

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

RATA PEAK



Report prepared for Timaru District Council by Mike Harding
May 2016

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Craig Fevear
Valuation Reference: ... 24640/012.00
Address: Rangitata Gorge Road, Geraldine 7992
Location:..... Southwest side of upper Rangitata River
Ecological District:..... Orari

ECOLOGICAL CONTEXT:

The property lies on the southwest (true right) side of the upper Rangitata River, inland from Peel Forest in South Canterbury. It covers moderately-steep to very steep hill country rising to an altitude of more than 1300m. It includes lower-altitude terraces along Rangitata Gorge Road adjacent to the Rangitata River. The underlying geology of the higher country is sandstone (greywacke) and mudstone (argillite), with areas of andesite/dacite (Mount Somers Volcanics) at lower-altitudes. Valley floor terraces comprise glacial and river deposits (Cox and Barrell, 2007).

The property is in Orari Ecological District (McEwen, 1987). Most low altitude (below 900m) slopes on the property lie within the E1.4d and B3.2b Level IV Land Environments as defined by Leathwick *et al* (2003). Terraces and lower-altitude areas along the Rangitata River boundary lie within J2.2b and K3.1b land environments. Indigenous vegetation within the B3.2b and J2.2b land environments is regarded as ‘acutely threatened’; within K3.1b as ‘chronically-threatened’; and within E1.4d as ‘critically under-protected’ (Walker *et al*, 2006).

It is unclear how much of this part of Orari Ecological District was forested in pre-human times. Forested areas were most likely dominated by mountain beech (*Nothofagus solandri*), though mountain totara (*Podocarpus cunninghamii*), kowhai (*Sophora microphylla*), broadleaf (*Griselinia littoralis*) and kanuka (*Kunzea ericoides*) may have been common. Scrub, shrubland, treeland and tussockland would have occupied steeper slopes and disturbed sites. Sedgeland, rushland and reedland (wetland vegetation) would have been present at poorly drained sites.

Today woody vegetation cover in this part of Orari Ecological District is largely confined to regenerating scrub in gullies or on steep rocky slopes. Small areas of wetland vegetation are present at lower altitudes. Likewise, habitats of indigenous fauna have been depleted or modified. However, the property is likely to provide habitat for karearea/eastern falcon (*Falco novaeseelandiae*), a species listed as ‘at risk’ (recovering) by Robertson *et al* (2012), and for ‘at risk’ and ‘threatened’ lizard species listed by Hitchmough *et al* (2012), such as jewelled gecko (*Naultinus gemmeus*) (declining) and common skink (*Oligosoma polychroma*) (declining).

SIGNIFICANT AREAS ON THE PROPERTY:

This property was not surveyed as part of the District-wide survey of Significant Natural Areas because permission for access was declined by the landowner. However, other properties in Orari Ecological District have been surveyed and there are good recent aerial images of the area. So it is possible to determine what indigenous vegetation is likely to be present on the property.

Indigenous vegetation on steeper parts of the property appears to comprise relatively extensive areas of young (regenerating) shrubland and fernland, probably dominated by matagouri (*Discaria toumatou*), mingimingi (*Coprosma propinqua*) and bracken (*Pteridium esculentum*). Steep shady or rocky slopes appear to support older shrubland and scrub, including areas of low kanuka scrub. Higher slopes appear to support

narrow-leaved snow-tussock grassland. Indigenous plant species will be present on sparsely vegetated rock bluffs; plant communities that are representative of the original vegetation.

Relatively extensive areas of shrubland are present on lower slopes, including large populations of prostrate kowhai (*Sophora prostrata*). Lower-altitude terraces on the property are largely developed as farmland. The northern property boundary includes areas of open gravel and riparian shrubland associated with the floodplain of the Rangitata River.

Without the benefit of a field survey it is difficult to accurately determine the extent of significant indigenous vegetation on the property. Aerial images and roadside views indicate the presence of three areas of indigenous vegetation that are likely to be Significant Natural Areas (SNAs) when assessed against the Timaru District Plan and/or Canterbury Regional Policy Statement criteria. Only areas at altitudes lower than 900m were assessed, as activities at higher-altitude areas are covered by other plan rules. The Rangitata River floodplain is also listed as an SNA.

