

Crown Pastoral Land Tenure Review

Lease name: GLENTANNER

Lease number: PT 006

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.

Note: Plans which form part of the Conservation Resources Report are published separately.

These documents are all released under the Official information Act 1982.

June

N7

** TPARTMENT OF CONSERVATION RESOURCE REPORT TO KNIGHT FRANK UNITENURE REVIEW OF GLENTANNER STATION

PART ONE: INTRODUCTION

Glentanner Station pastoral lease has a total area of 4,403 hectares. The property is situated at the head of lake Pukaki and borders the southern boundary of Mount Cook National Park. The property also lies just north of Ferintosh Station which is also undergoing tenure review. The homestead and tourist complex lie just off State Highway 80 north of Twin Steam. The Glentanner pastoral lease (P.L.) lies below a large area of Pastoral Occupation Licence (POL) which has been retired under a run plan. There area however, complex issues still to be negotiated under the run plan agreement and it is considered that the existing POL should be incorporated into any tenure review negotiations.

The Glentanner pastoral lease is similar in shape to Ferintosh Station which lies next to Lake Pukaki. It is an elongated property covering some 17 kilometres from Ferintosh Station in the south to the boundary of Mt Cook National Park (MCNP) in the north. Its eastern boundary lies alongside part of Lake Pukaki and part of the Tasman riverbed. Glentanner Station lies partly in the Tekapo Ecological District (ED) which was surveyed as part of the protected Natural Areas Programme (PNAP) in 1983 and it also lies within the Dobson Ecological District which has not been surveyed. The Tekapo PNAP survey identified Lake Pukaki as an area of significance and other subsequent surveys have indicated that Twin Stream delta and the Tasman riverbed and the Bush Stream delta are areas of high natural significance. As Glentanner is part of the wider Mackenzie Basin the property forms part of a nationally recognised landscape.

1 RT TWO: CONSERVATION RESOURCE DESCRIPTION

2.1 LANDSCAPE

2.1.1 Context

Glentanner Station is located on the eastern side of the Ben Ohau Range, a well known subsidiary range of the Southern Alps. Located on the western edge of the Mackenzie Basin and just 14km from the Southern Alps in the Mount Cook region. the station adjoins or is close to a number of New Zealand's most widely celebrated high country icons. These include:-

- The Southern Alps and Mount Cook/Aoraki New Zealand's highest mountain just 22km away;
- Mount Cook National Park the Station shares a common northern boundary with one of New Zealand's most nationally and internationally recognised national parks;
- South West New Zealand Te Waahi Pounamu World Heritage Area. The station borders this World Heritage area which extends to the Tasman Sea in the west.
- Mackenzie Waitaki Basin New Zealand's largest intermontane basin and considered an "outstanding landscape" at the national and regional level, (BMP and LA, 1993);
- Tasman riverbed noted for its vastness, naturalness and unimpeded views of the Southern Alps.

The station is part of a wider area which has long been recognised for its outstanding scenery, recreation and tourism opportunities. The Ben Ohau Range provides a continuous an dramatic backdrop to the Mackenzie Basin, Lake Pukaki and the Tasman Valley. It is highly visible from roads and other parts of the Basin. SH80, the road to Mount Cook National Park, traverses the coastal edge of Lake Pukaki and then passes (on legal road) through the station. The station is highly visible from all flight paths into and over the Tasman Valley and Mount Cook National Park.

The station is surrounded by Crown land with MCNP in the north, the Ben Ohau Crown Range in the west, Lake Pukaki and the braided river flats of the Tasman River in the east, and Ferintosh Station Pastoral Lease to the south. The significance of this tenure in landscape terms lies predominantly in the land management practices adopted.

2.1.2 CHARACTER

The Ben Ohau Range has a north-south orientation. It is characterised by a broken skyline of high peaks which are over 2000m and under permanent snow in the north. Its eastern flanks rise steeply above the Tasman Valley and Lake Pukaki. The lower slopes clearly

demonstrate the power of glaciation during the Quaternary geological era which resulted i ice carved terraces and moraine depositions of the Tasman Valley. The upper slopes are very steep and comprise a series of local side ridges and east flowing streams which have adopted the routes of former side glaciers and are incised into the more major glacial terraces and moraine remnants.

Glentanner Station is an integral part of the Ben Ohau Range and the wider landscape in which it exists. While Glentanner Station has been shaped by the same major climatic and geomorphic processes which have formed the larger landscape, the station area is underlain by a complex geology.

