Toitu te Land whenua Information New Zealand

# Crown Pastoral Land Tenure Review

## Lease name : SHINGLEY CREEK

## Lease number : PO 034

## Conservation Resources Report - Part 1

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.

May 06

# DOC CONSERVATION RESOURCES REPORT ON TENURE REVIEW OF SHINGLEY CREEK (P 34) UNDER PART 2 OF THE CROWN PASTORAL LAND ACT 1998

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# PART 1: INTRODUCTION

The lessees of Shingley Creek Pastoral Lease (PL), Otago Farms Limited, have applied to the Commissioner of Crown Lands for a review of the property's pastoral lease tenure.

The 816 hectare Shingley Creek PL is located close to SH85, about 45 km north-west of Palmerston. The PL occupies the Siberia Creek Catchment on the south-western side of the Kakanui Mountains. Shingley Creek PL rises from about 600m near the highway to almost 1200m on the spur between Shingley Creek to the west and Waddells Creek to the east. Topography ranges from steep hill country to strongly rolling downlands. The eastern boundary coincides with the western limits of The Dasher PL.

Shingley Creek PL has no road frontage. The PL is currently run in conjunction with an adjoining farm of approximately 1600ha, used primarily as a summer run-off block. The property has a history of over sowing and top dressing.

The PL lies in the Dansey Ecological District within the Kakanui Ecological Region. A Protected Natural Area Programme Survey has been carried out for the Dansey Ecological District (Comrie 1992). The PNAP survey included flora and invertebrate surveys. No Recommended Areas for Protection (RAP's) were identified on this property and no part of the lease is subject to protection.

A tenure review inspection of Shingley Creek PL was undertaken on 27 January 2003 by a range of specialists. Their findings are incorporated in this report.

# PART 2: INHERENT VALUES: DESCRIPTION OF CONSERVATION RESOURCES AND ASSESSMENT OF SIGNIFICANCE

## 2.1 LANDSCAPE

The Shingley Creek PL lies on the western side of the Kakanui Mountains. The Kakanui Mountains form the northern extent of Otago's distinctive fault 'block' mountains and rangelands but in many respects are more typical of the angulated mountains found in Canterbury. The skyline above Shingley Creek, for example, is strongly serrated with numerous high peaks.

Methodology

For this assessment, Shingley Creek PL has been divided into two landscape units (LU) as shown on Map 4.2.2. The boundaries are defined principally by changes in topography, aspect and ground cover.

- Siberia Creek (LU1)
- Balance of lease (LU2)

Each landscape unit is defined, and a description of landscape character in terms of landform, land cover and land use is given. An assessment of landscape values is made using the following criteria:

- Naturalness –an expression of the degree of indigenous content of the vegetative cover, and the extent of human intervention.
- Legibility –an expression of the clarity of the formative processes and how striking these physical processes are.
- Aesthetic values –includes the concepts of memorability and naturalness. Aesthetic factors that can make a particular landscape vivid include simplicity in landform, muted colours and fine textured ground cover.
- Historical values – areas containing high heritage importance.

A description of visual values or "visual amenity" is given. An assessment of each landscape unit's vulnerability to change is made.

### 2.1.1 Siberia Creek (LU1)

Description

This landscape unit incorporates all the upper and middle sections of Siberia Creek.

Siberia Creek catchment is relatively enclosed, surrounded by ridgelines that drop gradually towards hill country in the southwest. Siberia Creek has its origins approximately 250m below the summit of Obi (1,425m) which sits on a craggy ridgeline at the southern end of a series of high peaks. The Kakanui Mountains then descend to the lower Horse Range.

Dominant features of the catchment include:

- a bowl-like head basin characterised by substantial rocky formation and localized slumping;
- an extensive area of wind erosion in the eastern corner of the head basin below high point 1,140m;
- infrequent rock groupings which jut out from the side slopes;
- mid section slopes which are rounded and smooth due to the accumulation of colluviums – a characteristic most pronounced on the upper and lower section of the slopes

The side slopes of the head basin converge into a narrow valley floor where Siberia Creek is contained within a U-shaped channel. Siberia Creek meanders around a series of rocky side spurs and alluvial terraces through which there is occasional bank undercutting. A series of tributaries drain into Siberia Creek, the largest from extensive catchment area at the southeast corner of the lease. Siberia Creek connects with Pigroot Creek in the NW corner of the property, close to State Highway 85.

