



Crown Pastoral Land Tenure Review

Lease name :Rhoboro Downs

Lease number :PT 093

Conservation resources report

As part of the process of tenure review, advice on significant inherent values within the pastoral lease is provided by Department of Conservation officials in the form of a conservation resources report. This report is the result of outdoor survey and inspection. It is a key piece of information for the development of a preliminary consultation document.

The report attached is released under the Official Information Act 1982.

Copied October 2002

DEPARTMENT OF CONSERVATION REPORT TO KNIGHT FRANK LTD ON TENURE REVIEW OF RHOBORO DOWNS PASTORAL LEASE

PART ONE INTRODUCTION

Rhoboro Downs pastoral lease is 7615 ha and is situated at the southern end of Lake Pukaki and runs westwards to the top of the Ben Ohau Range. The homestead is located off State Highway 8 about one kilometre south of the SH 80 turnoff to Mt Cook, north of Twizel.

The property forms two distinct, topographical and management units. The "Forest Block" being the dry flats and terraces of the foot of the Ben Ohau range, and the "Back Block" comprising the high country of the Ben Ohau range.

Rhoboro Downs is located in the Pukaki Ecological District (ED) and the Ben Ohau ED which was surveyed as part of the Protected Natural Areas Programme (PNAP) in 1983. This survey identified four recommended areas for protection (RAPs) on the property. These are part Pukaki 3 Gladstone flats, Pukaki 5 Dry Stream Swamp, Pukaki 4 Lower Fraser Stream, Ben Ohau 6 Darts Bush and Ben Ohau 4 Fraser Stream Headwaters.

As part of the Mackenzie Basin, Rhoboro Downs forms part of a nationally recognised and regionally outstanding landscape.

PART TWO: CONSERVATION RESOURCE DESCRIPTION

2.1 Landscape

The Mackenzie-Waitaki Basin is New Zealand's largest intermontane basin. It is nationally unique and retains a number of predominantly natural values, including:

- the scale, diversity and extent of its glacial topography
- a number of geopreservation sites
- characteristic inland intermontane basin climate
- it constitutes its own Ecological Region
- habitat to a number of endangered and rare indigenous fauna and flora
- scenery
- location and setting of Mount Cook
- highly valued natural setting and location for a range of tourist attractions and recreation pursuits

These natural features are highly valued for visual and scenic reasons. Many of the pastoral leases in the basin are visible from state highways, canal roads, minor roads, settlements, tourist destinations and flight paths. The combination of physical features, diversity and distinctiveness of the area all contribute to the high inherent scenic and visual values.

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The natural landscape of Rhoboro Downs comprises four different character types. These are

- a) Crest and steep slopes of Ben Ohau Range
 - rises from 800 m to encompass the ridge and upper western slopes of the Ben Ohau Range
 - encompasses upper catchments of Darts Bush Stream and Fraser Stream
 - remnant glacial features, tarns and cique basins
 - snow tussock, remnant beech forest and shrublands
- b) Lower Spurs and slopes below 800 m
 - lower tributaries to the Fraser Stream
 - characterised by tussock/exotic grassland, and shrublands
- c) Valley Flats and Outwash Plains
 - terraced flats associated with Darts Bush and Fraser Stream
 - woody shrub species in channel margins
 - wetland associations and exotic grasslands
 - Ostler fault area
 - sorted glacial and outwash gravels
 - wilding pines
- d) Lake Pukaki Terminal moraine area
 - terminal moraine deposited by former advance of the Tasman Glacier
 - natural lake edge modified by raising of Lake Pukaki
 - concentrations of wilding pine spread

2.2 Landform and Geology

The Ben Ohau Range is comprised of two main rock types: greywackes of the Torlesse group and low grade chlorite schist of the Haast schist Group. The range was formed by uplift that occurred at the same time as the Southern Alps were formed. The Ben Ohau Range rises from 700m to over 1974m on Rhoboro Downs.

The lower hill slopes are largely Pleistocene deposits, while the broad flats are largely Pleistocene free draining gravels. These gravels are interbedded with moderately compacted sand and silt, which are known as the Glentanner beds. These beds are exposed along fault scarps or where streams have cut down through the gravels.