Area No.	Map ref. (NZTM)	Aprox. size(ha)	Vegetation/habitat type
759	1443430E-5156820N	23	shrubland; scrub
760	1442820E-5158310N	20	shrubland
761	1441610E-5158640N	18	shrubland; scrub

The likely values and boundaries of these areas are described on the SNA Forms in this report. Note that the boundaries of the SNAs are indicative, rather than precise. These areas are likely to meet the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) (and Canterbury Regional Policy Statement), and are considered to be sustainable in the long term, or sustainable with appropriate management (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed in the District Plan (pages B19-B20). It is expected that SNAs will be listed in the District Plan by way of a plan review.

At present, consent is required from Council for clearance of areas of indigenous vegetation or habitat which meet the Interim Definitions in the District Plan. Clearance includes burning, track construction, spraying with herbicides and over-planting. To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. Any questions regarding the protection, management and use of SNAs should be directed to the District Planner.

There may be other areas of significant indigenous vegetation or habitat on the property. This report should not be regarded as a comprehensive assessment; instead, it describes areas that are readily assessed from aerial photography and roadside views. Other possible significant sites include areas of woody vegetation (shrubland and scrub) on lower hill slopes and in the Quartz Creek valley, rock bluff vegetation, smaller seepages and flushes (wetlands), and habitats of threatened plant or animal species.

Area Name: Matagouri Stream	Property: Rata Peak
Ecological District: Orari	Nearest Locality: Peel Forest
Central map ref. (NZTM): 1443430E-5156820N	Area Size (ha): c. 23 Altitude (m): 600-800
Assessor: Mike Harding	Survey Time: n/a Survey Date: 01-05-16

General Description:

This SNA is located in the mid reaches of Matagouri Stream, where the stream flows through an incised gully on rocky slopes. It was viewed from the road and from aerial photographs. Permission for access for a ground survey was denied by the landowner. The SNA encompasses areas of shrubland and scrub on the gully sides and on adjacent rocky slopes. It appears to lie primarily on volcanic rock (Cox and Barrell, 2007).

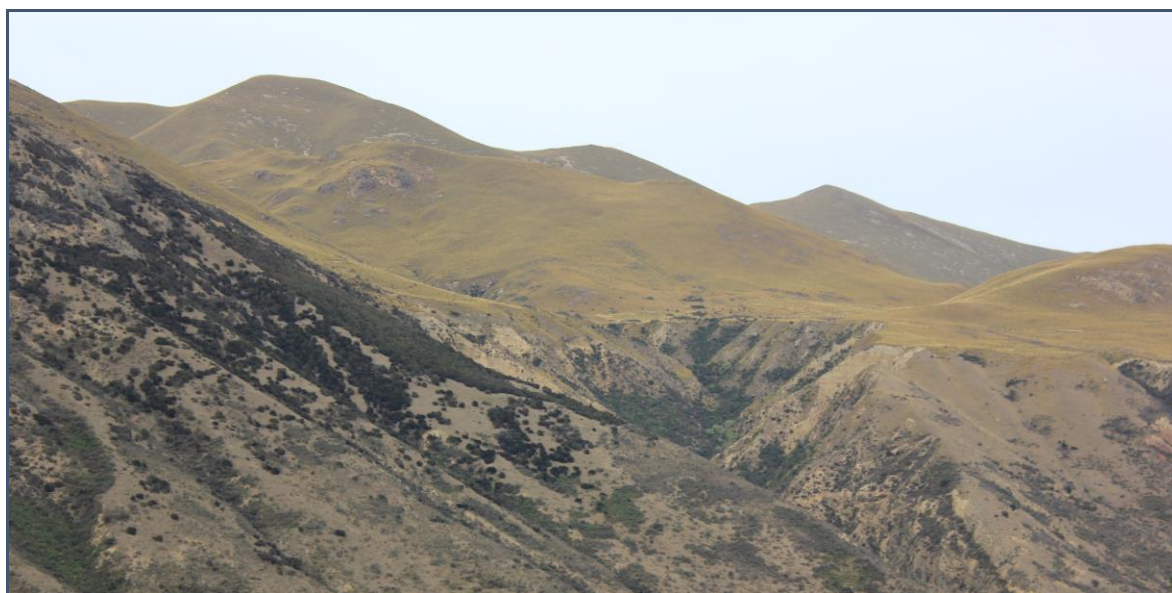
This SNA lies within Orari Ecological District (McEwen, 1987). It is mostly within the E1.4db Level IV Land Environment (Leathwick *et al*, 2003), in which indigenous vegetation is listed as ‘critically under-protected’ (Walker *et al*, 2006). Mafic (volcanic) cliffs, upon which parts of the SNA lie, are regarded as ‘originally rare’ ecosystems, in which indigenous vegetation is listed as ‘threatened’ (nationally vulnerable) (Holdaway *et al*, 2012).

