands in the Mackenzie Ecological Region. These are important because high value invertebrate habitats identified elsewhere in the Basin have been reduced by cultivation and border dyke irrigation.
- The area has a high value for public interpretation because it is the best remaining short tussock grassland adjacent to a state highway in the Mackenzie Basin. The current proposal only provides for a small area close to the northern boundary to be restored to full Crown ownership.
- Its scientific value because of five years of moth monitoring by Dr Graeme White.

Paragraph 3.2.1 of the proposal is contrary to section 24(b) of the Crown Pastoral Lands Act which seeks to enable the protection of significant inherent values by restoration to full Crown ownership and control. No reasons are given as to why the area's high conservation values have not been recognised.

Appendix I- Sites of Natural Significance:Mackenzie District, Proposed Mackenzie District Plan.

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The possible expansion of the Pukaki Aerodrome, and the benefits to the current lessee of having freehold title if this occurs, should not be a factor in a tenure review proposal.

The area proposed for freeholding includes a much wider area than has been designated as an Airport Zone in the proposed Mackenzie District Plan and is in a different location. Map 33 of the Plan is attached. Designations apply regardless of land ownership so it makes little difference in a planning sense if the underlying land status is freehold or conservation land. There is no need to change the tenure and freehold the area close to the State Highway just because it has been designated as an airport zone.

The Commissioner's decision about which areas are to be protected and which are to be freeholded should be based on an area's conservation values and the objects of tenure review in section 24 of the CPLA. It should not attempt to pre-determine any process or proposal (as yet inchoate) to expand Pukaki aerodrome. Any amendment of the current tenure review proposal to allow freeholding of all of the Airport Zone designation as it is set out in the District Plan would also be opposed as not protecting areas of inherent value.

Amendment sought

- 1. Significantly reduce the 430 ha area proposed for freeholding to confine it to the area close to the State Highway 8 in the southern western corner of the Pukaki Flat block where vegetation has been more modified by grazing, has more browntop, hieracium, and areas of willow.
- 2. Provide for all areas of short tussock in good condition in the to become conservation land.

See map I for amended boundaries.

Boundary of proposed Pukaki Flats conservation area

On the Topo/cadastral map for the property the lease boundaries are shown as being the true right bank of the Pukaki River. Yet the boundary proposed for the conservation area is an existing fenceline. As the Davis report notes the river terraces have important invertebrate values and possibly botanical values which deserve protection.

Amendment sought

Move the boundary of the Pukaki Flats conservation land further east to the true right bank of the Pukaki River.

Grazing Concession and Monitoring - Pukaki Flat Conservation Area

Generally Forest and Bird opposes grazing concessions on land which is being restored to full Crown control and conservation management. On the basis of ecological advice (Davis report attached) and the particular circumstances of the Pukaki Block (including the presence of long term monitoring as part of the Mackenzie Basin Grazing Trial and Dr Graeme White's moth monitoring) some light grazing may be acceptable to maintain a short tussock grassland and prevent this being overtaken by exotics. The inclusion of

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conservation objectives in the concession document and a comprehensive monitoring programme are required, however, to ensure that grazing does not further degrade the short tussock grassland. Without these safeguards, the issue of the grazing concession is opposed.

The proposed concession agreement has no objectives which establish that grazing is to be undertaken for conscrvation purposes. These are needed to guide the management of the concession, provide a basis for possible decisions to reduce stock numbers, and differentiate it from traditional pastoral lease grazing.

Responsibility for monitoring is confused and requires clarification. Paragraph 4(e) of the Details of Grazing Concession states "the Director-General to set up a monitoring system to ascertain the effects of on-going grazing and this monitoring will be reviewed every three years." Clause 9.05 of the draft DoC concession document (licence) states that "The Concessionaire shall,.... design in consultation with the Grantor and undertake a programme to monitor and report on the environmental effects of the Concessionaire's occupation of and the activities upon the site." Clause 7 of Schedule III of the concession document says, "The Grantor will set up a monitoring programme to ascertain the ongoing affects (sic) of grazing on the vegetation on the site and this will be reviewed every three years." (my emphasis)

If the monitoring programme is to be credible it must be designed and undertaken by the Department of Conservation (with advice from Landcare Research or other scientific advisors) not by the concessionaire. As the Davis report recommends, the monitoring should be based on the existing Mackenzie Basin Grazing Trial and moth monitoring sites.

The cost of monitoring should be shared between the department and the concessionaire in recognition that grazing may, in this instance, help maintain the short tussock grassland, monitoring would not be needed if grazing did not occur, and the financial benefit gained by the concessionaire.

As Mark Davis notes, moth populations respond to changes in vegetation. Continuing past moth monitoring and expanding it to include other invertebrate taxa would help determine both the seriousness and extent of vegetation change and the effects of grazing on invertebrates.

The cost of annual inspections to review weed and pest programmes should be charged back to the concessionaire in the normal way.

Amendment sought

1. Insert the following new conservation objectives in a new section in the concession document, preferably at the start of the document or possibly under clause 7 Land Management or clause 9 Protection of Environment or in Schedule I.

7A Objectives of Licence

"The Concessionaire shall, during the term of this concession, undertake the activity of grazing for the following objectives:

- To maintain or improve the ecological integrity of the short tussock grassland.
- To maintain faunal habitat values."
- To enable monitoring of the impacts of grazing on vegetation cover and condition, faunal and other conservation values.

The Grantor shall design and undertake a monitoring programme to ensure that the two primary objectives are being achieved."

- 2. Amend Clause 9.05 of the concession document to make it clear that the Grantor (DoC) will establish and undertake the monitoring programme.
- 3. Insert new clause which provides for cost of the annual weed and pest inspections and part of the cost of monitoring to be recovered from the concessionaire.
- 4. Insert new clause in the Schedule II which makes an undertaking to continue monitoring on the Mackenzie Basin Grazing Trial site on the Pukaki Flats block and Dr Graeme White's moth monitoring and monitoring here, on two adjacent sites at Catherine Fields and on the other side of State Highway 8. The Department of Conservation should also be required to consider expanding the range of invertebrates monitored.
- 5. Insert new clause in concession document which provides for consultation with those undertaking the Mackenzie Basin Grazing Trial in determining an appropriate grazing regime for the block.

Size of area subject to grazing concession

The size of the area subject to the proposed concession agreement is unclear. Paragraph 3.1.2 of the summary of the preliminary proposal states that 1085 ha of proposed conservation land will be subject to grazing under the agreement. However clause 1 of Schedule I of the licence agreement identifies the site as "Pukaki Flats 1400 hectares approximately". Davis identifies the difference as being the part of the airport designation proposed for freeholding.

Amendment sought

Clarify the area which is to be subject to the proposed grazing concession.

Term of concession and no renewal right

Paragraph 6 of the "Details of Grazing Concession" states that no right of renewal is proposed. However, this is nowhere stated in the actual concession document. It needs to be to ensure that the proposed licence holder has no expectation of being able to graze conservation land in perpetuity. Ten years is more than ample time for the concession holder to make other arrangements.

Amendments sought

- 1. Add new clauses to the concession document which clearly establishes that:
- the concession term is for 10 years.
- There is no right of renewal.

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That a full public notification and submission process and all of the normal concession provisions of the Conservation Act 1987 will apply to any application for a new concession at the end of 10 years. Including section 17Q(2), 17R-17Z and 17ZQJ.

Termination of concession

If monitoring establishes that continued grazing is degrading Pukaki Flat eg vegetation condition is deteriorating, the concession document must allow the department to terminate the concession. Clause 14.01 (f) as currently drafted does not do this because the reference to "risk to ... the environment" is very general and does not make it clear that this includes vegetation cover or faunal values.

Amendment sought

Add the following new clause to clause 14.01 of the concession document which allows termination if:

"In the opinion of the Grantor, the conservation objectives of this Concession are not being met; or if in the opinion of the Grantor there is a deterioration in the condition and extent, or integrity of indigenous vegetation cover and/or faunal habitat values."

Weed control

Clause 9.04 (b)of the concession document requires the concessionaire to "Clear and keep the land clear of all noxious plants and comply strictly with the provisions of the Biosecurity Act 1993." This clause is inadequate because the scope of the concession holder's weed control responsibilities is unclear.

"Noxious plants" is an unhelpful term as these are generally agricultural weeds and often do not include plants that degrade conservation values (eg Russell lupins). Maintaining conservation values may require control of plants which are not listed in the Regional Pest Management Strategy (eg wilding conifers are not currently listed in the RPMS or as a noxious weeds). While paragraph 4 of Schedule III says the concession holder shall be responsible for the costs of wilding control, there is nothing in the licence document which requires him/her to actually undertake wilding control. The weed species that the concession holder is required to control should be specified more clearly.

Amendment sought

1 Amend clause 9.04 of the concession document to state clearly that the concession holder is required to control the following:

- all species of wilding conifer including Corsican pine (Pinus nigra), Douglas fir (Pseudotsuga menzlesii), radiata pine (Pinus radiata) Contorta pine (Pinus contorta), Scots pine (Pinus sylvestris) Maritime pine (Pinus pinaster) European larch (Larix decidua) and Ponderosa pine (Pinus ponderosa).
- all woody exotic weeds including broom and briar.
- finestem needlegrass (Stipa temissima).

Proposal 3.2.2 Freeholding of 440 ha

The proposal document notes that this area of flat land between the Twizel River and State Highway 8 dissected by the Pukaki Canal and power lines is "of a fragile nature".

No covenants are proposed under section 97 of the CPLA to ensure that future management of this area is ecologically sustainable. Nothing in the document describes how the objective in section 24(a)(i) of the CPLA is to be achieved.

The efforts of the current lessee to improve vegetation cover are acknowledged but owners change and future owners may not be similarly inclined.

Amendment sought

Withdraw this area from freeholding and retain it as unallocated Crown land or provide for a section 97 covenant and controls on grazing and other measures to improve indigenous vegetation cover and prevent soil erosion.

Forest and Bird would welcome further discussion of the proposal and the amendments sought.

Eugenie Sage

Regional field officer

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For Kevin Smith, Conservation Director

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BEN OHAU TENURE REVIEW PROPOSALS

A report for the Royal Forest and Bird Protection Society Inc. by Mark Davis, Conservation Consultant, August 2000

Approach

This report reviews the DOC resource report and the summary of preliminary proposals. In doing so, it draws on additional information from the Mackenzie PNAP survey report, the Protected Areas Scientific Advisory Committee (PASAC) minutes, the Mackenzie Basin Grazing Trial (MBGT) and invertebrate studies in the Mackenzie. Using the same headings of the report, any issues or concerns are outlined as bullet points. There is a problem of not being able to be definitive about the proposals and how they should be changed, as the descriptive material is sometimes not site specific. This is especially so for areas not proposed for protection.

DEPARTMENT OF CONSERVATION RESOURCE REPORT

Part one: Introduction

While mention is made of the PNAP, Recommended Areas for Protection (RAP's), the Ecological District involved and past protection proposals, there are information gaps as follows:

- The property is not entirely within Pukaki Ecological District (ED), as the Pyramid is in Ben Ohau ED. The report is incorrect to state that there are two RAP's on the property, as a small portion of Pukaki 7 extends onto the property from Omahau Station in the South. No mention is made of PASAC recommendations relating to the RAP's, despite their relevance to protection proposals e.g. discussions about the ecological importance of RAP's in the context of the Mackenzie Ecological Region.
- No mention is made of Sites of Natural Significance (SONS), yet they signify important conservation values that the Department has previously advocated for in the Mackenzie District Plan process. The SONS and their boundaries reflect information that has been refined and updated since the PNAP. Identification of SONS has involved extensive field reviews of original PNAP recommendations.
- The presence of a Mackenzie Basin Grazing Trial (MBGT) site, and a mothmonitoring site should be acknowledged, though not necessarily in the introduction.

Part two: Conservation Resource Description

2.1 Landscape

 No comment is made of the river corridors, despite their importance for shrublands and fauna, and their expression of the drainage pattern linking the flats to the range behind.

- The Pyramid is arguably more prominent and visually important than other high points of the property, as it is higher and has similar vegetation to the adjacent mountain slopes. This is reflected by "its added visual value". At least some of the other high points are more modified, with introduced trees being prominent.
- I am unaware of any tarns on the property, and these are not mentioned elsewhere in the report. Presumably the "moraine feature" refers to the fluvioglacial outwash plains, which are really a glacial feature.

2.2 Landform and geology

Mention should be made of the different terrace surfaces on the outwash plains
representing different soil types and depths, as they are of significance when
assessing protection needs. The faultline mentioned later in the report should be
detailed here, as should any geopreservation sites on the property.