Above Lake Pukaki, glacial deposits have left a terminal moraine which was formed from the advance of the Tasman Glacier some 15,000 years ago.

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Vegetation

2.3.1 Front Block

The Front Block vegetation includes exotic wilding pines, briar, brown top, hawkweed, cultivated red clover, native hard tussock, red tussocklands and matagouri shrublands. All communities lie within the Montane environment.

Exotic Forest

A mixed aged stand of lodgepole pine (*Pinus ponderosa*) occurs on the hummocky moraines the Downs Block, extending into the NE part of Gravel Pit Block. The trees are encroaching into degraded hard tussock grassland, where fescue tussock has 30% cover and hawkweed around 60% cover. Whilst the exotic component is significant (including sweet vernal, brown top, sheep sorrel), some native herbs do occur, such as harebell. Ephemeral wetlands are scattered in the moraine, with native species such as moss, *Herpoterion novae-zealandiae*, *Carex gaudichaudiana*, creeping willowherb (*Epilobium komarovium*), *Gonocarpus micranthus*, and *Pratia perpusilla*.

Exotic grasslands

Much of the Front Block consists of exotic grasslands, with Jocks, Little Flat, Dry Creek, Tay Creek and south end of Big Flat Blocks being dominated by browntop, with hawkweed and scattered briar bushes.

The Farm Blocks have been cultivated for red clover hay production.

Depleted hard tussock grasslands

The depleted hard tussock grasslands are found on the lower fans and terraces adjacent to Fraser Stream and Dry Creek, and are characterised by high levels of mouse-eared hawkweed (*Hieracium pilosella*) and a predominance of exotic grasses. The Big Flat Block has scattered hard tussock throughout, with 30-40% cover occurring near to Dry Creek. Matagouri is associated with this grassland, as well as other native species such as *Dryocallis avenoides*, *Elymus rectisetus*, *Rytidosperma pumilum*, and *Celmisia gracilentia*. Small flushes and wetlands are associated with this community close to Fraser Stream, and where tributaries of Dry Stream pass through depressions.

The short tussock grasslands are largely depleted, with a high occurrence of exotic grass species and hawkweed. The red tussockland and Sphagnum peat bogs located at the boundary with Pukaki Downs Station, are of poorer condition and extent than those found on Pukaki Downs and elsewhere on Rhoboro downs. However, those found on a terrace face have been totally fenced out of the main block, and are not grazed.

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Wetlands

Red tussocklands occur on the terraces adjacent to the Pukaki downs Station bogpine RAP 3 Gladstone Flats, in the north western limit of Big Flat. Here a diversity of native plants are found, including cutry grass (*Carex coriacea*), *Juncus tenuis*, *Gentiana corymbifera*, *G. grisebachii*, *Celmisia alpina*, *Gonocarpus aggregatus*, bladderwort (*Utricularia monanthos*), manuka, *Cassinia leptophylla*, *Coprosma cheesemantii*, *Cyperus alpina* and *Gaultheria crassa*. However, red tussock cover is sparse 1-10%), and they tend to be small in stature. Comb sedge (*Oreobolus pectinatus*) bogs tend to have much sweet vernal growing through them. Individual red tussocks are also found scattered along streams elsewhere in the Front Block.

Shrublands

Matagouri shrubland occurs along the upper Dry Stream, in a gully close to the boundary with Pukaki Station, and along Fraser Stream, where it reaches 2m high. Matagouri shrubland is also present as patches in the Big Flat Block, and scattered along the Twizel River. Ground cover is largely exotic.

The majority of the Front block is highly modified, often dominated by hawkweed, and has no conservation value. However, the riparian shrublands, though small in extent, are of interest. They occur along Dry and Frasers Streams. They not only play an important hydrological role in maintaining water quality to downstream are also of interest for nature conservation, but are also of interest botanically.

2.3.2 Back Block

The Back Block has a range of communities including alpine boulderfields and fellfields, subalpine to alpine wetlands, montane to alpine snow tussock grasslands, beech forest, subalpine and montane shrublands, hard tussock grasslands and red tussock wetlands.

