

Karamea Place Stewardship Land



Stanley Palmer(b.1936) Road's End Karamea 2017 Screenprint on paper

Landscape Values

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Landscape context for decision-making about stewardship land in Karamea Place

Landscape is formally defined as “all aspects of the environment including its physical form, and all natural and cultural processes and systems, and the interactions of these systems.”

Landscapes are the outcome of many interconnected processes.

All landscapes are evolving. Even pre-human landscapes in Karamea Place were constantly changing in response to natural forces, such as cell by cell growth or massive catastrophic landslips, but their character used to be 100% natural. When people arrived processes of modification began, as successive generations shaped the landscape to meet their needs and desires. Original vegetation was harvested or removed, landforms and drainage patterns altered, natural soils cultivated, and many things have been built.

In Karamea Place the processes of modification are limited to the coastal plain and valley floor land part way up some rivers. Most of the stewardship land is in the modified landscape near the coast or a little way up the valleys of the three main rivers: Ōpārara, Karamea and Little Wanganui.

Further inland landscapes have largely retained their original natural character as state owned and managed indigenous forest and more recently as Kahurangi National Park. About half of Karamea Place is in Kahurangi National Park.

Outside the national park the processes of landscape change continue. It seems likely that over the next few generations what is left of indigenous vegetation in the modified landscapes of Karamea Place will be further modified or replaced. This will make remaining fragments of natural character all the more valuable as indicators of the landscapes past, as indigenous biodiversity refuges, and as ecological, hydrological and visual contributors to sustainability of the evolving rural landscape.

Karamea Place defined

Karamea Place extends from Kahurangi Point in the north to Gentle Annie Point in the south, with its inland boundary following the western edge of the Mackay and Goulard Downs and the crests of the Goulard, Grange, Herbert and Radiant Ranges. For the purposes of this report, all of eastern Radiant Range is included in Karamea Place, but the catchment of Mokikinui River is not.

Karamea Place is separated from the rest of the West Coast by the Radiant Range, a natural barrier which forces the coastal road inland over Happy Valley saddle. This makes Karamea Place feel remote, at the end of the road, a perception which contributes to its landscape character.

Nikau are a distinctive and recurring motif, visible evidence of a mild moist climate. They also contribute to defining the landscape character of Karamea Place.

Department of Conservation role in managing landscape values

In these landscape values reports the focus is on natural character (and to a much lesser extent historic character). This is because the stewardship land reclassification process is occurring

under the Conservation Act 1987 and the purpose of this act is “to promote the conservation of New Zealand’s natural and historic resources”. “Conservation means the preservation and protection of natural and historic resources for the purpose of

- maintaining their intrinsic values,
- providing for their appreciation and recreational enjoyment by the public and
- safeguarding the options for future generations.”

How the Department of Conservation plans to achieve the purpose of the Conservation Act is set out in a regional Conservation Management Strategy (CMS). The West Coast *Te Tai o Poutini* Conservation Management Strategy 2010-2020 (CMS) states the desired outcomes for the region and for the seven individual places within the region including Karamea Place (pp 184-192). Landscape outcomes sought for the whole West Coast region are:

“Within public conservation lands, natural, historical and cultural heritage is protected, maintained and enhanced.” (p177), and

“Where practicable, natural heritage is improved to a more natural state. The ecological integrity and natural character of managed sites is maintained or restored... The connectivity and natural functioning of mountain-sea ecosystems, lowland wetlands and riparian areas is improving.”(p181)

At Karamea Place the landscape outcome sought is:

4.2.1.3 Geodiversity, landforms and landscapes in 2020

The overall character of geodiversity, landforms and landscapes in Karamea Place is maintained in its 2010 condition. (p185, CMS)

Territorial authority role in managing landscape values

Karamea Place is governed by the Buller District Council. Their operative Buller District Plan 2000 seeks to:

“To protect the distinctive character and unique values of outstanding landscapes and natural features.” (Objective 4.9.3.1)

with two relevant policies:

“4.9.4.1. To discourage activities which would significantly alter the character of outstanding landscapes.

4.9.4.2. Character areas shall be identified in the Plan and shall reflect the distinctive landscape elements and natural values held for each region.”(page 34)

A Natural Environment Character Area is identified in section 5.5:

“5.5.1.1. The Natural Environments Character Area covers those parts of the District that are national park (part of the Paparoa National Park and proposed Kahurangi National Park) and ecological areas.

5.5.1.2. The broad purpose of the Natural Environments Character Area is to reflect the high overall conservation values present, while recognising that there are also a number of other uses and/or values attributable to this land, such as recreation, tourism, mining, hydroelectric generation and cultural and aesthetic values.”

Thus the operative Buller District plan largely relies on various legal protections provided to Public Conservation Land (PCL) to protect outstanding landscapes in the Buller District, including Karamea Place.

Buller District Council is one of the three West Coast territorial authorities currently working on a new joint plan *Te Tai o Poutini*. In the draft plan [Outstanding Natural Landscapes \(ONLs\)](#) in Karamea Place have been mapped and are listed in Schedule 5. Specific rules intended to protect the values of the ONLs are included in the plan

A lot of PCL is included in the ONLs, but they are defined by attributes of the landscape rather than historical legal boundaries. Land which is not PCL may be included in an ONL.

Regional council role in managing landscape values

The West Coast Regional Council also has responsibility to protect Outstanding Natural Landscapes in Karamea Place under the Resource Management Act 1991, as a matter of national importance.