2.3 Vegetation

ii) Short tussock grasslands

- While it is true that the Pukaki Block contains one of the most extensive areas of fescue grassland (on outwash) on the property, there are other areas of similar size e.g. on Maryburn Station.
- Tussock depletion near fencelines is probably related to stock use, and rabbit concentrations.
- Mention is made of The Knobbies but it is unclear where this is. Despite this, the short tussock grasslands in this area are associated with matagouri and cassinia shrublands, wetlands and flushes. Tussock health is considered to be good. Its association with these communites provides an important contrast, as there are different sequences and ecotones that do not occur on the outwash plains.
- In referring to RAP Pukaki 8, PASAC recommended that a covenant be sought over the whole block, but this has not been mentioned. This recommendation reflected the entire blocks' importance, and consistent with this, the values map identifies the entire block as having ecological value. The lessee previously offered the entire block, and this was the basis of the proposed covenant prior to tenure review.

iii) Wetlands

- The reference to deep-water wetlands is rather loose. PASAC described Ben Ohau swamp (RAP Pukaki 6) as including "semi-deep water habitat. I don't know the depth of Lakes Merino and Poaka, but I suspect they are shallow and generally less than the usual 2m threshold between lacustrine and palustrine wetlands.
- The report acknowledges that Ben Ohau swamp is an RAP, but again neglects to mention PASAC's recommendation, which referred to "maintaining the natural hydrological and ecological character of the system". The connection with "Mossy Hollow" via a seepage is mentioned in the report, but the ecological and hydrological significance of this is under recognised. The presence of associated

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cushion bogs with only small quantities of exotics further reinforces the value of these other wetlands. I assume that one of the small circles on the values map is "Mossy Hollow".

- Dr Peter Johnson of Landcare Research reportedly assessed "Mossy Hollow", but no reference is provided. I assume he assessed the site because it was worthy of attention - it has a similar species composition to the swamp, but this of course does not reduce its value.
- Red tussocklands have been treated separately from wetlands but are discussed here. The red tussock extends across the boundary with Rhoboro Downs to the north. The report observes that the bogs appear to be drying out and are being invaded by exotics. This process is characteristically associated with grazing and rabbit browsing, and can be seen at different successional stages throughout the Mackenzie. It has implications for proposed management, emphasising the importance of excluding grazing and controlling rabbits to help restore soil moisture levels.

v) Narrow-leaved snow tussock

A pocket is noted in the valley head of "Mossy Hollow", and near the red tussock on the true left of Darts Bush Stream. While both areas are small in extent, they are of low altitude and therefore important. They also contribute to the mosaic of ecotones here, and are an important component in the transition between the 2 ED's. The reference to low density tussock above "Mossy Hollow" is insufficient to allow a judgement to be made about potential regeneration there. This pocket is also likely to contribute to maintaining the hydrological functioning of "Mossy Hollow", and the swamp below.

vi) Shrublands

- Cassinia shrublands are described as "distinctive", with a moderate (ground cover) native species diversity and exotics not being prominent this contrasts with riparian shrublands where ground cover is dominated by exotic grasses and herbs. It is unclear, but the small circle on the values map may indicate the presence of cassinia, as it corresponds to part of RAP Pukaki 7. PASAC specifically recognised the importance of cassinia in the RAP and the need to protect an example of it. Given that fescue tussock, flushes and matagouri shrublands are also associated with cassinia, and there are likely hydrological relationships with the swamp, there is a good case for protecting these communities.
- With further over-sowing and top-dressing (OSTD), modification is likely to increase with fertility increases, more grasses and weeds and continued or increased grazing.
- The faultline referred to is not mentioned in the geology section.

vii) Forestlands

 Mention is made of negligible ground cover and little regeneration. Comment on the reasons for this would be appropriate, e.g. grazing and browsing.

2.4 Fauna

- The faunal information provided is useful, but it undervalues the importance of various communities for invertebrates, and wetlands in particular. The suggested lack of rare or unusual insects should not be interpreted as meaning a lack of importance.
- The outwash plains of the Pukaki block provide habitat for the endemic grasshopper, Sigaus minutus. This species is restricted to the Mackenzie and upper Waitaki Basins, and several parts of Central Otago.
- The block provides excellent habitat for a variety of indigenous invertebrates, reflecting the presence of mat and cushion plants such as Raoulia spp and Muchlenbeckia axillaris, and a diversity of small herbs, mosses and lichens especially in the fluvioglacial channels.
- Dr Graeme White has undertaken 5 years of moth monitoring here, the site being close to the MBGT exclosures.
- Brian Patrick undertook moth surveys focusing on RAP's in the Mackenzie Ecological Region, but did not assess RAP Pukaki 8. However, given the plant communities present, many of the species recorded clsewhere can be expected here and other species may also be present.
- Wetlands are referred to as providing important habitat for birds, and wetland insects were noted. These comments do not adequately convey the importance of smaller wetlands to invertebrates; particularly those associated with flushes, bogs and seepages. Such wetlands provide habitat for specialised fauna (and flora), and need to be considered collectively for the biodiversity that they support, quite apart from their hydrological importance and linkages.
- The association of flushes with fescue grasslands and cassinia shrublands adds further diversity and ecotones at a microhabitat level.

2.5 Historic values

• These have been specifically identified, in contrast to some of the ecological values, which are only broadly identified. There is no indication of what approach was used to gather information about cultural values, and whether local iwi were consulted.

2.6 Existing land status

- The NE property boundary is shown on the topo/cadastral map as being the true
 right bank of the Pukaki River this is relevant to the Pukaki block protection
 proposal, and is discussed later.
- The proposed Mackenzic District Plan has been available for some time, and the Department has provided extensive submissions and evidence on it, and lodged a reference with the Environment Court on SONS boundaries and other matters. The tenure review report should be updated with relevant provisions from the Plan including SONS, the airport designation and any rules relating to vegetation clearance.

2.7 Recreation/access

- The key access tracks should be specifically identified. Mountain biking use or
 potential should also be discussed, particularly as it is mentioned in "user issues".
- In "user issues", reference is made to the need for recreational controls, but no suggestions are made. An outline of what is envisaged, and why, should be included.
- Under "existing management" the requirement for wetland management is noted. The need for grazing management and stock exclusion from flushes should be accorded similar attention to other wetlands, which themselves should be specifically identified and discussed. This is a key concern, as their demise is likely under continued grazing due to increased desiccation and weed ingress.
- If public access could conflict with habitat needs, the report should discuss where this may be an issue, and outline how it should be managed.
- The grazing management of RAP Pukaki 8 needs to be discussed, and the findings of the MBGT site should be used to guide grazing management here. Stock grazing and rabbits are also an issue for the shrublands and wetlands, and should be discussed more fully.

3. SUMMARY OF THE CONSERVATION RESOURCES REPORT

It is disappointing to see basic errors about the Ecological Districts and RAP's – while they may appear minor they should be accurately referred to. PASAC's minutes should have been used more and referred to accurately. Similarly, information from the Proposed Mackenzie District Plan should be updated. Other resource information that can assist in conservation management should have been referred to, namely the MBGT and the invertebrate monitoring. None of the reports used are referenced and this is not in keeping with accepted standards. These errors reduce the readers' sense of confidence in the report's conclusions, and the adequacy of the areas identified for return to full Crown ownership. They raise doubts about whether the Department has taken full account of all matters in developing its proposals.

The botanical information is generally very good, though there are limitations in interpreting the information about cassinia shrublands and flushes associated with The Pyramid. The value of small wetlands, and flushes in particular, has been under recognised. Grazing impacts and management are only touched upon, despite their implications for conservation values and the design of protection proposals.

4. OTHER RESOURCE INFORMATION OF RELEVANCE TO THE PROPSALS

4.1 Airport designation

The following information comes from DOC file DIP 021, folios 44, 50 and an unnumbered folio, and includes notes based on a field inspection in 1997:

- The outwash "channels" represent likely pre-European vegetation. Values appear as a mosaic, though the SW corner is probably of lesser value. The public interpretation value of the block is heightened by it being adjacent to the state highway.
- Designations are made irrespective of tenure, be it freehold or a conservation area.
- If an enlarged airport was to be developed, the actual airstrip would be along the centreline of the designation area, and adjacent land would apparently be largely undisturbed. Grazing to maintain the grassland could be achieved using electric fences, and Mackenzie District Council has stated they would work to achieve that. Of course, an important determinant of this would be aviation safety requirements, and I do not know what they are.
- It was clear that the background information used for the designation was not
 extensive, with climatic data from Tekapo being used. DOC has climatic data
 for Twizel, but it is unclear whether this data has now been used and what its
 implications are.
- It was acknowledged that the runway could possibly be shifted closer to SHI, and this would impact less on the conservation values. The grassland closer to the road is more modified by grazing, has more hawkweed, browntop and areas of willow.

4.2 Invertebrate conservation and PASAC's minutes

- Brian Patrick undertook a Lepidoptera (moth) survey of a number of habitats in the Mackenzie Ecological Region, to more fully represent the invertebrate fauna beyond existing RAP's. While he did not assess RAP Pukaki 8 on Ben Ohau, he identified 3 other important invertebrate habitats associated with short tussock in Pukaki and Omarama Ecological Districts. Part of one of these habitats (RAP Pukaki 14) has since been direct drilled, reducing its habitat values through an increase in exotics and grazing pressure. Another invertebrate habitat (RAP Omarama 4) is highly degraded and it is thought a resource consent has been granted for border dyke irrigation there (D.Massam, pers.comm.). Extensive areas of short tussock grassland nearby have already been destroyed by border dyke irrigation.
- PASAC emphasised the importance of protecting full sequences of short tussock grasslands, including the deeper soils of older terraces on Pukaki 14. This option has been lost because of direct drilling, and Omarama 4 has been reduced to a very small part of the landform-community association. This further reinforces the importance of the RAP Pukaki 8, as full sequences are still intact here, except for the existing airport.

4.3 Graeme White's invertebrate monitoring and the MBGT

 Dr Graeme White (paper in preparation) has carried out moth monitoring at a number of sites in the Mackenzie Ecological Region to assess population changes over time. The site on the Pukaki block is important for comparison with a nearby site on Catherine Fields, which is separated by a rabbit fence and has only been intermittently grazed. The actual site is located within the proposed covenant, near a MBGT exclosure which provides detailed vegetation data. It is important to retain the site for future monitoring, to add to the data that has already been collected.

• The MBGT (report in preparation) involves the monitoring of vegetation in relation to stock grazing and rabbit browsing at 9 sites in the Mackenzie and Upper Waitaki basins. It was originally co-ordinated by the Department of Conservation, but it is now co-ordinated by Landcare Research.

5. SUMMARY REPORT OF THE PRELIMINARY PROPOSAL

Proposal 2.1(a)

- It is unclear if the south side of Darts Bush Stream, and the west side of Fraser Stream are fenced, and the proposal does not include fences on the boundaries of the marginal strips. This is a concern, as grazing does contribute to the degradation of shrublands, especially in combination with rabbits. The Department will have not control over grazing on the freehold, and the lessee has grazed cattle in the past. These animals can easily cross the streams, entering the red tussock and any other small wetlands that may be present. It is possible that sheep could cross the streams at times.
- It is important that these boundaries be fenced to exclude stock, though this may require alternative sources of stock water to be found.
- Similar concerns about grazing and fencing apply to other streams with marginal strips if they are not currently fenced. Neither report has clarified this matter.

Proposal 2.1(b)

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The western part of area 4 has clearly been excluded because of the airport designation. This does not accord with the conservation values of the site important invertebrate habitat exists here, and complete sequences need protection, especially as other areas of short tussock in the basin are severely degraded or have been developed, and this pattern can be expected to continue.

Proposal 3.1.1(A)

- While reference is made to linkages, buffers and the integrity of the indigenous component, the recommendation fails to recognise important hydrological and other ecological linkages. The main concern is The Pyramid and "Mossy Hollow" in particular, though it appears there are other flushes on the slopes that may be connected to the swamp below.
- Fencing is not proposed along the true right of both streams, and they do not appear to be fenced. They should be, to exclude stock from the streams, shrublands and any wetlands present.
- The comment about red tussock not being well represented in the Mackenzie Basin is questionable. While it is not well protected, probably the largest mosaic of red tussock in the South Island is found in the Braemar area, and there are other substantial areas including those on Pukaki Downs and Balmoral Station.

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In promoting the linkages of different communities with the streams, and the
provision of faunal habitat, the report fails to recognise the importance of smaller
wetlands associated with The Pyramid, especially flushes.

Proposal 3.1.2(C)

- The report should acknowledge explicitly, the importance of the whole block for its short tussock grasslands, invertebrates and undeveloped soils. The proposal should include the airport designation portion as it supports similar values, increases the size of the area and is already perimeter fenced.
- The cadastral boundary of the block was previously shown as the Pukaki River, but the proposal follows the existing fenceline. This difference should be explained, as I am aware of important invertebrate values, and perhaps botanical values associated with the river terraces.
- The importance of the block for vegetation and moth monitoring should be acknowledged.
- The comment that this habitat is uncommon in the high country is questionable, as short tussock grasslands are very extensive, albeit typically degraded.