Dominant vegetation in the upper section of the catchment is tussock land which is generally intact on shaded slopes but depleted on sunny slopes. Vegetation in the mid section of Siberia Creek catchment is relatively modified. Upper side slopes are clad in silver tussock, corresponding drier slopes in a mosaic of browntop, hawkweed and short matagouri, and darker side slopes in a mixture of pasture grasses. The valley floor is also dominated by pasture grasses, apart from the gravely terraces, which are covered in dense hawkweed and occasional matagouri. Shrublands line the main watercourse.

Landscape Values

Parts of this landscape unit form a fundamental component of a larger high country landscape. The unit is representative of the landscape values typical of

the western flanks of the Kakanui Mountains. These constant and repetitive characteristics include:

- A "finely grained" landscape with a strong coherence in the grasslands.
- Uniformity in colour and texture of the ground cover.
- Simplicity of the rounded landforms in the foreground, contrasting with the serrated ridge crests of the Kakanuis.

Visual Values

From a visual and landscape perspective, the upper Siberia Creek Catchment's homogenous qualities enhance the natural characteristics of the Kakanui Mountain's western flank. The upper section of the head basin has a significant resource value as the head basin, eastern ridgeline and the slopes of Obi are visible from State Highway 85.

Vulnerability to Change

The unit is sensitive to change, with threats including:

- Spread of wilding pines.
- Afforestation on the mid and high side slopes.
- Further infestation of hawkweed.
- Fragmentation of the coherent landscape through further subdivision.
- Unsympathetic earth disturbances over the drier and visually conspicuous slopes.
- Unsympathetic siting and colour of installations on sensitive skylines.

### 2.1.2 Balance of lease (LU2)

Description

This unit encompasses the balance of the pastoral lease. The unit is bounded to the east by the long ridgelines that extend down from the Kakanui Mountains. To the west the dominant landform is the broken foothills that lead down to the Shag River valley floor. The side slopes of these lower hills are generally constant with rounded crests and concave bases. Two main valleys are separated by high point 732m. Each contains a permanent watercourse that drains directly into the Pigroot Creek. The largest of these two side valleys contains extensive rock formations on the north-facing slope.

This front country on the pastoral lease has been subdivided into several small grazing blocks for both sheep and cattle, and the vegetation is relatively modified. Spasmodic silver tussocks grow on the crests and shady sides of the foothills, but pasture grasses and legumes dominate the unit. Dry knolls are frequently clad in hawkweed and damp areas of the valley floor tend to support cutty grass, Maori onion and leafless rush.

Landscape Values

This unit has limited landscape values due to the extensive modifications to the native vegetation and the lack of distinctive landforms.

Visual Values

This unit has a limited visual resource value, being obscured by the freehold slopes and Pigroot Hill in the foreground.

Vulnerability to Change

The major threat to the existing pastoral character of this unit would be unsympathetic afforestation.

### 2.1.4 Significance of the Landscape

From a landscape perspective this property contributes to inherent values within the high country as part of a contiguous landscape. The summit and head basin areas are an integral component of the high country landscape. The overall landscape characteristics of the PL typify the western flank of the Kakanui Mountains. This landscape is highly visible from SH85.

The front country on Shingley Creek has been transformed into semi-intensive farmland owing to its easy access, mid -altitudinal range and gentle terrain. The steeper side slopes that extend down from Obi still convey an overall impression of being natural, although the grasslands have a high component of exotic species.

## 2.2 LANDFORMS, GEOLOGY AND SOILS

### 2.2.1 Landforms and Geology

The Kakanui Mountains, one of several uplifted and tilted fault blocks in Central Otago, were formed by reverse faulting along the NW-SE trending Waihemo fault system. This fault block comprises a steep front or scarp descending into the Shag Valley and Maniototo Plain, and a gently inclined back slope descending gradually eastward toward the Waitaki River. This gently inclined back slope is believed to be a surface formed under the periglacial climatic conditions and may in places be parallel, but much lower, to a former stripped Cretaceous peneplain surface.

