

## **Crown Pastoral Land Tenure Review**

**Lease name :Ben More**

**Lease number :PC 109**

### **Conservation resources report**

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

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

**Copied October 2002**

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## DOC CONSERVATION RESOURCES REPORT ON TENURE REVIEW OF BENMORE PASTORAL LEASE

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### PART 1 INTRODUCTION

- 1.1 Benmore Crown Pastoral Lease covers approximately 1312 ha of land on the north-eastern end of the Big Ben Range, 70 km from Christchurch, and south of the West Coast Road (State Highway 73).

Land adjoining to the east is Benmore and Brooksdale freehold, to the north and north-east is Brooksdale pastoral lease (and freehold) and to the west is 5120 hectares of land, formerly Benmore pastoral lease, surrendered out of the lease as part of a Nature Heritage Fund purchase. To the south-west is Thirteen Mile Bush Conservation Area, and to the south is freehold land owned by an adjoining landholder.

The property lies within the Torlesse Ecological District, which has not been surveyed by the PNA Programme.

### PART 2

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

##### 2.1 LANDSCAPE

###### 2.1.1 Location and Landscape Context

Benmore is part of the Front Range-Canterbury Plains landscape. These are the high ranges, foothills and downlands which rim the western edge of the Canterbury Plains. The dramatic visual contrast between flat, highly developed plains and steep, rugged, relatively natural hills and mountains is a very distinctive characteristic of this landscape. This contrast is very sharp in some places. In other places, there is a narrow transition band where there are partly developed low hills and downlands.

In the Kowai River valley, in which Benmore is located, there is a strong contrast between natural mountains and highly developed alluvial flats, although there is a small area of partly developed downlands and low hills on Benmore providing a small transition area.

The hills and ranges enclosing the Kowai Valley have been identified as a regionally outstanding and regionally significant natural landscape in the Canterbury Regional Landscape Study (BMP and LA 1993). Macfarlane Stream is the approximate boundary between these two areas leaving the majority of Benmore within a regionally significant natural landscape.

A key factor understood to underlie this significance is the fact these areas form the landscape corridor for a major east-west South Island highway and tourist route (both historical and modern). The significance of the road corridor is recognised in several previous studies which describe the route as one of the most scenic drives in New Zealand, offering a unique travel experience as it traverses a distinctive natural and cultural sequence of landscapes between the east and west coasts of the South Island over a short period of time (around 2.5 to 3 hrs). Over 200,000 vehicles use the highway annually, of which 50% used it for leisure.

Benmore is a significant part of this highway corridor landscape. The peak of Ben More is the natural visual focus, being directly in view, on the long straight between Brooksdale and Benmore. The lower slopes increasingly dominate and enclose the view heading west, together with the lower slopes of the Torlesse Range.

### 2.1.2 Property Landscape Description

Benmore can be subdivided into two Landscape Types. The southern portion between Thirteen Mile Bush Stream and the mouth of Macfarlane Stream where it meets the Kowhai River is part of the Foothills and Downlands Landscape Type. The northern part of the lease, particularly the McFarlane Stream catchment, is part of the Front Ranges Landscape Type (Puketeraki, Torlesse, and Oxford Ranges).

#### 1. *Foothills and Downlands Landscape Type*

This is a small area of the more rolling, moderately-steep to steep greywacke hills and downlands on the true left of Thirteen Mile Bush Stream, forming the lower slopes of the east end of Big Ben range. They essentially form two small catchments draining into Thirteen Mile Bush Stream.

They have little erosion with minor slips and screes and are moderately dissected. Rock outcrops are common. They are partly developed, being subdivided into small grazing blocks with some pasture improvement. A pattern of vegetation exists typical of previously forested country. Grassland dominated by exotics, bracken fern, and patches, or scattered bushes of "grey" scrub (matagouri/coprosma species) and regenerating kanuka/manuka form the surface cover. Grazing and burning have disrupted the natural patterns and processes, resulting in a complex and dynamic mix of seral vegetation communities in random patterns as a result of uneven patterns of disturbance. With recent burning of the kanuka/manuka, there is a grey haze of dead sticks over some areas and scattered clumps of unburnt shrubs in others.