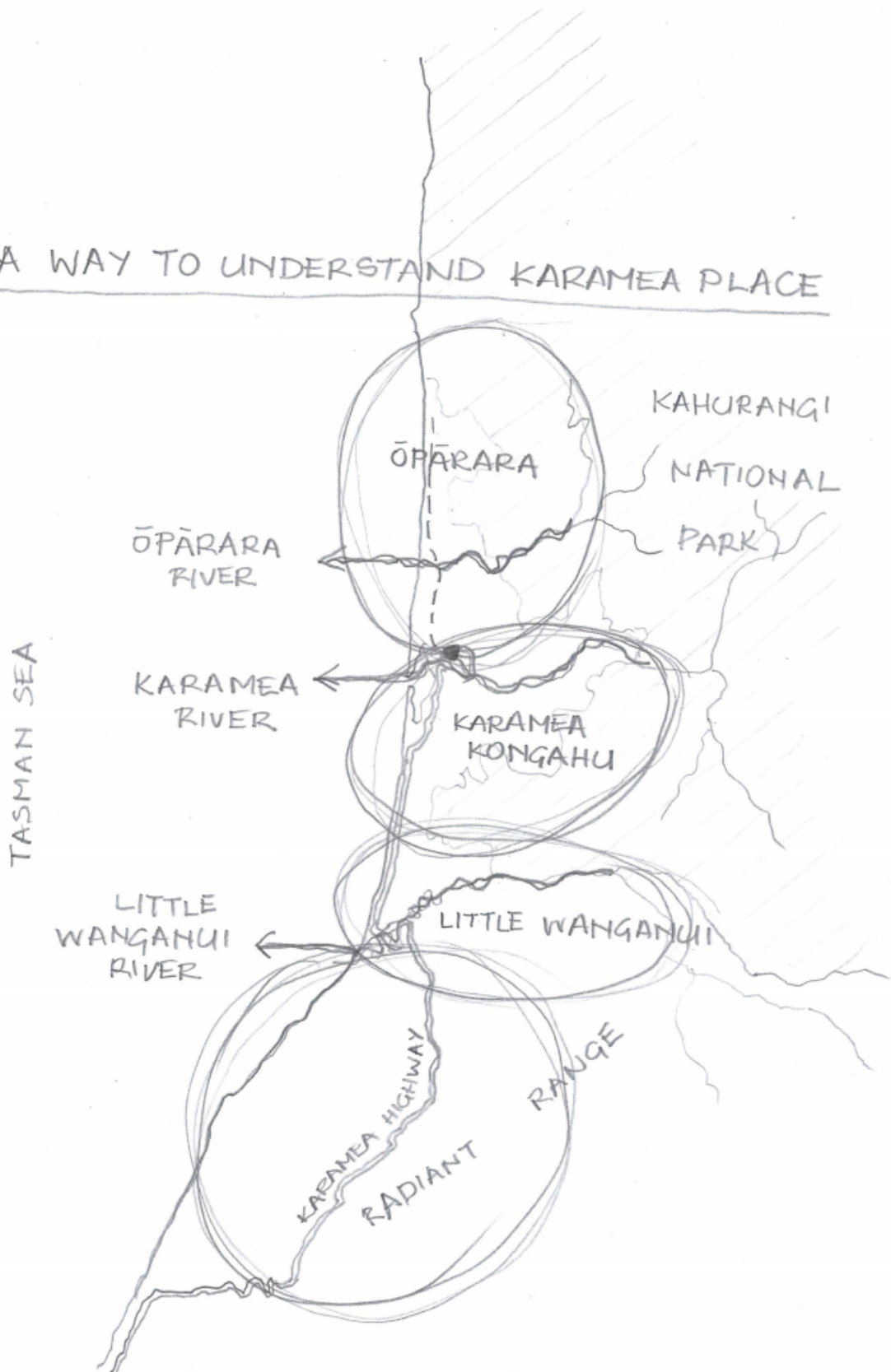
The regional council commissioned a region-wide assessment of coastal natural character which was undertaken by [Brown Ltd](#) in 2013. Some inland landscapes have been added. This work has fed into the Outstanding Natural landscapes identified and mapped in the [draft Te Tai o Poutini plan](#).

Some stewardship land parcels in Karamea Place fall into [Brown's high and outstanding natural character units](#), and some are also located in ONLs identified in the [draft Te Tai o Poutini](#).

Stewardship land in Karamea Place

There are 32 parcels of stewardship land in Karamea Place. To better understand how each stewardship parcel fits within its wider landscape setting Karamea Place is broken into four chunks of similar character. Stewardship parcels in each are identified and landscape factors discussed. Where part or all of a stewardship parcel falls into an [ONL](#) or [natural character unit](#) this is stated because this is a consideration which may need to be given some weight. That said, there are many places with high or outstanding natural character outside the boundaries of units identified at the regional scale.

A WAY TO UNDERSTAND KARAMEA PLACE



Contents Karamea Place

Report No.	NaPalis	Name of Conservation Area/Stewardship Land Parcel (area in hectares)	ONL	Natural Character
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Ōpārara

KAR01	2807687	Mossy Burn Conservation Area (20ha)		
KAR02	2807683	Ōpārara River Lagoon Conservation Area (11ha)		NCA58
KAR04	2807685	Ōpārara Riverbed Conservation Area (7ha)		
KAR04	2807686	Ōpārara Conservation Area (in riverbed) (0.4ha)		
KAR02	2807684	Ōpārara Conservation Area (Butterfly Creek) (5ha)		NCA58

Karamea and Kongahu

KAR09	2807688	Elfin Bluff Conservation Area (323ha)		T156
KAR10	2807709	Kelly Creek Conservation Area (30ha)		T157
KAR13	2807713	Jordan Creek Conservation Area (7ha)	ONL54	T157
KAR13	2807697	Arapito Conservation Area (5ha)		T157
KAR08	2807693	Market Cross Conservation Area (9ha)		NCA57
KAR07	2807692	Karamea Riverbed Cons Area (Maori Point) (12ha)		NCA57
KAR07	2807691	Karamea Estuary Conservation Area (0.6ha)		NCA57
KAR05	2807689	Karamea Conservation Area (0.1ha)		
KAR05	2807712	Karamea Conservation Area (Waverley Street) (0.9ha)		
KAR06	2807690	Karamea Estuary Conservation Area (4ha)		NCA57
KAR07	2807698	Karamea Estuary Conservation Area (3ha)		NCA57
KAR07	2807708	Otumahana Estuary Conservation Areas (22ha)		NCA57
KAR06	2807694	Kongahu Conservation Area (38ha)		
KAR14	2807724	Kongahu Swamp Road Conservation Area (2ha)		
KAR11	2807695	Kongahu Conservation Area (469ha)		NCA57
KAR12	2807696	Kimberley Creek Conservation Area (3ha)	ONL54	

Little Wanganui

KAR06	2807734	Little Wanganui Riverhead Cons Area (sand spit) (1ha)		
KAR15	2807699	Little Wanganui Conservation Area (hillside) (52ha)	ONL54	
KAR16	2807711	Scobie Clearing Conservation Area (31ha)	ONL54	
KAR17	2807700	Little Wanganui Conservation Area (riverbed) (14ha)	ONL54	T157
KAR17	2807723	Little Wanganui Conservation Area (riverbed) (23ha)	ONL54	T157

Radiant Range

KAR18	2807733	Little Wanganui Conservation Area (headland) (40ha)	ONL53	C56
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KAR18	2807735	O'Connor Creek Conservation Area	(793ha)	53/54	
KAR18	2807737	Boulder Creek Conservation Area	(926ha)	ONL53	
KAR19	2807736	Tidal Creek Conservation Area	(62ha)	ONL54	
KAR19	2807732	Blue Duck Creek Conservation Area	(2ha)		T155
KAR19	2807731	Lyell Range-Radiant Range Cons Area	(5,6336ha)		

Ōpārara

North of Karamea settlement where the Karamea Highway ends.
Includes coastal land inland to the boundary of Kahurangi National Park. Most is modified.
Includes the catchment and hāpua of Ōpārara River.
Sparsely settled, remote.