The Kakanui Mountains are unusual in that they are part of a major South Island divide stretching from the east coast to the Main Divide. The east-west axis of these mountains together with the eastern extremities (Horse Range) descending towards the coastline, is distinctive.

Two distinct topographical and altitudinal units are visible on the PL. These include upper steeplands of dissected catchments and a small area of broad ridges ranging from 760m to 1270m, and steeper hill country and rolling downlands below about 760m.

The following three geological sections are found on the property.

- Chlorite 3 schist, a poorly foliated metamorphic rock, is the parent material of the upland areas.
- Dark greywacke and argillite sedimentary rocks are the parent materials of the downlands and rolling hill country.
- Sedimentary plus volcanic areas, which occur where sedimentary rocks have been eroded, exposing small underlying hard volcanic rocks. These in turn form a cap over soft limestone and sandstones.

### 2.2.2 Soils

Soil types found on the lease reflect the greywacke parent materials of the Kakanui Mountains and the basaltic nature of Obi and the volcanic Hectors Plateau area. Natural nutrient status varies from medium to low.

### 2.2.3 Significance of landform and geology

No geopreservation sites are located on this property. Geology and soils are largely typical of steepland areas of the Kakanui Mountains. The basaltic nature of Obi and the Hectors Plateau is evident in some soil types and characteristics.

## 2.3 CLIMATE

Shingley Creek lies in the transition between the distinctive coastal Otago and Central Otago climates.

Annual rainfall as measured on a neighbouring property is approximately 600mm at the homestead and increases to approximately 900mm at the top boundary. Frequent NE fog conditions occur in the higher reaches of the property. The wettest months are January and August.

Winters are cold with severe frosts. Snowfalls are common on the higher altitude areas of the property and lies above 950m for most of the winter months. Snow may blanket the entire property for limited periods.

Drying NW winds through Pigroot Pass and southerly winds on the exposed top country are the predominant winds affecting the property.

## 2.4 VEGETATION

A list of vascular plant species is given in Appendix One. Three main vegetation types were recognised on the Shingley Creek PL. These were:

- Pasture which is predominant in the lower elevations of the pastoral lease
- Shrubland which occupies much of the riparian zone and flood terraces of Siberia Creek linking to tussock grasslands
- Snow tussock grassland which is dominant above approximately 640m

### 2.4.1 Pasture

At the lowest elevations on the PL, the flood terraces of Siberia Creek and adjacent gently-sloping fans carry pasture dominated by sweet vernal (*Athoxanthum odoratum*), browntop (*Agrostis capillaris*), Yorkshire fog (*Holcus lanatus*), and white clover (*Trifolium repens*). Many herbaceous weeds are present, including Californian thistle (*Cirsium arvense*), sheep's sorrel (*Rumex acetosella*), yarrow (*Achillea millefolium*), woolly mullein (*Verbascum thapsus*), and hawksbeard (*Crepis capillaris*). Rautahi (*Carex coriacea*) and

rushes (mainly *Juncus gregiflorus* and *J. effusus*) are common on damp ground, and permanently wet substrate at stream sides also carries jointed rush (*Juncus articulatus*), toad rush (*J. bufonius*), musk (*Mimulus moschatus*), and curly dock (*Rumex crispus*). The tussock sedge purei (*Carex secta*) is present with these species on a boggy flush in the pasture.

Lower hillsides support pasture of similar composition, but with a variable abundance of silver tussock (*Poa cita*) and scattered shrubs and stands of matagouri (*Discaria toumatou*). A large kowhai (*Sophora microphylla*) tree was also present. Mouse-eared hawkweed (*Hieracium pilosella*) and a few native species, predominantly *Raoulia subsericea*, danthonia (*Rytidisperma gracile*), *Geranium microphyllum*, and the bidibidi *Acaena caesiiglauca*, were recorded on the farm track and other disturbed and sparsely vegetated areas. Blue tussock (*Poa colensoi*), hard tussock (*Festuca novae-zelandiae*), and scattered small snow tussocks (*Chionochloa rigida*) are present in pasture above about 640 m elevation on shady aspects.