Within this wider context, the property can be described in terms of eight main character types. However, in providing these descriptions it is important to note that it is their combination and relationships which also contribute to the total landscape in which they are found.

i) Upper Southern Steeplands

These steep slopes of the upper range lands are generally above 1070m. While the north facing upper valley catchment (feeding into Twin Stream) has been significantly modified by grazing, the east facing steeplands are less modified and retain more continuous tussock grassland cover. These steeplands constitute a relatively small part of the pastoral lease but form the lower extension of the higher steeplands of the Ben Ohau Range to the west.

ii) Terrace Flats

Characterised by depositional features from the Mt John (earlier) and Tekapo glacial advances (e.g. moraine, tarns, kettleholes and associated wetlands) the terrace "flats" form the northern extension of the glacially carved terrace formations so characteristic of the eastern lower Ben Ohau Range, broken by east flowing streams that extend from the southern boundary for approximately five to six kilometres (as far as Dead Horse Stream).

iii) Terrace Escarpments and Lower Steeplands

Rising steeply from Lake Pukaki on the Tasman Valley floor, these glacially carved steeplands form part of the remarkable glacial terracing in the south (ref above) and grade into truncations of the more pronounced side ridge and valley systems in the north. The Glentanner Beds/Badlands (a regional unconformity) are exposed in several areas north of Twin Stream and most notably on the southern side of Bush Stream at Red Slip.

These steepland slopes are "broken" by five main (named) deeply cut streams (Whale, Twin, Bush, Dead Horse, Fred and Birch Hill) and numerous unnamed surface streams. Vegetation is predominantly mixed exotic/indigenous grassland with significant areas of indigenous woody shrubland and some beech forest in the incised stream areas.

iv) Valleys

Five streams (Whale, Twin, Bush, Fred and Birch Hill), which have their upper catchments high in Ben Ohau Range, cross the property. In their lower reaches (i.e. within the property boundaries) they form distinctive 'v' shaped valleys which have been incised into the surrounding terrace landforms. Birch Hill and Fred Stream have large areas of intact forest or regenerating shrublands. The other three valleys are predominantly in tussock grassland associations (with some localised woody vegetation).

Dead Horse Stream is a less well developed incised valley crossing the property.

v) Outwash Fans

The outwash fans of Fred, Bush, Twin and Whale streams are wholly or partly in the property. The two southern fans are highly developed farm land with farm buildings, shelter belts and the tourist associated facilities - motor camp, airstrip, helipad, booking offices and restaurant etc.

In contrast, the outwash fan of Bush Stream is largely undeveloped. It is outstanding for its scale and established matagouri cover.

vi) Recent (Birch Hill) Moraines

The moraine features associated with the most recent Birch Hill ice advance are highly distinctive in the area south of Fred Stream. This area includes distinctive, highly visible tarns (within 100 metres from the SH80) amongst the hummocky moraine features. The southern most parts of this area have been colonised by wilding trees, many of which are fully mature.

vii) Tasman Valley Flats and Wetlands

An extensive wetland occurs adjacent to the braided Tasman riverbed which is the only one of its kind of this scale in the Tasman Valley. It is currently grazed.

viii) Lake Pukaki Coastal Margin

The station borders the north-western shoreline of Lake Pukaki for approximately five kilometres. This area consists of a very narrow strip on the lower slopes or at the base of the terrace escarpment and including the outer coastal edge of Whale Stream and Twin Stream Fans. SH80 traverses this strip. Some wilding conifers have spread north from a relatively contained, mature stand on the adjoining Whale Stream fan.

2.2 LANDFORM AND GEOLOGY

The property consists of greywacke hill slopes, morainic terraces, smaller alluvial terraces and some extensive delta wetlands. The majority of the property has been shaped by ice advances and retreats from the Tasman Glacier. Morainic depositions of silt and rock are evident on the front terraces of the lease. Glacially formed kettle holes are a feature of parts of the property next to SH80. The property is dissected by a number of large and small streams which have their source at the back of the property in the main Ben Ohau Range.

At higher altitudes there are extensive areas of bare rock and scree with some patches of alpine soils. These unstable steepland soils are strongly leached and stony, being derived from greywacke and related slope deposits. Slightly deeper soils derived from loess are present on the terraces, moraines, and fans.