Plant Communities:

Shrubland and scrub within the incised gully appears to be dominated by matagouri (*Discaria toumatou*) and other small-leaved shrubs, such as mingimingi (*Coprosma propinqua*). Cabbage tree (*Cordyline australis*) and mountain ribbonwood (*Hoheria lyallii*) trees are present in the main gully. Open sites between the shrubland/scrub appear to be dominated by narrow-leaved snow-tussock (*Chionochloa rigida*). Other species present likely to be present are native broom (*Carmichaelia australis*), bracken (*Pteridium esculentum*), scrub pohuehue (*Muehlenbeckia complexa*) and lawyer (*Rubus schmidelioides*).

Rocky slopes at the east part of the site support scrub. This appears to be dominated by kanuka (*Kunzea ericoides*), though manuka (*Leptospermum scoparium*) and other woody species may be present. As far as can be determined from aerial photographs, other parts of the SNA support shrubland and tussockland on rocky or bare slopes.

Survey of indigenous fauna was not possible. However, it is most likely that the area provides suitable habitat for lizards, including common skink; a species listed as ‘at risk’ by Hitchmough *et al* (2012).



Kanuka scrub (at left) and matagouri scrub (centre) at SNA 759

Notable Flora, Fauna and Habitats:

Notable features of this SNA are the presence of indigenous vegetation in a ‘nationally vulnerable’ ecosystem (volcanic rock), within a ‘critically under-protected’ land environment. Also important is the extent of indigenous woody vegetation at a relatively low altitude in an area where woody vegetation is substantially depleted.

Notable Plant and Animal Pests:

Assessment of plant and animal pests was not possible.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

The boundaries of this SNA have been drawn to include the main areas of shrubland and scrub on rocky or open slopes within and adjacent to the central part of Matagouri Stream. Ground survey would be required to confirm the accuracy of these proposed boundaries.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	Indigenous vegetation which is representative of seral woody vegetation originally present in the ecological district, and typical of that remaining in the ecological district.
Rarity	M/H	Indigenous vegetation within a ‘chronically threatened’ land environment and part of a ‘nationally vulnerable’ ecosystem.
Diversity and pattern	?	Plant species diversity could not be accurately assessed.
Distinctiveness/special features	?	The area appears likely to provide favourable habitat for lizards.
Other Criteria		
Size/shape	M/H	A relatively large area of indigenous vegetation at this altitude.
Connectivity	M	Lies relatively close to other areas of shrubland and scrub.
Long-term Sustainability	?	Unclear.

ASSESSMENT AGAINST REGIONAL POLICY STATEMENT CRITERIA:

Criteria	Yes/No	Comments
Representativeness	Yes	Indigenous vegetation that is moderately representative and is typical/characteristic of the natural diversity of the ecological district. A relatively large example of its type within the ecological district.
Rarity/Distinctiveness	Yes	Indigenous vegetation within an originally rare ecosystem.
Diversity and Pattern	?	Unclear.
Ecological Context	Likely	Likely to provide important habitat for lizards.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

This area appears to have been set aside from farm development and has very limited potential for further development. The site has undoubtedly been modified but now supports strongly regenerating indigenous woody vegetation. It does not appear seriously affected by plant or animal pests.

Discussion:

If the above assessment is accurate, this site meets the Timaru District Plan and Canterbury Regional Policy Statement criteria for a significant natural area. Important values are the presence of indigenous vegetation on volcanic rock and within a critically under-protected land environment and nationally vulnerable ecosystem.



SNA 759, presumed extent

Area Name: Rata Peak shrubland	Property: Rata Peak
Ecological District: Orari	Nearest Locality: Peel Forest
Central map ref. (NZTM): 1442600E-5158310N	Area Size (ha): c. 20 Altitude (m): 460-650
Assessor: Mike Harding	Survey Time: n/a Survey Date: 01-05-16

General Description:

This SNA is located on moderately steep slopes west of Powerhouse Stream and alongside Rangitata Gorge Road. It was viewed from the road and from aerial photographs. Permission for access for a ground survey was denied by the landowner. The SNA encompasses areas of shrubland and scrub on broad slopes and rock bluffs. It appears to lie primarily on volcanic rock (Cox and Barrell, 2007).