### 2.4.2 Shrubland

A band of shrubland dominated by matagouri occupies much of the riparian zone and flood terrace of Siberia Creek and its tributaries. Associated shrub species include *Olearia bullata*, *Carmichaelia petriei*, briar (*Rosa rubiginosa*), *Coprosma propinqua*, and *C. rugosa*, and there are areas of vines including *Clematis marata*, pohuehue (*Muehlenbeckia complexa*) and lawyer (*Rubus schmidelioides*). Tutu (*Coriaria sarmentosa*) is present, and there are a few shrubs of koromiko (*Hebe salicifolia*) and rare *H. rakaiensis*. Ground vegetation is predominantly pasture species and silver tussock, with occasional golden Spaniard (*Aciphylla aurea*) and snow tussock, mainly along the tops of terrace scarps.

Matagouri is sparse and the small-leaved tutu (*Coriaria plumose)* abundant on bouldery stream terraces, along with patches of mouse-eared hawkweed (*Raoulia tenuicaulis)*, and carpets of *Muehlenbeckia axillaris*.

The more incised upper reaches of the main creek carry similar shrubland, but with mountain flax (*Phormium cookianum*) and occasionally the large Spaniard *Aciphylla scott-thomsonii* being carried. Ground vegetation here has much prickly shield fern (*Polystichum vestitum*), and some kiokio (*Blechnum novae-zelandiae*) and *Hypolepis millefolium*. Species from higher elevations also occur, for example the mountain daisy *Celmisia densiflora* and the small shrubs *Gaultheria crassa* and *Pimelea pseudolyallii*.

### 2.4.3 Snow Tussock Grassland

Snow tussock is the dominant plant of grassland above about 640 m elevation, with cover varying from less than 20% on lower sunny aspects to almost 100% on upper shady aspects. Mouse-eared hawkweed and bare ground are prominent between snow tussocks on sunny faces. There is more or less continuous plant cover on shady faces, where sweet vernal and browntop generally dominate inter tussock vegetation. Coral broom (*Carmichaelia crassicaule*) is a notable feature here, where there are scattered plants and occasional small stands of the species.

Above about 1,000m elevation, more native plant species become evident. Characteristic small shrubs include turpentine shrub (*Dracophyllum uniflorum*), *Gaultheria crassa*, *Pimelea pseuodolyalli*, and porcupine shrub (*Melicytus alpinus*). *Hebe buchananii*, *H. lycopodioides*, *Myrsine nummularia*, and tauhinu (*Ozothamnus leptophyllus*) are less common. Herbaceous species include *Celmisia densiflora*, false Spaniard (*Celmisia lyallii*), golden Spaniard, *Kelleria dieffenbachii*, *Anisotome flexuosa*, tussock hawkweed (*Hieracium lepidulum*), and the grasses blue tussock and *Rytidosperma pumila*.

Boulderfields near the top of the catchment support similar but sparse vegetation, additionally with scattered shrubs of *Coprosma parviflora* var. *dumosa*, the ferns *Blechnum penna-marina* and *Hypolepis millefolium*, and prickly shield fern.

### 2.4.4 Problem Plants

Shrubland: Briar is presently the only notable pest plant species but is an insignificant element of the shrubland.

Snow tussock grassland: Mouse-eared hawkweed (*Hieracium pilosella*) and tussock hawkweed (*H. lepidulum*) are well established, the former is very prominent in snow tussock grassland. Broom (*Cytisus scoparius*) is present as scattered plants beside farm tracks. Wilding conifers, probably radiata pine (*Pinus radiata*), are scattered across the property.

### 2.4.5 Significance of Vegetation

The following plant species recorded on Shingley Creek PL are listed by Hitchmough (2002) as being threatened: *Hebe buchananii* (range restricted); *Clematis marata*, *Olearia bullata*, *Pimelea pseudolyallii* (sparse); and *Carmichaelia crassicaule* (gradual decline).

The vegetation of Shingley Creek PL is typical of the western side of the Kakanui Mountains, and is representative of the Dansey Ecological District as described by Comrie (1992). Some nearby areas identified as Recommended Areas for Protection (RAP) by Comrie (1992). for example RAP 6: Kakanui Peak and RAP: 5 The Dasher, contain snow tussock grassland similar to that of the Shingley Creek PL. No Dansey Ecological District RAPs contain low elevation shrubland, which is a characteristic vegetation type of the area. Shrubland on Shingley Creek PL is moderately diverse, is reasonably natural and in good condition. With protection from grazing, the abundance of presently uncommon palatable plants, such as koromiko and *Hebe rakaiensis*, will increase.

