Motorised Access onto the Pisa Range: Issues and Options

Background

Some 17,000 ha on the Pisa - Criffel Ranges are now managed by the Department of Conservation as public conservation land and reserves. Completion of further tenure reviews is likely to result in the entire range crest of the two ranges retuming to full Crown ownership.

Use of motorised transport, whilst enabling a wide range of people to enjoy the area's scenic and recreational qualities, has led to damage of fragile environments. Some passive recreational users have expressed a preference for the area's intrinsic qualities to be protected by means of an exclusion of or a limit on motorised recreation. A number of neighbouring landowners are unhappy that vehicle owners have trespassed from adjoining public conservation land onto private land causing disruption to farming practices, damage to tracks. In some cases vandalism of private property has occurred.

In winter months, snow mobiles can impact on the enjoyment of the area by ski tourers who have traditionally enjoyed the ranges wilderness qualities over winter and spring, when the entire range crest is inaccessible to most forms of motorised recreation.

It is therefore timely to circulate a paper outlining issues and options associated with vehicle on the ranges and to seek Comment from interested stakeholders.

Introduction

This report is broken into twelve sections:

(i) The Resource
The physical nature and extent of the Pisa Range/Criffel Ranges is described and a brief summary of conservation features present.
(ii) Land Tenure on the Pisa - Criffel Ranges
The current matrix of tenure is described, including the extent of public lands administered by the Department.
(iii) Existing Public Access onto the Pisa-Criffel Ranges (legal roads, easements)
Legal access to the Pisa Conservation Area is summarised.
(iv) Negative Impacts Associated with Vehicle Use.
The vulnerability of various conservation features to vehicle damage is documented.
(v) Positive Attributes Associated with Vehicle Use
(vi) Legal Status of Vehicle Use in Conservation Areas
This section summarises what the Conservation Act (1987) says about vehicle use on conservation areas.
(vii) Proposed Conservation (Authorisations, Compliance and Enforcement) Bill
The implications of a possible law change area explored
(viii) Existing Vehicle Use on the Pisa - Criffel Ranges
The existing pattern of vehicle use on the ranges is described.
(ix) Relevant Planning Documents — What they say about vehicle access
• The Otago Conservation Management Strategy
• The Otago Conservancy Recreation Strategy
• 1992 Recreation Opportunity Spectrum
• Outdoor Recreation ln Otago » A Conservation Plan. Federated Mountain Clubs.
(x) Vehicle Access Provisions on other Central Otago Block Mountains

For the purpose of context, the availability of vehicle access to and over public conservation lands on other Central Otago block ranges is summarised.

(xi) Management Options for the Pisa-Criffel Ranges

Finally, the pros and cons of various vehicle management strategies are explored, ranging from unrestricted access to a total exclusion.

(xi) Monitoring Requirements

(i) The Resource

Landforms

This Pisa-Criffel Range complex is the highest of the block fault mountains characteristic of the Central Otago region, and one of the most distinctive land form and ecological systems in New Zealand. It includes a remarkable summit landscape of broad gently undulating slopes which in places is up to 8 km wide, falling 1700 m to the Clutha Valley floor. The Criffel Range forms part of the greater Pisa Range fault block mountain range that separates the Cardrona Valley from the Upper Clutha Valley.

Elevation ranges from approximately 450 m to 1956 m at the highest point. The extent of the ranges is defined by the Clutha River Valley to the north and Cast, while the Cardrona River Valley and Kawarau River lie on the western and southern boundaries respectively.

Two major catchments drain the area from the north and south. Luggate Creek flows into the C1utl1a River from the northern end of the range, while the Roaring Meg flows into the Kawarau River at the southern end of the range.
Numerous alpine tarns occupy cirque basins, the largest of which is Lake McKay,

Climate

The Pisa—Cr1ffel Ranges have a dry sub continental climate, somewhat typical of Central Otago.
Annual rainfall ranges from 600 mm at the Cardrona River to 1500 mm at the crest of tl1e Pisa Range. Snow lies above 1000 m for much of the winter, persisting well into the summer months at high altitude.

Vegetation

On the eastem and northem flanks of the range some forest and shrubland remnants are present. The southern flanks (Kawarau) support quite extensive shrublands characterised by a high component of exotic species. The westem (Cardrona Valley) faces are largely free of woody vegetation. Some of the most extensive remaining woodlands are protected as scientific reserves in the vicinity of Luggate Creek and the Lochar Burn.

Mid slopes generally support short tussockland which, with increasing altitude, yield to a discontinuous band of snow tussock.