This SNA lies within Orari Ecological District (McEwen, 1987). It is within the B3.2b Level IV Land Environment (Leathwick *et al*, 2003), in which indigenous vegetation is listed as ‘acutely threatened’ (Walker *et al*, 2006). Mafic (volcanic) rock, upon which parts of the SNA lie, is regarded as an ‘originally rare’ ecosystem, in which indigenous vegetation is listed as ‘threatened’ (nationally vulnerable) (Holdaway *et al*, 2012).

Plant Communities:

As far as can be determined from roadside views, two main plant communities are present: prostrate kowhai (*Sophora prostrata*) shrubland; and matagouri (*Discaria toumatou*)-mingiming (*Coprosma propinqua*) shrubland and scrub.

The prostrate kowhai shrubland is present as large patches of low-growing scattered clumps of prostrate kowhai. Other species present are porcupine shrub (*Melicytus alpinus*), matagouri, native broom (*Carmichaelia australis*), sweet brier* (*Rosa rubiginosa*)¹ and silver tussock (*Poa cita*). It is present on the broad open slopes and at adjacent rocky sites

The matagouri-mingiming shrubland-scrub is dominated by these two species. Other species present are sweet brier*, native broom, Khasia berry* (*Cotoneaster simonsii*), scrub pohuehue (*Muehlenbeckia complexa*), lawyer (*Rubus schmidlioides*) and bracken (*Pteridium esculentum*).

Survey of indigenous fauna was not possible, although grey warbler (*Gerygone igata*) was observed. The area most likely provides suitable habitat for lizards.



prostrate kowhai shrubland at SNA 760

¹ Naturalized (exotic) species are indicated with an asterisk.

Notable Flora, Fauna and Habitats:

Notable features of this SNA are the presence of indigenous vegetation in an 'originally rare' ecosystem, within an 'acutely threatened' land environment. Also important is the extent of the shrubland/scrub in an area where woody vegetation is substantially depleted.

Notable Plant and Animal Pests:

Assessment of plant and animal pests was not possible. However, sweet brier and Khasia berry are present near the roadside.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

The boundaries of this SNA have been drawn to include the main areas of shrubland and scrub. Ground survey would be required to confirm the accuracy of these proposed boundaries.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	Indigenous vegetation which is representative of that originally present in the ecological district, and typical of that remaining in the ecological district.
Rarity	H	Indigenous vegetation within an 'acutely threatened' land environment and part of a 'nationally vulnerable' ecosystem.
Diversity and pattern	?	Plant species diversity could not be accurately assessed.
Distinctiveness/special features	?	The area appears to support one of the largest known populations of prostrate kowhai in the ecological district. The area appears likely to provide favourable habitat for lizards.
Other Criteria		
Size/shape	M/H	A relatively large area of indigenous vegetation at this altitude.
Connectivity	M	Lies close to other areas of shrubland and scrub (e.g. SNA 631).
Long-term Sustainability	?	Unclear.

ASSESSMENT AGAINST REGIONAL POLICY STATEMENT CRITERIA:

Criteria	Yes/No	Comments
Representativeness	Yes	Indigenous vegetation that is representative and is typical/characteristic of the natural diversity of the ecological district. A large example of its type in the ecological district.
Rarity/Distinctiveness	Yes	Indigenous vegetation which is reduced to less than 10% of its former extent in the land environment. Indigenous vegetation within an originally rare ecosystem.
Diversity and Pattern	?	Unclear.
Ecological Context	Likely	Likely to provide important habitat for lizards.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