Proposal 3.2.1

• The report actually acknowledges that the airport designation part of the block has similar significant inherent values to the wider block, yet it proposes its freeholding. This reinforces a concern that the Department may not be focusing on the conservation values involved.

Diagram A, Ben Ohau Swamp

- The southern part of the proposed conservation area is not to be fenced. This area will inevitably be grazed, especially as the wetland is drier and more vulnerable near its edges. The proposal demonstrates the earlier references to integrity and linkages to be rather selective. The southern portion should be fenced beyond the existing fenceline.
- It is not possible to tell from the report if some parts of the wetland extend beyond the proposed boundaries. A 20m margin beyond the wetland may represent a minimal buffer zone but it will be of little practical value if it is not fenced, as stock will still gain access. The entire wetland should have a suitable buffer zone and be fully fenced from potential farmland. The issue of OSTD affecting the wetland should also be addressed. As mentioned earlier, hydrological connections and associated communities on the south and east sides of The Pyramid should be included in this proposal. This would reduce the threats from grazing and OSTD.
- It is pleasing to note that Lake Poaka is to be completely fenced.

Grazing concession

 Grazing of the proposed conservation area is intended to limit the spread of exotic grasses and other weeds. The Pukaki block is one of the two largest areas of short tussock grassland in relatively good condition in the Mackenzie Basin with annual precipitation of around 600mm. The historical grazing regime of the block is regarded as being conservative, and contributes to the maintenance of the communities present. Adjacent areas of short tussock are more modified, Catherine Fields having been intermittently grazed and the airport not being grazed. Both examples suggest that differences in sheep grazing reflect differences in vegetation condition, in this particular context.

I consider that the MBGT site here is pivotal in providing data to ensure that the
grazing regime of the concession is appropriate, in terms of the level and period
of grazing. It is important that the existing data is used, and that the trial be

continued.

In conjunction with this, Dr Graeme Whites' moth monitoring should be continued here, and on the two adjacent sites at Catherine Fields and the other side of State Highway 8. This is important as moth populations respond to changes in vegetation, and the health of invertebrates needs to be monitored in the Pukaki block. In this regard, consideration should be given to expanding the monitoring to include other invertebrate taxa.

- The tenure review proposal states that 1085 ha of proposed conservation land will be subject to grazing under the proposed concession agreement. However, schedule 1 of the concession agreement identifies "the area as approximately 1400 ha" (M. Harding, pers.comm.). The smaller figure appears to be the area with the airport designation portion freeholded. The larger figure is the entire block, as it is not fenced from the proposed airport designation. The existing airport is fenced off.
- It is important for the grazing concession to specify the conservation objectives. These are mentioned in 4(f) of "details of grazing concession", but none are provided. The following objectives are suggested for inclusion in a schedule:

"To maintain or improve the ecological integrity of the short tussock grassland, and

To maintain faunal habitat values, and

To undertake monitoring to ensure the two primary objectives are being met."

- Clause 9.05 states that the Department and the concessionaire shall design and
 undertake a monitoring programme, but schedule III, 7) says the Grantor will. It
 would be simpler if the Department decided on the conservation objectives, and
 required the monitoring to be based on the existing MBGT and the mothmonitoring site. The frequency of monitoring should be decided in consultation
 with Dr Colin Meurk of Landcare Research, and Dr Graeme White.
- While the Grantor reserves the right to adjust grazing levels based on monitoring results, it is unclear if "environmental risk" in clause 14.01 f means degradation of grassland or faunal habitat, and if this is a basis for termination. It is important that the Department can terminate the concession for these reasons, even though the grazing history of the site and evidence suggests that grazing is necessary to maintain conservation values here.

 It would be helpful if the concession document was written in plain english, along the lines of the plain english covenants developed by the Department for use in PNAP implementation work.

Mark Davis, 3 August 2000.

PO Box 12-293, Beckenham, Christchurch. Ph. (03)3322-685.

References

Davis, C.M. 1986. A Survey of Sigaus minutus. Report No. 252, Department of Lands and Survey, Christchurch.

Davis, C.M. 1999. Canterbury Region Wetlands Report and Inventory, Part 1 – Desktop Review. Unpublished report for Canterbury Regional Council, Christchurch.

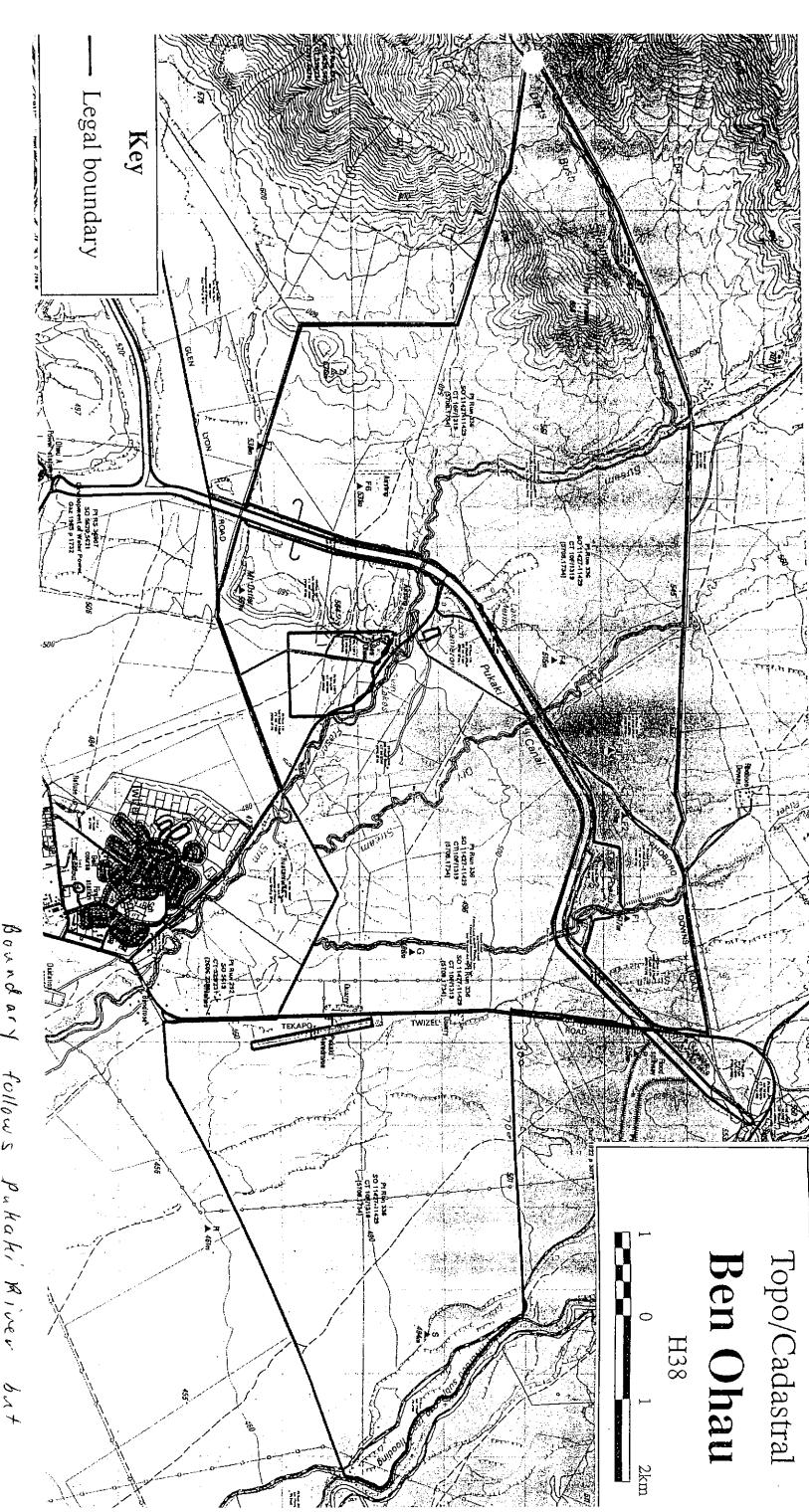
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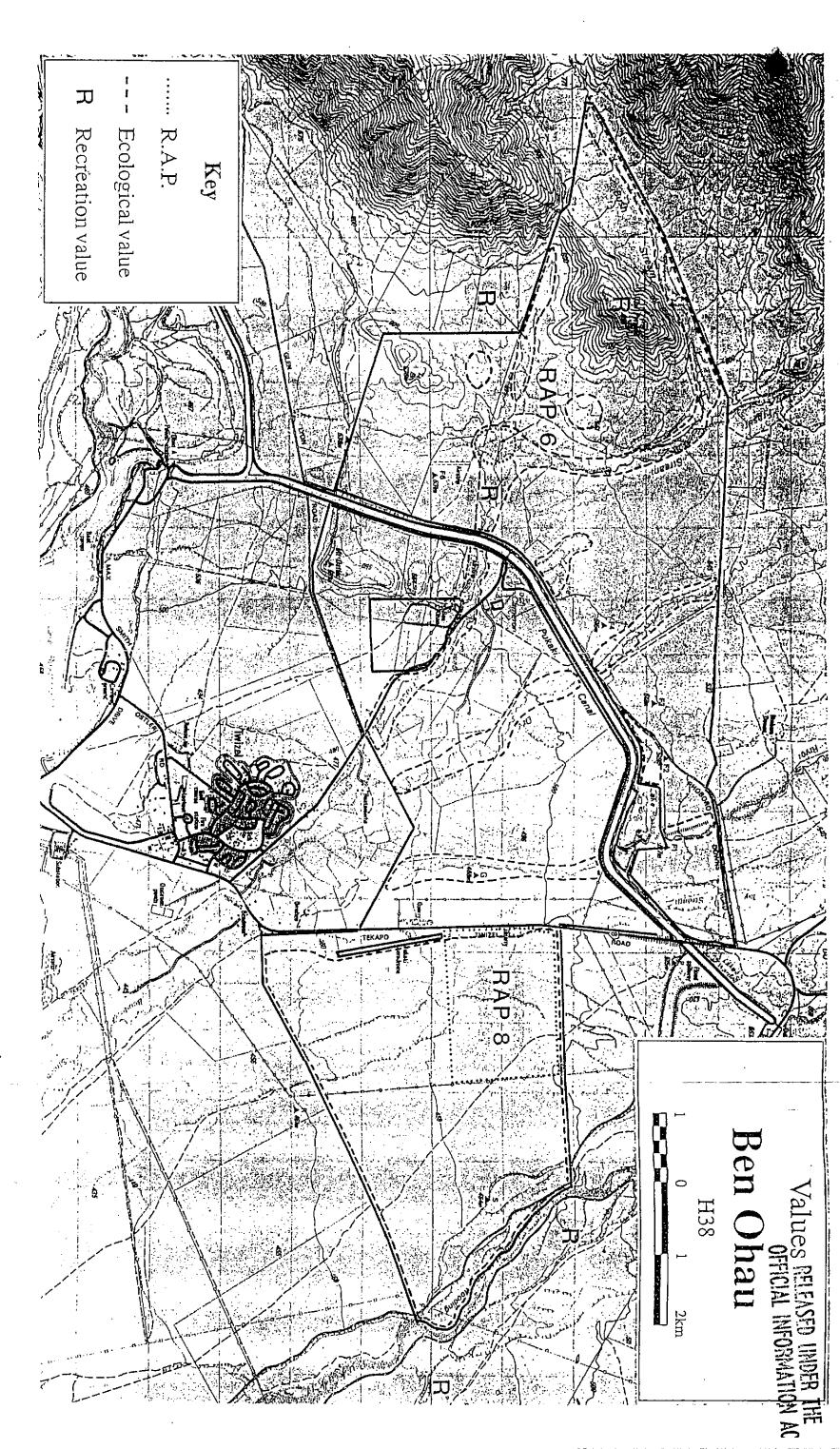
Programme. Department of Lands and Survey, Wellington.