There are also many patches of gorse and broom. Some cultivation and coniferous exotic tree planting has occurred on the lower slopes next to the Kowai River.

Thirteen Mile Bush, a large protected area of beech forest, immediately adjoins on the upstream side. The upper slopes above are retired pastoral lease. Intensively farmed alluvial flats adjoin to the east, downstream. This part of the lease is closest to the homestead.

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Overall, the area retains a moderately natural appearance, with the exception of the cultivated/planted areas. Man-made features such as fences and tracks are not obvious. More intensive grazing use however is indicated by the smaller block sizes (including deer blocks), dominance of exotic grasses and the "greenness", and the degree of disturbance resulting in the random vegetation patterns. It is very typical of transitional areas between highly developed flat land and undeveloped steep mountain range.

## 2. *Front Ranges Landscape Type*

The northern half of the lease - the Macfarlane and Coach Stream valleys - comprises the higher and steeper greywacke mountain and hill range country rising to the highest parts of the lease at around 1100m asl. It is mainly a semi-natural landscape, dominated by landform, natural features such as large rock outcrops and screes, and small patches of native vegetation, particularly on shady faces.

Man-made elements are not common, limited to boundary fences and 3 or 4 subdividing fences and a 4WD track. These are generally unobtrusive but in places they form unnatural lines in contrast to natural patterns and forms. An old homestead site on the true right of Macfarlane Stream is indicated by a clump of mature deciduous exotic trees (mainly ash trees). These have spread down-valley, resulting in occasional individual specimens along with hawthorn. Riddells Hotel Site on SH73 immediately adjacent is another historical site of significance related to the stage-coach history of the area. This seems to be where the hawthorn has come from. A benched track up the true left of Coach Stream (outside the current lease) is the old coach route up Porters Pass.

Even though the overall impression is one of naturalness compared to the Plains, disturbance through burning and grazing is very obvious. Grassland (partly open short tussock, with a predominance of exotic inter-tussock species), fern and bracken, extensive and often dense matagouri scrub, and various native shrubland communities are still present, particularly on shady faces, in the complex random mix typical of such an area. Extensive gorse and broom cover the valley floors with patches on the lower adjacent hill slopes. Thick shrubland containing broadleaf, hoheria, hebes, and flax, and occasional small clumps of beech forest remain around large rock outcrops and in deeper gullies on shady slopes, where they have been more protected from burning and grazing. There are also cabbage trees as individuals or groups scattered over the hill slopes, managing to survive the regular burnings.

This area can be subdivided into two landscape units:

(i) *Macfarlane Spur* - this is a small, narrow, hard rock greywacke spur on the north side of McFarlane Stream with a distinct, small scale "knob and saddle" ridgeline terminating in a sharp point at the confluence of Macfarlane Stream and the Kowai River. Its sides are very steep with a number of large rock outcrops

often with dense mixed native shrubland around them. Much of its shadier southfacing side is covered in dense matagouri scrub.

(ii) *Ben More* - the more simple, massive rectilinear slopes and rounded large knobs and spurs of the lower north and east faces of the peak of Ben More (on the south side of Mcfarlane Stream) has large expanses of scrub-free open short tussock land.

### 2.1.3 Visual Values

Landscape values exist regardless of how many or how often people see the landscape. Nevertheless it is recognised that those landscapes regularly seen by the most people will hold more values for more people and be more important to the more widely held view of the landscape.

There are significant views of Benmore from SH 73 as already described.

The lower to middle altitude slopes of Ben More, in the Macfarlane Valley, and particularly the north side of Macfarlane Spur is in direct and close view from the highway. Views of short duration are possible for some distance up Macfarlane and Coach Stream valleys. A tantalising glimpse of the north side of Macfarlane Spur is possible through the only saddle on the highway on the descent from Porters Pass, where there is a pull-in bay. This is where the old coach road joins the highway.