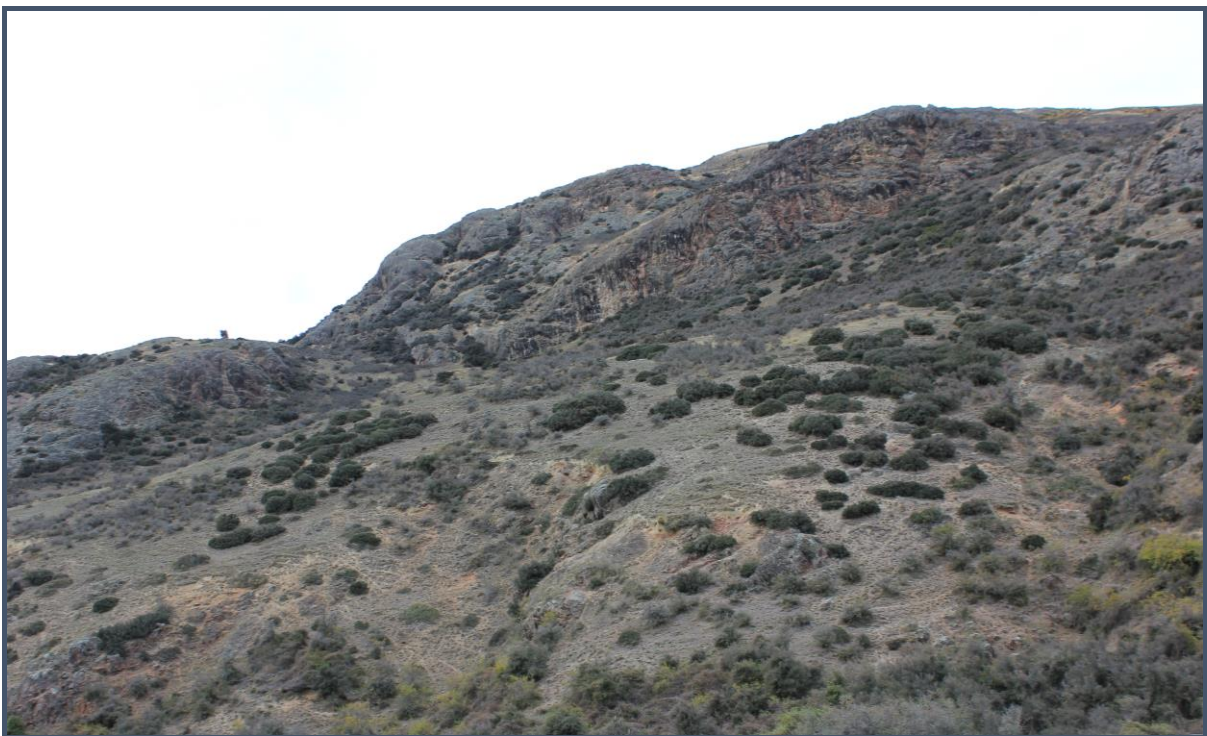
This area appears to have been set aside from farm development. It has potential for further development, though substantial parts of the site are steep and rocky. Vegetation at the site does not appear seriously affected by plant or animal pests, though Khasia berry (*Cotoneaster simonsii*) poses a significant threat.

Discussion:

If the above assessment is accurate, this site meets the Timaru District Plan and Canterbury Regional Policy Statement criteria for a significant natural area. Important values are the presence of woody vegetation, including a large population of prostrate kowhai, within an acutely threatened land environment and nationally vulnerable ecosystem.



SNA 760, presumed extent



prostrate kowhai shrubland (centre) and matagouri shrubland/scrub at SNA 760

Area Name: Lodge Stream shrubland	Property: Rata Peak
Ecological District: Orari	Nearest Locality: Peel Forest
Central map ref. (NZTM): 1441610E-5158640N	Area Size (ha): c. 18 Altitude (m): 450-630
Assessor: Mike Harding	Survey Time: n/a Survey Date: 01-05-16

General Description:

This SNA is located on a broad low-lying ridge and associated rocky slopes east of Lodge Stream, at the western part of the property. It was viewed from the road and from aerial photographs. Permission for access for a ground survey was denied by the landowner. The SNA encompasses areas of shrubland and scrub. Underlying rock is volcanic (Mt Somers Volcanics Group) (Cox and Barrell, 2007).

This SNA lies within Orari Ecological District (McEwen, 1987). It is within the B3.2b Level IV Land Environment (Leathwick *et al*, 2003), in which indigenous vegetation is listed as ‘acutely threatened’ (Walker *et al*, 2006). Cliffs and scarps of mafic (volcanic) rocks are regarded as an ‘originally rare’ ecosystem, in which indigenous vegetation is ‘threatened’ (nationally vulnerable) (Holdaway *et al*, 2012).

Plant Communities:

As far as can be determined from roadside views and aerial photographs, the gentler slopes support prostrate kowhai shrubland and steeper rocky sites support matagouri-mingimangi shrubland and scrub. It is not possible to determine species composition without closer inspection. However, the plant communities are likely to be similar to those described for the adjacent SNA 760.

Survey of indigenous fauna was not possible. However, it is likely that the area provides suitable habitat for indigenous lizard species.



Indigenous woody vegetation at SNA 761 (higher slopes)

Notable Flora, Fauna and Habitats:

Notable features of this SNA are the presence of indigenous vegetation in an ‘originally rare’ (nationally vulnerable) ecosystem, within an ‘acutely threatened’ land environment. Also important is the extent of the shrubland/scrub in an area where woody vegetation is substantially depleted.