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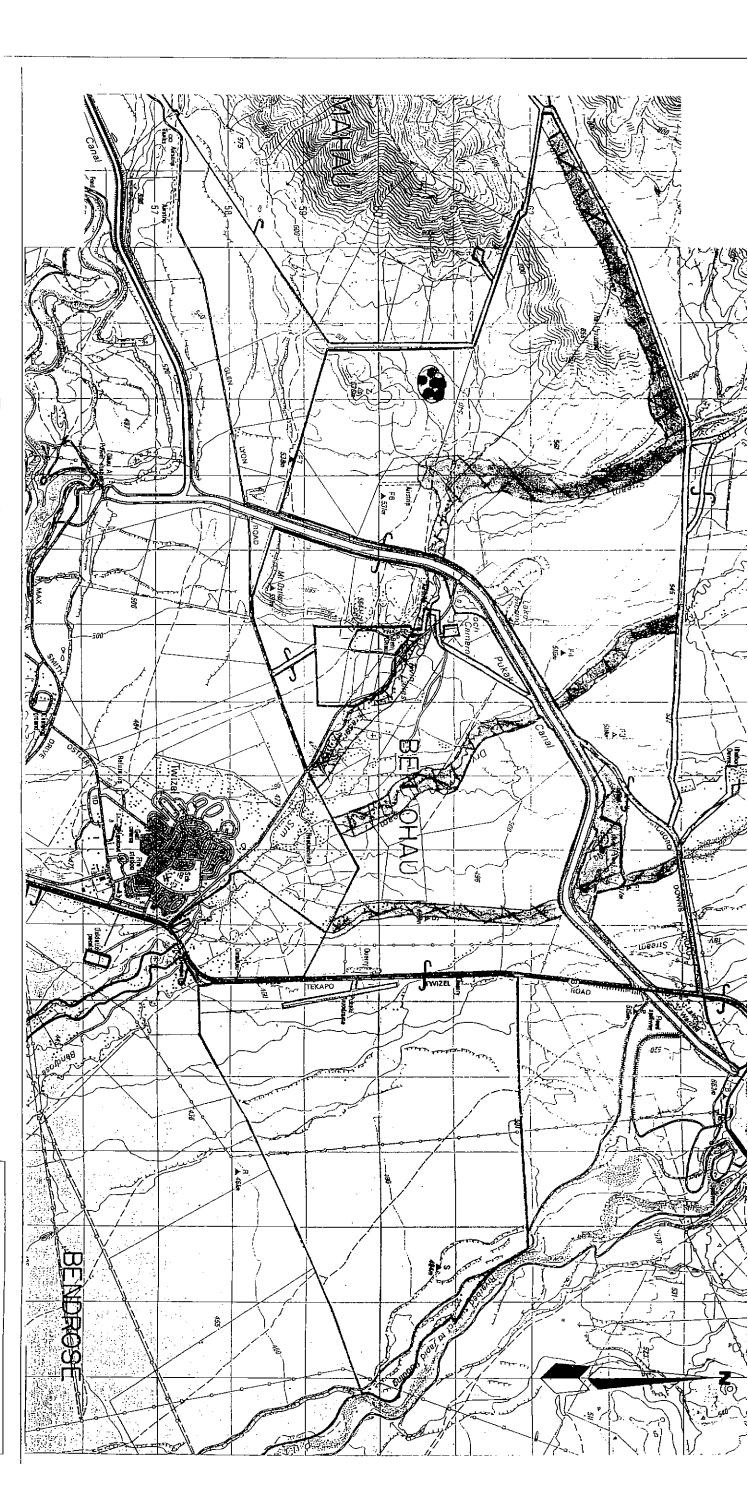
Patrick, B.H. 1992. Supplement to the Lepidoptera of the Mackenzie Country with Recommendations on their Conservation. New Zealand Entomologist 15, 48-58.



proposed boundary of Pukaki Flat conservation are a follows fence-line. Forest - Bird seeks boundary on river bank.



areas of conservation land ecological which Forest & Bird value which proposed 4



Pastoral Lease Boundaries

Key

Run boundary

Ben Ohau

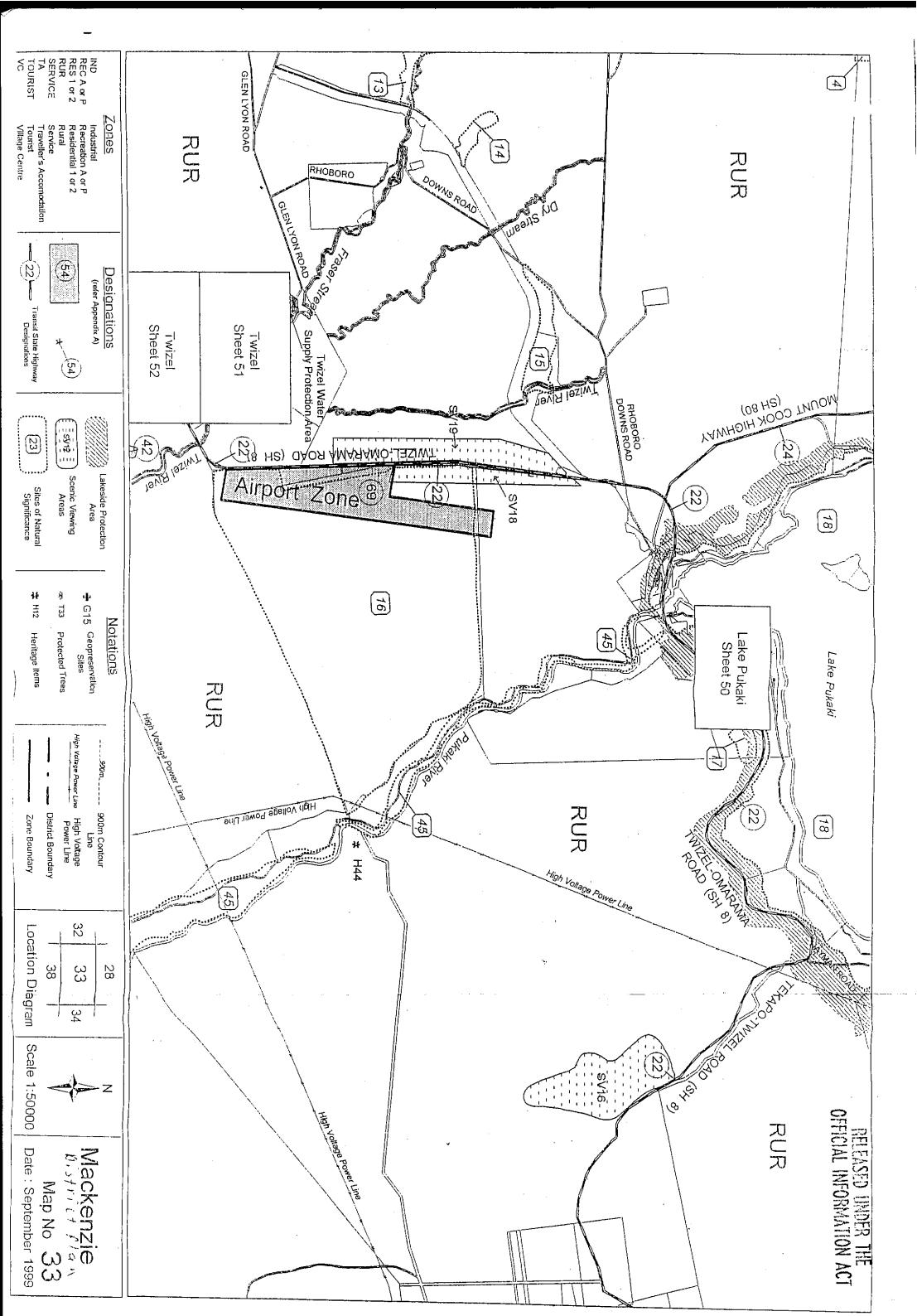
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File-D004-06

14th August 2000

Commissioner of Crown Lands C/o Knight Frank (NZ) Limited P O Box 546 **TIMARU**

Dear Sir.



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SUBMISSION – BEN OHAU TENURE REVIEW

Thank you for the information concerning the proposed tenure review for Ben Ohau Station Limited. As owners of land whose boundaries align with much of this property, Meridian Energy Ltd expects that it should have been informed of this review and the documentation sent to it rather than having to ascertain the information from a local newspaper.

The main aspect that affects Meridian Energy is the access to land, more particularly that land being designated "Land to be restored to Full Crown Ownership" (land to be administered by the Department of Conservation.)

Item 2.2 (B) indicates public access.... from the Pukaki Canal westward to the legal road...." With the exception of the tar sealed portion of road alongside the true right of the Pukaki Canal which is operated as a public road by the Mackenzie District Council, all other land alongside the canal is owned by Meridian Energy Public access along Meridian Energy core land cannot be taken for granted.

Item 2.2 (C) refers to access by "....personnel of the Department of Conservation...." The same comments apply as in the paragraph above.

Item 3.1.1 (B) refers to Lake Poaka. This Lake is not part of the Ben Ohau Station Lease. Lake Poaka is already Crown Land as shown on the attached diagram. From the reading of this paragraph it seems likely that the reference is to DoC diagram 'B'.

Public Access: The main concern of Meridian Energy is the apparent assumption of public access over Meridian Energy core land. With the exception of the portion of canal roads that is under the agreement with Mackenzie District Council, all other roads are classed as 'Private'. They are owned by Meridian Energy and can be closed at any time.

Consultation may lead to public access being granted, but no approach has been

Yours sincerely.

Environmental Field Consultant

Meridian@wizzeIn@ffice

Christchurch Office 25 Sir William Pickering Drive PO Box 2454

Christchurch, New Zealand Phone +64 3 357-9700

Wellington Office Level 2, 15 Allen Street PO Box 10 840

Wellington, New Zoaland

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State Highway 8 Private Bag 950 Iwizel, New Zealand

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+6434350918 MERIDIAN TWZ ENV/ENG

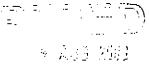
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Tor	Knight Frank N Z Ltd			
Соптрату:				
Fax:	03 684-0407 688.0407			
Frems	Paul Cain	<u> </u>		
###decets	SUBMISSION - BEN OHAU TENURE REVIEW			
Date	14 August 2000	Page 1 of	2	

STATEMENT OF CONFIDENTIALITY

The information contained in this and any attached pages is intended to be for the use of the addresses named on this transmittal sheat. If you are not the addresses, note that you are not the addresses, note that faced adormation is prohibited. If you have received this faced in error, please notify us by talephone (collect) inmediately so that we can arrange for the retrieval of the original document/s at no cost to you,

Attached is a copy of our submission for the Ben Ohau Tenure Review.

The 'original' of the submission is being placed in to-night's mail.

Paul Cein

Twizel Office Telephone:

03 4350 915

Fax:

03 4350 918

August 13, 2000

Otago Tramping & Mountaineering Club PO Box 1120 Dunedin

The Manager Knight Frank Ltd. Land Resources Div. Timarau Office PO. Box 564 Timaru RELEASED UNDER THE OFFICIAL INFORMATION A

Dear Sir

Submission on Tenure Review for Ben Ohau Station

We support the proposed tenure review outcomes as presented without reservation.

Regards

Chris Barren

Chris Pearson

for the Otago Tramping and Mountaineering Club.

Glentanner

Glentanner Station Ltd PO Box 23 Mount Cook

14.08.00

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11

Mr Ray Ward-Smith Knight Frank PO Box 564 Timaru

Dear Sir,

BEN OHAU TENURE REVIEW PRELIMINARY PROPOSAL

I have previously submitted on this tenure review hold under the LAND Λ CT 1948, letter dated 31.05.98

I understand the need for the process to be repeated with the new legislation ie. the Crown Pastoral Land Act 1998.

My judgement is that this proposal to surrender the Ben Ohau Pastoral lease and place 1200 hectares into the Conservation Estate has been well considered and should be supported.

The proposal strikes a sensible balance between the requirements of the present lessec, Ben Ohau Ltd, the Crown and the Public.

The proposal to grant a grazing concession for 1085 hectaces will help the viability of Ben Ohau Ltd and also help maintain the short tussock grassland in its present form. I was not aware of this concession when I submitted previously.

Yours Faithfully.

Ross Ivey

For Glentanner Station Ltd.

Public Access New Zealand

INCORPORATED

R D 1 Omakau 9182 Central Otago New Zealand
www.publicacoesanewzealand.org

Phone & Fax 64-3-447 3554
panzeos.co.nz

Thursday, 10 August 2000

The Manager

Knight Frank (NZ) Ltd Land Resources Division

P O Box 564

Timaru

Fax: 03 684 0407

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Submission on Ben Ohau Tenure Review Preliminary Proposal

The current proposal is very similar to an earlier advertised proposal on which we submitted our support on May 28, 1998.

As a result of the earlier round of submissions you advised us that changes had been made to the proposal, including the tussock flat north of the airport being extended to the State Highway for Conservation purposes. We are pleased to see this incorporated into the current proposals.

Public Access New Zealand is pleased to support the new proposals, subject to the following.

Conservation Areas/Reserves?

The extensive conservation area on the Pukaki flats will secure a large area of open space suitable for non-motorised recreation. As the Mackenzie basin becomes more developed, this area will provide an increasingly valuable open space. For this, and its natural values, we believe this to be a worthwhile addition to the public estate. We gleaned from the proposed concession document that this will become a Conservation Area.