In the [draft Te Taio o Poutini](#) plan, schedule 5, much of the Ōpārara part of Karamea Place is outstanding natural landscape including:

[ONL55 Kohaihai Bluff to Kahurangi Point](#)

[ONL54 Fenian, Stormy & Radiant Ranges](#)

However none of the stewardship parcels fall within the boundaries of an ONL

In the [West Coast Region Natural Character Study \(Brown 2013\)](#) three outstanding natural character units are identified in the Ōpārara part of Karamea Place. They include:

Unit T160 Heaphy River (outstanding)

Unit T159 Kohaihai River (outstanding)

Unit T158 Ōpārara River (outstanding)

Also coastal high and outstanding natural character units:

Unit NCA 61 Kohaihai Bluff-Kahurangi Point (outstanding)

Unit NCA 60 Kohaihai Coast (high)

Unit NCA 59 Ōpārara-Kohaihai Coastal Foothills (outstanding)

Unit NCA 58 Ōpārara River Mouth (high)

While many of these character units include PCL none includes stewardship land.

There are five parcels of stewardship land in this part of Karamea Place:

- KAR01 2807687 Mossy Burn Conservation Area (20ha)
- KAR02 2807683 Ōpārara River Lagoon Conservation Area(11ha)
- KAR04 2807685 Ōpārara Riverbed Conservation Area (7ha)
- KAR04 2807686 Ōpārara Conservation Area (in riverbed) (0.4ha)
- KAR02 2807684 Ōpārara Conservation Area (Butterfly Creek) (5ha)

Landscape factors for decision-makers to consider:

- KAR01 2807687 **Mossy Burn Conservation Area** (20ha)
This parcel contains forested coastal hill country contiguous with Kahurangi National Park along its long northern boundary, and a short section of Coal Creek which is otherwise within the national park. It includes a lookout at the high point 174m. Public access is from Kohaihai Road (unsealed) which forms one boundary. Forest/shrubland cover is more or less complete although vegetation appears more modified than adjacent national park. Clearance of indigenous vegetation appears to be occurring on neighbouring non-PCL land along southern boundary.

Consideration could be given to including this parcel in the adjacent Kahurangi National Park.

Within the context of policy to effectively administer the Park, the Kahurangi National Park Management Plan 2001 includes the following guidance:

“Additions to the Park

In future, public land adjacent to the national park, which meets the criteria for national park status, could become available. In such cases, the Department should seek to add that land to the Kahurangi National Park through the process dictated in the National Parks Act. Section 452 of the Ngai Tahu Claims Settlement Act provides that an area of land at Whakapouai will become part of the Park in the future.” (p150)

to be implemented thus:

“4. Seek to add adjacent public land, which meets the necessary criteria, to Kahurangi National Park if and when it becomes available.” (p151)

The “necessary criteria” are presumably those set out in the National Parks Act 1980 and General Policy for National Parks 2005, currently under review.

- **KAR02 2807683 Ōpārara River Lagoon Conservation Area (11ha)**

This conservation area is located on a coastal sand spit enclosing northern lobe of the tidal lagoon of Ōpārara River. Shrubland vegetation looks modified although salt marsh at hapua edge looks natural. The stewardship land is surrounded by Ōpārara River Mouth Marginal Strips, effectively increasing the width of the stewardship land parcel.

There is public access from Kōhaihai Road to the beach and stewardship land although this does not appear to be a legal connection. A 4WD track runs along most of the length of the conservation area.

This parcel of stewardship Land is located in high natural character *Unit NCA58 Ōpārara River Mouth*. Key attributes/characteristics noted are:

Extensive river mouth enclosed by a large dune field, and series of sandbars that extend across the river mouth on either side. Includes part of the river channel with a sequence of sand beds flanked by a vegetated escarpment.

This landscape is highly expressive of the interplay between the Ōpārara River mouth, enclosing dune fields and sandbars, and the Tasman Sea. The tidal rhythm of the sea also provides a counterpoint for the rivers natural variations of flow, clarity and flood cycles.

Dune landform enclosing the river mouth is expressive of the coastal processes.

Intact vegetation sequences from dune field through to coastal scrub.

Regenerating to mature coastal forest extend across the coastal terrace to the northern edge of the river.

While the prominence of adjoining pasture and farming activities along the shoreline of the river does affect the perceived intactness and cohesion of the coastal environment, they do not overly detract from the highly expressive and natural processes of the river mouth that dominate the local landscape.

- **KAR04 2807685 Ōpārara Riverbed Conservation Area (7ha)**

Two land parcels on an alluvial terrace adjacent to lower Ōpārara River which appear to reflect the serpentine form of former riverbed, possibly a former oxbow lake. They are likely to be overflow channels during floods. The river is tannin-stained, with contrasting white gravel.

Remnant native vegetation is in two blocks bisected by a clearing with a farm track. All is surrounded by pastoral farmland. The northern parcel on the other side of a legal road width is completely modified. Consideration could be given to a possible land swap to reduce edge effects on riverbank forest remnants and enhance connectivity through the modified landscape setting.

There appears to be public vehicle access to riverbed on the bank opposite these parcels.

- **KAR04 2807686 Ōpārara Conservation Area** (in riverbed) (0.4ha)
A second small parcel of Ōpārara Conservation Area on south bank of Ōpārara River includes some riverbank forest vegetation but is otherwise modified for pastoral farming. As a riparian parcel this one has much in common with Ōpārara Riverbed Conservation Area above and the two may be best considered together.
- **KAR02 2807684 Ōpārara Conservation Area** (Butterfly Creek) (5ha)
This is a small forested conservation area, triangular in shape, contiguous with Kahurangi National Park along its north boundary. It appears to be same land type as adjacent national park but the forest has been cut over and vegetation is regenerating with some emergent trees. In time it will be ecologically and visually indistinguishable from neighbouring national park. No public road access apparently.

High natural character *Unit NCA58 Ōpārara River Mouth* extends inland to include the Ōpārara Conservation Area at Butterfly Creek. Key attributes/characteristics noted are noted above.

Consideration could be given to including this Butterfly Creek Ōpārara Conservation Area in Kahurangi National Park. For context see above.

Karamea and Kongahu

Includes the catchment of the Karamea River and its tidal hapua, Kongahu Swamp, and coastal land south as far as Little Wanganui River. Granite Creek also flows into the hapua at its southern end.

The Karamea Highway runs along the coast for the length of the coastal plain in this area.