Montane Environment

Wetlands

Two broad types of montane wetland occur: red tussocklands (*Chionochloa rubra*), and bogs. Both are extensive on the valley flats and terrace risers in the Darts Bush Flats. Several small creeks meander through the red tussockland at its northern extent, making the ground wet underfoot. Here the red tussock comprises 40-60% of groundcover, and can reach 1.5m tall. Other native species include *Oreomyrrhis ramosa*, *Carex sinclairii*, *C. secta* var. *tenuiculmis*, *Eleocharis acuta*, *Ranunculus glabrifolius*, and bog rush (*Schoenus pauciflorus*). Yourkshire Fog is the main exotic species present.

Further south, the red tussocklands are drier, with about 30% cover, and are intermingled with narrow-leaved snow tussock (*Chionochloa rigida*) on slight rises. In places, the latter can have 50% cover and reach over 1.5m tall. A lone bog pine

(*Halocarpus bidwillii*) is located in a dry area of mixed red and narrow leaved snow tussock.

The red tussocklands form a mosaic with the comb sedge cushion bogs, which also extend up onto gentle terrace surfaces. Other native bog species include peat forming *Sphagnum* moss, moss, *Hypoleion novae zealandiae*, *Juncus antarcticus*, and sundew (*Drosera arcturi*). Exotic *Juncus acuminatus*, sheeps sorrel, brown top and king devil hawkweed (*Hieracium praealtum*) can also be present in small amounts.

Hard Tussock Grassland

Hard tussock communities are associated with a mixed *Dracophyllum* shrubland on the lower to mid slopes of the Back Block, especially the shady faces associated with the minor spurs. Hawkweed (*Hieracium pilosella*) can be dominant (65%) and occurs with brown top, and occasional narrow leaved snow tussock and shrubs. *Dracophyllum prunum* dominates the shrub component, although *D. longifolium* and turpentine shrub (*D. uniflorum*), snowberry (*Gaultheria depressa*), mountain heath (*Leucopogon colensoi*), matagouri, *Hebe pauciramosa* and *H. subalpina* are present. Hawkweed cover decreases with altitude.

Shrublands

Two main shrublands occur in the Front Range: - riparian matagouri and manuka communities. Riparian matagouri shrublands occur along the Fraser Stream from 580 to 1040m, as well as up most of its tributaries. Similar shrublands occur in the upper reaches of streams feeding into the Darts Bush Flats. Other common shrub species include mingimingi and mountain wineberry (*Aristotella frutcosa*), with scattered briar. Species diversity increases with altitude, with mountain ribbonwood, porcupine shrub, *Coprosma rugosa* present. Matagouri shrubs tend to be quite old, reaching over 2m tall. Cracked willow trees become more common in the Fraser Stream at lower altitudes, and ground cover also becomes dominated by exotic species.

An extensive shrubland (RAP 4 Lower Fraser Stream) occupies the valleys between Spur 2 and Long Spur, extending up to about 1000m. Native species diversity and cover is exceptionally good, with, in addition to the common shrub species, *Hoheria lyallii*, *Coprosma intertexta*, *C. cheesemanii*, scented tree daisy (*Olearia odorata*), porcupine shrub, with beech trees growing at the head of the valley. *Cassinia leptophylla*, *Hebe pauciramosa*, *H. odora*, turpentine shrub, *Dracophyllum longifolium*, and native broom (*Carmichaelia petriei*) occur at the margins. Groundcover here has a significant native component, including prickly shield fern (*Phyticium vestitum*) and thousand leaved fern (*Hypolepis millefolium*), blue wheat grass (*Elymus rectisetus*) and mountain oat grass (*Deyeuxia avenoides*), and tutu. Exotics present are hawkweed, brown top and sweet vernal. A lone bog pine occurs on the margins of this shrubland.

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Manuka shrubland is common on the sunny lower faces of the spurs. The most dense stand is associated with sunny faces above the shrubland RAP, where it extends to around 900m. It is dense at lower altitudes, but increasingly is associated with hard tussock, hawkweeds and matagouri with altitude.