We support the terms of the grazing concession, and stress the importance of the public use rights over the area concurrent with the term of the concession. We strongly support the concession not conveying any exclusive rights of occupation or use, or causing any derogation of the rights of the public "to have access across the area". The latter phrase should be expanded to "to have access across and recreational use of the conservation area", so as to make it explicit that the public have more than mere rights of passage. The latter are more akin to a narrow presumption of passage along an easement, rather than to a designated area of public land that is available for recreational use of an unconstrained areal extent.

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There are discrepancies in the plans supplied, as to the area intended to become conservation area. We are uncertain which plan is the definitive proposal. The western boundaries on the 'Ben Ohau Tenure Review Draft Preliminary Proposal' plan do not coincide with the coloured plan of the concession area. The coloured plan does not show the northern boundary extending to the State Highway, and the southern end of the western boundary falls short of point 'E' of the easement A to E. We presume that the plan entitled 'Ben Ohau Tenure Review Draft Preliminary Proposal' is the definitive plan. If it is not we cannot support this proposal.

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Other areas to be retained in public ownership are wetlands and extended river margins. These are valuable wildlife habitats, and will become increasingly important. They are also very attractive locations for passive recreation/wildlife viewing, and for through-access in the case of the Fraser River. We strongly support their protection and availability for public use. However, other than marginal strips, there is no information within the documents supplied to us to indicate what the intended status of these areas will be once transferred to DOC's administration. We believe that such information should be supplied at the time of public notification of tenure review proposals. Whether the area(s) are to become Conservation Areas, or Reserves, and the latter's classification, will have a bearing on their availability for public recreation. This is pertinent to the public interest in tenure review. Please could you advise us of the intended land tenure/status so that we can make further submissions on this aspect if necessary.

PANZ believes that the above areas are the only areas on the property that warrant Crown ownership.

Access easements

In regard to the access easements proposed, we note that two of the three are intended for public benefit.

We also note that two of the easements are easements in gross, and one an appurtenant easement.

We note that the two 'public benefit' easements are subject to section 7(2) of the Conservation Act. We strongly support this, as these easements are deemed to be interests in land that require public notification-objection procedures if these are at any time proposed for revocation or modification. The one easement that isn't subject to Section 7(2), is for DOC management purposes. We are not concerned about this as DOC has generally demonstrated a greater willingness to protect its own direct interests that that of the public at large. The section 7(2) restraint on any future revocation of public easements, provides a measure of restraint on DOC if the department wishes to extinguish public use rights in the future.

Our lawyers advise us that there are major differences in the security afforded to public rights of passage between easements in gross, and easements appurtenant to particular parcels of land.

We understand that easements in gross, with the public in general being the specified beneficiaries, provide rights of passage (confined to specified classes of user) akin to those enjoyed over public roads. There are common law remedies available to the public in the case of obstruction or denial of access by any user or by the parties creating such easements. We strongly believe that such rights be available as "the ultimate" protection of the public interest. We also understand that there are statutory remedies open to members of the public, independent of the Conservation Act. We therefore strongly support the 'Public access and vehicle parking' easement in gross from the Pukaki canal to the legal road leading to Darts Bush Stream. The public rights created over the easement are, and should be, akin to those over the legal road. The latter is passively an integral part of the proposals, otherwise alternative access would have to be provided up Darts Bush Stream.

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We think it reasonable that on the above easement that use is consided to feel, person-powered' vehicles (e.g. cycles, carts, perambulators etc) and horses in the company persons. It is critically important that such users enjoy "the full, free uninterrupted and unrestricted right, liberty and privilege from time to time and at all times by day and by night to go, pass and repass" over the easement. We note that no width is specified in the proposed easement. We think that this should be a minimum of 20 metres, to coincide with the legal road it adjoins.

In view of our discussion above, we have a concern that the 'public access easement' to the Pukaki Flats conservation area is an easement appurtenant to the conservation area. In effect, public users of the easement are 'at the pleasure' of the owner/occupier of the appurtenant conservation area. This has the potential to preclude or constrain common law remedies for obstruction of use over the easement. The terms of the proposed easement requires a Certificate of Title over the appurtenant land. We believe that the issue of 'title' to DOC is both unnecessary and dangerous. The Crown does not require 'title' to be the land owner. Only land that is transferred from the Crown requires Certificates of Title as evidence of ownership. The scheme of the Conservation Act is that the Crown owns land for public conservation purposes, not for DOC as some kind of separate Crown entity. DOC's proper statutory role is to be the administrator and manager of such lands, not an owner or occupier.

It should be noted that it is Labour's policy that the (recent) practice of issuing certificates of title for public lands be discontinued as a protection against future land sales.

We submit that the Pukald flats easement becomes an easement in gross, on the terms proposed, with one clarification. The draft document variously refers to foot and "non-motorised bicycle access", or non-motorised "vehicles". There should be consistent reference to 'non-motorised vehicles'. Use of the term 'bicycle' would preclude perambulators (prams in common parlance), which would be an unwarranted restriction.

Yours faithfully
Bruce Mason
Researcher, Spokesman & Perambulator Advocate

South Canterbury Branch 319 Hilton Highway Timaru

09,8,00

The Manager Knight Frank Land Resources Division P.O. Box 564 Timaru

Dear Sir

RELEASED UNDER THE OFFICIAL DISORDATION ACT FOREST & BIRD

ROYAL FOREST AND BIRD FROTECTION 9 O C I E T Y O I NEW ZEALAND INC

//

RE: BEN OHAU TENURE REVIEW PRELIMINARY PROPOSAL

The South Canterbury Branch thanks you for sending us a copy of the proposed tenure review proposals for Ben Ohau Pastoral Lease.

It is noted that 120ha is to be restored to full crown ownership, 1085ha to be restored to Crown control as a conservation area, subject to a grazing concession and 4500ha to be disposed of by freehold disposal to Ben Ohau Station Limited subject to conditions.

With reference to the proposals in the Summary of the Preliminary Proposal, the Branch would like to make the following comments and requests;

2.1 Landscape

We feel comment on landscape should include the river corridors as they are important for shrublands and associated fauna, and as a visual feature with their drainage patterns which link the flats to the ranges in the distance.

The Pyramid is a prominent and important visual feature and has similar vegetation to the adjacent mountain slopes. It contains the only observed manuka community in the district. Because of its significance it should be protected either by remaining in Crown Control, or by protective covenants.

2.2 (C) Easements

The casements off State Highway 8 should allow for off road parking so to give greater protection for vehicles.

3. Description of proposed designation

Pous

Regarding Ben Ohau Swamp, 3.1.1.(A) here its states that the inherent values have been identified but does not indicate how these inherent values will be adequately september. THE OFFICIAL INFORMATION ACT

There is a need to ensure that this will happen, especially by maintaining the natural hydrological and ecological values of the wider area. There appears to be a connection with "Mossy Hollow", via a seepage which may be significant, in part at least, for maintaining the integrity of the Ben Ohau Swamp. And, there are associated cushion bogs, which comprise largely of indigenous vegetation, which may also contribute to the hydrology of the swamp, along with any others in the area, they should be protected along with the Ben Ohau Swamp.

Regarding the River Margins, the proposal report states that the boundary will be a nearby fence, and a new fence to be erected which will protect key ecological values such as shrublands and adjoining red tussock grasslands. However, it is unclear if the south side of Darts Bush Stream and the west side of Fraser Stream are now fenced and it is also unclear if all the marginal strips are fenced or will be fenced. If left unfenced grazing in combination with rabbits will contribute to the degradation of the natural areas along river margins. All river margins should be fenced.

It appears to us that the marginal strips are narrowly confined to the river itself. We question, will the marginal strips protect all the significant natural values in the vicinity of rivers as stated in the report. And it is stated that the river margins will secure better public access alongside the streams. Here, there is a possible conflict of interest between the desire to protect significant ecological values and to provide secure access along a very narrow strip of public land. We ask that all areas of significant natural values adjoining river margins be retained in crown control and not just a narrow marginal strip.

The Branch is pleased Lake Poaka is to be retained by the Crown as it is a key site for the black stilt and easily accessible. The integrity of this wetland should be maintained by protecting it from stock and ensuring its water inflows are maintained to a high water quality standard.

Pukaki Flat

Regarding 3.1.2 (C) the Pukaki Flat, the Branch is pleased that our earlier recommendation, which was accepted, that the western boundary adjoining the State Highway, has been retained. However the report does state that the area designated for the airport does have significant inherent values similar to the wider block. This airport block is right adjacent to the State Highway and is in full public view from that road while very little of the Pukaki Flats adjoins this road. Significant conservation and landscape values should not be compromised to freeholding. The airport block should be retained by the crown.

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We understand that an airport designation can be made irrespective of tenure - be it freehold or conservation land. Management and grazing of that land should able to be continued even if the land was retained by the Crown. RELEASED UNDER THE OFFICIAL INFORMATION ACT

Freehold Disposal

Regarding 3.2.1 430ha to be disposed of by freehold disposal, as stated the cover consists of short tussock grasslands having similar significant inherent values as those identified for the proposed Pukaki Flat conservation area, the Branch recommends this area should be included with the Pukaki Flat conservation area, as discussed above. With a designation for airport use and development. And, an easement should be provided with off road car parking at the southern end of this block.

Proposed Concession Agreement

With regards to the proposed grazing concession 9.04(b) here it is not clear which weed species the concession holder is required to control. And, the term "Noxious plants" is now out of use and so not helpful. It should be specifically stated, by the Dept of Conservation, which weeds are to be controlled such as all woody weeds (and perhaps some others) and they must be removed by the concession holder.

Regarding the size of the proposed grazing concession the actual area is unclear. The Tenure Review proposal states the area to be 1085ha of proposed DoC land will be subject to grazing under agreement but Schedule 1 of the concession agreement identifies the area as approximately 1400ha. We ask that this difference be clarified.

And, the tenure review proposal states that the Director General will set up a monitoring system but in the actual concession agreement (9.05) it states the concession holder has the responsibility for establishing the monitoring programme.

The Branch asks that the responsibility for, and the costs of, setting up and maintaining the monitoring should be clarified.

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The Branch maintains that the Ben Ohau Pastoral Lease contains significant natural areas and features - we would welcome their protection.

Yours faithfully

Fraser Ross

Field Officer - S.C. Branch.



Mackenzie District Council

REF: 25320 01300

10 August 2000

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Knight Frank NZ Ltd PO Box 564 TIMARU

Attention: Mr Ray Ward-Smith

Dear Sir

BEN OHAU STATION TENURE REVIEW SUBMISSION

Please find enclosed a submission of the Mackenzie District Council in the above matter, along with attachments A, B & C.

I trust that this submission adequately sets out the concerns of the Mackenzie District Council. Should you wish to discuss any aspect of the submission, please do not hesitate to

Yours faithfully

John McKenzie

Manager - Planning and Regulations

1 MY Lewie

Direct dial (03) 685-9019 Email john@mackenzie.govt.nz

CROWN PASTORAL LAND ACT 1998

SUBMISSION ON

RELEASED UNDER THE OFFICIAL INFORMATION 11

BEN OHAU TENURE REVIEW PRELIMINARY PROPOSAL

SUBMITTER

Mackenzie District Council

SUBMISSION

Background

- 1. The Mackenzie District Council has for the last five years adopted a strategy to promote safe, efficient and effective location and use of airfields and associated facilities throughout the Mackenzie Basin. This Strategy was developed in response to the ad hoc (and often unauthorised) establishment or use of landing areas throughout the District, which raised a number of issues, in particular air safety between operations which is potentially a matter of national importance in relation to the affect that an aviation incident could have on international tourism.
- 2. The Strategy adopted by the District Council to overcome problems associated with multiple landing facilities involves the following components:
 - ensure that there is at least one airfield within the Mackenzie Basin which is 'open' to all operators.

place an airport zoning over all existing within the Mackenzic Basin.

- specify in the District Plan several aviation sites which satisfy safety and other concerns and within which landing and taking off of aircraft can occur as of right.
- require all other landing sites, airfields etc to apply for resource consent as a
 discretionary activity to enable assessment of the impacts of the proposed
 activity.
- The Pukaki-Twizel airfield, which is, located within the Ben Ohau pastoral lease is a key element in this Strategy and fulfils the first two components of the Strategy.
- 4. In 1996 the Council, in seeking to ensure that at least one airfield within the Mackenzie Basin was in public ownership and therefore "open" to all operators, purchased the existing runway (sealed strip) area of the Pukaki-Twizel airfield being Section 1 SO 1950, Certificate of Title 41C/173 containing 14.1600 hectares. At the time of this purchase the Council was aware that the land purchased (being the sealed strip only) was insufficient for the current operation of the airfield as it did not provide for any facilities such as hangers and booking facilities. In addition the area purchased does not provide for the potential level of future operations. As such it was known that additional land would be required for the existing operation and for possible realignment and extension of the runway.