## 2.5 FAUNA

### 2.5.1 Invertebrate Fauna

A brief inspection of terrestrial invertebrate values was undertaken. The various vegetation communities of the PL were not extensively sampled. Two specimens of the large and brightly coloured mountain weta (*Hemideina maori)* were found beneath rocks on the ridgeline which forms the eastern boundary of the station, at 1250m.

#### Significance of Invertebrate Fauna

The presence of the mountain weta is significant biogeographically as no previous records of the species are known for the Kakanui Mountains. This find extends the known range of this weta. The species is widespread, but localized, in Otago and Canterbury and in most locations it is restricted to the alpine zone. The species has since also been located on the neighbouring PL, 'The Dasher'.

### 2.5.2 Herpetofauna

There are no previous lizard records for Shingley Creek PL. Ground searches were undertaken throughout the Shingley Creek property during the tenure review inspection. Particular attention was paid to boulder scree at higher levels. Three species of lizards were found on the property: the gecko *Hoplodactylus sp.* 'Otago' (Hitchmough, 1997), and the skinks *Oligosoma chloronoton* (Hardy) and *O. maccanni* (Hardy). *Hoplodactylus sp.* 'Otago' and *O. maccanni* were abundant among rock outcrops and boulder scree from the lowlands up to 1100m (gecko) and 1250m (skink). *O. chloronoton* was found

at two sites, between 1100-1250m, again in association with boulder scree and rock outcrops.

### Significance of Herpetofauna

*Hoplodactylus sp.* 'Otago' is relatively common but shows a high degree of geographic variation across its range. The form of *Hoplodactylus* found on Shingley Creek PL is representative of the form "Kakanui/Horse Range" (see Hitchmough, 1997). This form is found only in the Kakanui Mountains, and so the populations on this property are representative of a geographically restricted variation on the species.

The green skink *O. chloronoton,* is classified as a chronically threatened species in gradual decline (Hitchmough, 2002). It is restricted to localized populations in Otago and Southland. The taxonomy of green skinks is not clear (Whitaker *et al.* 2002). Although only one species is currently recognised in Otago and Southland there is likely to be a complex of more than two species, some of which are seriously threatened (R. Hitchmough, *pers. comm.*).

Green skinks have declined significantly as a result of human influence through habitat destruction and the introduction of mammalian predators. Threats include habitat modification through browsing and burning, predation, destabilisation of screes by grazing animals and shrubland fragmentation which removes cover and increases the risk of predation and poaching.

### 2.5.3 Avifauna

Table 1 lists bird species seen or heard during this survey of Shingley Creek PL. None of the bird species identified are considered to be threatened species.

Table 1: Bird species recorded on Shingley Creek PL. Exotic species are denoted by an asterisk.

| Species | Common name |
|---|---|
| *Circus approximans* | Harrier |
| *Carduelis flammea** | Redpoll |
| *Fringilla coelebs** | Chaffinch |
| *Ardea novaehollandiae* | White-faced heron |
| *Turdus merula** | Blackbird |
| *Turdus philomelos** | Thrush |
| *Zosterops lateralis* | Silvereye |

### 2.5.4 Aquatic Fauna

No previous freshwater fish records for Shingley Creek PL were found on the National Institute of Water and Atmospheric Research Freshwater Fish Database.

During this survey four sites on Pigroot Creek and Siberia Creek were sampled (Table 2). Each site was sampled using a backpack electric fishing machine using defined criteria (Allibone, in prep). Habitat measurements were taken and recorded as set out in a NIWA freshwater fish data form. In-stream invertebrates were noted when they could be identified during electric fishing survey, but no specific collection was undertaken.

Predominant catchment and riparian margin vegetation was grassy farmland with areas of scrub and tussock which provided variable fish cover. Survey sites were dominated by pool-run-riffle habitat with gravel, cobble and boulder substrate in varying proportions. Average stream wet zone width ranged from 0.86 – 2.34m, and average depth from 0.07 – 0.21m. In all sites water quality was relatively high and bottom fauna was low to moderate. Predominant species were the mayflies *Ameletopsis* and *Deleatidium* and the horny-case caddis (*Olinga feredayi*).