2.3 CLIMATE

Glentanner is subject to an inland mountain climate with high rainfall over 3000m, strong winds and seasonal snow falls. The harsh climate has caused considerable hardship for the landholders, with snow being one of the greatest killers of stock in the Mackenzie. It has also isolated the property socially, for long periods of time. Strong nor-west winds also raise a considerable amount of dust and silt from the Tasman Riverbed during the spring/summer period.

2.4 VEGETATION

Glentanner pastoral lease and POL have a very diverse range of plant communities. These range from the high alpine scree and cushion communities over 2400m, to wetlands adjoining the Tasman River, and high productive oversown and topdressed pasture around the homestead complex.

The early settlers described the area as a bleak landscape covered in tussock, matagouri (Discaria toumatou) and Spaniard (Aciphylla sp). A century of extensive pastoralism has resulted in many of the natural vegetation patterns and sequences changing. However, the vegetation sequences that occur on many properties along the Ben Ohau Range also occur on Glentanner. The low altitude lands have been highly modified, subdivided and OSTD. Scattered shrublands occur on the terraces, hill slopes and gullies. The front faces have a mixture of shrubland, exotic pasture and short tussock grassland. This grades into tall tussock grassland and Dracophyllum shrubland. Pockets of beech forest occur in the sheltered wetter valleys. The major vegetation communities are described below.

i) Modified Grasslands

On Glentanner, most of the grasslands below the upper boundary of the pastoral lease have been OSTD and intensively grazed. This has resulted in a partial transformation of tall tussock (*Chionochloa rigida*) grassland into short tussock (*Festuca novae-zelandiae*) and introduced grasses dominated by sweet vernal and

brown top. Flatweeds are represented mainly by Hypochoeris radicata, with Hieracium pilosella being present throughout most of the improved country. On the lower slopes, on deeper soils F. novae-zelandiae is the dominant tussock along with a dense cover of browntop.

Wetlands ii)

On Glentanner the largest wetlands occur between the Mt Cook highway and the Tasman River. The Acland Lagoon, located near to the north end of the property, is the largest 'open water' area surrounded by wetlands. The margin of the lagoon dominated by Carex coriacea, Juncus effusus and Schoenus pauciflorus. Further from the shore, there are giant tussocks of Carex secta partially submerged in water. On drier patches introduced grasses such as Holcus lanatus and vigorous Agrostis capillaris have established. More accessible parts of the wetland are grazed by cattle and the tick layer of Sphagnum and moss Polytrichum commune are trampled and mostly turned into mud.

Another large wetland (Glentanner Swamp) is located near to the Tasman River, between Dead Horse Stream and the Glentanner Airstrip. This wetland does not include any 'open water'. The original wetland vegetation is reduced to clumps of Juncus effusus and Schoenus pauciflorus and occasional patches of Carex coriacea which have been chewed and trampled. Introduced grasses are gaining dominance around some of the wetter margins.

Shrublands iii)

There are three different types of shrubland community present on Glentanner which are distinguished by their physiognomy, species composition and their origin. These communities are:

- Matagouri a)
 - The original matagouri scrub is confined to the alluvial fans of the larger streams. Disturbance of surrounding grassland through burning and grazing have provided an opportunity for matagouri to expand into the new habitats. In these secondary habitats, matagouri is often associated with sweet briar and other ruderal species. These introduced species, such as bracken, have the ability to occupy disturbed surfaces within original matagouri stands. For this reason it is difficult to distinguish between the original and induced scrub communities on the basis of species composition alone. Generally, the more original communities occupy the alluvial fans with the characteristic triangular shape similar to the large area on the Bush Stream fan.
- Kanuka b) Kanuka shrubland is largely confined to the sunny side of Freds Stream. It is thought to have replaced beech (Nothofagus) forest destroyed earlier, as remnant beech trees are found in the sheltered depressions and gullies within this area.

the kanuka below the P.L/POL fence is relatively open with large areas *Hieracium pilosella* present. Above the P.L/POL fence kanuka is present with *H. praealtum* cover up to 75% of the ground.

c) Induced Shrublands

These shrublands, developed directly from the *Notofagus* forest on Glentanner are rare and restricted to the shady slopes above Freds stream. This type of shrubland is adjacent to one of the largest remnants of native forest in Glentanner. The slopes within the shrubland are not as steep and are slightly warmer.