In the [draft Te Taio o Poutini plan](#), schedule 5, only the inland part of Karamea and Kongahu has been assessed as Outstanding Natural Landscape:

[ONL 54 Fenian, Stormy & Radiant Ranges](#)

In the [West Coast Region Natural Character Study \(Brown 2013\)](#) identified two high and one outstanding natural character units in the Karamea River catchment and Kongahu Swamp part of Karamea Place. Most do not have stewardship land in them. They include:

Unit T156 Karamea River Flats (high)

Unit T157 Karamea River (outstanding)

Also coastal natural character unit:

Unit NCA57 Karamea River Mouth (high)

There are sixteen parcels of stewardship land in this part of Karamea Place:

- KAR09 2807688 Elfin Bluff Conservation Area (323ha)
- KAR10 2807709 Kelly Creek Conservation Area (30ha)
- KAR13 2807713 Jordan Creek Conservation Area (7ha)
- KAR13 2807697 Arapito Conservation Area (5ha)
- KAR08 2807693 Market Cross Conservation Area (9ha)
- KAR07 2807692 Karamea Riverbed Cons Area (Maori Point) (12ha)
- KAR07 2807691 Karamea Estuary Conservation Area (0.6ha)
- KAR05 2807689 Karamea Conservation Area (0.1ha)
- KAR05 2807712 Karamea Conservation Area (Waverley Street) (0.9ha)
- KAR06 2807690 Karamea Estuary Conservation Area (4ha)
- KAR07 2807698 Karamea Estuary Conservation Area (3ha)
- KAR07 2807708 Otumahana Estuary Conservation Areas (22ha)
- KAR06 2807694 Kongahu Conservation Area (38ha)
- KAR14 2807724 Kongahu Swamp Road Conservation Area (2ha)
- KAR112807695 Kongahu Conservation Area (469ha)
- KAR122807696 Kimberley Creek Conservation Area (3ha)

Landscape factors for decision-makers to consider:

- KAR09 2807688 **Elfin Bluff Conservation Area** (323ha)
This conservation area is adjacent to the landmark Elfin Bluffs on the north side of Karamea River and includes river terrace forest with Big Rimu Tree Track short walk accessed from Umere Road. The beginning of the track is very close to the river. What appears to be a farm track passes through the conservation area more or less parallel to Umere Road connecting two modified areas either side of the conservation area.

Vegetation is variable reflecting disturbance, with large open areas in the remaining forest with wind throw.

Elfin Bluff Conservation Area is contiguous with Kahurangi National Park, but the land type quite different. The shared boundary is a natural boundary between the two land types, with an unformed legal road width between them in places. Although modified the vegetation is recovering to a new indigenous normal.

Elfin Bluff is included in high natural character *Unit T156 Karamea River Flats*. *Key attributes/characteristics cited are:*

Largely confined river channel and series of gravel beds surrounded by pasture, farming activities and flanked by a strip of regenerating native forest. Includes the enclosing vegetated landform of Elfin Bluff.

Mix of aggregate sizes, their volume and the pronounced river beds give the impression of the rivers force during flood events and a distinct impression of the rivers wildness.

Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding.

The river contains a range of aggregate sizes and weathered boulders that are constantly sifted and graded by the varying flows.

Dynamic natural processes associated with the meandering braids and gravel beds, grading of aggregate sizes, downcutting, river terracing, flood events and inundation.

A wide range of channel typologies (braids, pools, rapids, eddies).

The modified landscape adjoining the river – including farming activities, pasture, and roads – does impact upon the sense of seclusion and remoteness, but on balance, does not detract from the integrity of the evident and very expressive natural processes of the river bed.

Enclosing landform of Elfin Bluff heightens the sense of wildness.

Consideration could be given to including Elfin Bluff Conservation Area in the adjacent Kahurangi National Park. Within the context of policy to effectively administer the Park, the Kahurangi National Park Management Plan 2001 includes the following guidance:

“Additions to the Park

In future, public land adjacent to the national park, which meets the criteria for national park status, could become available. In such cases, the Department should seek to add that land to the Kahurangi National Park through the process dictated in the National Parks Act. Section 452 of the Ngai Tahu Claims Settlement Act provides that an area of land at Whakapouai will become part of the Park in the future.” (p150)

to be implemented thus:

“4. Seek to add adjacent public land, which meets the necessary criteria, to Kahurangi National Park if and when it becomes available.” (p151)

The “necessary criteria” are presumably those set out in the National Parks Act 1980 and General Policy for National Parks 2005 which is currently under review.

- KAR10 2807709 **Kelly Creek Conservation Area** (30ha)
Kelly Creek Conservation Area is on a rising landform above the Karamea River floodplain on the south bank, opposite Elfin Bluff Conservation Area (above). The stewardship land lies between Kelly Creek and Scarlett Creek, and includes the toe of slope, where rolling hill country changes to the level modified flood plain of the Karamea River. The vegetation is mostly regenerating bush and fern land but nearly a third is modified as farming encroaches along eastern boundary.

It is contiguous with Kahurangi National Park along long north, east and southern boundary and although modified, consideration could be given to including it with the national park. See above for context.

This conservation area is in outstanding natural character *Unit T157 Karamea River*. Key attributes/characteristics for this landscape unit are cited as:

Extensive river valley system comprising an unconfined river channel along the valley floor with sections of gorges, rapids, pools, braids and eddies, flanked by pristine beech / podocarp forest and enclosed by high altitude mountain ranges.

Strongly contained and enclosed by unmodified landforms.

Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and depositional landforms reinforce these qualities.

Rugged and raw landforms and their dramatic profile give the river a sense of wildness. Characteristic high rainfall events accentuate the drama and the sense of wildness.

Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding. The river contains a range of aggregate sizes and weathered boulders that are constantly sifted and graded by the varying flows.

Pristine mature mixed podocarp/beech forest.

Entirely devoid of development.

Includes a number of tributaries – Huia, Kakapo, Ugly, Beautiful, Roaring Lion, Lesie, Crow, and Taipo Rivers.

Consists of a number of lakes including the Black Lakes, Lake Bellbird, Twenty Four Tarn Basin, Lake Jewell, Lake Rotopai, Lake Barfoot, Lake Elmer, Lake Henderson, and Island Lake as well as numerous unnamed waterbodies.

- **KAR13 2807713 Jordan Creek Conservation Area (7ha)**

Jordan Creek is a tributary of the Karamea River. This is a narrow riparian parcel sandwiched between two parts of Kahurangi National Park. It is aligned alongside Arapito Conservation Area (see below), which has a similar function. Some land labelled North West Nelson Forest Park Conservation Area is also contiguous.

Valley floor land within the conservation area appears to be used for grazing. There is a concession.

Most or all of Jordan Creek Conservation Area falls within **Outstanding Natural Landscape** *ONL54 Fenian, Stormy & Radiant Ranges*, which covers all the high natural character inland hill country of Karamea Place. Site type and characteristics for this landscape are cited as:

Assemblage of north-east to south-west orientated ranges and dissected hill country and stream corridors with extensive native forest that contrast with the low lying pastoral farmland.

Interplay of mature indigenous forest and vegetative sequence from lowland beech forest through to alpine scrub communities reinforcing topography and pronounced relief.

Exposed peaks and ridge tops revealing underlying geology are highly expressive of the landscapes formative and ongoing natural processes.

Coastal derived landforms with indigenous vegetation patterns and pasture reinforcing the dramatic topography. Sequence of ridge lines of similar orientation, elevation and vegetation cover, punctuated by exposed ridge tops and tussock lands.

Predominately mature native coastal forest cover.

The Radiant Range, Stormy Ridge, Kakara Taramea/Karamea River, and the Ōparara limestone arches are key/representative landmarks within this landscape.

This conservation area is also in outstanding natural character *Unit T157 Karamea River* (see above for details).