- The Council then employed aviation consultants Beca Carter Hollings and Ferner Limited to consider the likely future operational needs of the airfield. From the BECA study it was determined that it was appropriate to provide for the creation of an aviation facility which is capable of handling Boeing 737 equivalent heavy aircraft which are capable of trans-Tasman charter. To protect the airfield from future development which could limit airfield development options the Mackenzie District Council, under the Resource Management Act 1991, designated land in their Proposed District Plan for airport purposes (refer Designation 69 on Attachment A). The same area was also given on underlying Airport zoning (refer also Attachment A). It can be seen that this designation area is considerably larger than the original sealed strip and includes part of the land to be freeholded (area 2) and part the Pukaki Flat Conservation Area (area 4).
- 6. After consideration of submissions to the proposed designation for the airport Hearing Commissioner David Collins determined that Designation 69 should be confirmed subject to a number of conditions (refer Attachment B). The Designation and the Airport zoning are therefore now in place. The land use consequences of the designation and Airport zoning of the area are:
 - 1. That a runway (including a realigned and extended runway) can be developed and used as of right.
 - 2. That various aviation related activities such as terminal buildings, commercial and general aviation building and facilities, freight forwarding and cargo warehouses, and New Zealand Defence Force activities can occur within the area as of right.
 - That no other activity is permitted within the area
 - without the written approval of the requiring authority (Mackenzie District Council), and/or
 - resource consent under the Resource Management Act 1991.
- 7. In relation to the current grazing use of the majority of the designated area, this can proceed with the approval of the Requiring Authority but needs no resource consent as it will have existing use rights under s10 of the Resource Management Act 1991.

Relevance to Tenure Review

- 8. The land use controls that now apply through the Proposed Mackenzie District Plan and the Resource Management Act 1991 are directly relevant to tenure review because they limit the future use of land. It is foreseeable that the District Council will purchase the designated area to enable either maintenance of the existing airfield operations and/or development of other aviation activities on site including a realigned and extended runway. Both these factors strongly suggest that any designation boundaries under the tenure review process should reflect the District Plan controls. This will:
 - avoid the Crown acquiring land that is subject to significant development constraints.
 - will simplify the acquisition of the land for its designated purpose with the designated area falling within a single certificate of title.

Conservation Values



- With regard to conservation values the decision on the airport designation 9. acknowledged that these were important but they could only satisfactorily be dealt with at the time an 'outline plan' is prepared under section 176A of the Resource Management Act. Such an outline plan must be prepared before any development proceeds and must be approved by the Council. During the approval process conditions could be placed on the location of activities to minimise disturbances to the natural values of the area. The District Plan also acknowledges the values of this area identifying it as a Site of Natural Significance (16).
- The extended runway section of the airfield Designation/Airport zone falls within the 10. Pukaki Flats conservation area (area 4 on the Preliminary Proposal). The values of this area could be protected by covenant or similar means requiring the landowner to limit stock numbers of this area in accordance with the proposed grazing concession for the

Access

Access to the Pukaki Flats area from SH 8 by the future owner (the Crown) will not be 11. legally available through the northern section if the designated airfield/airport zone area is included in the freehold title. It will be necessary therefore to create alternative access provision. We understand that the Department of Conservation needs access to the Pukaki Flats area for fieldwork at the northern end, and possibly also the southern end of the block. We therefore suggest

that an easement be created along the northern boundary of the runway extension area for "vehicles for management purposes" subject to safety

considerations relating to use of the runway.

that easement A be broadened to include access by 'vehicles for management purposes' or that a strip of land along the southern boundary be included in the Pukaki Flats Conservation area to provide unrestricted legal road frontage for area 4 at this location.

RELIEF SOUGHT

- Amend Ben Ohau Tenure Review Proposal by modifying the northern boundary of the 12. proposed freehold area east of SH8 to incorporate area 2a shown on Attachment C thus including all of the Designation 69 - Pukaki Airfield and Airport Zone contained in the Proposed Mackenzie District Plan - refer Attachment C for amended boundaries.
- Place a covenant or similar restriction relating to area 2a on Attachment C limiting 13. grazing to the conditions specified in the Grazing Concession applying to the whole of Pukaki Flats.
- Create an easement at A on the southern end of the freehold area to pennit 'vehicles 14. for management purposes' to access the Pukaki Flats Conservation Area OR include in the Pukaki Flats Conservation Area a strip of land along the southern boundary of a width sufficient for foot and vehicle access.

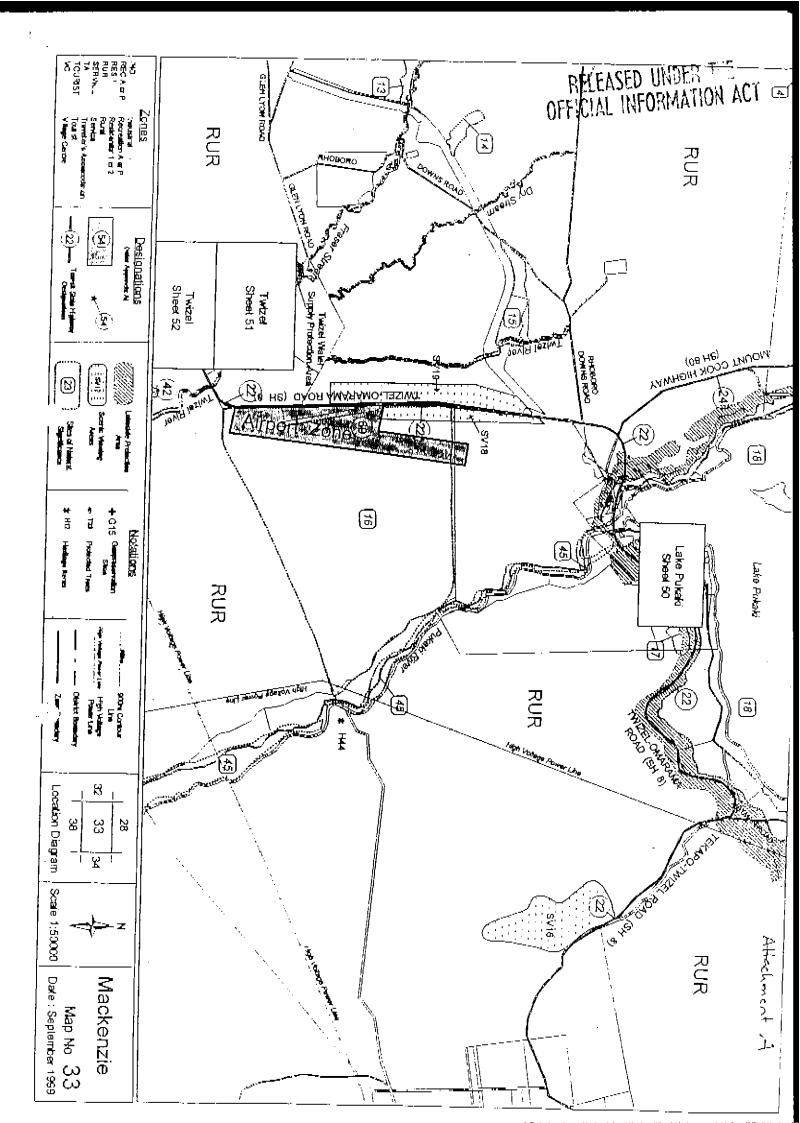
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15 Create an easement along the northern boundary, marked "M" on Attachment C, to permit "vehicles access for management purposes" to the rear of the Pukaki Flats Conservation Area.

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MACKENZIE DISTRICT COUNCIL

DATE.....10 August 2000.....



RELEASED UNDER THE RESource Management Act 1991.



IN THE MATTER OF a Requirement for a Designation of land for aerodrome purposes - Pukaki Airfield, Mackenzie District.

DECISION OF DAVID W. COLLINS ACTING AS A REARINGS COMMISSIONER APPOINTED PURSUANT TO SECTION 34 OF THE ACT

INTRODUCTION

I was appointed to deal with this requirement as one of a number of aviation issues arising from the Proposed District Plan where, because of a potential conflict of interest, the Mackenzie District Council has elected to delegate to an independent commissioner.

This decision deals only with the requirement to designate Pukaki Airfield. Although this requirement was included in the Proposed District Plan rather than being processed separately, the procedure, assessment criteria, and extent of my delegation are different for this matter and to avoid confusion I have separated it from the other aviation issues.

THE REQUIREMENT

The requirement was in the standard format of a notice under section 168 and was served by the Mackenzie District Council as a requiring authority on the Mackenzie District Council as the territorial authority. Although the document is undated, it must have been issued at some time before the District Plan review was notified because, as already noted, the designation was included in the Proposed District Plan (Appendix A, Designation 69 and on Map 33) and has been open to submissions as part of the District Plan review process. It is clear from the submissions that submitters had access to the notice of requirement. The notice describes the purpose of the designation as follows:

"The designation is required to protect and obtain sufficient land for an aerodrome within the Mackenzie Basin which will be generally available for aviation use. In particular the Council want to provide for the creation of an aviation facility which will be capable of handling Boeing 737 equivalent heavy aircraft capable of Tranz Tasman charter."

The notice includes some background information about aviation in the District, describes the airport site, existing and proposed future facilities, describes the anticipated environmental effects of further development of the airfield, and sets out some alternatives considered. The area to be designated is some 270 hectares providing for realigning and rebuilding the present sealed runway to more than twice the existing length.

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The following summary of submissions on the proposed Designation 69 is taken from the section 42A report for the hearing prepared by a consultant planner, Mrs Patricia Harte.

307/9 South Ganteebury Federated Larmers

Oppos

Decision Requested

Remove this designation from the Plan.

Reason

The new Airport Designation should not be included in this plan as consultation is incomplete. The designations have severe impacts on the viability of private properties. We do not believe that this is a matter of national importance and question how adverse effects will be mitigated, and how the Council will ensure that the sustainable management of s(6)(b,c) sites are promoted.

6/6 Aoraki Conservation Board

Onnose

Decision Requested

We seek appropriate conditions on the designation.

Reason

This is within a site of natural significance. The use of this area as an airfield should be subject to conditions which as far as practicable protect the natural values.

50/22 Commissioner:of Chown Lands

Oppose

Decision Requested

[This submission refers to the notice of requirement and not the designation listed in the Plan]

- 1) Reference to 'Candcorp' should be replaced with "Commissioner of Crown Land".
- Under point 4.4, replace rescue' with 'fescue'.
- 3) Under point 4.7, clarify whether reference to Ben Ohau Station should be reference to Bendrose Station.
- 4) Under point 4.6, provide more details to justify decision not to apply provisions of NZS 6805 given proximity of Omahau Station to the proposed airport.

Reason

It is more appropriate to refer to the Commissioner of Crown Lands than to Landcorp. Perusal of the plan of the aerodrome designation suggests that it is Bendrose homestead that will be more directly affected. This should be clarified. The Council should provide more details on the justification of the decision not to apply the provisions of NZS 6805.

68/82

Department of Conservation

Oppose

Decision Requested

Include conditions in terms of section 17I and Clause 10 of the 1st Schedule RMA, which address the potential adverse effects of activities associated with the designation. These should include restoration of remaining areas of tussock grassland, replanting of disturbed areas in appropriate indigenous species sourced from the area, and weed and pest control.

Reason

This designation has the potential to have significant adverse effects on Significant Natural Site 16, through earthworks, paving and the loss of tussock grassland from this site. These effects should be addressed through appropriate mitigation measures (including restoration of the vegetation and weed and pest control) of remaining areas of the site.

Submission Clarification

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This group of submissions along with the Mount Cook Group's submission 213/1 and Mackenzie District Council's submission 198/65 relate to the Mackenzie District Council's requirement for Pukaki Aerodrome numbered Designation 69 on Planning Map 33. The designation is shown as having a 10 year life and an underlying zoning of 'Airport Zone'.

South Canterbury Federated Farmers request that the designation be removed because consultation is incomplete and it is likely to have severe 'impacts on the viability of private properties'. They also raise the concern of how the site of natural significance will be sustainably managed.

The Department of Conservation and Aoraki Conservation Board also raise the issue of the impact of the aerodrome on SONS 16 which includes the aerodrome.

The Commissioner of Crown Lands has asked for a number of corrections and clarifications to be made to the notice of requirement. It is my understanding that the notice cannot be changed at this stage and that the only relevant documents are the designation schedule listing, the planning map identification of the designation and any conditions listed in the Plan applying to the

Mackenzie District Council request that the runway alignment be altered, amending the designation boundary westward. I understand this has been requested after consultation with the Department of Conservation and the landholder, and attempts to reduce the impact on the sensitive conservation values of the area as well as avoid the need for substantial filling.