Notable Plant and Animal Pests:

Assessment of plant and animal pests was not possible, although Khasia berry (*Cotoneaster simonsii*) is likely to be present.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

The boundaries of this SNA have been drawn to include the main areas of woody vegetation, as determined from aerial photographs. Ground survey would be required to confirm the accuracy of these proposed boundaries.

Primary Criteria	Rank	Notes
Representativeness	M/H	Indigenous vegetation which is representative of that originally present in the ecological district, and typical of that remaining in the ecological district.
Rarity	H	Indigenous vegetation within an 'acutely threatened' land environment and part of a 'nationally vulnerable' ecosystem.
Diversity and pattern	?	Plant species diversity could not be accurately assessed.
Distinctiveness/special features	?	The area appears to support one of the largest known populations of prostrate kowhai in the ecological district. The area appears likely to provide favourable habitat for lizards.
Other Criteria		
Size/shape	M/H	A relatively large area of indigenous vegetation at this altitude.
Connectivity	M	Lies close to other areas of shrubland and scrub (e.g. SNA 630).
Long-term Sustainability	?	Unclear.

ASSESSMENT AGAINST REGIONAL POLICY STATEMENT CRITERIA:

Criteria	Yes/No	Comments
Representativeness	Yes	Indigenous vegetation that is representative and typical/characteristic of the natural diversity of the ecological district. A large example of its type in the ecological district.
Rarity/Distinctiveness	Yes	Indigenous vegetation which is reduced to less than 10% of its former extent in the land environment. Indigenous vegetation within an originally rare ecosystem.
Diversity and Pattern	?	Unclear.
Ecological Context	Likely	Likely to provide important habitat for lizards.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

This area appears to have been set aside from farm development. It has potential for further development, though parts of the site are steep and rocky. Vegetation at the site does not appear seriously affected by plant or animal pests, though Khasia berry (*Cotoneaster simonsii*) is likely to be present.

Discussion:

If the above assessment is accurate, this site meets the Timaru District Plan and Canterbury Regional Policy Statement criteria for a significant natural area. Important values are the presence of woody vegetation, including a large population of prostrate kowhai, within an acutely threatened land environment.



SNA 761, presumed extent

References Cited

Cox, S.C; Barrell, D.J.A (compilers). 2007. Geology of the Aoraki area. *Institute of Geological and Nuclear Sciences 1:250,000 geological map 15*. Institute of Geological and Nuclear Sciences Limited, Lower Hutt.

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Leathwick, J; Wilson, G; Rutledge, D; Wardle, P; Morgan, F; Johnston, K; McLeod, M; Kirkpatrick, R. 2003. *Land Environments of New Zealand*. David Bateman Ltd.

McEwen, WM (editor). 1987. Ecological regions and districts of New Zealand, third revised edition (Sheet 4). *New Zealand Biological Resources Centre Publication No. 5*. Department of Conservation, Wellington, 1987.

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Area Name: Upper Rangitata River

Ecological Districts: Hakatere and Orari

Surveyors: Mike Harding

Property: UCL and AMF

Nearest Locality: Peel Forest

Survey Time: n/a

Survey Date: n/a

General Description:

These SNAs comprise the flood plain of the upper Rangitata River, above Rangitata Gorge. They lie predominantly on Unallocated Crown Land (UCL). However, small parts of the floodplain lie within adjacent privately-owned or leasehold land parcels. Some parts may be covered by Ad Medium Filium (AMF) rights. The key value of these SNAs is the habitat the riverbed provides for indigenous birds, including threatened species. Also, stable parts of the river floodplain support indigenous plant communities, including several at risk species. These SNAs comprise one contiguous area; it is separated into different SNAs only for mapping purposes.

Plant Communities:

Gravelfield, stonefield, herbfield, grassland, shrubland and sedgeland-rushland (wetland) plant communities are present. Most parts of the riverbed comprise recently-deposited river gravels with scattered herbs and grasses, which are frequently swept away by floods before more stable plant communities can become established. At stable sites, indigenous mat plants become established, along with a range of indigenous and exotic herbs and grasses. If a site remains stable, a grassland-herbfield becomes established and eventually the site is colonised by shrubs. Small areas of sedgeland-rushland (wetland) vegetation are present at damp stable sites.

Birds/Fauna Habitat:

The open gravels of the riverbed provided habitat for at least 20 indigenous bird species during the period 1999 to 2004 (Robertson *et al*, 2007). The riverbed provides very important breeding habitat for wrybill (*Anarhynchus frontalis*), black-fronted tern (*Sterna albostrigata*), banded dotterel (*Charadrius bicinctus*) and black-billed gull (*Larus bulleri*). Stable parts of the river berms are likely to provide important habitat for lizards, especially where there is good vegetation cover.