Tall tussock grasslands

Tall tussock grasslands extend through montane to subalpine environments. Whilst individual narrow leaved snow tussocks are found on the lower slopes, they increase in density and condition with altitude. Patches of bare subsoil are common on sunny spur faces on the front between 900-1300m. These have been exposed by stock camping. There is moderately high hawkweed cover (to 45%), with mountain heath and matagouri being the dominant shrubs. Tussocks tend to be small and eaten back, with 10% cover. Shady faces have a higher shrub component, especially of *Dracophyllum* species, and greater ground cover of vegetation. Tussock size and condition tend to be marginally better than on sunny faces.

In the basins along the Ben Ohau Ridge, tussock condition is excellent, being tall and dense, especially at about 1350m. Tussock cover tends to be denser on shady faces than on sunny faces. Flushes occur throughout these grasslands. The main exotic component is king devil hawkweed (<1-7%, but locally 25%). Species associated with the tall tussock grasslands include *Celmisia densiflora*, eyebright (*Euphrasia zelandica*), *Gentiana corymbifera*, *Dracophyllum pronum*, and *D. kirkii*.

Wilding pines are present, especially in the Darts Bush catchment above the flats.

Subalpine Environment

Slim Snow Tussock

Slim snow tussock (*Chionochoa macra*) grassland occurs at about 1350m, on shady faces, and at about 1500m on sunny faces. In basins on the Ben Ohau Ridge, tussocks can reach 40-50cm tall, and make up to 60% of ground cover. The native diversity of groundcover species is reduced because of the overshadowing by the tussocks. Native species include false spaniard (*Celmisia tyallii*), mountain clubmoss (*Lycopodium fastigiatum*), blue tussock, *Dracophyllum pronum*, *Gentiana corymbifera*, *Hebe lycopodioides* and the exotic king devil hawkweed (<1% cover). Slim snow tussocks here are replaced by blue tussock, false spaniard and cushionfield vegetation.

Subalpine Shrublands

There are two types of subalpine shrubland found: *Dracophyllum pronum/uniflorum* dominated shrublands and a more upright mixed species shrubland.

Dracophyllum pronum/uniflorum shrublands are associated with shady faces and spurs of the Front Ridge and Ben Ohau ridge, west facing slopes of Darts Bush upper catchment, and Dorcy Stream/flannigans Pass face. Other shrubs associated

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with it include *Cassinia leptophylla*, snowberry, and *Hebe pauciramosa*. Narrow leaved snow tussock has about 10% cover. Hawkweed cover can be high (<30%), but native species diversity is good with blue tussock, *Raoulia subsericea*, *Anisotome flexuosa*, *Celmisia gracilentia*, *Brachyglottis bellidioides*, *Rytidosperma setifolia*, *Gentiana corymbifera*, eyebright, *Celmisia densiflora*, *C. grandiflora* and false spaniard. Tongues of scree are common in the sub-alpine zone.

A more diverse shrubland is often associated with mountain streams, where native species diversity and health are exceptionally high. Species include: mountain wineberry (*Hoheria lyallii*), *Brachyglottis cassiniodes*, *Dracophyllum longifolium*, turpentine shrub, snow totara (*Podocarpus nivalis*), shrub daisy (*Olearia nummularifolia*), *Gaultheria depressa*, native broom, *Hebe pauciramosa*, *H. subalpina*, *H. treadwellii*, *H. buchananii*, matagouri, porcupine shrub, mountain celery pine (*Phyllocladus alpinus*) and mountain flax (*Phormium cookianum*). The understorey includes *Celmisia coriacea*, *C. grandiflora*, *Geum leptospermum*, tutu, blue wheat grass, *Festuca mathewsii*, *Senecio wairauensis*, *Coprosma ciliata* and narrow leaved snow tussock.

Beech Forest

Mountain beech forest is regenerating in two main areas: Dart Bush at 960m and Upper Fraser Stream catchment at 1100m, whilst individual trees were observed elsewhere on the property.

Darts Bush forest, identified as RAP 6 in the Ben Ohau Ecological District. It occupies the valley floor and mountain side.

The Upper Fraser Stream beech forest is regenerating, and whilst it shows signs of disturbance, it has a good litter cover with a range of ground cover plants. These include snow totara, mingimingi, *Coprosma ciliata*, *C. rugosa*, *Pittosporum anomale*, *Myrsine nummularia*, mountain ribbonwood, *Polytichum vestitum* fern and *Acaena fistulipula*. Exotics are few with hawkweed, Yorkshire fog and white clover present. Downstream, young beech trees are regenerating on bluffs on the true right of Fraser Stream at about 1050m.