- KAR13 2807697 **Arapito Conservation Area** (5ha)

This is a long strip of stewardship land which follows lower Jordan Creek and includes bush-covered slopes on the east side of the creek. It is closely associated with Jordan Creek Conservation Area, connected at its southern boundary. Part of eastern boundary is contiguous with Kahurangi National Park separated, only separated by a legal road width.

This conservation area is also in outstanding natural character *Unit T157 Karamea River* (see above for details).

Jordan Creek and Arapito Creek Conservation Areas are connected and very similar. They may be best considered together. Both could be included in Kahurangi National Park.

- KAR08 2807693 **Market Cross Conservation Area** (9ha)

This conservation area is on the north bank of Karamea River, on a low flood prone alluvial terrace bounded by a stop bank. It is a short way upstream from Karamea Riverbed Conservation Area (Maori Point) (see below). There is public access from Bridge Street in Karamea settlement.

The stewardship land is completely modified for pastoral farming at present except for a tiny bit of remnant forest right next to the river at the eastern tip. Part or all has been cultivated. There is potential for this parcel to be restored to improve its riparian protection function and its riverside amenity value at some point in the future.

Part of this conservation area is included in high coastal natural character *Unit NCA57 Karamea River Mouth* (see attributes/characteristics below).

- KAR07 2807692 **Karamea Riverbed Conservation Area** (Maori Point)(12ha)

This crescent-shaped parcel is on the south bank immediately below the Maori Point 47m terrace. It is just on the cusp between the tidally-influenced estuary and the mainly freshwater lower Karamea River. The conservation area is effectively an island formed by two branches of a (spring fed?) stream which runs around the toe of the terrace riser which partially encloses the conservation area. This stream drains a significant area of wetland on neighbouring land. The wetland appears to have been recently sprayed, so aquatic values are likely to be compromised at present. The stream bed around the toe of the terrace probably still functions as a flood channel or overflow braid for Karamea River in times of high water.

Land in the conservation area has been modified for pastoral farming and probably cultivated. Ponding in former braids and a backwater near the river indicate the site is still subject to influences of the rivers hydrology. A line of trees (willows?) appears to follow another stream channel across the conservation area. There are several 4WD vehicle tracks providing access to the river and the estuary.

An historic pā site is located in the vicinity of the Karamea Estuary (2807691)

The conservation area is close to Karamea Estuary Conservation Area and Karamea River Marginal Strip. All three could be considered together.

Although currently modified, this parcel and other areas functionally linked with it, have great potential for restoration, if not now then by some future generation. It has good natural boundaries, is located on an ecological continuum, and has complex hydrological influences. At some point in the future it could once again support high indigenous biodiversity values, conveniently close to a population centre and visitor destination.

Part of outstanding natural character *Unit NCA57 Karamea River Mouth*. (see above for key attributes/characteristics).

- KAR07 2807691 **Karamea Estuary Conservation Area** (0.6ha)
Small parcel almost touching Karamea Riverbed Conservation Area (Maori Point) (above) at its seaward tip. The two parcels function together as one.
Tidal water mainly covers this parcel.

Included in outstanding natural character *Unit NCA57 Karamea River Mouth* (see below for details).

- KAR05 2807689 **Karamea Conservation Area** (0.1ha)
A town section, with road frontage along Waverley Street in Karamea settlement, contiguous with the parcel below and providing vehicle access to buildings on the rear section. Appears as part of a private residential property. Occupied by DOC staff quarters and associated infrastructure.
- KAR05 2807712 **Karamea Conservation Area** (Waverley Street, Karamea) (0.9ha)
A town back section accessed off Waverley Street in Karamea Settlement, contiguous with the parcel above, with two buildings on it. Occupied by DOC staff quarters and associated infrastructure.

This and the parcel above should be considered together.

- KAR06 2807690 **Karamea Estuary Conservation Area** (4ha)
Small randomly-located triangular parcel on sand spit enclosing northern lobe of Karamea River lagoon. Bare white sand beach and dunes with shrub vegetation (lupins?)
There is a 4WD access track through conservation area from the end of the road to Karamea aerodrome.

Part of outstanding natural character *Unit NCA57 Karamea River Mouth* (see below for details). Brown notes the following key attributes/characteristics for this unit:

Very extensive river mouth approximately 5km wide enclosed by a series of beaches and dune field, islands, sandbars and is also fed by Granite and Baker Creek.

This landscape is highly expressive of the interplay between the Karamea River mouth, enclosing beaches and sandbars, and the Tasman Sea. The tidal rhythm of the sea also provides a counterpoint for the rivers natural variations of flow, clarity and flood cycles.

Dune landform enclosing the River mouth is expressive of the coastal processes.

Intact vegetation sequences from dune field through to coastal scrub.

While the prominence of adjoining pasture and farming activities along the shoreline of the river does affect the perceived intactness and cohesion of the coastal environment, they do not overly detract from the highly expressive and natural processes of the river mouth that dominate the local landscape.

Backed by a vegetated coastal terrace at its southern end.

- KAR07 2807698 **Karamea Estuary Conservation Area** (3ha)

This is a small randomly located parcel on eastern edge of estuary of Karamea River, overlooked by Radley Heights subdivision.

Largely unmodified salt marsh vegetation and mud.

Included in outstanding natural character *Unit NCA57 Karamea River Mouth* (see above for details).

- KAR07 2807708 **Otamahuna Estuary conservation Area** (22ha)

This conservation area is in two parcels, one each side of the Karamea Highway SH76, where the Otamahuna(?) Creek enters the hapua. This waterway has its origins on the plateau above which is partially protected by the big Kongahu Conservation Area (469ha) (see below). Then the stream passes through land modified by subdivision and farming.

The northern parcel on the seaward side of the road appears to be relatively unmodified, naturally functioning estuary.

The southern parcel inland of the highway appears to have been part of the estuary system before the highway was built and probably still is, although possibly with modified hydrology. It has low vegetation e.g. *Salicornia* or similar. The western boundary follows a small waterway which has been straightened. There is cultivated farmland with humps and hollows to the west and south of the conservation area.

- Included in outstanding natural character *Unit NCA57 Karamea River Mouth* (see above for details).

- KAR06 2807694 **Kongahu Conservation Area** (sand spit)(38ha)

This conservation area is located on sand spit enclosing the southern lobe of estuary of Karamea River. The natural dune and coastal vegetation is almost entirely replaced by exotic grassland for pastoral farming, except for inland edge, where some tidal salt mash vegetation persists.

The stewardship land is fenced, grazed under concession and cultivated. A formed road runs for most of the length of conservation area, within its boundaries. Access is from the Karamea Highway at Kongahu, although the conservation area would probably appear as private property.

The northern tip of the conservation area is in Tasman sea. Coastal processes are likely to affect this land.

- KAR14 2807724 **Kongahu Swamp Road Conservation Area** (2ha)

Kongahu Swamp Road Conservation Area is a long, very thin parcel stretched along the boundary of Kahurangi National Park just where hill country meets coastal plain. There is a dwelling and farmland between the conservation area and Swamp Road.