Notable Flora, Fauna and Habitats:

The bed of the upper Rangitata River was recommended for protection as Priority Natural Area 21 by the Protected Natural Areas report for Heron Ecological Region (Harrington *et al*, 1986). The upper Rangitata River was also listed as a Site of Special Wildlife Interest by the (former) New Zealand Wildlife Service and as a Wetland of Ecological and Representative Importance by the Department of Conservation.

Recent river flood plains are not covered by the Land Environments framework compiled by Leathwick *et al* (2003). However, adjacent Level IV Land Environments at areas of stable riverbed and recent terraces are listed as 'acutely threatened' by Walker *et al* (2006). Braided riverbeds are listed as originally rare ecosystems by Williams *et al* (2007) that are classified as 'nationally endangered' by Holdway *et al* (2012).

A number of plants listed as 'at risk' by de Lange *et al* (2102) are present on the floodplain of the upper Rangitata River, including:

<i>Anthosachne falcis</i>	naturally uncommon
<i>Carmichaelia appressa</i>	naturally uncommon
<i>Craspedia</i> "Havelock River".....	naturally uncommon
<i>Luzula celata</i>	declining
<i>Muehlenbeckia ephedroides</i>	declining
<i>Raoulia monroi</i>	declining

Eleven native bird species listed as 'threatened' or 'at risk' by Robertson *et al* (2012) have been recorded from the upper Rangitata River in recent years:

banded dotterel (<i>Charadrius bicinctus</i>).....	nationally vulnerable
black-billed gull (<i>Larus bulleri</i>).....	nationally critical
black-fronted tern (<i>Sterna albostrigata</i>).....	nationally endangered
black shag (<i>Phalacrocorax carbo</i>).....	naturally uncommon
Caspian tern (<i>Sterna caspia</i>).....	nationally vulnerable
grey duck (<i>Anas superciliosa</i>).....	nationally critical
little shag (<i>Phalacrocorax melanoleucos</i>).....	naturally uncommon
NZ pipit (<i>Anthus novaeseelandiae</i>).....	declining

pied stilt (*Himantopus himantopus*) declining
 South Island pied oystercatcher (*Haematopus ostralegus*) declining
 wrybill (*Anarhynchus frontalis*) nationally vulnerable

Notable Plant and Animal Pests:

Open river gravels are especially vulnerable to invasion by plant pests. Important plant pests recorded from or near the bed of the upper Rangitata River (Harding, 2002) and on more recent surveys, or that pose a significant threat, are:

- broom (*Cytisus scoparius*)
- cotoneaster (*Cotoneaster microphylla*)
- crack willow (*Salix fragilis*)
- Douglas fir (*Pseudotsuga menziesii*)
- false tamarisk (*Myricaria germanica*)
- grey willow (*Salix cinerea*)
- gorse (*Ulex europaeus*)
- Russell lupin (*Lupinus polyphyllus*)
- sweet brier (*Rosa rubiginosa*)
- thyme (*Thymus vulgaris*)
- wilding pines (*Pinus* species)

A number of non-woody weed species are common, notably St John’s wort (*Hypericum perforatum*), haresfoot trefoil (*Trifolium arvense*), Californian thistle (*Cirsium arvense*), viper’s bugloss (*Echium vulgare*), mouse-ear hawkweed (*Pilosella officinarum*), sheep’s sorrel (*Rumex acetosella*), sweet vernal (*Anthoxanthum odoratum*) and browntop (*Agrostis capillaris*).

Animal pests were not surveyed, though rabbits and hares are present. A number of important introduced predators are also likely to be present, including rats, feral cats, hedgehogs, stoats and ferrets. These predators pose a significant threat to indigenous birds and lizards.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

The boundaries of these areas have been drawn (from aerial photos) to include all areas of open gravel and stable vegetated islands within the main river floodplain. This boundary extends beyond areas of UCL into adjacent land parcels at some locations. Ground survey is required to confirm the accuracy of proposed boundaries at these locations.



