

KAW_17 – Mount Rochfort and Old Denniston School site (7539.7384 ha)

Protected Area(s)	Area (ha)	NaPALIS #	# of Primary Parcels
Conservation Area – Old Denniston School Site	0.5688	2807866	1
Conservation Area – Mount Rochfort	7539.1696	2808235	132

Location

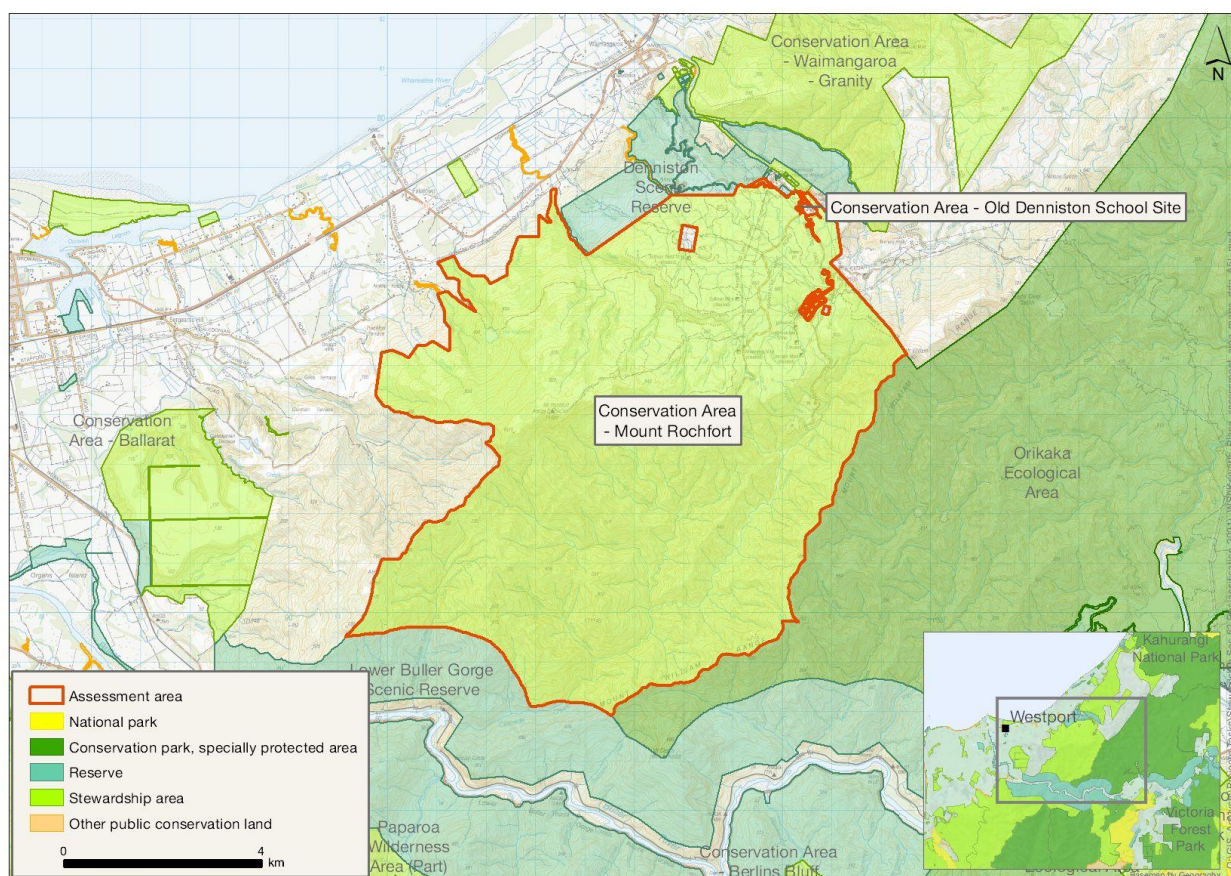
Mt Rochfort Denniston Plateau and the Cascade Creek catchment (tributary of the Buller River), east of Westport.

Brief Description

A large area comprising high elevation coal measure ecosystems and a large, forested valley system to the east. The assessment area is congruent with the Denniston Ecological Management Unit and sits on the boundary of Buller and Ngakawau Ecological Districts. A large area of high sandstone plateau with high ecological and historic value. Denniston Plateau, with its relatively low predator and browser numbers, has a unique assemblage of lizards, including two species not found elsewhere.

Denniston holds a major place in the history of the coal mining industry in New Zealand through the sustained quality and quantity of its output and the special features associated with its operation. The multiple recreation opportunities include visiting heritage and archaeological sites, historic walks, tramping, cycling and 4WD. Some activities are managed by DOC and others by local clubs and concessionaires. There are two access arrangements.