Vegetation is very similar to the adjacent national park land with a mosaic of seral forest types with punga and/or nikau.

Consideration could be given to including this parcel in the national park.

- KAR112807695 **Kongahu Conservation Area** (469ha)
This conservation area is on a plateau between Karamea River and Granite Creek rising to 160m. It encircles an area of non-PCL which is farmed and has disturbed soils with little vegetative cover. Much of the plateau is more or less level and is drained by several waterways to the rivers north and south, or directly to the hapua.

The southern part is more dissected with three high points at 134m, 118m and 130m and a distinct terrace edge sloping down to Granite Creek which forms a sinuous boundary at the south eastern corner.

Radley Heights subdivision on the escarpment overlooking the estuary has a long straight boundary with the conservation area at the north western corner.

Vegetation in the conservation area is modified, in various seral stages following forest clearance with wetland, fern land and low shrubland, possibly manuka and/or kanuka. Despite the anthropogenic disturbance natural character is reasonably high and will increase with time if no further disruption occurs.

A small part of this Kongahu Conservation Area, along the top of the coastal terrace, is included in outstanding natural character *Unit NCA57 Karamea River Mouth* (see above for details).

- KAR122807696 **Kimberley Creek Conservation Area** (3ha)
Kimberley Creek is an isolated triangular parcel on a spur on the terrace escarpment of the north bank of Granite Creek. The forest cover is disturbed but regenerating. East of the spur there is lots of wind throw, but in the lee of the spur the forest is intact.

The uphill tip of Kimberley Creek Conservation Area is inside the edge of Outstanding Natural Landscape *ONL54 Fenian, Stormy & Radiant Ranges* (see details above).

Little Wanganui

This part of Karamea Place includes the catchment and estuary of the Little Wanganui River. Most of the river's catchment is in Kahurangi National Park. The river is tannin-stained and the gravels are pale.

Valley floor land is modified up to the end of Wangapeka Road.

The Wangapeka Track follows the Little Wanganui River up to its source in the Scarlett Range deep inside the national park. The river is braided up as far as the Belltown Mananui Hut.

Captains Creek and Blue Duck Creek flow from the south into the Little Wanganui before it leaves the hills.

Below the bridge at Te Namu the river slows and meanders converging with Glasseye Creek to meet the sea at Little Wanganui Head.

In the [draft *Te Taio o Poutini* plan](#), schedule 5, much of the Little Wanganui part of Karamea Place is outstanding natural landscape including:

[ONL54 Fenian, Stormy & Radiant Ranges](#)

In the [West Coast Region Natural Character Study \(Brown 2013\)](#) identified two outstanding natural character units in this part of Karamea Place:

Unit T155 Little Wanganui River (outstanding)

Unit T157 Karamea River (outstanding)

There are five parcels of stewardship land in this part of Karamea Place:

- Little Wanganui Riverhead Conservation Area (sand spit) (1ha)
- Little Wanganui Conservation Area (hillside)(52ha)
- Scobie Clearing Conservation Area (31ha)
- Little Wanganui Conservation Area (riverbed)(14ha)
- Little Wanganui Conservation Area (riverbed)(23ha)

Landscape factors for decision-makers to consider:

- KAR06 2807734 **Little Wanganui Riverhead Conservation Area** (sand spit) (1ha)
This conservation area is located at the tip of the sand spit enclosing the estuary of the Little Wanganui River. It contains dunes, sandy beach and the tidal channel, but the vegetation has been greatly modified and now appears to be pasture, farmed in conjunction with neighbouring land on the sand spit. Several vehicle tracks in the conservation area are used to access the beach.

Nearby regenerating coastal shrubland/forest on the Little Wanganui Head is a potential seed source, just across the channel (see Little Wanganui River (headland) Conservation Area in Radiant Range chapter).

- KAR15 2807699 **Little Wanganui Conservation Area** (hillside) (52ha)
This is an isolated conservation area on sloping country with two high points at 134m and 174m, north of the river. It has regenerating forest and shrubland vegetation. Its long southern boundary follows toe of slope at edge of the flood plain of the Little Wanganui

River, with farmland right up to the boundary. Non-PCL along the other three boundaries has bush and appears indistinguishable to date. A stream flows through the north east corner.

This parcel straddles the boundary of **Outstanding Natural Landscape ONL54 Fenian, Stormy & Radiant Ranges** (see details below).

- KAR16 2807711 **Scobie Clearing Conservation Area** (31ha)
Scobie Clearing Conservation Area occupies flattish land between Little Wanganui River and Hodge Creek. It has been historically cleared of forest and is slowly regenerating. Marsh wetlands in a relatively natural state occur within the conservation area, but there are no waterways. The parcel is set into Kahurangi National Park, surrounded on three sides.

Although modified, consideration could be given to including Scobie Clearing Conservation Area in the Kahurangi National Park, to reduce edge effects and avoid the emergence of unsympathetic boundaries in the event of land use change.

Scobie Clearing Conservation Area is in **Outstanding Natural Landscape ONL54 Fenian, Stormy & Radiant Ranges** which covers most of the high natural character inland hill country in Karamea Place. Site type and values for this landscape are:

Assemblage of north-east to south-west orientated ranges and dissected hill country and stream corridors with extensive native forest that contrast with the low lying pastoral farmland.

Interplay of mature indigenous forest and vegetative sequence from lowland beech forest through to alpine scrub communities reinforcing topography and pronounced relief.

Exposed peaks and ridge tops revealing underlying geology are highly expressive of the landscapes formative and ongoing natural processes.

Coastal derived landforms with indigenous vegetation patterns and pasture reinforcing the dramatic topography. Sequence of ridge lines of similar orientation, elevation and vegetation cover, punctuated by exposed ridge tops and tussock lands.

Predominately mature native coastal forest cover.

The Radiant Range, Stormy Ridge, Kakara Taramea/Karamea River, and the Ōpārara limestone arches are key/representative landmarks within this landscape.

- KAR17 2807700 **Little Wanganui Conservation Area** (riverbed) (14ha)
One group of a string of seven riverbed or river flat parcels along the braided upper Little Wanganui River, this group of five discrete parcels includes vegetated islands, active channel, back waters and bare gravels. Vegetation appears to be recovering from previous disturbance, but on the biggest island there are some large trees and punga. At this point the river is largely surrounded by Kahurangi National Park together with a contiguous parcel on the adjacent hills still called North West Nelson Forest Park Conservation Area. This, and the similar conservation area below should be considered together.

This conservation area is within **Outstanding Natural Landscape ONL54 Fenian, Stormy & Radiant Ranges** (see details above).