Upper Rangitata River SNA, downstream from the confluence of Potts River (at left)

Condition and Management

Most parts of the river floodplain are in good condition. Regular flooding helps maintain the areas of open gravel that are important as nesting habitat for riverbed birds. Landowners in the upper Rangitata valley have undertaken coordinated plant pest control for many years in an attempt to maintain the riverbed and adjacent lands free of the most important plant pests, such as broom, gorse and crack willow. This plant pest control programme has received financial support from Timaru District Council and other agencies. In recent years there has been a coordinated predator control programme in the upper Rangitata valley.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	H	Most parts of the river floodplain are highly representative of the original condition and are typical of that remaining in the ecological district.
Rarity	H	The riverbed provides habitat for six 'threatened' and five 'at risk' bird species, and at least six 'at risk' plant species.
Diversity and pattern	H	Habitat and species diversity is similar to that originally present.
Distinctiveness/special features	H	This area provides nationally important breeding habitat for several bird species.
Other Criteria		
Size/shape	H	A very large area, especially for an alluvial land surface at relatively low altitude.
Connectivity	M/H	Riparian vegetation and habitat is modified in many places. However, the hydrological of the river system is intact. It provides a link between the almost pristine river headwaters and habitats in the lower reaches of the river.
Long-term Sustainability	M/H	Continued plant and animal pest control and protection from water extraction will be required to maintain ecological values in the long term.

ASSESSMENT AGAINST REGIONAL POLICY STATEMENT CRITERIA:

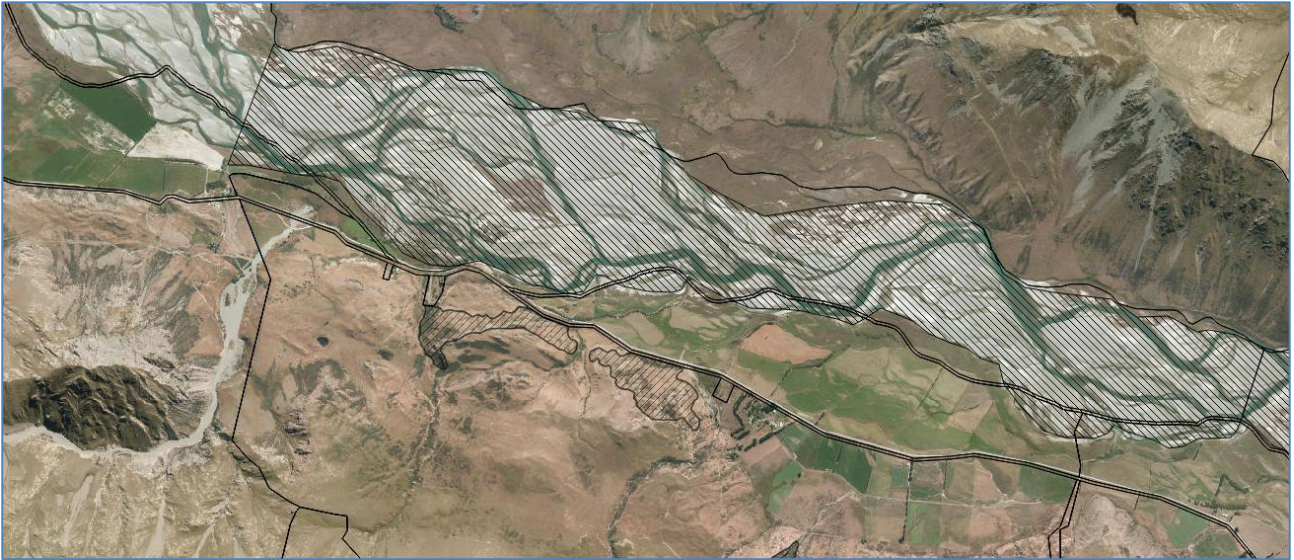
Criteria	Yes/No	Comments
Representativeness	Yes	Indigenous vegetation and habitat that is highly representative and is typical/characteristic of the natural diversity of the ecological district. A very large example of its type within the ecological district.
Rarity/Distinctiveness	Yes	Indigenous vegetation within an originally rare ecosystem. Provides habitat for at least eleven bird and six plant species that are listed as 'threatened' or 'at risk'. The area is an originally rare ecosystem that is listed as 'nationally endangered'.
Diversity and Pattern	Yes	Bird species diversity is high.
Ecological Context	Yes	The area provides an important habitat link and is critical for the natural hydrological functioning of the Rangitata River.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

Most parts of this large SNA are UCL and not automatically available for development. However, some parts are affected by flood protection works and, once stabilized, by pasture development. Otherwise, development of most parts of this area is not practical.

Discussion:

This large area has values that are nationally important. It very easily meets the Timaru District Plan and Canterbury Regional Policy Statement criteria for a Significant Natural Area.



Part of Upper Rangitata River (SNA 770)

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