There are views of the north slopes of the peak of Ben More and Macfarlane Spur from Foggy Peak, a popular and easily accessible peak on the Torlesse Range nearby. Similar views are from the Kowai Valley and Mt Torlesse on Brooksdale Station, regularly used by trampers.

The presence of mature exotic deciduous trees are valuable visual indicators of the former occupation on the property – the old Porters homestead site in the Macfarlane Stream (mainly the exotic tree “ash”) and Riddells Hotel Site (hawthorn). They are important in maintaining an appropriate context for these historic sites. However wildings from these trees need to be controlled.

### 2.1.4 Evaluation and Conclusions

Benmore occupies an important position in the Canterbury landscape. This is recognised in giving the area outstanding and regionally significant natural landscape status in the Canterbury Regional Landscape Study (BMP and LA 1993). Benmore is a significant part of the SH73 road corridor experience, a major east-west transport route and described as a scenic journey of national significance. The mountain and hill slopes adjacent to the highway are a highly visible and dominant part of the landscape in the Kowai Valley approaching Porters Pass. The section of SH73 between Springfield and Lake Lyndon is one of the most memorable sections, because of the sharp transition between high country and plains and the accentuated entry to or exit from the high country at Porters Pass. The country of Benmore is an important part of this section of highway.

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There is also a cultural history attached to the corridor, both Maori and European. The Macfarlane and Coach Stream valleys are the context for these historical cultural values. The indigenous vegetation and landforms are important in maintaining these values.

## 2.2 Landforms and geology

The basement rocks on Benmore are sandstones, silt-stones, mud-stones and cherts – the greywackes and argillites of the Torlesse Supergroup.

Landforms are dominated by colluvial mountain-slopes, steep in the head of catchments, but low to rolling at the lower end of the main spurs or side catchments. The lease is dissected by three main catchments, all tributaries of the Kowhai River (Macfarlane, Thirteen Mile Stream and Coach Stream). The downstream ends of Macfarlane and Thirteen Mile Stream catchments have small areas of terraced alluvial flats and shingle riverbeds. There is little sign of bare ground, except some minor slips, occasional rock outcrop and some steepened talus or scree on streamsides.

## 2.3 Vegetation

The vegetation on Benmore is predominantly abundant introduced grasses with very scattered fescue and silver tussock, interspersed with mixed species shrublands, grey scrub, gorse, broom and some manuka. The shrublands tend to be much thicker and more extensive on shady faces such as the northern side of Macfarlane Stream and south facing slopes of the Thirteen Mile Bush tributaries, whereas north facing slopes are often more open and covered in exotic grasses with patches of gorse or broom.

Matagouri is common throughout the property thickening into shrublands or "grey scrub" of matagouri and *Coprosma* species in the Macfarlane and Thirteen Mile Streams, and on shady faces. Introduced broom, either in small patches or as numerous scattered bushes are commonly scattered throughout the scrub. Many of the shrubs are covered in the climbers *Muehlenbeckia* (*M. complexa* and *M. australis*) and bush lawyer. Hawthorne\* and ash\* also occur scattered throughout the hillslopes of the mid-Macfarlane. Other shrubs that occur amongst the scrub are mountain wineberry (*Aristotelia fruticosa*), porcupine shrub (*Melicytus alpina*), cabbage trees and occasional mountain lacebark (*Hoheria lyallii*) as well as occasional flax (*Phormium cookianum*) with prickly shield fern (*Polystichum vestitum*) in some gullies and hollows. Ground cover under and around these shrublands is mainly introduced grasses, mullein\* (*Verbascum virgatum* and *V. thapsus*), foxglove\*, horehound\*, and thistles\* (all introduced plants). Gorse\* is plentiful in the main riverbeds and occurs in patches on some adjacent lower hill-slopes, particularly on sunny faces.