This conservation area is also within outstanding natural character *Unit T155 Little Wanganui River*. Key attributes/characteristics for this unit are:

Braided river channel that passes through a broad open valley flanked by rolling foothills, then becoming

particularly steep and incised in its upper reaches being flanked by the Radiant, Scarlett, and Allen Ranges. Strongly contained and enclosed by unmodified landforms. Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and depositional landforms reinforce these qualities. Rugged and raw landforms and their dramatic profile give the river a sense of wildness. Characteristic high rainfall events accentuate the drama and the sense of wildness. Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding. The river contains a range of aggregate sizes and weathered boulders that are constantly sifted and graded by the varying flows. Unconstrained and unmodified river bed with a variety of channel typologies. Continuous podocarp / beech forest with areas of regenerating scrub and periodic clearance on flood plains immediately flanked the riverbed. Devoid of development. Part of the Kahurangi National Park. Includes a steep valley escarpment that flanks a small portion of the Little Wanganui River at Blue Duck Creek

Although modified, consideration could be given to including Scobie Clearing Conservation Area in the Kahurangi National Park, to reduce edge effects and avoid the emergence of unsympathetic boundaries if land use was to change.

Within the context of policy to effectively administer the Park, the Kahurangi National Park Management Plan 2001 includes the following guidance:

“Additions to the Park

In future, public land adjacent to the national park, which meets the criteria for national park status, could become available. In such cases, the Department should seek to add that land to the Kahurangi National Park through the process dictated in the National Parks Act. Section 452 of the Ngai Tahu Claims Settlement Act provides that an area of land at Whakapouai will become part of the Park in the future.” (p150)

to be implemented thus:

“4. Seek to add adjacent public land, which meets the necessary criteria, to Kahurangi National Park if and when it becomes available.” (p151)

The “necessary criteria” are presumably those set out in the National Parks Act 1980 and General Policy for National Parks 2005, currently under review.

- KAR17 2807723 **Little Wanganui Conservation Area** (riverbed) (23ha)
The second group of the series of seven riverbed or river flat parcels along upper Little Wanganui River, similar to the ones above, but tending to be associated more with the south bank. Both these two parcels are contiguous with Kahurangi National Park, the largest of the two along its long southern boundary. This one is also connected with a small square parcel mysteriously notched into the national park for no obvious reason. Both appear to have vegetation recovering from historic disturbance.

This parcel of Little Wanganui Conservation Area is also within **Outstanding Natural Landscape** *ONL54 Fenian, Stormy & Radiant Ranges* (see details above).

Like the one above it is also in the outstanding natural character *Unit T155 Little Wanganui River*.

This conservation area should be considered together with the one above as they both perform a riparian protection function, and their increasingly natural character is important for the integrity of the national park landscape at this location.

Radiant Range

The hill country of Radiant Range extends right to the coast, providing a natural barrier between Karamea and the rest of the Buller Kawatiri District, and defining it as a discrete landscape. For the purposes of this report, the whole east side of the Radiant Range is included in Karamea Place, but the catchment of Mokikinui River is not.

In the [draft *Te Taio o Poutini* plan](#), schedule 5, most of the Radiant Range part of Karamea Place is outstanding natural landscape including:

[ONL53 Kongahu Point](#)

[ONL54 Fenian, Stormy & Radiant Ranges](#)

In the [West Coast Region Natural Character Study \(Brown 2013\)](#) identified three outstanding natural character units in the Radiant Range part of Karamea Place:

Unit T155 Little Wanganui River (outstanding)

Unit T154 Lake Hanlon (outstanding)

and outstanding coastal natural character unit

Unit NCA56 Gentle Annie Point-Little Wanganui Head (outstanding)

There are six parcels of Stewardship land in this part of Karamea Place

- KAR18 2807733 Little Wanganui Conservation Area (headland)(40ha)
- KAR18 2807735 O'Connor Creek Conservation Area (793ha)
- KAR18 2807737 Boulder Creek Conservation Area (926ha)
- KAR19 2807736 Tidal Creek Conservation Area (62ha)
- KAR19 2807732 Blue Duck Creek Conservation Area (2ha)
- KAR19 2807731 Lyell Range-Radiant Range Conservation Area (5,6336ha)

Landscape factors for decision-makers to consider:

- KAR18 2807733 **Little Wanganui Conservation Area** (headland)(40ha)
This conservation area is on coastal hills just south of the mouth of the Little Wanganui River and includes land wrapped around Little Wanganui Head. Seaward slopes are much steeper than slopes around the point above the out flowing river channel. The seaward side includes escarpments with sand dunes below.

All of Little Wanganui Conservation Area falls within **Outstanding Natural Landscape**

[ONL53 Kongahu Point](#). Site type and values for this landscape are cited as:

Sequence of bluffs and steep coastal slopes backed by rugged hill country and a series of broad basins.

Successional vegetation and regeneration of native forest gives way to scrubland and windswept vegetation along exposed ridge tops and coastal faces – patterning of vegetation and across the bluffs and slopes reinforces the topography and exposure.

Amalgam of raw and exposed coastal landforms, strong elevated relief, windswept vegetation which impart a strong sense of naturalness.

Well defined basins enclosed by a series of steep ranges and bluffs.

Continuous mature native forest comprising stands of matai and northern rata.

Lake Hanlon, Karamea Bluff, Kongahu Point and the Radiant Range are key/representative landmarks with this landscape.

Area below mean high water springs also scheduled in Proposed Regional Coastal Plan as ONL53.

This headland conservation area is also in outstanding natural character *Unit C56 Gentle Annie Point-Little Wanganui Head*. Key attributes/characteristics for this coastal landscape are cited as:

Remote sequence of exposed coastal ranges, cliffs and headlands with a series of rocky shoals, outcrops, islets, bluffs, and broad beaches, as well as eroded dune lands and wetlands.

Varied amalgam of raw and exposed landforms, natural vegetation patterns and isolated beach fronts and bays impart a strong sense of wildness and remoteness.

Strong elevated relief.

Striking interface with the Tasman Sea – sheer cliffs and scarps plunge dramatically to the sea with the eroded dune lands and coastal terraces providing an impressive sense of the landscapes formative processes.

Extensive native lowland forest with windswept and stunted shrublands on exposed faces.

Dramatic engagement with the Tasman Sea.

Backed by the Karamea Bluff Ecological Area.

- KAR18 2807735 **O'Connor Creek Conservation Area** (793ha)

O'Connor Creek Conservation Area is in two parts separated by Glasseye Creek. The northern part is characterised by dissected hills with lowland forest and shrubland cover with highest point at 315m. Vegetation is variable from solid-looking forest to more open areas. Patterning appears to be related to aspect. O'Connor Creek, Glasseye Creek and several other unnamed streams flow from it in different directions. O'Connor Creek Marginal Strip is contiguous along a length of the creek.

The smaller part south of Glasseye Creek is characterised by east-facing slopes from 200m down to Glasseye Creek and a tributary. A completely inaccessible Local Purpose Reserve-Glasseye Creek Gravel Reserve on the northern boundary is a bonus for nature.