Species composition of the area is relatively divers and includes *Hebe subalpina*, *Coprosma cheesemanii*, *Coprosma parviflora*, *Coprosma propinqua*, *Cassinia leptophylla*, *Griselinia littoralis*, *Gaultheria crassa*. *Dracophyllum* is represented by three species (*D. longifolium*, *D. uniflorum* and *D. kirkii*) and *Celmisia* species by *C. angustifolia*, *C. coriacea*, *C. densiflora*, and *C. petiolata*. the abundance of *Dracophyllum* and *Celmisia* reflects the impact of past fires. The more sheltered parts of shrubland are characterised by a thick layer of *Sphagnum*, effectively holding the moisture. The shrubland includes enclaves of *Ranunculus lyalii*.

The steeper part of this area includes some erosion slips induced by fire. Species that have developed on the slips provide some indication of the species succession following a serious disturbance. These areas are dominated by tutu (Coriaria angustifolia), sheeps sorrel (Rumex acetosella) and Hieracium praealtum.

iv) Forests

Indigenous Forest:

On Glentanner, beech forest is present only as remnants. The relatively larger areas of beech forest occupy the most sheltered, coolest and wettest south oriented slopes at altitudes around 900m. All these areas are above the pastoral lease boundary. Additional smaller remnants are present within the area of pastoral lease in the gullies of mostly east oriented slopes. A small remnant of snow totara (*Podocarpus nivalis* is present on the north slopes of Round Hill above Freds Stream.

v) Grasslands

a) Chionochloa rigida and Dracophyllum grasslands

Relatively dense *C. rigida* grasslands associated with *Dracophyllum* are present on sheltered, south facing slopes between 700 and 900m. Grasslands with a warmer, sunnier aspect at the same altitude have a sparse *C. rigida* cover and the tussocks tend to be of a lower stature. *C. rigida* tussock is generally reasonably abundant (50 - 75% cover) and in good condition. The proportion of *D. uniflorum* is about 25%. The impact of grazing is

manifested by the presence of prostrate or dwarf shrubs (Dracophyllum pronum, Gaultheria depressa, Leucopogon fraseri).

In the flatter area to the south, around the DSIR hut, C. rigida grasslands are more modified. They include short tussocks (Poa colensoi, Festuca novaezelandiae) and introduced grasses dominated by Agrostis capillaris. Dracophyllum has a lower cover in this area.

Chionochloa rigida grasslands on the mountain plateau b)

The plateau at an altitude around 1200m to the south of Twin Stream carries tall tussock grasslands which are modified but have a more natural component of inter-tussock species than elsewhere on the rest of the property. The plateau includes numerous small wetlands. These wetlands are grazed and dry out over summer. The spongy layer of Sphagnum has been compressed by stock, and other wetland vegetation shows the impact of grazing. northern part of the plateau has been recently burnt, with a resulting increase in Hieracium pilosella cover.

Elsewhere, Poa colensoi and Festuca novae-zelandiae occur, along with dwarf shrubs such as Leucopogon fraseri, Leucopogon colensoi, Gaultheria depressa, Pimelia oreophilla, or mat forming Raoulia subsericea.

Snow tussock grasslands in the upper montane zone On Glentanner, the best tall tussock grasslands of the upper montane zone occur between 1100m and 1600m. the majority of this community is above the pastoral lease/POL boundary.

A striking feature of this community is the high proportion of Celmisia lyallii reflecting the impact of burning in the past. C. rigida tussocks represent 50% cover. Inter-tussock vegetation is dominated by Lycopodium fastigiatum, Pentachondra pumila, Gaultheria depressa and the moss Rhacomitrium languinosum. The high proportion of dwarf shrubs could reflect the long-term effects of grazing. Shrubs are represented by Dracophyllum pronum and Hebe odora. Closer to the tarns the vegetation cover consists of low growing and cushion forming plants dominated by Oreobolus pectinatus, Anisotome, A. aromatica and A. filifolia.

The Chionochloa rigida is highly variable and intergrades into C. macra. The C. rigida species normally occurs on the exposed ridges at this lower altitude. The majority of the area has a common vegetation structure determined by codominance of C. rigida or C. macra in association with Celmisia lyallii and Dracophyllum pronum.

Erosion has been a problem in this area for some time which prompted an experience with the introduction of C. avellana (hazelnut), conducted by the DSIR (now AgResearch). This species was introduced to arrest erosion. At present there is a vigorous patch of C. avellana occupying the eroded side of the track.