Stream banks in the beech forest support a more diverse community and include *Geum parviflora*, *Epilobium melanocaulon*, *Parahebe decora*, *Phyllocladus alpinus*, *Celmisia petiolata*, *Gaultheria rupestris*, *Hebe subalpina*, *Coprosma pseudocuneata*, *Corybus trilobus*, *Belchnum penna marina*, and *Dolichoglottis sp.*

Alpine Environment

Boulderfields and fellfields

The upper slopes of the Ben Ohau Ridge are dominated by steep block scree, bluffs, and, in the upper basins, blocky rock glaciers. The blocky screes are largely uncolonised except for *Aciphylla dobsonii*, *Celmisia angustifolia*, *C. argentea*, *C. haastii*, *C. laricifolia*, *Colobanthus strictus*, *Agrostis* ~~multiceps~~

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pumila. Around the rocky bluffs, where a thin layer of soil has developed, a wider diversity of native plants are found, including South Island edelweiss (*Leucogenes grandiceps*), *Aciphylla montana*, *Rytidosperma setifolia*, *Koeleria novae-zeelandia*, *Chionochloa macra*, *Leptinella pectinata*, *Myrsine nummularia*, *Poa lindsayii*, blue tussock, *Raoulia youngii* and *Rytidosperma pumilum*. *Carex pyrenaica* var. *cephatotes* is common on moraine surfaces to the side of rock glaciers.

Finer screes are located on the western face of the Darts Bush catchment.

Cushionfields

Alpine cushionfields are associated with the rock glaciers, occurring on the gently sloping stable surfaces made up of smaller sized rocks. *Dracophyllum prunum* is the dominant species, and is found with *Kelleria hyalii*, *Chionohebe pulvinaris*, *Raoulia grandiflora*, *Gentiana corymbifera*, *Agrostis muelleriana*, *Anisotome flexuosa*, *Celmisia laticifolia*, *C. sessiliflora*, *Phyllachne colensoi*, blue tussock and lichen. Vegetation cover can vary between 35 to 70%.

Alpine flushes and wetlands

A number of tarns occur at about 1700m in basins off the Ben Ohau Ridge. Wetland vegetation is diverse with a very high native component including *Abrotanella caespitosa*, *Plantago triandra*, moss, *Caltha obtusa*, *Celmisia sessiliflora*, *C. haastii*, *Ranunculus gracillipes*, blue tussock, *Gnaphalium luteoalbum*, *Euphrasia zelandica*, *Uncinia* sp, *Epilobium macropus*, *Carex lachenalii* and *Colobanthus strictus*. Moist sites are dominated by comb sedge, with moss daisy (*Abrotanella caespitosa*), *Juncus novae zealandia*, *Celmisia alpina* and *Gnaphallum delicatum*. Slim snow tussocks often surround wetland areas, except where overgrazing has removed them.

Many flushes occur throughout the slim tussock grasslands, and are characterised by *Montia australasica*, *Lobelia linnaeoides*, *Celmisia argentea* and *C. glandulosa* above 1700m. Around 1500m, flush species include *Schoenus pauciflorus*, *Carex wakatipu*, *Uncinia fuscovaginata*, *Nertera* sp, *Ranunculus gracillipes*, *Juncus perpusillus* and moss. Stock tend to camp in these flush zones.

The upper catchments of both Darts Bush (900-1932m) and Frasers Stream (950-1974m), as well as Flannigans Pass face, have a diverse range of communities relating to both altitudinal and aspect gradients. Communities include alpine scree, fellfield, cushionfield, slim tussock grassland (including Fraser Stream headwaters RAP), and wetlands, subalpine and montane tall tussock grasslands and shrublands, and two areas of regenerating beech forest (including Darts Bush beech forest RAP).

The catchments include a range of habitats and physical features including fellfield talus, rock glaciers, basins, steep colluvial mountain slopes, boulderfields and mountain streams. The communities show a high degree of naturalness, with very little sign of exotic species present (king devil hawkweed is present in small

quantities to 1500m). Some very localised modification has occurred as a result of stock camping on ridge crests, and at high altitudes (1700m), have grazed out slim snow tussock. This has induced a native community of false spaniard, blue tussock and cushionfield vegetation to develop locally.