While the Mount Cook Group's submission (213/1) is stated to relate to the Aviation Strategy in Appendix L, it in fact is devoted to the proposed designation of the Pukaki Aerodrome. Reasons given for requesting the removal of the designation include:

- little justification for facility handling aircraft capable of trans-Tasman charter;
- economic effects of direct flights on existing providers;
- inadequate planning of infrastructure required for aircraft, e.g. utility resources;
- fails to satisfy s32 duties;
- inefficient and likely to become financial burden to the district;
- no justification for idea that a number of airfields is less beneficial than a single open airport;
- the potential for air collisions will be greater within a single airport;
- inadequate assessment of noise impact on Twizel;
- cost of strip and consequent landing fees will deter use of acrodrome;
- too far away from sight seeing destinations and likely only to be used in bad weather.

THE HEARING

A hearing was convened in Twizel on the 9th of December 1998. The District Council, as requiring authority, was represented by Mr Mike Foster, a consultant planner. Counsel for the Mount Cook Group Limited, Mr Ben Tothill, had faxed some written submissions on Mrs Harte's report and these were read at the hearing. The other submitters did not attend.

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Section 168A of the Act sets out the procedure for processing a proposed requirement when the requiring authority and the territorial authority are the same body. Section 168A refers back to the normal assessment section - section 171 - which sets out four matters which I must have particular regard to and makes it clear that these are subject to the purpose and principles of the Act set out in Part II.

As a preliminary matter, I note that although the notice of requirement specified a 15 year life for this designation, Appendix A in the District Plan indicates this to be 10 years. There is no obvious reason for this and Mr Foster urged me to confirm a 15 year lapsing period on the basis that no third parties would be affected. I am uneasy about doing that because strictly, 10 years is what has been publicly advertised as part of the Proposed Plan and although it is admittedly unlikely, it is conceivable that a potential submitter accepted that but would have had concerns about a longer lapsing period. Section 184A which deals with lapsing periods of designations refers to periods specified when designations are incorporated into plans. Section 2 of the Act defines plans as operative plans so I take it that the 10 year period specified in Appendix A of the Proposed Plan would run from the date when the District Plan becomes operative.

Section 171(1)(a) requires consideration of:

"Whether the designation is reasonably necessary for achieving the objectives of the public work or project or work for which the designation is sought;"

Much of the Mount Cook Group's comprehensive submission and Mr Foster's commentary of this at the hearing relate to the merits of what the Council is trying to achieve at the Pukaki Aerodrome. It is well established that section 171(1)(a) does not invite a general inquiry about the merits of a requiring authority's objectives. As I understand it, those objectives may be founded on policy or economic concerns beyond Resource Management Act considerations and are not open to question under this procedure, although of course there are other ways and procedures available for influencing the Council's policies and in particular Council spending. I have therefore not considered, as part of this designation procedure, whether the requiring authority's stated objective quoted on page 1 of this decision is appropriate. The Council's whole aviation strategy has however been reviewed as part of the parallel procedure for considering all of the other submissions on the Proposed Plan relating to aviation and this is covered in a separate report.

The evidence established that there is no suitable site or area currently available to meet the Council's objective. The Council has acquired part of the site being designated. It could be argued that designation is not required for that area but that is not sufficient land for what the Council proposes. There was some discussion at the hearing about the availability of the various existing airfields for various operators but it is clear that the existing airfields which have been developed by aviation companies for their own use are unlikely to become available in the way which would meet the requiring authority's stated objective. In my assessment the designation is reasonably necessary to achieve that objective.

Mr Tothill raised the question of whether the requirement is for a "public work" submitting that "...the work is not a Public Work under the Act because it relates to the nationalisation of an otherwise private asset....". I cannot see why something (the existing facilities) which can operate as a private asset should be excluded from becoming a public work. In any case the designation provides for major redevelopment of the facilities at Pukaki.

Turning to consideration of alternatives (section 171(1)(b)), Mr Foster explained the background of studies his firm has carried out leading to the development of the Mackenzie Basin Aviation Needs and Development Strategy which has formed the basis for this requirement and the approach to aviation issues taken in the Proposed District Plan. Mr Tothill's submissions criticised the assessment of alternative sites as being "...motivated more by the fact that the Pukaki site is an existing site owned by the Council, than for any consideration of optimum site to achieve the purposes of section 5".

As already mentioned the Council has acquired only part of the 270 hectares proposed to be designated - only 14.1 hectares accordingly to Mr Foster. I do not see ownership of part of the site as any sort of bar to designation - requiring authorities often own land, for example part of a new road alignment, and this is regarded as a positive factor in designating additional land required.

I do not accept that the Council has to prove the site selected is "the optimum site". The test in section 171(1)(b) as I understand it is just whether alternatives have been adequately considered. What is adequate must depend largely on whether the site selected raises conflicts with Part II matters as in the case of Olsen cited by Mr Tothill.

In the present case, the only submissions on the requirement raising concerns about the environmental effects of developing this land for aviation purposes are the submissions from the Department of Conservation and the Aoraki Conservation Board. (A submission on the zoning from Bendrose Station also raises concerns). They are concerned that most of the proposed designation area is within one of the "sites of natural significance" identified in the District Plan. Map 33 shows this site of natural significance as extending from the State Highway right across to the Pukaki River and the schedule in Appendix I of the Proposed Plan indicates that the significance of this site is:

"Fescue Tussock Grassland, formerly the most extensive association within the District. Common tussock fauna abundant. Site is part of an invertebrate study area including the small area across the State Highway. RAP extended to include a proposed covenant.

These submitters do not oppose the designation but seek conditions to mitigate the effects of development including restoration of remaining areas of tussock grassland, weed control etc.

A submission from the District Council requests realignment of the land to be designated for the future runway closer to the State Highway so as to minimise damage to the most ecologically important parts of the site. Mr Foster indicated that this proposal arose following discussions with the Department of Conservation and the landholder. The Department and the Conservation Board have not commented on this proposed realignment through further submissions or contributions to the hearing so I take it that as Mr Foster suggested, this realignment would reduce the environmental impact.

Although there was no detailed evidence about the likely effect of the proposed aviation developments on ecological values, I take it from the description of the area quoted above and the Department of Conservation's submission that the native species and ecosystems involved are not endangered and that the area is not pristine and requires active management to preserve and enhance these conservation values. The notice of requirement indicates that the maximum area likely to be covered by runway, roads and buildings within the site of natural significance would be 35 hectares and that this would constitute only 2.2 percent of the 1600 hectare site of natural

significance identified. I am drawn to the conclusion that, subject to appropriate conditions to minimise damage and enhance areas already degraded as requested by the Department of onservation, development and use of this area as proposed by the designation would not present any significant conflict with the environmental concerns set out in Part Hof the Actuary Tur-

The question then is what is the best mechanism for ensuring appropriate of this area for aviation. Mrs Harte discussed this issue in her report and I accept her conclusion that this would best be dealt with at the outline plan stage (section 176A of the Act). That is because the sort of conditions needed will be quite detailed and depend on the detail of development proposals. That may be why the Department of Conservation and the Aoraki Conservation Board did not put forward suggested conditions in their submissions.

The only reservation I have about relying on the section 176A outline plan process is that it does not provide for involvement by third parties. For that reason I believe it would be appropriate to impose a condition on this designation requiring consultation with the two bodies which have shown interest in this matter when outline plans for development are produced.

Turning to the assessment criteria in section 171(1)(c) - whether the nature of the work means that it would be unreasonable for the requiring authority to use an alternative - I can see nothing special about the work which precludes alternatives, but as discussed above. I am not persuaded that there are any problems with the proposed site which could lead to the conclusion that alternatives such as the Tekapo airfield should be further considered.

Section 171(1)(d) requires me to have regard to relevant provisions of various statutory planning documents. Mrs Harte directed my attention to a broad objective in the Regional Policy Statement:

"Enable a safe, efficient and cost effective transportation system to meet present and future regional, inter-regional, and national needs for transport."

That is so general as to provide little guidance. The submission from the Mount Cook Group suggests development of this airfield would not be efficient and cost effective but as Mr Foster pointed out it is very difficult to predict future aviation needs in the Mackenzie Basin and from the evidence available I am not able to come to any conclusion about that.

Mrs Harte also drew my attention to Rural Objective 9 and Policy 9A of the Proposed Mackenzie District Plan (pages 122, 123). These policies are supported by this proposed designation but I have not attached much weight to them because they are contested.

Consideration of requirements made under section 168 is subject to Part II of the Act matters. I have already discussed the issue of conservation values. Two other matters were raised at the hearing - air safety and noise.

The High Court has determined that air safety is a relevant consideration under the Resource Management Act because of the wide definition of "environment" (Director of Civil Aviation v the Planning Tribunal CP128/95 1997 NZRMA). There is no evidence that the designation site is inherently unsafe for aviation and future outline plans produced under section 176A could be expected to show how safety concerns will be addressed because of the requirement for an outline plan to show:

"(f) any other matters to avoid, remedy or mitigate any adverse effects on the environment."

RELEASED UNDER THE

Similarly, while I accept that noise could become an issue of the Chiral Could accept that noise could become an issue of the Chiral Chiral Could abstantially, this could occur only after major development involving outline plans and the opportunity to include provisions in those outline plans to avoid or mitigate noise effects.

The Commissioner of Crown Lands submission questions the Council's decision to not apply the provisions of New Zealand Standard 6805 which deals with airport noise. This standard involves predicting airport noise at a future date on the basis of the expected number of movements of various types of aircraft and then using this noise prediction to define rules for maximum noise to be generated by an airport on the one hand, and controls on noise-sensitive land uses in the surrounding area on the other hand. I accept that at this time it is not possible to make a realistic prediction of future noise in the manner anticipated by NZS 6805. The other three matters raised in the submission from the Commissioner of Crown Lands all relate to minor factual errors in the notice of requirement rather than the designation as shown in the Proposed District Plan, so no decision on these is required.

There are a number of provisions in the rules for the proposed Airport Zone which coincides with the proposed designation, intended to control adverse environmental effects. I believe there ought to be a condition on the designation specifically making the designation subject to the Airport Zone standards, otherwise as I understand it there would be no obligation to meet these standards.

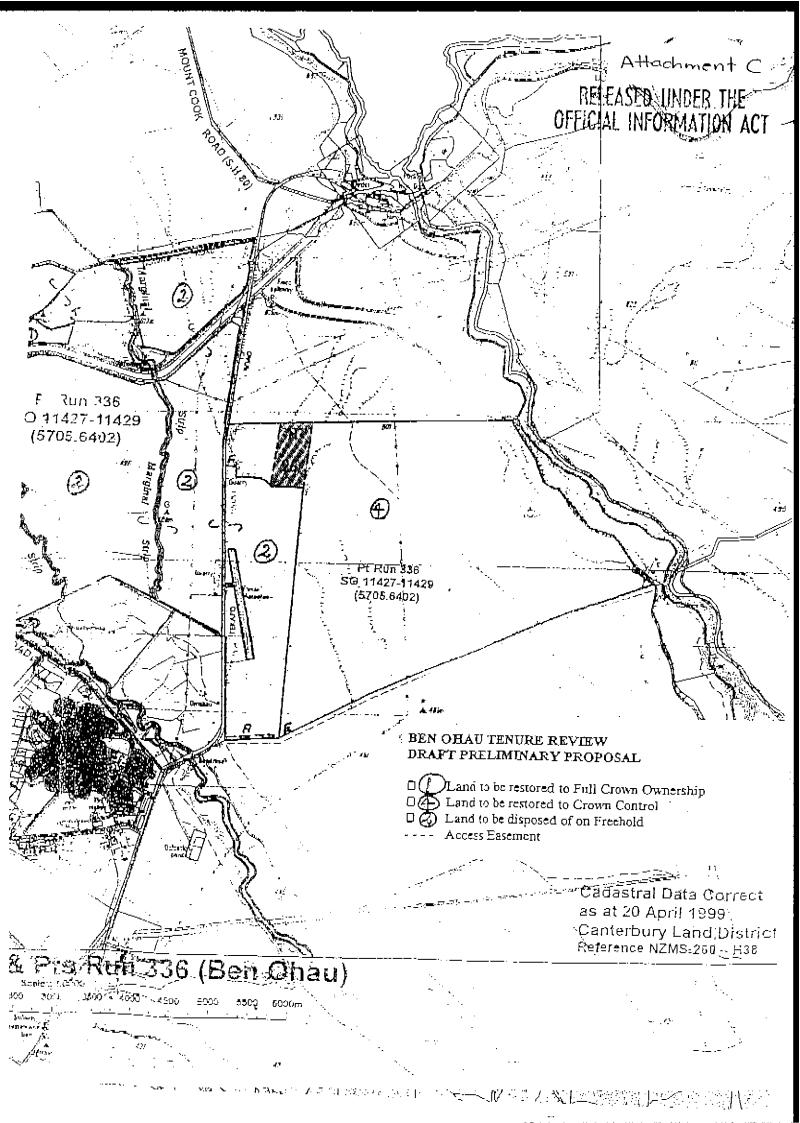
DECISION

Pursuant to section 168A of the Act, for the reasons given above the requirement for a designation for aerodrome purposes of the land in the vicinity of the Pukaki Airfield identified in the Proposed District Plan is hereby confirmed subject to the following conditions:

- 1. Pursuant to section 184A the designation shall not lapse until 10 years after its incorporation into the District Plan when made operative.
- 2. The boundary of the designated area shall be amended in accordance with the submission by the Mackenzie District Council.
- 3. Prior to Outline Plans pursuant to section 176A being submitted by the requiring authority to the territorial authority, the outline plans shall be made available to the Department of Conservation and the Aoraki Conservation Board for at least 20 working days and any comments on the Outline Plans received from those organisations shall be provided to the territorial authority when the outline plans are formally submitted.
- 4. Except as otherwise provided for in future Outline Plans produced pursuant to section 176A of the Act, development and use of the designated area shall comply with the rules for the underlying Airport Zone.