Some of the more exposed and warmer slopes show some signs of erosion occurring there in patches. On some sunny slopes erosion is much more serious. In this area, C. rigida grasslands are characterised by running shingle and the occasional buried tussocks. Aciphylla aurea, which is a species highly adapted to unstable surfaces is spreading rapidly in these grasslands at present.

Grasslands with C. macra are present in the subalpine zone, from an altitude of about 1500m, which is outside of the current pastoral lease area. C. macra has a relatively low cover (10-30%) and there is a high proportion of Celmisia lyallii and Dracophyllum pronum. These two species reflect the impact of past burning and long term effect of grazing. The proportion of bare ground is high (around 30%) and the C. macra tussocks are short, often reaching only about 30cm. The lack of palatable species is a characteristic feature of these grasslands.

At a lower level on a lateral moraine at the altitude of about 1000m, in the vicinity of some small kettleholes, dense red tussock C. rubra grassland is This grassland occupies a large shallow depression partially submerged in water. There are three different successional stages of this grassland depending on the presence of water and the impact of grazing.

One area represents the drier edge of the grassland accessible to grazing for only part of the year. Red tussock here is dense, with more than 75% cover, which includes patches with shorter species such as Poa colensoi and Celmisia lyalii. Species of Dracophyllum uniflorum and Dracophyllum pronum are also present. Another area represents a part of the grassland which is still too wt for sheep to enter for most of the year. C. rubra cover is up to 75% and species diversity is low, which is natural for unmodified red tussock grasslands. The main feature of these grasslands is a thick layer of mosses. The third area represents a more boggy part of C. rubra grasslands, with the presence of Schoenus pauciflorus, Carex, Oreobolus pectinatus, Drosera arcturi and other small wetland species.

2.5 **FAUNA**

On Glentanner Station the New Zealand falcon is widespread and juveniles have been sighted on the property. The kea and rock wren have also been recorded at higher elevations. The braided riverbeds of the Tasman are a valuable habitat for river birds such as black stilt, pied stilt, wry bill, banded dotterel, black-fronted tern, Caspian tern and South Island pied oystercatcher. These birds have also been frequently sighted on Glentanner itself on the wetland and moraine areas that adjoin the Tasman riverbed. Some 47 species of bird have been recorded on the property. Pipits are common in the tussock grasslands, while the shrublands and bush remnants host the rifleman, pied fantail, grey warbler and tomtit, along with the New Zealand wood pigeon which has been seen feeding on Coprosma berries. Other birds that have been frequently observed are pukeko, paradise shellduck,

bittern, mallard duck, black teal and white faced heron, marsh crake and shoveller duck.

Glentanner swamp and Aclands Lagoon host a range of bird species. Glentanner swamp is important for black stilt, and during the 1995/96 season three pair of black stilts nested in the swamp. marsh crake have also been heard and recorded at both areas. The swamp and lagoon compliment the braided Tasman Riverbed and there is a lot of movement between the areas.

The common gecko and common skink are widespread. The jewelled gecko has been recorded in the shrublands along the shores of Lake Pukaki and near to the Tasman riverbed. The jewelled gecko has a limited distribution and is considered to be relatively rare.

The invertebrate fauna of Glentanner is largely unknown but from the January surveys, three species of short-horned grasshopper were recorded and one species of long-horned grasshopper. Six endemic butterflies were also observed on the property and are relatively common throughout, along with a number of moths. Other invertebrate fauna include dragonflies, one ground weta, numerous spiders and a black tunnelweb spider was found in the tussock country above the Glentanner homestead.

Two species of native freshwater fish have been found in the waterways of Glentanner Station. These are the koaro which is found in the streams and also the outlet stream of Aclands Lagoon, and the streams of Glentanner Swamp. It is also The upland bully was also found in similar common in the Tasman River. situations and is very plentiful in the Tasman River and throughout the Mackenzie Basin.

2.6 HISTORIC VALUES

Glentanner was settled in 1858 and became part of what was known as the "Ferry Run" which later became part of Ben Ohau. In 1884 the property was sold to a George Thompson who died in Lake Pukaki the following year. Between then and 1911 the property was sold and resold several times.

In 1911 Glentanner was divided into three parts, Ferintosh, Glentanner and Birch Hill. Birch Hill continued to be part of Glentanner until Mt Cook National park was gazetted in 1953. In 1949 the original homestead was burnt down. Glentanner lost a considerable amount of its lowland country when Lake Pukaki was raised for the hydro electric development. The only feature of historical interest is the grave of John Brown, near Aclands Lagoon.