Alpine cushion-fields, fell fields, blue tussocklands and scree pavements cover much of the broad summit plateau,

Numerous threatened plant species are present on the Pisa Range; for example tl1e Nationally Endangered cress Curdumine "Pisa Range" occupies rocky ledges on summit tors in the alpine zone.

Many vegetation communities are botanically significant, including cushionflelds on patterned ground, alpine tors, alpine fescue tussocklands, snow banks, herb seepages,

native shrublands and forest remnants.

Soils

Upland hygrous yellow-brown earths dominate the Pisa Range, Yellow Grey Earths are common at mid altitude, and on sunny aspects above 1000 111. Small deposits of organic soils occur on easy rolling or flat and hilly topography between 650-1200 m. Recent soils occur on the valley floors, fans and terraces.

Fauna

Insects

Several insect species present on the Pisa-Criffel Ranges are listed as threatened on the most recent classification system (Hitchmough 2002). 'I'hese include two moth species present on the Criffel range scarp and a grasshopper which inhabits the high plateau area and in the vicinity of the Criffel summit.

The upper plateau of the Pisa Range has outstanding insect conservation value on the basis of the distinctiveness and high diversity of high altitude habitats, including extensive wetland sequences.

Birds

High basins with their associated tarns are important habitat and breeding grounds for the black backed gull and South Island pied oystercatcher and the chronically threatened banded dotterel (Hitchmough 2002).
Archaeological Values

Maori

The first settlers in the region were the Maori as they travelled through Central Otago en-route to the West Coast on pounamu expeditions, as well as in search of seasonal food resources.
Maori archaeological sites are concentrated on the lower flanks of the Pisa Range. Sites indicative of early Maori occupation include an oven associated with Moa Bones near Luggate and an oven at Gibston Flat. There are no documented Maori sites in the Pisa Conservation Area (Hamel 1991).

Pastoral

Pastoral relicts in the Pisa Conservation Area are confined to boundary fences and hut sites. 'The Deep Creek Hut located at the head of Skeleton Creek dates back to at least 1891. The basic single»gabled hut with its six pane windows is still visible among the more recent surrounding additions.

Gold Mining

Gold mining occurred along a line of gold bearing quartz gravel deposits, which stretches from the Criffel up to Mt Pisa.
The area contains a myriad of gold ruining sites dating from 1885 up until the early 1900's. Key remnants can be found on the Criffel Range, Lower Luggate Creek, the Kawerau Gorge, Gentle Annie, Roaring Meg, Tuohys Gully and the Cardrona Valley. These sites include sluicings, dray tracks, huts, tent sites, dams, race complexes and sluice pits.

(ii) Land Tenure on the Pisa-Criffel Ranges

The lower and mid slopes mostly comprise farmland and pastoral land held under freehold titles. Only three pastoral leases (Robrosa, Lowbum Valley and The Larches) have not completed tenure review. A tenure review proposal for The Larches is expected to be advertised for public comment later in the year.

862 ha of Crown Land in the headwaters of Luggate Creek is subject to a special lease under Section 67 of the Land Act 1948 and is held by the owners of Midrun and . Lake McKay Stations. This area has wander at will public foot access but no right of vehicular access.

A small area comprising 327 ha of Unallocated Crown Land (expired Cardrona pastoral occupation licence) lies to the west of Lowbum Valley pastoral lease. Two areas of freehold land extend onto the crest of the Criffel Range, Mount Barker at the northem end of the range and a run known as the Smiths Block or Labrador Park north of Robrosa pastoral lease.

Land tenure of the range is depicted on Map l.Appendix 1.

Pisa Conservation Areas and Reserves

The Pisa Conservation Area currently comprises 17,041 ha of high country over looking the Southern Alps and the Upper Clutha and Wakatipu Basins. Separate Conservation Areas at Alfern Creek and Poison Creek comprise a further 74 ha of public land. Public lands and legal roads are depicted on Map l.Append.ix 1.

The Pisa Conservation Area encompasses about half of the gently west»tilted plateau of the Pisa Range and a small segment of the steep eastern fault scarp face.

The Conservation Area is cut in two by the expired Cardrona Pastoral Occupation Licence (Unallocated Crown Land) and Lowbum Valley pastoral lease.

Scenic Reserves at Locharburn, Luggate Creek and the Fall Bum add another 443 hectares to the public land network on the Pisa Range.

(iii) Existing Public Access onto the Pisa-Criffel Ranges (legal roads, easements)

Unlike all other Central Otago block mountains, there is no practical legal vehicle access to the boundary of the public conservation estate.