Flathead galaxias (*Galaxias depressiceps*) and brown trout (*Salmo trutta*) were recorded on the lease (Table2). Flathead galaxiid were present at all sites surveyed. Siberia Creek was surveyed at three sites. Fish numbers ranged from abundant in the Siberia Ck (1) site where a large shoal of juveniles was also seen, to rare in one of the Siberia Creek tributaries. This galaxiid population is currently compromised due to the presence of brown trout, which were present at two Siberia Creek sites. The Pigroot creek site was affected by siltation. Flathead galaxiid were common at the Pigroot Creek site and, notably, brown trout were absent.

Table 2 Site Details for Aquatic Fauna Survey

| Site Fished (Grid reference) | Species Present | Abundance |
|---|---|---|
| Siberia Ck (1) (I42 086 533) | Flathead galaxiid | Abundant |
| Siberia Ck tributary (I42 093 536) | Flathead galaxiid<br>Brown trout | Rare<br>common |
| Siberia Ck (2) (I42 093 536)<br>(below tributary junction) | Flathead galaxiid<br>Brown trout | Common<br>Rare |
| Pigroot Ck tributary (I42 088 540) | Flathead galaxiid | Common |

### Significance of Aquatic Fauna

These two galaxiid populations are significant. Flathead galaxias are ranked as a chronically threatened species in gradual decline (Hitchmough, 2002). Flathead galaxias are limited to twenty known populations of varying size in the Shag, Taieri and Waikouaiti Rivers and in a tributary of Akatore Creek just south of the Taieri River. Protection of these populations is currently limited to marginal strip protection on the upper Taieri River.

Genetic testing of the Shag River populations has shown high genetic variability. Different streams in the catchment retain different sub-sets of the total genetic variation present and retention of populations throughout the catchment is required to retain the full suite of variation present.

### 2.5.6 Problem Animals

No pest animals were seen, but rabbits, hares, possums, feral cats, ferrets, stoats, hedgehogs, and rats are probably present throughout the property. These undoubtedly reduce populations of palatable native plants, native birds, reptiles and invertebrates. Vegetation damage, and the absence or low abundance of palatable plants, is attributable largely to the effects of stock. Possum control has recently been carried out using bagged 1080 pellets. Feral pigs and deer are occasionally seen on the property. Some evidence of rooting was reported during property inspections.

## 2.6 HISTORIC SITES

No known sites occur on the lease and no evidence of any has been recorded.

## 2.7 PUBLIC RECREATION

### 2.7.1 Physical Characteristics

In 1992 DOC compiled a Recreation Opportunity Spectrum for the entire conservancy whereby all areas regardless of land tenure, were classified and mapped according to setting, activity and recreational experience characteristics.

Shingley Creek PL is zoned *Backcountry Four Wheel Drive In,* which "is characterised by a feeling of relative remoteness from populated areas". The highly natural setting is a valued part of the experience and may be associated

with motivations of "escape from town, education and nature appreciation". "Four wheel drive vehicles are desirable to give access to high country tussock lands and block mountains and more rugged remote areas".

A Federated Mountain Clubs publication titled *Outdoor Recreation in Otago – A Recreation Plan* (Mason 1989) includes land on Shingley Creek PL above 900m in a "natural experience" zone. In this zone Mason recommended that for recreational purposes no approvals be given for further fire breaking or vehicle access tracking within the alpine natural experience zone. The remainder of the property lies in an area zoned "open space" which includes tussock grassland from 600m. The key recommendations for this area were "to maintain an undeveloped and open appearance" through control of earth disturbance, forestry and cultivation, and that "Public foot access easements be provided at convenient locations... to future reserves and surrendered high country".

### 2.7.2 Legal Access

The location of legal roads and marginal strips on or adjoining the PL is shown on Map 4.2.1. Practical access to the lease is currently gained through surrounding freehold property, with the owner's permission. An unformed legal road runs off SH85 along the southern boundary of the lease, and runs inside the eastern boundary before exiting the lease just below Obi. Marginal strip exists on the section of Siberia Creek between SH85 and the western boundary of the lease.