David W. Collins Hearings Commissioner

5 February 1999



4 August 2000

RELEASED UNDER THE OFFICIAL INFORMATION AS

Knight Frank NZ Ltd Box 564., Timaru

Re Ben Ohau Tenure Review

Dear Knight Frank,

Thank you for the Tenure Review report received recently. I have found serious flaws in the Preliminary Proposal For Tenure Review of this station, based on my personal experience of this Pastoral Lease and the conservation values of the Mackenzie Country.

I make the following comments;

1. Pukaki Flat

While I agree with the six points noted to justify its restoration to the Crown, I see no justification noted for continued grazing of the area.

Under the Section "Details of Grazing Concession" it is stated that "grazing has traditionally been a component of this grassland" and "in order to maintain the grassland some limited form of grazing is desirable" What nonsense! Where is the science? Desirable to whom or what? Surely not the identified conservation values.

If we examine the facts, we will clearly see that "traditional grazing" has in many documented cases eliminated the natural flora and fauna of areas such as this nationwide. This is evidenced by the fact that areas of the quality of Pukaki Flat are now extremely uncommon in Otago and Canterbury and elsewhere. I would venture to say that Pukaki Flat has survived to this point despite "traditional grazing", not because of it! Note the case of Waikerikeri Terrace near Alexandra, where under "traditional grazing" identified conservation values were gradually reduced through the late 1980s and 1990s to the point where the crown has no further interest.

With this grazing proposal we are running the risk of completely losing these types of communities. I do not accept that the stated grazing level is acceptable either, in fact it appears to be too high.

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I believe that it is a waste of the crown's resources to accept grazing and have to monitor the vegetation for at least ten years. Who is going to monitor the fate or trend in invertebrate numbers and diversity? Where is the science that states that vegetation monitoring answers all the biodiversity questions?

Surely continued grazing should only be considered for this site if there is solid science that has clearly shown that continued grazing at certain levels, at certain times of year and by a certain type of animal is beneficial to the identified conservation values. With sites of this value it is far too risky to be using them as large experiments.

There are numerous reports that have shown the benefits of destocking low altitude and montane grassland areas of high conservation value. Additionally the lowering of rabbit numbers in recent years has also been recorded as beneficial in areas of Otago & Canterbury for conservation values. Hence it is the norm for the Department of conservation to remove grazing animals from areas it manages for conservation values.

When considering protecting a grassland system such as Pukaki Flat, we should start from the premise that the area should be destocked. Only if solid evidence is presented that the identified conservation values need some sort of grazing regime to survive, should continued grazing be contemplated.

2. Area marked "2" on the Map, and west of the Pukaki Canal

Based on Conservation values present I believe this area should also be restored to the crown. Although I note it is termed "poor native tussock grassland in the south-west corner", it in fact has a range of conservation values quite different to the Pukaki Flat. One such significant value is a tall native gentian of the genus Gentiana, that is locally common at that site. Further investigation in the field would better delineate the size of any reserve in that area, but I believe a significant grassland reserve is justified.

3. Areas marked "2" that are between the main Twizel to Tekapo road and Twizel River 440 hectares

These grassland areas lying below the state highway have conservation values in terms of their uncultivated state, amount of bare ground so important for a range of native invertebrates, and the semi-natural vegetation present.

I note the proposal states that these lands are "of a fragile nature". Why then are they being considered for disposal by the crown? (freehold disposal to Ben Ohau Station).

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RELEASED UNDER THE

I see no reason based on the information in this preliminary proposal for Tenure Review, that justifies disposal of this block. I believe the block should be retained by the crown and nurtured to retain its natural values. Thus complementing Pukaki Flat.

Please contact me if you require additional information.

Yours faithfully

OFFICIAL INFORMATION ACT

BENDROSE STATION

P.O. Box 84 Twizel Phone 034350 843: Fax 034350843 bendrose.station@xtra.co.nz

1 August 2000

Submission for BenOhau Tenure Review proposal.

The Commissioner of Crown Lands, c/o Knight Frank (NZ) Limited, Land Resources Division, P.O. Box 546, Timatu

Dear Sir.

We of Bendrose Station being neighbours of BenOhau Station would like to comment on the

land 2 to be restored to Crown control during the Tenure Review negotiations.

During the 1950's Bendrose Station along with other neighbouring properties established a stock water race system from the headwaters of the Twizel River. This runs through the Pukaki Flat to our Property. With the advent of reliable stock water to this vast area, better grazing management could be achieved. As time passed this scheme was modified and extended as development progressed.

In the proposed plan to call some of this land a Conservation area we find that there is no mention of any stock water systems which we believe are important to our property.

In the future we would hope to be able to source increased water supplies, being either open race or pipeline for on going development.

We believe it is important that the right to water for development of this vast area be noted in the proposed conditions of this Conservation area.

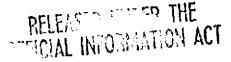
Yours Sincerely,

J.D.J Allan

note:

2 Pukaki Flat

Alto M. Ry Ward Smith



(5

SOME QUICK NOTES ON THE BEN OHAU TENURE REVIEW PROPOSAL

29th July 2000

Qualifier:

I have not visited the property; neither am I familiar with its conservation values. However the following things attracted my attention when I read the proposed concession agreement in the preliminary proposal document. My comments are limited to that proposed concession.

- 1. Weed species that the concession holder is required to control should be specified more clearly. Clause 9.04 (b) is inadequate. 'Noxious plants' is not a very helpful term any more. And, control should not be limited to that required by the Biosecurity Act 1993 (i.e. the RPMS). DOC should specify that all woody weeds (and perhaps others) must be removed by the concession holder.
- 2. The area subject to the proposed concession agreement is unclear. The tenure review proposal states that 1085 ha of proposed DOC land will be subject to grazing under the agreement. However, Schedule I of the concession agreement identifies the "area as approximately 1400 ha". This must be clarified.
- 3. The responsibility for, and cost of, monitoring should be clarified. The tenure review proposal states that the Director General will set up a monitoring system, whereas the concession agreement (Clause 9.05) gives the concession holder the responsibility for establishing the monitoring programme. Also, who will pay for this monitoring. Are there grounds for insisting that the concession holder pay, or are the benefits of grazing for conservation fairly certain?
- Concession term and conditions: I support the "no right of renewal" condition of the
 concession. And I support the grantor (DOC) retaining the right to adjust stock numbers
 to meet conservation objectives.

I hope these brief comments are useful.

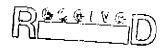
cc: Eugenie Sage (email)
Mark Davis (email)
Fraser Ross (post)
John Talbot (post)
Allan Evans (post)
Andy Dennis (post)

Ry Jands

SOUTH CANTERBURY TRAMPING CLUB P O BOX 221 TIMARU







18.07.00

The Manager, Knight Frank NZ Ltd P O Box 564 TIMARU

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Dear Mr Ward-Smith,

Thank you for the opportunity to comment on the proposal for Ben Ohau Tenure Review. We are pleased with the intention to restore Ben Ohau Swamp and Lake Poaka to Crown ownership and eventually Pukaki Flat also.

One improvement we consider should be made is the provision of vehicle parking well off State Highway 8 for persons wishing to visit Pakaki Flat.

We suggest a car park with vehicle access to it, situated at or near the south east corner of the area containing Pukaki Aerodrome would achieve this.

Thanks for sending the preliminary proposal to us.

Regards,

M Workman SECRETARY

S.C. TRAMPING CLUB



RELEASED UNDER THE OFFICIAL INFORMATION ACT

PO Box 168 Alexandra Central Otago New Zealand

Emuil: backcountry@xtra.co.nz

7th July, 2000

18 JUL 2009

Knight Frank Box 564 Timaru

Re: Ben Ohau Tenure Review

Dear Sir,

We are pleased to see the inclusion of public access provisions from the Pukaki canal to the ridge in the direction of Darts Bush stream. Eventually, with further tenure reviews in the region, this will provide skiers with access to the high country beyond.

For this access to be effective we request that it be available year-round, and that the starting-point be clearly marked by the canal road.

Thank you for the opportunity to comment on the Review.

Yours Faithfully,

John Robinson Secretary,



Concerned Recreation Action Groups of South Canterbury

Kalaugher Road RD 21 Geraldine 7 July 2000 RELEASED UNDER THE
OFFICIAL INFORMATION ACT

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The Commissioner of Crown Lands c/- Knight Frank Ltd PO Box 564 Timaru

Dear Mr Ward-Smith

re: Ben Ohau Tenure Review

Our organisation comprises some fifteen outdoor recreation clubs and associations in the area; from Methven to Camaru.

We are writing to you in support of the submission from Mr Allan Evans dated 22 June 2000. The extension of the easement as he proposes and the provision of parking well off State Highway eight would provide the public with the opportunity for a very pleasant day walk linking the Pukaki and Twizel rivers.

Thank you for the opportunity to comment. We hope that you will be able to smend the Proposal for Tenure Review as suggested.

Yours faithfully

GRK Hunter

34 John Street TEMUKA RESEIVED

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23 113 199

The Commissioner of Crown Land C/o Knight Frank Ltd P O Box 564 TIMARU

RELEASED UNDER THE OFFICIAL INFORMATION ACT

Dear Mr Ward-Smith

I write with regard to the publicly notified notice on the Ben Ohav lease Tenure Review

There appears to be one important provision necessary to amend the easement east of State Highway 8.

As described there is no provision for vehicle access to park off State Highway 8 where they would be subjected to vandalism and no right for pedestrian access from the easement shown in red on the plan to the boundary of the proposed Crown Land.

The easement should be enlarged by extending it along the south boundary of the land to be disposed of in 3.2.1. 430 hectares to the south-west corner of the land, shown in yellow on the plan and described in 3.1.2, which is beyond the end of this easement shown in red.

The public should be allowed to use at least part of this easement for vehicle access towards the boundary of the proposed Crown Land subject to a grazing concession with provision for parking well off State Highway 8.

With this exception the proposal for land exchange and reservation appears to be satisfactory to all parties and a good outcome of the Tenure Review Process.

Thank you for sending me the proposal and for the opportunity to comments.

Yours faithfully

Allan Evans Patron FMC



RELEASED UNDER THE

CROWN PASTORAL LAND ACT FRUIT INFORMATION ACT BEN OHAU TENURE REVIEW: NOTICE OF PRELIMINARY PROPOSAL

Notice is given under section 43 of the Crown Pastoral Land Act by the Commissioner of Crown Lands that he has put a preliminary proposal for tenure review to Ben Ohau Station Limited, lessee of the Ben Ohau pastoral lease.

Legal description of land concerned: Parts Run 336 Ban Ohau and Section 1 SO 8529 Strachey Survey district, contained in lease document, folio reference 10F/1319, Canterbury Land Registry.

General description of proposal:

1. Under section 35(2)(a)(i) CPL Act, to designate 120 hectares (approximately) as land to be restored to full Crown ownership and control as conservation

Under sections 35(2)(b)(i) and 36(1)(a) CPL act, to designate 1085 hectares (approximately) as land to be restored to Crown control as conservation area subject to the granting of a grazing concession to Ben Ohan Station Limited.

Under section 35(3) CPL Act to

designated 4500 hectares (approximately) as land to be disposed of by freehold disposal to Ben Ohau Station Limited subject to the following:

Protective mechanisms

(a) Public access to conservation area easement (under section 7(2) section 7(2)Conservation Act 1987

(b) Public access and vehicle parking (under section 7(2)casement Conservation Act 1987)

Easement

(c) Vehicles for management purposes easement (under section 60 Land Act 1948)

Further information including a copy of a plan and concession and easement documents is available on request from the Commissioner's agent at the following address:

> The Manager Knight Frank (NZ) Ltd Land Resources Division PO Box 564, Timaru Phone (03) 684-8340 Fax (03) 684-0407

Submissions:

Any person or organisation may send a written submission on the above proposal to the Commissioner of Crown Lands c/- Knight Frank (NZ) Limited at the above address.

Closing date for submissions: Written submissions must be received no later than August 14, 2000.