Legal Roads which link with the Pisa Conservation Area

Tuohys Gully

The Tuohys Gully track links with the Roaring Meg Pack Track to form a 19 km through route to the Kawarau River (SH6). Most of the track closely corresponds with a legal road line; however before it meets the Pisa Conservation area there is a significant deviation which is subject to an easement catering for public foot, bicycle and horse access.

Roaring Meg Road/Pack Track

This well formed and graded road leading to the Meg Power Station lies near to but _ not on a legal road line. Beyond the power station, tl1e legal road line more or less i corresponds with the Meg Pack Track which links with the Tuohys Gully road line. The road is currently locked by Pioneer Generation Limited at SH6. There would be

merits in moving the locked gate up the hill to the vicinity of the power station to cut the somewhat tedious walk along a formed metalled road to the start of tl1e poled Meg Pack Track route. This would require some earth works to create a car parking area.

Lowburn Valley Pack Track (Packspur Gully)

A lightly formed and marked route provides for foot, mountain bike and horse access up the approximate line of a legal road. The legal road line does not closely co»inside with a formed vehicle track and does not provide for practical vehicle access to the Pisa Conservation Area.

Ripponvale - Mount Michael Road Line

A legal road line closely correlates with formed farm tracks for its entire length. From the point where the road line meets the Pisa Conservation Area there are no formed tracks.

Mount Barker Road Line

This legal road is truncated by private land on the lower reaches of Mount Barker station, and is therefore of no utility for public access.

Public Access Easements

There are six easements scattered along the length of the Pisa Range which provide public foot access (and in some cases also for foot and bicycle) from valley floors to the Pisa Conservation Area. None of the easements provide for public vehicle access.

The Waiorau Snow Farm Road provides as of right public vehicle access to the Waiorau Snow Farm, situated immediately to the south of Robrosa Pastoral Lease. There is a road toll payable at the Snow Farm Lodge. From the Snow Farm car park at the end of the vehicle easement, there is a poled public foot access easement, managed by the Department, to the Pisa Conservation Area via the upper Roaring Meg. There is no as of right vehicle access from the Snow Farm car park to the Pisa Conservation Area.

Vehicle access is available to ~ 800 m via easements created under a tenure review of the Queensberry Hills and Queensberry Ridges pastoral leases. This does not provide for vehicle access to the Pisa Conservation Area boundary. Vehicle access has not been fully implemented as yet, as the route will soon move onto a better public road associated with a subdivision development.

Other Public Access Arrangements

The Mid Run Special Lease on the northem end of the Criffel Range has provisions for public to wander at will foot access.

Public Access Gaps

Landholder permission is required to use those parts of the Pisa summit ridge track which are located on the freehold land on Waitiri Station freehold and Lowbum and Robrosa pastoral leases,

(iv) Impacts Associated with Vehicle Use

Off-road use of vehicles can create serious impacts on the environment and is often

incompatible with the enjoyment of other users of the land. Experience has shown that off—road use of vehicles may result in one or more of the following effects:

Vegetation

All short vegetation communities are vulnerable to vehicle damage when vehicles are taken off existing formed tracks. Cushionfields, bogs aud seepages are especially vulnerable, with a single exposure to vehicle use often resulting in damage which can take decades to repair,

Soils

The impacts of off-road vehicles on soil structure can be significant. The primary impact on soil has been identified as excessive compaction due to vehicle weight bearing, skidding and wheel-spinning, and motor vibration transmitted through the wheels (Cessford, l995“). The most commonly affected areas are on hill sections where the likelihood of wheel slippage is greatest. Soil compaction results in reduced water infiltration, which has been identified as a significant contributor to bogs and reduced vegetation growth and direct damage to seedlings and germinating seeds (Sheridan. 1979).

Alpine soils are particularly slow to recover from damage as cold climates are conducive to low levels of biological activity and slow rates of chemical weathering of parent material, both key components of soil formation.

Alpine areas are particularly vulnerable as the cold climate and poorly formed alpine soils make re-establishment of a vegetative cover extremely slow. Alpine peat bogs and scree slopes are particularly vulnerable to damage. Recent damage by trail bikes in the vicinity of Lake McKay amounts to deliberate vandalism, while concentric tracking in the vicinity of wet areas along the main range crest has formed as a result of drivers trying to avoid the worst sections of the track.

The block mountains of Central Otago are vulnerable to damage by vehicles as the gentle nature of the range crests means it is often possible to stray from formed route without creating an excessive hazard or undue discomfort for users.

Formed Tracks

Use of tracks after heavy rain, during periods of frost and snow melt can cause serious damage to the surface and alter drainage pattems. Diverting around wet or boggy ‘ areas or impedances such as slips or rock falls can lead to the creation of new tracking which in tum may become impassable thus leading to the spread of vehicle impact over substantial areas.