On some shady and steep faces, in the base of gullies or close to streams, in the "upper" Macfarlane and Thirteen Mile Bush Stream valleys there are a small number of localised areas of trees such as mountain lacebark, kowhai, broadleaf, and mountain

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\* asterix denotes introduced plant species

beech. These are often associated with grey scrub as described above, although not always. Most of these tree areas are small except in a side branch of Macfarlane Stream where there is an approximately 20 ha patch of beech around GR K35 084643, in the base of a steep, mainly shady catchment. This remnant like other mountain beech patches is devoid of an understorey, except where the canopy is broken and there is regenerating beech. This is especially evident on the south-facing slope where over half the canopy is missing and much of the young beech is over 2m tall. Here, as elsewhere under the beech, the slopes are loose gravel making it difficult for other plants, including ground-cover, to establish. This particular patch of beech mainly grades into scattered shrublands and grassland. But on the south facing slope above there is some dense scrub including flax, *Dracophyllum acerosum*, Hebes, occasional tauhinu and another much smaller patch of beech. Just below the beech is a number of plants of kowhai, broadleaf and mountain lacebark. The sunnier north facing and east facing slopes are covered in sparse and patchy "shrubland" species such as *Coprosma*, bracken, matagouri, occasional cabbage trees, and manuka intermixed with exotic grass and sparsely scattered silver and fescue tussock.

Manuka shrublands are more common on the southern part of the property, particularly in the side streams of Thirteen Mile Bush Stream. The area where it occurs thickest on the property is in the first side-stream down from the Thirteen Mile Bush (Conservation Area). Although a 20-30 hectare block has been burnt manuka is still scattered reasonably densely over this catchment, mainly under 2 m high and interspersed with other shrub species and, on steeper shady stream-sides, small patches of trees – mountain lacebark, mountain beech and broadleaf. This catchment is also reasonably clear of gorse and broom, unlike other parts of the property.

These areas of grey scrub, manuka and beech forest are however, very small compared to the overall dominant cover of exotic grasses and "herbs" (such as mullein, foxglove, horehound etc), broom and patches of gorse.

## 2.4 Fauna

No specific faunal survey was undertaken on the property but notes of bird species were made during the vegetation surveys and suggestions were made on the likely freshwater fish of nearby rivers. The bird species include bellbirds, silvereyes, and grey warblers in forest and shrublands. Occasional black shag were seen flying down Macfarlane Stream, with quails, kingfisher, and pukeko around scrub and open grassland mainly on valley floors.

No fish survey was undertaken but database records of nearby streams show that the likely species of fish in the waters of Thirteen Mile Bush and Macfarlane Stream are upland bully, Canterbury galaxias and long-finned eel and possibly koaro.

## 2.5 Historic

There are no known historic sites on the property except what looks to be an old homestead site in Macfarlane Stream marked by an area of exotic trees, mainly ash but also hawthorn and undoubtedly the source of spread of ash onto adjacent hillslopes.

## 2. Public Recreation

### 2.6.1 Physical Characteristics

Benmore is very accessible for recreation. Located immediately adjacent to a main State highway it is only 1 hour from Christchurch. To get to the remotest parts of the lease takes less than half a day's walk. It's physical setting is more "rural" than back-country, being on the foothills adjacent to the Canterbury Plains, composed predominantly of rolling downlands and lower hillslopes. It is very modified, with little in the way of naturalness left, except scattered second-growth shrublands and tiny forest remnants amongst introduced grasslands. It is, however, one of the closest pastoral leases to Christchurch and an "introductory" area to the high country.

### 2.6.2 Legal Access

There are three main areas of legal access onto Benmore - along the West Coast Road which adjoins the northern boundary of the lease, and secondly via a legal road and marginal strip alongside Macfarlane Stream. This latter access doesn't follow the formed 4 w.d track over part of its length so it is likely walkers will be tempted to follow the track rather than the legal road. There is also legal access to Thirteen Mile Bush Stream across Benmore freehold that goes along formed access right past the homestead and yards and through Benmore's deer paddocks providing reasonably practical access at least initially to 13 Mile Bush Conservation Area. With the current way the fences are and the lack of definition, walkers have to walk outside the boundary of the deer fence and hence onto freehold.