Stock camps adjacent to an alpine tarn is nutrifying the water, as evidenced by much algal growth.

The Front Ridge - E facing slope, spurs and flats contain a wide range of communities and ecosystems ranging from montane to alpine environments. An aspect derived vegetation gradient is evident on spurs, where shady faces are dominated by *Dracophyllum* shrublands, and sunny faces by tall tussock grasslands. Many communities are representative of ones which were once more widespread in the district e.g. red tussocklands, tall tussock grasslands and shrublands.

Natural diversity is good, with a range of natural to semi-natural communities occurring in montane to alpine environments. The condition of communities, especially tussock grasslands, are good at higher altitude, but tend to be more modified than their counterparts in the moister Ben Ohau Ridge catchments. Exotic species have little presence over 1300m, whilst at montane levels, hawkweed can be a significant component to groundcover, especially in the depleted short tussock/shrubland communities, and the valley flats close to Fraser Stream.

This area has some special features, notably the red tussockland in Darts Bush flats, which is in good condition. Such communities were once more extensive in the Mackenzie Basin. There are many bogs and flushes associated with the tussockland. The presence of *Sphagnum* moss indicates that peat is being formed, which is uncommon south of Rakaia River at this altitude. Grazing by cattle and horses appear to be having localised impacts on the comb sedge bogs, as has a farm track. Three plants of the vulnerable to rare *Carex secta* var. *tenuiculmis* were observed growing beside one flush. One bog pine plant, considered uncommon, was also observed. This wetland not only has important conservation values, but has also an important hydrological role..

Another area of note is the extensive shrubland occupying the valleys between Spurs 2 and Long Spur. It is of exceptional diversity, density and has a moderate native component to its groundcover, which is not usual. It has a high level of naturalness, and is buffered by the extensive manuka shrubland on the sunny faces, and *Dracophyllum* shrublands-tussock grasslands on the shady faces. Briar is scattered, but tends to be at its lower altitudes. A wilding pine is present.

Other riparian shrublands, whilst not so diverse botanically, do exhibit moderate species diversity in their upper reaches. They also play an important hydrological role for maintaining water flow and quality to downstream areas of importance to conservation e.g. Darts Bush Flats red tussockland: Ben Ohau wetlands, and for fisheries. Briar is present in small amounts, as well as crack willow, which is common in Fraser Stream bed.

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Fauna

The streams, swamps, shrublands, bush remnants and the tussock grassland host a wide range of fauna on Rhoboro downs some 29 species of birds have been recorded on the property. These include 16 indigenous and 13 introduced species.

On the Ben Ohau Range the New Zealand falcon is relatively common, along with the Australasian harrier. Skylarks and pipits are common in the tussock grasslands, while the shrubland and bush remnants host the pied fantail, silvereye, grey warbler, rifleman and various finches. The black fronted tern, banded dotterel, grey duck and the occasional white faced heron have been noted in the flats and river beds.

Four species of freshwater fish have been recorded on Rhoboro Downs along with brown trout. The latter has only been found in the Twizel river but is thought to exist in the Fraser Stream. The endemic fish recorded are upland bully, kooro, *Galaxias brevipinnis* (Category C for conservation), Alpine galaxid and long jawed galaxid.

Invertebrate fauna is largely unknown but five endemic butterflies and four species of grasshopper were found on Rhoboro Downs.

The common gecko and McCanns skink are common on the property. While the rare jewelled gecko and spotted skink may exist, as they have been recorded in close proximity to Rhoboro Downs.

2.5 Historic Values

Rhoboro downs was the first run claimed on the west side of Lake Pukaki. Some 10,000 acres was claimed in 1856 by Henry John Gladstone. A year later another 10,000 acres was added to the property.

Over the next few decades Rhoboro Downs had a succession of owners. Part of Lake Ohau Station was in the property along with Ferintosh and Glentanner. In 1920 the property was divided into the present day stations of Glentanner, Ferintosh and Pukaki downs.