Insect Fauna

Insect fauna is vulnerable to loss of habitat by damage to vegetation, soils and drainage characteristics.

Birds

Vehicles straying off tracks can destroy nests and disrupt breeding and nesting habitats, especially of vulnerable species, resulting in loss of young;

Archaeological Values

Historic sites are vulnerable to physical damage by vehicles straying off formed

tracks. The use of vehicles also facilitates the removal (theft) of artefacts.

Fire

Illegally or improperly operated vehicles can often create a fire hazard on public or private lands.

Litter

By virtue of mechanisation, operators of vehicles carry more gear, with potential to leave more litter

Vandalism

Motorised ease of access is often coupled with increase of acts of vandalism on public and private property.

Impacts on Adjoining Private Land

Vehicles trespassing from public to adjoining private land often disrupts farming operations; especially during lambing and calving seasons. A single gate being left open can cause costly and time consuming consequences for landholders.

Social impacts of motorised off-road vehicles

The social impacts of motorised off-road vehicle use have been identified through conflict with other users. The most common source of complaint attributed to use of vehicles off road is excessive noise emission in an otherwise noiseless environment (Knopp & Tyger, 1973), In particular, the noise levels emitted from motorcycles and snow mobiles is a regular source of complaint. Other passive users feel that the enjoyment of some of our public lands should be reserved to those who are prepared to put the physical effort in to enjoy the backcountry on its own terms.

In general, research has found clear differences between motorised and non-motorised users in the recreation experiences they are seeking. Studies of conflict between snowmobilers and cross-country skiers in the USA have found differences in the fundamental orientation of preferences and motivations between the two groups (Knopp and Tyger 1973). Skiers indicated an aversion to mechanisation in recreation and tended to be motivated by needs for solitude, tranquility and physical exercise. Snowmobilers were machine—oriented and tended to be motivated by needs for socialisation, adventure and escapism. When both are trying to use the same settings, perceptions of conflict are inevitable.

(v) Positive Attributes of Vehicle Use

Use of four wheel drives opens up country to groups of people who, by virtue of age, health or lack of physical fitness, are unable to cover significant distances on foot, bicycle or horse back.

Four wheel drive vehicles can also be used to facilitate other recreational activities that might not be practically undertaken without a great deal of physical effort. Examples include use of vehicles by hunters to carry out animal carcasses, hang-gliders or paraponters accessing high points, back country skiers accessing the snow line and mountain bikers driving to high points to avoid energetic climbs.

Use of four wheel drives can reduce travel time to the boundary of public lands and allow recreationists to enter lands with high natural and scenic values without the

requirement to spend some hours walking or riding through modified pastoral country which many view as being uninspiring.

Increasing the range of users of our public conservation lands can broaden the base of support for their continued protection. Users can become advocates for adequate resourcing for land management and the provision and maintenance of recreational facilities.

(vi) Legal Status of Vehicle Use on Lands Administered by the Department of Conservation.

All public lands administered by the Department of Conservation on the Pisa Range which can be practically accessed by vehicle are held as conservation areas under the Conservation Act 1987. Comment is therefore limited to the provisions of the Conservation Act.

The Conservation Act provides for the entry to and use of conservation areas by the public free of charge subject to certain limitations. Section 48(l)(f) enables regulations to be made prohibiting, restricting or regulating the entry of vehicles of any class or description into any conservation area. "Vehicle" has the same meaning as "vehicle" in the Land Transport Act but includes any vehicle from which any wheels have been removed (full definition in Appendix 2).

Section 39(l)(b) provides that a person commits an offence who, without the authority of the Minister or the Director-General, enters a conservation area with a s vehicle in breach of any prohibition or restriction imposed under the Act. An example where such a prosecution might be brought is if a concessionaire takes a vehicle onto a conservation area that contravenes the conditions contained in his or her concession document.

It is possible that a conservation management strategy or plan may provide for closure of a conservation area in whole or in part for conservation purposes to public entry. In that case, the Minister is able, under section l3(1), to close the conservation area to all forms of access or to particular classes of access such as vehicles. Areas where vehicles can and cannot go could also be described in a Conservation Management Strategy or plan and a regulation would need to be put in place to make restrictions enforceable.

Unless the area has been closed to vehicles under section 13, or there are restrictions imposed in regulations made under section 48(1)(f), the only remedy the Department has to prosecute for use of vehicles in a conservation area is if they interfere or damage the historical or natural features.

(vii) Proposed Conservation (Authorisations, Compliance and Enforcement) Bill "Vehicles and their use".