2.7 RECREATION

2.7.1 Physical Characteristics

The environs of Glentanner Station are well known to travellers and tourists alike. State Highway 80, which traverses the property on its way to Mount Cook. provides a setting above Lake Pukaki and the Tasman Glacier with its foreground of glacial terraces and alluvial fans and wide braided stream mouths that flow into the Tasman River. Above State Highway 80 the topography is steep and rugged. The front faces rise sharply to approximately 1200 - 1300 metres while the balance of the property and the POL is extremely rugged. The majority of the land is class seven and eight country.

2.7.2 Public Access

State Highway 80 is the only formed legal road which passes through the property. Remnants of the old Mount Cook highway exist below State Highway 80 and in places forms a margin along Lake Pukaki or above the Tasman riverbed. There is legal access into the three enclaves of conservation land beyond the proposed surrender line on the property. One enclave in the middle reaches of Fred Stream has an unformed legal road running into it while in all the other areas access is by way of the marginal strips. These are Birch Hill, with a marginal strip on the true right bank, Fred Stream and Bush Stream which have marginal strips laid off on either side and extend from the Tasman River up to the conservation areas. Twin Stream has marginal strips along part of its length up to the approximate PL/POL boundary line while Whale Stream has marginal strips on both banks which extend up to approximately the State Highway 80. The land that exists between these two marginal strips is Crown land.

2.8.3 Activities

State Highway 80 provides the tourists which an opportunity to appreciate much of Glentanner. This view is primarily a passive one and is orientated around Lake Pukaki, the Tasman riverbed and the magnificent vista of Mount Cook beyond. At Glentanner itself a tourist complex has been developed which has a restaurant, accommodation and an airstrip. The airstrip is a base for fixed wing and helicopter tourist trips or heliskiing trips.

There are a number of four wheel drive tracks which extend up the various streams and these are used by a number of recreationists for mountainbiking, running and These existing farm tracks which are available for recreational use can only be utilised by people who obtain permission from Glentanner Station. While the primary focus to many people are the recreation activities in Mount Cook National Park, Glentanner certainly provides a number of recreational opportunities. Recreational use has been increasing over the last few years and Glentanner Station has held a recreation permit for heliskiing over the POL for a number of years. There are a number of runs that are utilised in the right conditions. The faces and ridges on the POL provide climbers with a number of

RELEASED UNDER THE OFFICIAL INFORMATION ACT

high quality climbs with a high degree of technical difficulty. A crag in Twin Stream offers a good training ground for rock climbing, about an hour's walk from SH80. the POL/Pl offer hill walking opportunities and some excellent tramps.

PART THREE: CONSULTATION AND DISTRICT PLAN

3.1 CONSULTATION

An NGO meeting was held in Timaru on 28 November 1996. At this meeting, attended by a variety of NGOs the following comments were made:

- The POL and pastoral lease should be dealt with as part of the tenure review process.
- All the POL should go to DOC.
- Thee needs to be good access up Fred Stream.
- The question was raised about whether the grazing licences in Mount Cook National Park were being dealt with as part of tenure review.
- It is an appropriate opportunity to deal with uncontrolled cattle grazing in the Tasman riverbed.
- There are high tourism values and that the Crown could lose out if the area is evaluated only on a grazing value basis and that the commercial values would need to be assessed under the Land Act.
- The camping ground is one of the most hazardous areas because of river flooding.
- The Acland Lagoon and its outlet stream are particularly valued angling streams which should have marginal strips laid off.

3.2 DISTRICT PLAN PROVISIONS

Glentanner lies in the Mackenzie District, whose district scheme became operative in 1986. The scheme identified that nearly all of the property lay within the rural 1 zone which is a general farming zone. The purpose of the zone is to provide for all land uses that are appropriate in the rural area and to protect land from effects that would or might limit its suitability for agricultural production. This zone allows for agricultural and pastoral production, some forestry up to a maximum of 50 hectares and all activities in the zone area required to have regard to soil productivity, soil management, erosion control, river protection and scenic amenities. A strip along the upper part of the property along the POL/PL boundary has been identified as rural 2 (erodible high country). The Mackenzie District Scheme has now become a Transitional District Plan due to local government restructuring. The new plan has been publicly notified and submissions are being analysed. The plan is expected to be open to further submissions in September. As notified, the Plan controls vegetation clearance (including burning), pastoral intensification, exotic tree planting, building and earthworks and tracking above 900m altitude.