### 2.6.3 Activities

The main recreation activities on Benmore are from tramping and hunting parties walking through Benmore pastoral lease and freehold to get to pieces of adjoining public conservation land (Thirteen Mile Bush and the proposed Benmore Conservation Area). Hunters usually access Thirteen Mile Bush by the southern end through High Peak Station because of uncertainty of access from the Benmore side, and most of the access onto the Benmore Conservation Area is from Porters Pass or Lake Lyndon which are Conservation land.

## PART 3

## CONSULTATION AND OTHER PLANS

### 3.1 Consultation

Two meetings were held with representatives from Federated Mountain Clubs, Forest and Bird, NZ Deerstalkers Association, local tramping clubs and Fish and Game on 17 and 18 August 1999 in Christchurch and Timaru to discuss a number of pastoral leases under tenure review including Benmore. The only issues raised on Benmore were ones of access, landscape and historical sites. Recreation groups asked for secure legal

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access up Macfarlane Stream to the tops and to Thirteen Mile Bush from the West Coast Road, rather than the uncertainty with the current access. The Landscape Architects were keen to get landscape protection for the areas facing the road, noting it was important for the Porters Pass experience and for wildness. They also noted that the airstrip matagouri was important. Historic – attendees noted two historic sites associated with the property – an old homestead site in Macfarlane Stream and the Riddells Hotel site (which is mainly on road reserve and Brooksdale).

### **3.2 District Plans (Matters of National Importance)**

Benmore is in the Selwyn District. Their proposed District Plan was notified in 1996 but was withdrawn on August 22 1997. Until a new plan is notified (or a specific variation to the old plan is introduced), all rules and protection provisions have instead reverted to the Malvern section of the Transitional District Plan.

Under this section most of Benmore is zoned Rural C (High Country), and within that is the Upper Waimakariri Scenic Corridor. The Transitional Plan does not list any special features on the property. There are no protection provisions for indigenous vegetation in the Plan, other than indigenous forest or shrubland greater than 2m in height which is not "regrowth or invasion on farmland". The general rules in the plan control tracking, quarrying/mining, commercial forestry and the erection of some buildings.

### **3.3 Conservation Management Strategies**

Benmore pastoral lease lies in the CMS unit known as Puketeraki. The key priorities for this unit are to identify the significant native vegetation and threatened species and protect a representative range of indigenous biodiversity of the unit as well as enhancing the viability of priority threatened species populations and their habitats in the unit. For recreation and tourism the Conservancy wishes to minimise conflict between different recreational users on lands managed by the Department, to manage foothills areas under Departmental control for low impact recreation and tourist activities and to improve public access to lands managed by the Department. Another Conservancy objective is to improve and rationalise the protected status of land by the Department in the Puketeraki unit.