There is currently work in progress to amend the legal status of vehicles in conservation areas. The proposed Conservation (Authorisations, Compliance and Enforcement) Bill will, if passed in its current form:

(a) make offences relating to vehicle use, strict liability offences so that the onus will be on the defendant to prove that s/he did not commit the offence.
(b) repeal existing definition of vehicle, and insert new one. The definition includes bicycles.
(c) confine vehicle use to designated roads, although in conservation

areas and certain categories of reserves bicycles will be exempted.
(d) define a road as meaning a road that is formed and maintained by the Director-General for vehicular use by the public or as a vehicle parking area or a route over, or part of, a conservation area that is identified in the conservation management strategy or conservation management as being available for vehicular use by the public.
(e) allows the Minister to issue notices for the public generally, or permits for individuals to regulate vehicle use. Notices and permits must be consistent with Genera] Policy, Conservation Management Strategies and Plans

The proposed amended definition of a vehicle is set out in Appendix 2.

(viii) Existing Vehicle Use on the Pisa Conservation Area

Grazing licences over conservation land on Lake McKay, Mt Pisa and Avalon allow for sporadic vehicle use for farming purposes over limited areas. These all expire by 2016.

A track counter installed in the vicinity of Lake McKay recently recorded 250 vehicles over a 16 month time span. Most of these vehicles are assumed to be undertaking a traverse of the Pisa Range.

There is a limited amount of concessionaire use of the area involving vehicle use. Currently there is one active concession (involving 4WD and trail bikes) and another four applications under consideration.

One off concessions involving vehicle use are issued periodically,

Typically one to two organised events are authorised per year; for example Rotary Fund Raisers.

An unknown number of vehicle owners gain access to the range crest via a number of privately owned farm tracks situated on the following properties:

Snow mobile use is mostly confined to private land at the Waiorau Snowfarm.

• **Waiorau** The Snow Farm road is the main entrance route onto the range for vehicles. The road as far as the Snow Farm car park is subject to a public easement for vehicle use. There is no legal vehicle access to the boundary of the Pisa Conservation Area
• **Locharburn**
• **Lake McKay**
• **Packspnr Gully**
• **Mount Pisa Station Road**
• **Queensberry Hills/Ridges**
• **Eastburn**
• **Waitiri**

Vehicle access over some tracks is usually granted whilst over other tracks it is almost never granted.

(ix) Relevant Planning Documents

The Otago Conservation Management Strategy (CMS)

The CMS describes "off road" vehicular use as an activity enjoyed by many people

and a legitimate form of recreation when carried out responsibly. It notes that vehicle use of public land is frequently prohibited under the National Parks and Reserves Acts to prevent environmental damage. Use is seen as appropriate only on well formed, graded and maintained vehicle tracks.

'The CMS identifies 41 special places of conservation interest in the Otago Conservancy. The Pisa Range comprises "Special Place Number 25".

The recreational setting of the Pisa Range is described as being predominantly back country 4WD. It is noted that in winter the crest of the range is inaccessible to vehicles and takes on remote characteristics.

Relevant management issues identified in the CMS include track maintenance, the limited nature of public access to the northern part of the range, off-road vehicles and i their impacts on vulnerable areas, commercial recreation and tourism

The stated CMS **Objective** for the range is ***"To protect representative low altitude lands and high altitude lands in the area for their landscape, nature conservation and historical values; the later lands an an extensive basis providing enhanced public recreational opportunities complementary to those already being provided commercially. "***

Relevant **Implementation** measures are:

(a) Seek opportunities arising out of pastoral lease tenure review negotiations to protect extensive high altitude areas of high landscape, nature conservation, historical, recreational and water and soil conservation significance.

(b) As tenure reviews are concluded keep under consideration the unifying concept of a high altitude Pisa Conservation Park. If the park proceeds a management plan for the park will be developed.

(c) Ensure appropriate public access, both vehicular or by horse where appropriate, and on foot to areas managed by the department.

(d) Recreational and tourist concessionaire use of the range may be allowed where any potential adverse effects on the natural, historical and recreational resources and opportunities can be avoided remedied or mitigated.

(d) Continuing education of surmnertime recreationists about the fragility of upland wetlands to vehicle traffic, and tire hazards.

Other Planning Documents

The Otago Conservancy Recreation Strategy (Springer 1993)
This document identifies the block mountains of Central Otago as a possible area for increased 4WD access.

1992 Recreation Opportunity Spectrum

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

The upper western flanks of the Pisa Range, which include Mt Pisa, Dome Rock (1902 m) and point 1956 m, are zoned “Backcountry Walk-in" which, "although relatively close to visitor facility developments, access to these areas is only possible

on foot and is often associated with tramping tracks or routes" (Harper 1992).