### 2.7.3 Activities

A formed farm road runs within the eastern boundary of the property (see Map 4.2.3). With permission as appropriate, this route provides relatively easy access to the Kakanui Mountains.

Recreational opportunities include:

- One or multi day recreational opportunities in the Kakanui Mountains on foot, horseback and mountain bike.
- One day walking round trips using formed track to Obi and returning along northern and southern boundaries and multi day walking trips.
- Formed farm road access to Obi and continuing on over Hectors Plateau which provides access to features such as Siberia Hill, Kakanui Peak, Mt Dasher, and Mt Pisgah

- Opportunities for backcountry ski touring trips along the crest of the Kakanui Mountains when snow cover is sufficient
- Use of farm tracks by 4WD, trail bike riders and MTB riders traversing the property from the Waitaki valley to the Pigroot.
- Access for pig and deer hunting dependant on current status of populations in the area.

# PART 3: OTHER RELEVANT MATTERS & PLANS

## 3.1 CONSULTATION

Shingley Creek PL was discussed at an NGO early warning meeting held in Alexandra on 21st September, 2002 and at a further NGO meeting held in Alexandra on 22nd May 2003. NGO representatives have also inspected the property. The main points raised during the meeting were:

Public Access New Zealand (PANZ)

- The walk over the range via Obi was of good quality and TR provided the chance to secure public access along this route.
- TR should result in integrated access with adjoining properties
- Access from the Pigroot is the best route to the top of the Kakanui Mountains. Access up both the northern and southern boundary would create a good round trip.
- Given the property's proximity to the main road, with car parking, marking and signage of routes there is considerable potential for an increased use of the area.

Royal Forest and Bird Protection Society (F&B)

- Access up the spur on the lease's northern boundary in combination with access up the southern boundary would provide for a good round trip. Vehicle access to as near as possible to Siberia Creek would be a good outcome from the review. The views from Obi are spectacular.
- Access up the southern boundary of the lease to the Kakanui Mountains is a possibility

F&B also made a written submission. A full copy is attached as Appendix Two. The key findings and recommendations (abbreviated) of that submission are:

- Climate is quite different (wetter) to other parts of the Otago mountains due to frequent fog conditions. Subsequently, the area supports different and more varied vegetation types. Climate and

geological formations give this area unusual and outstanding landscape values.

- Siberia Creek headwaters area to be fenced off and returned to the Crown in recognition of the valuable tussockland and riparian shrubland found in that area

- The vegetation in upper north eastern area of catchment on boundaries of Mt Dasher and The Dasher contains a variety of alpine plants not seen at such low altitude elsewhere in Otago.

- Access is an important issue. The legal road could be realigned with the formed road and provision for car parking made at the foot of the hill. Access is required through neighbouring property to south west corner of lease and through Shingley Creek Pl to Siberia Creek

- Marginal strip up Siberia Creek will be required as part of the review process

Federated Mountain Clubs (FMC)

- Track to the old ski field in the Kakanui Mountains near Kakanui Peak could be used as a circular day walk.
- TR outcomes on this pastoral lease should be viewed in relation to Islay Downs

FMC also provided a preliminary report on recreational and related significant inherent values on the property. A copy is included as Appendix Three. The key findings and recommendations (abbreviated) of the report are:

- Formal public access to the range top via Shingley Creek needs to be established through tenure review

- A small area between the catchments of Siberia Creek (on Shingley Creek Station) and Waddells Creek (on The Dasher) has significant inherent value and should be returned to full Crown ownership and control and be managed for conservation and recreational purposes.

- The tenure review of Shingley Creek should be undertaken in the context of an overview of the entire network of recreational opportunities in the Kakanui Mountains which should be developed now. Decisions taken for Shingley Creek must be appropriate in relation to recreational outcomes for other nearby tenure review properties.

- FMC members noted evidence of rooting pigs on the property

General

- This is only a small property and outcomes of tenure review on Kinross, Mt Dasher and Mt Stalker are relevant to this property

- If access to Kakanui peak is an outcome of the Islay Downs review, a good round trip would include Obi and return to the Pigroot Highway via a track on the southern boundary of Shingley creek

- Need secure legal access over the track leading to Obi and beyond

## 3.2 REGIONAL POLICY STATEMENTS & PLANS

**(a) Regional Policy Statement.** The Regional Policy Statement for Otago provides a policy framework for all of Otago's significant regional resource management issues. It does not contain rules. District Plans shall not be inconsistent with the Regional Policy Statement.