The eastern boundary of the conservation area is formed by Karamea Highway over Happy Valley Saddle. The stewardship land is contiguous with Glasseye Creek Ecological Area and neighbouring Lake Hanlon Amenity Area along southern boundary. It is contiguous with Boulder Creek Conservation Area to the west (see below)

O'Connor Creek Conservation Area lies across the boundary of two **Outstanding Natural Landscapes** *ONL53 Kongahu Point* and *ONL54 Fenian, Stormy & Radiant Ranges* (for details see above and below).

- KAR18 2807737 **Boulder Creek Conservation Area** (926ha)

This is a coastal conservation area of dissected hill country with several high points between 300 and 490m between Falls Creek and Kongahu Point. It includes a steep coastal escarpment. It is bisected by Falls Creek which is not itself included. Falls Creek is dammed and the conservation area includes some of the width of the impounded lake. Boulder Creek Conservation Area includes some sand dunes along the western edge. White sand contrasts strongly with shrubland and regenerating forest vegetation. The conservation area possibly includes some wetland areas too.

Boulder Creek Conservation Area is contiguous with O'Connor Creek Conservation Area (see above) to the north west. It is contiguous with Glasseye Creek Ecological Area and Karamea Bluff Ecological Area to the south. The long thin Hiwinui Scenic Reserve (sand

dunes? and coastal terraces) runs along part of the western boundary separating it from the coast. Only an unformed legal road width separates the two.

Boulder Creek Conservation Area is in an **Outstanding Natural Landscape ONL53 *Kongahu Point*** (details above).

- KAR19 2807736 **Tidal Creek Conservation Area** (62ha)
This conservation area spans hills between two branches of Tidal Creek. Two sides are contiguous with the Lyell Range-Radiant Range Conservation Area (see below). A third western boundary is formed by Tidal Creek itself. Lowland forest vegetation at various seral stages seems similar to surrounding land. Significant wind throw on eastern facing hill slopes.

Tidal Creek Conservation Area is in Outstanding Natural Landscape **ONL54 *Fenian, Stormy & Radiant Ranges***. Site type and values are cited as:

Assemblage of north-east to south-west orientated ranges and dissected hill country and stream corridors with extensive native forest that contrast with the low lying pastoral farmland.

Interplay of mature indigenous forest and vegetative sequence from lowland beech forest through to alpine scrub communities reinforcing topography and pronounced relief.

Exposed peaks and ridge tops revealing underlying geology are highly expressive of the landscapes formative and ongoing natural processes.

Coastal derived landforms with indigenous vegetation patterns and pasture reinforcing the dramatic topography. Sequence of ridge lines of similar orientation, elevation and vegetation cover, punctuated by exposed ridge tops and tussock lands.

Predominately mature native coastal forest cover.

The Radiant Range, Stormy Ridge, Kakara Taramea/Karamea River, and the Ōpārara limestone arches are key / representative landmarks within this landscape.

- KAR19 2807732 **Blue Duck Creek Conservation Area** (2ha)
This is a small disconnected parcel of forested escarpment adjacent to the modified flood plain of Blue Duck Creek. Non-PCL on top of the terrace is modified by multiple vehicle tracks. The conservation area is not far from a northern boundary of Lyell Range-Radiant Range Conservation Area (see below).

Blue Duck Creek Conservation Area is in an **Outstanding Natural Landscape ONL54 *Fenian, Stormy & Radiant Ranges*** (details above).

It is also in outstanding natural character **Unit T155 *Little Wanganui River***. Key attributes/characteristics for this landscape are:

Braided river channel that passes through a broad open valley flanked by rolling foothills, then becoming particularly steep and incised in its upper reaches being flanked by the Radiant, Scarlett, and Allen Ranges. Strongly contained and enclosed by unmodified landforms.

Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and depositional landforms reinforce these qualities.

Rugged and raw landforms and their dramatic profile give the river a sense of wildness. Characteristic high rainfall events accentuate the drama and the sense of wildness.

Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding. The river contains a range of aggregate sizes and weathered boulders that are constantly sifted and graded by the varying flows. Unconstrained and unmodified river bed with a variety of channel typologies.

Continuous podocarp / beech forest with areas of regenerating scrub and periodic clearance on flood plains immediately flanked the riverbed.

Devoid of development.

Part of the Kahurangi National Park.

Includes a steep valley escarpment that flanks a small portion of the Little Wanganui River at Blue Duck Creek.

- KAR19 2807731 **Lyell Range-Radiant Range Conservation Area** (5,6336ha)
This big well-connected conservation area is entirely forested. It includes the north east slopes of the Radiant Range which drain north via multiple parallel streams toward the meandering lower reaches of the Little Wanganui River. This series of streams includes Blue Duck Creek and Misery Creek.

The conservation area rises to Mt O'Connor 1257m and with Mt Johnston 1323m at the north east corner. The western boundary is the Karamea Highway as it passes together with transmission lines over Happy Valley Saddle. Lyell Range-Radiant Range Conservation Area extends south to Kawatiri Place. It includes part of the Mokihinui Forest.

The Radiant Range part of **Lyell Range-Radiant Range Conservation Area** is in **Outstanding Natural Landscape** [ONL54 Fenian, Stormy & Radiant Ranges](#) (for details see above).

References

Brown NZ Ltd. 2013. (1) **West Coast Region Natural Character Study: Coastal + Inland Outstanding and High Natural Character Areas Schedule**. Prepared for West Coast Regional Council Planning and Environmental Department.

Brown NZ Ltd. 2013. (2) **West Coast Region Landscape Study 2013 Coastal Outstanding Natural Features / Landscapes Schedule + Maps**. Prepared for West Coast Regional Council Planning and Environmental Department.

Department of Conservation. 2001. **Kahurangi National Park Management Plan** (incorporating the 2009/2010 partial review and 2016/2017 amendment). Nelson/Marlborough Conservancy. Management Plan Series 18

Department of Conservation. 2010. **The West Coast Te Tai o Poutini Conservation Management Strategy 2010-2020** (CMS). West Coast Tai Poutini Conservancy Management Planning Series No. 10

Buller District Council. 2000 **Buller District Plan, Te Kaupapa Whenua O Kawatiri**. Last amended September 2011.

Kiwimaps Pathfinder. Date unknown. **South Island Complete Drivers Atlas** with indexed Country Roads. Edition 8.

Te Tai o Poutini Plan Committee. 2022. **Te Tai o Poutini Exposure Draft**. A new combined district plan covering the whole of the West Coast.

Note: The maps currently used in the draft Plan were produced in 2013 and recently digitised for the draft Plan. People have drawn attention to mapping errors in relation to the High Natural Character areas in particular. The Outstanding Natural Landscape and High/Outstanding Coastal Natural Character boundaries are currently being reviewed through an updated field assessment from the landscape architect.

<https://www.doc.govt.nz/globalassets/documents/science-and-technical/sfc124.pdf>

<http://envirolink.govt.nz/assets/Envirolink/Reports/1871-WCRC172-Review-of-ecological-and-natural-hazard-management-values-in-Kongahu-Wetland.pdf>