The majority of the range was zoned "Backcountry 4WD Drive ln" 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 grasslands and block mountains and more rugged remote areas (Harper 1992).

The crest of the range was zoned Back Country Walk in which "although relatively close to visitor facility developments, access to these areas is only possible on foot and is often associated with tramping tracks and routes".

A narrow corridor beside the Cardrona Valley Road is zoned "Backcountry Drive-in", where "good road access routes allow visitors into pockets or corridors which afford a sense of relative remoteness" (Harper 1992).

Outdoor Recreation In Otago — A Conservation Plan. Federated Mountain Clubs

In 1989, Federated Mountain Clubs compiled an outdoor recreation plan for (Mason 1989) which included the Pisa Range. This report was produced as part of an advocacy exercise to quantify public interests in lands predominantly held under pastoral lease tenure as a means of assuring that public interests would be taken into account in the future management of these lands. To some extent the recommendations have become superseded by tenure outcomes.

The FMC plan zones the main Pisa Plateau and crest between the Mt Dotterel area, to above the "Lochar Burn ridge, as natural experience and recommends that this zone ` be managed for the primary purpose of nature conservation, with compatible Q recreation (commercial and public as secondary uses).

The Criffel Range and all the mid to low-altitude flanks of the Pisas are zoned as open space. Within the Open Space Zone vehicle use on farm tracks is recommended to l continue under runholder discretion.

(x) Context in Terms of other Central Otago Block Ranges.

The Pisa—Criffel Range complex, is the most western of Otago‘s block mountains. It is the only block mountain range located in the area administered by the Department of Conservation Wanaka Area Office.
Whilst it is the highest of the block ranges, it is not the most extensive. A brief summary follows which outlines the current status of 4WD access on these other . block ranges.

Rock and Pillar and Lammermoor/Lamerlaw Ranges

The Rock and Pillars are the lowest and eastem most of the Otago Block ranges. Currently some 7400 ha are held as public conservation estate. The majority of this area has been secured through the tenure review process. Most remaining pastoral leases on the range are currently undergoing tenure review. DOC currently has no formal policy or management plan for vehicle access on the range. Therefore no controls are currently in place. As of right vehicle access is available to the range via the Kinvara track near Middlemarch and a roughly formed road legal road on the southern end of the range. The Kinvara track was purchased by DOC specifically for securing public vehicle access. Uncompleted tenure reviews stand to secure at least a further two vehicle access routes to the boundary of a future conservation park.

Lammermoor/Lamerlaw Ranges

21,000 ha of this area is held as public conservation land within Te Papanui Conservation Park. Four wheel drive access is available along the single farm track which provides access through the park. Vehicle access off this main track is inappropriate as much of the area is poorly drained and vulnerable to damage.

Old Man - Old Woman Ranges

This very extensive high altitude area comprises some 14,500 ha of land administered by the Department, mostly acquired through land purchase and pastoral lease tenure review. The area of public land is likely to increase with completion of further tenure reviews. Vehicle access to this area is well serviced by three public roads (W aikaia Bush, Symes Road and Nevis Valley -Cromwell Road. Use of Waikaia Bush Road (and to a lesser degree the later two) has long been associated with damage to fragile alpine ecosystems by vehicles, especially trail bikes. The Central Otago Area Office is currently working on a vehicle access strategy which, if implemented, would confine public vehicle use to a number of formed tracks.

North Dunstan Range

With the exception of the North Dunstan Conservation Area (303 ha) immediately to the north of Thomsons Saddle, where vehicle access is not strategically unimportant, there is currently no legal public access to the range. Four wheel drive usage of the North Dunstan Conservation Area is prevented through the placement of a locked gate. Access to the Lauder Conservation Area (1512 ha) is currently at the discretion of neighbouring landholders. Tenure review of various pastoral leases provides an opportunity to remedy this situation. The Department is attempting to secure public . vehicle access to the range through the tenure review process.

South Dunstan Range

There is currently some 2300 ha of public conservation land on the upper range. The Bendigo Conservation Area which forms most of this area is legally accessible by four wheel drive vehicle via a roughly formed legal road leading from Thomsons Saddle. Currently four wheel drive usage occurs along a four wheel drive track that traverses the conservation area. Continued use of this track is mooted in the Central Otago Area's draft 4WD strategy. A full traverse of the range requires landowner permission to use the southern section of the track. Permission appears to be generally granted.
Tracks and their surrounds in the Lauder Conservation Area are vulnerable to damage as there are numerous areas where drainage is impeded.