Notable historic features that survive today are the water race and reservoir which supplied the old Pukaki village and part of the old telephone line which linked Pukaki with Glen Lyon Station via Flanigans Pass. The homestead and farm buildings are on a small enclave of freehold land.

No information about Maori cultural values was available at the time of writing this report.

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i Existing Land Status

Rhoboro Downs is bounded by pastoral lease land to the north (Pukaki Downs) south (Ben Ohau) and west (Glen Lyon). The eastern boundary adjoins Lake Pukaki. Around Lake Pukaki there is a strip of land that was taken for hydro operating purposes. There is currently no marginal strip.

None of the streams on the property have marginal strips laid off.

The homestead area is surrounded by a small block of freehold land, with a legal road joining it to Rhoboro Downs Road.

Along the Rhoboro Downs/Ben Ohau boundary is an unformed legal road. A farm track follows this approximate line. An unformed legal road follows part of the Fraser stream into the centre of the property where it stops in the middle of nowhere.

The Mackenzie District Scheme became operative in 1986. This scheme identified approximately two thirds of the property as being within the Rural 1 zone, which is the general farming zone. Predominant uses include agricultural and pastoral farming and forestry up to maximum of 50 ha. The remaining third of the property (the higher mountainous eastern end) lies in Rural 2 zone (erodible high country). Land in this zone was generally classified as Class VIII or severely eroded Class VII and was considered unsuitable for grazing or commercial forestry.

The district scheme has now become a Transitional District Plan due to local government restructuring. A new plan is to be publicly advertised in December 1996.

2.7 Recreation/Access

2.7.1 Access

Legal roads and unformed paper roads have been dealt with in 2.6 above. Rhoboro Downs is relatively accessible from SH 80, Rhoboro Downs Road and the Rhoboro Downs/Ben Ohau farm track. A good four wheel drive track also follows part of the paper road up the Fraser Stream before climbing on to the open tops of the Ben Ohau Range.

2.7.2 Uses

The current uses of Rhoboro Downs are hunting, cross country skiing, tramping, mountain biking and heli biking while mountain climbing is limited. Fishing occurs in the Twizel river.

Being close to Twizel the Ben Ohau Range could provide for a wide range of activities, especially if tenure review proceeds on adjoining properties.

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Other potential recreational uses are horse trekking, guided natural history trips, painting and scenic four wheel drive trips.

2.7.3 User Issues

One commonly re-occurring issue is the maintenance of the four wheel drive farm tracks if vehicle access is allowed. Foot, mountain biking and horse access should not cause any undue concern. However, any access easements require a level of commitment with regards to signs, and styles. Controlling access to the flats in order to prevent disturbance to farming activities or wildlife needs consideration and management.

Public access to and along the shores of Lake Pukaki needs addressing.

2.8 Existing Management

Management issues that affect the high inherent values on Rhoboro Downs are:

i) Weeds

Hieracium is present over the majority of the flats and on the lower hill slopes. Willows are present along the streams and rivers and could affect the galaxid and trout populations as well as the wildlife values in the longer term.

Wilding pines are a major problem near the Mt Cook highway and above Lake Pukaki. Their spread over the flats on to the Ben Ohau Range will require management.

ii) Pests

Rhoboro Downs has been part of the Rabbit and Land Management Programme. Rabbit numbers can be high on the flats and lower hill country.

Any commitment the rabbit control will depend on the values being protected.

(iii) Grazing

Continued grazing is likely to have a detrimental affect on the high inherent values on Rhoboro Downs. Fencing will be required to protect areas of ecological value.