## **PART 4**

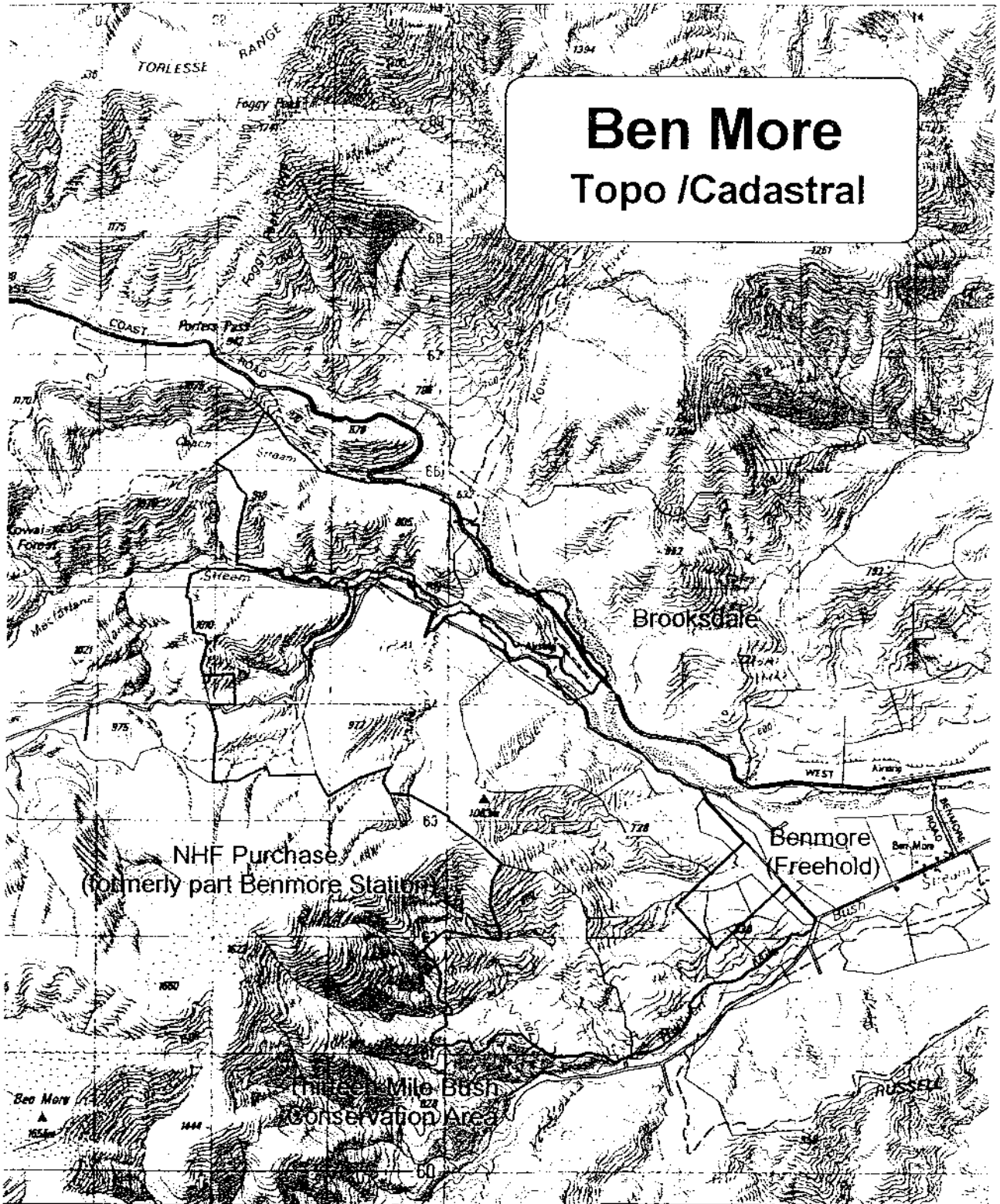
### **MAPS**



#### **4.1 Cadastral**

#### **4.2 Values**

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# Ben More Topo /Cadastral

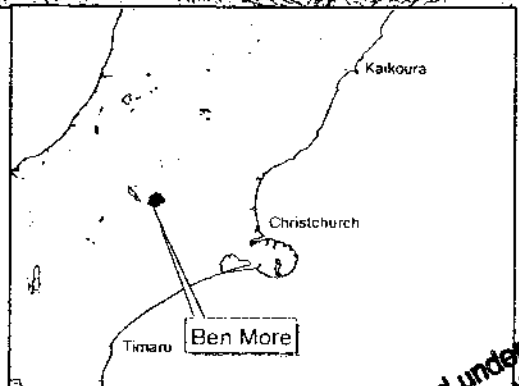


-  Legalaccess.shp
-  Benmore

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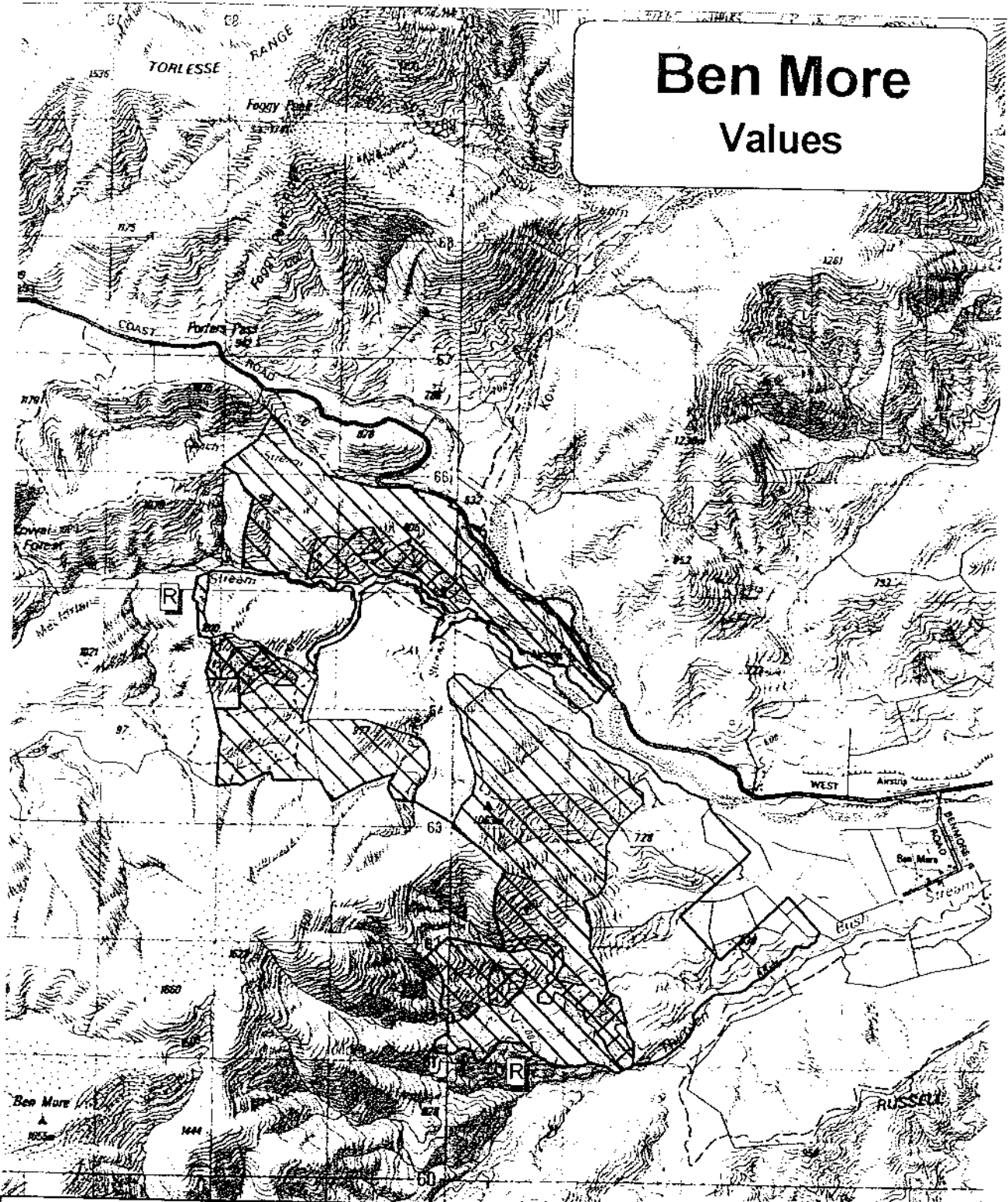






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Topographical map sheet 1:50,000 NZMS 260 J39




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# Ben More Values

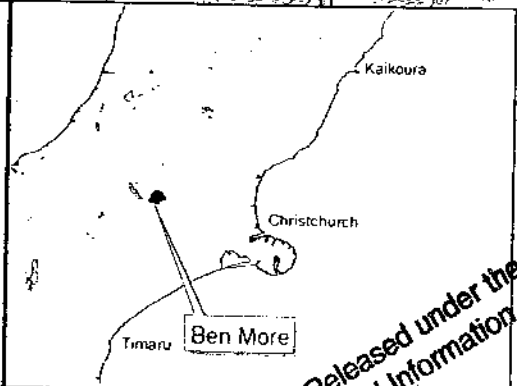


-  Ecological Values
-  Landscape Values
-  Recreation (R)
-  Benmore

0 0.5 1 1.5 2 Kilometers



Map prepared: 27 January 2000  
 Topographical map sheet 1:50,000 NZMS 260 J39



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