In respect of natural values the Regional Policy Statement includes the following policy and method:

Policy: "To maintain and where practicable enhance the diversity of Otago's significant vegetation and significant habitats of indigenous fauna, trout and salmon..."

> Method: "Identify and protect Otago's significant indigenous vegetation and significant indigenous habitat of indigenous fauna, trout and salmon, in consultation with relevant agencies and with Otago's communities".

In respect of landscapes and natural features it includes the following policy and method:

Policy: "To recognise and provide for the protection of Otago's outstanding natural features and landscapes."

> Method:" Prepare in conjunction with relevant agencies and in consultation with the community and affected landowners, an inventory of outstanding features and landscapes that are regionally significant."

## 3.3 DISTRICT PLAN

The property is located within the Rural Scenic Zone of Waitaki District Plan. In general, the proposed Waitaki District Plan (amended to incorporate Council decisions) does not act as a trigger for the protection of tussock grasslands and smaller wetlands and forest areas. No indigenous vegetation clearance or exotic tree planting is allowed within 20m of a water body or in any wetland. There are effectively no provisions that protect scenic values.

There are no registered archaeological sites, or areas of significant indigenous vegetation and habitat of significant indigenous fauna as set out in the appendices of the plan. Protection is limited to the controls set out above.

## 3.4 CONSERVATION MANAGEMENT STRATEGY & PLANS

The Otago Conservancy of DOC has prepared a Conservation Management Strategy (CMS) which was approved by the New Zealand Conservation Authority in August 1998. The CMS identifies 41 special places of conservation interest in Otago Conservancy. This list includes the Kakanui Mountains Special Place which incorporates Shingley Creek.

The CMS objectives for the Kakanui Mountains Special Place relevant to Shingley Creek are:

*"To maintain the natural resources contained within the existing protected areas on the Kakanui Mountains while taking opportunities that may arise through pastoral lease tenure review to negotiate protection of and access to areas of high natural and recreational value"*

The key implementation methods relevant to Shingley Creek are:

- Foot access negotiated at key points for the public to areas managed by the Department, with public vehicular access having a lower priority
- Resource information that assists management of existing areas administered by the department or assists pastoral lease tenure review discussions will be gathered
- Protection of key areas for natural and historic resources will be sought through pastoral lease tenure review negotiation opportunities

Priorities for the Kakanui Special Place are:

*In this special place, tenure review negotiations and wilding pine control will be the priority method for implementing the objective during the course of this CMS*

## 3.5 NEW ZEALAND BIODIVERSITY STRATEGY

The New Zealand Government is a signatory to the Convention on Biological Diversity. In February 2000, Government released the New Zealand Biodiversity Strategy which is a blueprint for managing the country's diversity of species and habitats and sets a number of goals to achieve this aim. Of particular relevance to tenure review, is goal three which states:

- *Maintain and restore a full range of remaining natural habitats and ecosystems to a healthy functioning state, enhance critically scarce habitats, and sustain the more modified ecosystems in production and urban environments, and do what is necessary to:-*

- *Maintain and restore viable populations of all indigenous species across their natural range and maintain their genetic diversity.*

The strategy outlines action plans to achieve this goal covering terrestrial and freshwater habitat and ecosystem protection, sympathetic management, pest management, terrestrial and freshwater habitat restoration, threatened terrestrial and freshwater species management, etc.

# PART 4: MAPS ETC.

## 4.1 ADDITIONAL INFORMATION

### 4.1.1 References

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### 4.1.1 Appendices

**Appendix One:** Vascular Plant Species List for Shingley Creek Pastoral Lease

**Appendix Two:** Royal Forest and Bird Protection Society of New Zealand Incorporated – Submission

**Appendix Three:** Federated Mountain Clubs of New Zealand (Inc.) – Submission

## 4.2 ILLUSTRATIVE MAPS

4.2.1 Topographic and cadastral boundaries;
4.2.2 Landscape units and significant inherent landscape values; and
4.2.3 Ecological, historic and recreation resources