Hawkdun Range

Public vehicle access is available onto the Hawkdun Range via an easement created under the tenure review of Braeside pastoral lease and from the legal formed Mount Buster Road. Access is also available along the base of the range up the Manuherikia River via legal roads and newly acquired conservation land created from the recent Michael Peak property purchase. The Department aims to secure vehicle access through to the Waitaki side of the range through the completion of pastoral lease and pastoral occupation licence reviews. Tracks in this area are generally well suited to vehicle access in that they are well drained and there is usually little opportunity to venture off formed tracks.

(xi) Management Options for the Pisa-Criffel Ranges

A variety of options exist for the management of vehicle use on the Pisa and Criffel Ranges. All solutions with the exception of the "Free for All" option under current legislation would require a modified Conservation Management Strategy, the creation of a management plan for the Pisa Conservation Area or the creation of regulations under Section 48(l)(f) of the Conservation Act. All options with the exception of free for all access would require erection of effective vehicle barriers at potential entry l points. These are presented below in no order of preference;

l. Total Exclusion

As the Pisa/Criffel Range is the only block mountain range in Central Otago to have no formed public roads or designated legal vehicle access routes to the boundary of the the public conservation area, the Pisa Conservation Area could be designated as a passive recreation zone where users can enjoy the areas intrinsic remote qualities without interference from motorised transport. Exclusion of motorised recreation can arguably be justified in that vehicle access is widely available on other Central Otago block mountain ranges. This objective could be achieved through a combination of plarming initiatives; for example inserting provisions in a revised Conservation Management Strategy, preparing a management plan specifically for the Pisa Conservation Area or the introduction of bylaws under the Conservation Act. Implementation of this option would necessitate erection of locked gates and signage at all entry points to the Pisa Conservation Area. Co-operation with neighbouring land owners would be required to achieve this outcome. A dispensation would be required for run holders who hold temporary phase out grazing licences over parts of the Pisa Conservation Area.

This approach would require that all existing commercial concession involving vehicle use not be renewed upon expiry.

Advantages

• Simple, no room for ambiguity
• Achieves ultimate protection for the environment
• Ensures a high quality recreational experience for passive recreation users
• Ensures one Central Otago block mountain range is free from motorised recreation
• Recognises that motorised recreation needs are well served elsewhere on public lands on the block mountains of Central Otago

Disadvantages

• Would limit recreational enjoyment of the Pisa Conservation Area to those users who have at least a moderate degree of physical fitness
• Would eliminate motorised recreation as a form of recreation in the Pisa Conservation Area
• Difficult to enforce: may encourage vandalism such as cutting of fences and destruction of gates by those determined to enter area
• May fuel perception held by some that public conservation lands are "locked up"
• Pre-empts a conservancy wide plan for motorised recreation for all of the Otago Block Mountains

2. Vehicle access by permit only

This option would allow the issue of permits within a defined season over the drier late summer - early autumn months. A limit could be placed on the number of vehicles with permitted access at any one time. To implement this strategy provision would have to be made via a management plan, by law or revised CMS to limit vehicle use to tl1e conservation area. Implementation of this option would necessitate erection of locked gates and signage at all entry

points to the Pisa Conservation Area. A key pick up and return system would need to be implemented by the Wanaka Area Office. Co-operation with neighbouring land owners would be required.

An example of DOC operating a permit and key system for vehicle access can be found in Canterbury, where access to Lake Sumner is restricted to minimise damage to both farm and conservation lands. Motorised access is restricted to ten vehicles (including trail and four-wheel bikes) beyond the gate at any one time from 1 November to 1 July. The gate is secured with a combination lock, the number of which is regularly changed. 'The full pamphlet outlining this arrangement is attached as Appendix 3.

Advantages

• Goes some way towards protecting the rights and enjoyment of other ` users by limiting number of vehicles
• Allows conditions to be issued as part of permit which if breached would facilitate prosecution of those who breach conditions
• Allows permit holders to be informed of conditions, hazards prior to departure
• Permits could be withheld from those with unsuitable vehicles.
• Permits could be withheld from those who have not complied with conditions previously
• Provides an opportunity for vehicle owners to enjoy their form of recreation on public conservation land

Disadvantages

• Time consuming and costly to administer system for DOC
• Open to abuse; for example keys could be copied and kept or gates and fences can be vandalised by non permit holders
• Difficult to implement when DOC does not control any vehicle access route to the boundary of the Pisa Conservation Area

3. Access with approved concessionaires only

Access to vehicles could be restricted to those participating in a concession activity provided by an approved concessionaire. This would involve the concessionaires coming to separate arrangements with neighbouring landowners. As with several other options, implementation would require erection of locked gates and signage, This solution could only be implemented if provided for in a revised CMS of a management plan prepared for the Pisa Conservation Area.