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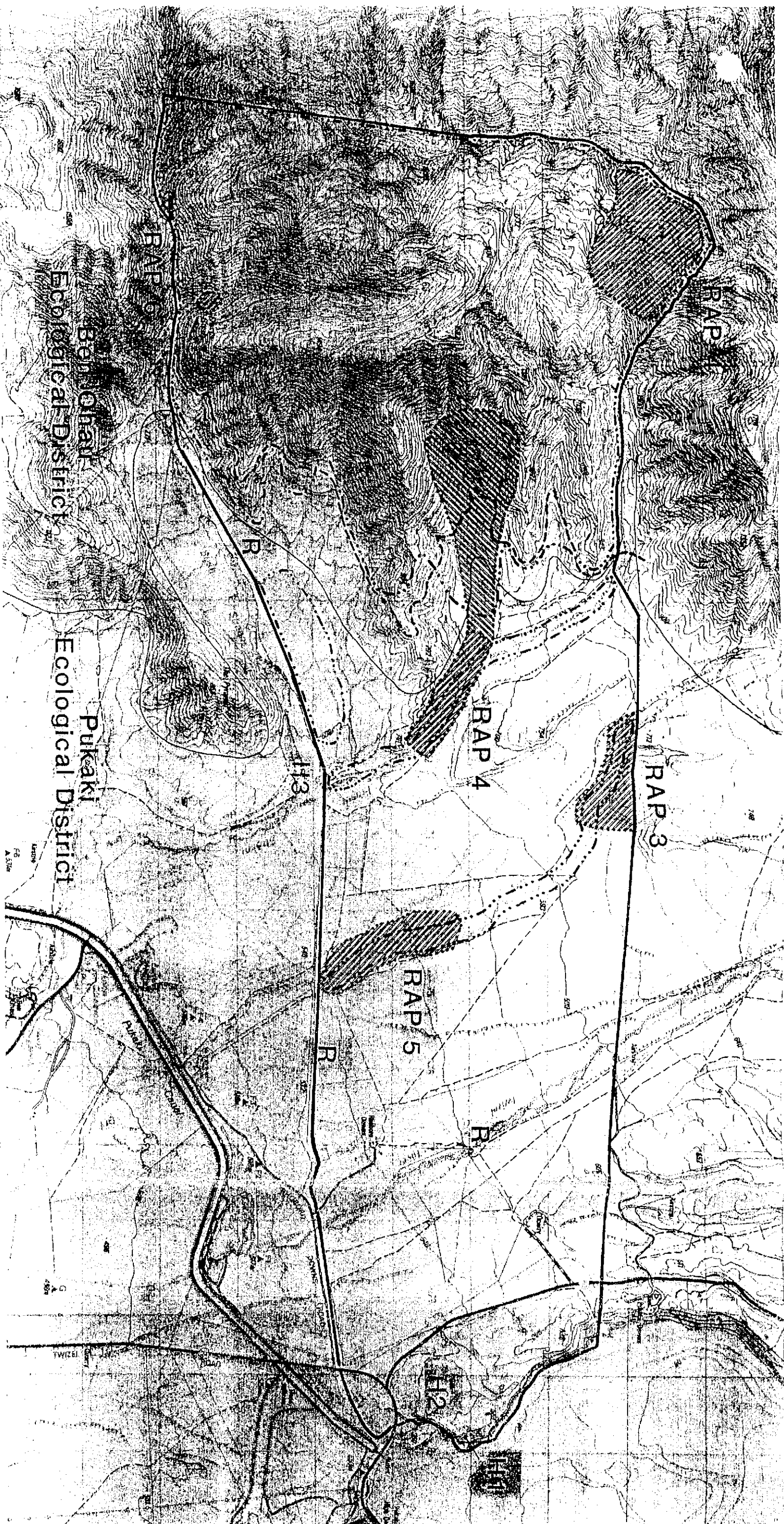
PART THREE CONSULTATION

On 28 November 1996 an NGO meeting was held in Timaru. This meeting was attended by representatives from Forest and Bird, Public Access New Zealand, tramping clubs, deer stalkers associations and Aoraki Conservation Board.

The questions/issues arising from the discussions on Rhoboro Downs were:

- query of 4WD track access to Ben Ohau tops
- marginal strips on all streams and protection from stock
- concerned that conservation land will be confined to high tops
- red tussock area should be conservation land and destocked
- need for good access for skiing in the high basins
- utilise existing fences near Fraser Stream as demarcation line between conservation land/freehold
- requirement for buffer zone
- landscape issues of forestry and wilding pines
- concerns that two way split does not work

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Key

- Landscape value
- - - Ecological value
- R Recreation value
- H Historical
- Legal boundary
- Ecological district boundary
- ▨ R.A.P.
- ▤ Proposed R.A.P.

Values

Rhoboro Downs

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