Advantages

• Concessionaires operate under strict conditions covering protection of the environment
• Concessionaires have a strong interest to comply with their concession in terms of securing future renewals
• Easy to limit numbers, thus protecting recreational experience of other users
• Public comment can be sought prior to issue

Disadvantages

• Would preclude private non commercial use of public land. Many New Zealanders prefer an independent approach to recreation
• Undermines satisfaction of independently planning for recreational activities. Removes the "initiative factor"

• Users confined to pre-packaged schedule, reduces potential to go at ones own pace.
• Increases cost of enjoying public conservation land

4. One off events/Fundraisers
Vehicle access could be confined to periodic "one off" concessions. This type of use is usually associated with fundraising of one type or another (for example Rotary Club tours).

Advantages
• Positive community activity which usually raises fund for a worthy cause
• Confines vehicle use to a few selected days, which if well publicised those seeking solitude can avoid
• Controlled by concession conditions

Disadvantages
• Restricts use to those that happen to be at the right place at the right time, many of whom would be locals
• Many vehicle owners would prefer not to be part of a "crowd" and favour an independent approach to recreation
• Increases cost of enjoying public conservation land
• Prevents vehicle owners from driving into the area for most of the year

5. Restricted Vehicle Open Season
Under this option vehicle use would be limited to that part of the year when tracks are driest and snowfalls are rare. The season could be somewhat shortened to cater for those recreationists seeking solitude as part of their recreational experience. A possible season for the Pisa Conservation Area would be January 15 to March 15. A period for motoiised winter recreation use could also be permitted under this option.

Advantages
• Administratively simple
• Confines vehicle use to that part of the year when tracks are generally least vulnerable to damage
• Allows passive users to enjoy the area outside of the vehicle season

Disadvantages
• Best time of year for vehicle use of tracks would in some years not coincide with prescribed season
• Passive recreationists will encounter motorised recreation over the period when they are mostly likely to use the area
• Open season may not correlate with the time when vehicle users want to enter the Pisa Conservation area (e.g. hunters)
• Places little control on users during the open season
• Without the use of concessions or permits DOC‘s ability to penalize inappropriate vehicle use during the open season would be confined to the somewhat inadequate provisions of the Conservation Act
• DOC would not have good information as to the level of use or profile of users
• DOC would have limited formal opportunity to inform vehicle owners of the nature of the country, tracks and potential hazards
• Damage to tracks and adjoining land would most likely continue and likely increase

6. Open Season Year Round
Subject to vehicle owners attaining permission from neighbouring landowners there would be no restrictions on vehicle usage under this scenario. However as is currently the situation, it would be an offence under the Conservation Act to cause damage.

Advantages
• Administratively simple
• Would allow vehicle owners full access to public conservation land

Disadvantages
• Would not allow closure of tracks during periods or seasons when tracks are vulnerable to damage
• Would provide no safeguards to the protection of solitude sought by passive recreationists
• DOC would not have good information as to the level of use or profile of users
• DOC would have limited formal opportunity to inform vehicle owners of the nature of the country, tracks and potential hazards
• Damage to tracks and adjoining land would most likely continue and likely increase

7. Interim Arrangement: Code of Conduct

Pending a revised Otago Conservation Management Strategy, a Pisa Conservation Area Management Plan, or the enactment of the Conservation (authorisations, compliance and enforcement) Bill or an amended Conservation Act which enable vehicle use to be restricted, permitted or excluded; the most effective mechanism for controlling impacts associated with motorised recreation on the Pisas/Criffel Ranges, may be to establish a code of practice. As all vehicle access to the range crest involves use of privately owned tracks, landholder buy in to this concept is essential.
A code of practice could deal with:

• timing of use
• climatic conditions when access should not be granted
• appropriate behaviour on private land
• maintenance of a record of users
• in conjunction with the Department of Conservation the establishment of locked gates with provisions for access to keys

Land holders views are sought regarding such an initiative.

(xii) Monitoring

A basic monitoring programme was established in 2005 in the vicinity of Lake McKay, where photo points have been established around wetlands which have been subject to damage by vehicles.
A more comprehensive programme should be implemented to quantify impacts of motorised recreation on the wider Pisa/Criffel Range area. Physical impacts would be adequately recorded through the expansion of photo points to cover a broader range of locations and environments. Photo points should be concentrated at those locations where vehicles are likely to stray off formed tracks.
A concurrent visitor monitoring programme should be undertaken whereby

users are canvassed as to their attitudes towards motorised recreation and asked to rate the quality of their recreational experience whilst visiting the Pisa Conservation Area.
Monitoring results will provide the Department guidance as to the most appropriate future management options.

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