Map



Ngāi Tahu Values and Interests

Mo tātou, a, mo ka uri, a muri ake nei – for us and our children after us

There is a deep connection between Ngāi Tahu and all of the whenua in the Ngāi Tahu takiwā. A section 4 Conservation Act and Te Tiriti principles perspective is required, and it may be that areas of land are significant to Ngāi Tahu from that broader perspective. To avoid doubt, nothing in the proposed classification affects, limits or derogates from the rangatiratanga of Ngāi Tahu over its takiwā, including in relation to freshwater; and/or any other rights or interests Ngāi Tahu may have. Further, Ngāi Tahu may have future aspirations for this land (such as from an economic wellbeing and development perspective) and so those aspirations must be considered and provided for as well.

Ecological Values

Representativeness

This large assessment area crosses the boundaries of three ecological districts all within the North Westland Ecological Region. The area comprises three distinct landforms: the gently westward-sloping elevated Denniston Coal Plateau; coastal hillslopes on Brunner Coal Measures on the steep western faces; and south along the ridgeline to the peaks above Te Kuha the steep, forested, east facing, dissected hills on basement rocks of the Cascade Creek and Little Cascade Creek catchments that flow into Buller River. Each landform type is large and relatively intact, supporting both typical and special elements of the fauna and flora of the Ngakawau and Buller ecological districts. The

Denniston Plateau is a well-defined barren, rocky, weakly dissected plateau. It is an attractive feature classified as an extremely well-defined landform of scientific, educational and scenic value. It is of tertiary importance both regionally and locally (Mew 1990).

Modification has occurred throughout with an opencast coal mine amid the forest in the headwaters of Cascade Creek and fire, opencast mining, a telecommunications tower, power line and hydro-electrical scheme on the plateau and western slopes. Despite this, the environment is still highly natural.

Subalpine leatherwood scrub (tūpare, *Olearia colensoi*) with sandstone outcrops dominate the upper slopes, and mānuka (*Leptospermum scoparium*) bog and sandstone erosion pavement the flatter areas of the plateau. The distinctive mountain beech (*Fuscospora cliffortioides*)/pink pine (*Halocarpus biforme*) forests in the gullies of the Denniston Plateau are representative of the original forest vegetation, and a forest type known to provide outstanding habitat for bryophytes. The slopes below Mt Rochfort are the best remaining representation of the coal measures landform and vegetation patterns in a full altitudinal sequence (Overmars et al. 1998). The forest on the plateau margins and in the Cascade Valley comprise mixed beech, dominated by hard (*Fuscospora truncata*), silver (*Lophozonia menziesii*) and red beech (*Fuscospora fusca*) with rimu (*Dacrydium cupressinum*), southern rātā (*Metrosideros umbellata*), kamāhi (*Weinmannia racemosa*) and Westland *Quintinia* trees, appearing at lower altitudes. Some tree fuchsia (kōtukutuku, *Fuchsia excorticata*) is present within the Cascade valley.

There is a full suite of common forest birds present such as tomtit (ngirungiru, *Petroica macrocephala*), weka (*Gallirallus australis*), grey warbler (riroriro, *Gerygone igata*), riflemen (tītiti pounamu, *Acanthisitta chloris*) and South Island robin (toutouwai, *Petroica australis australis*). Lizards are frequently found in this habitat, which is in contrast to the rest of the West Coast.

The elevated coal measure ridgeline above Te Kuha, some of which is in the south of the assessment area, is an example of unmodified Buller Coal Measure ecosystems, with a level of naturalness not seen in the Stockton or Denniston Coal Measure sectors. The area is congruent with the smaller (1335 ha) Mt Rochfort Recommended Area for Protection in the Ngakawau District (Overmars et al. 1998) and adjacent to the Part Westport Water Conservation Reserve Recommended Area for Protection.

Diversity and pattern

In addition to a wide diversity in substrate, aspect, exposure, fertility and topography, the assessment area spans from near sea level to the alpine summit of Mts William and Rochfort, engendering a high diversity of habitats and species. Among the diversity of ecosystems are: lowland forest to the high rocky summit of Mount Rochfort; the Whareatea Gorge, incised deeply into the plateau to the open Cascade riverbed; rock pavement to extensive shallow wetland; and the granite substrate on shady south-eastern slopes to infertile west-dipping coal measures on a plateau which itself comprises a mosaic of finer-scale ecotones and gradients. The abundant creeks and streams of the assessment area provide riparian habitat for plant species requiring high disturbance and high light, adding value to the diversity of the area. The assessment area is classified as a P3.2b (53% in public conservation land in Ngakawau and 87% in public conservation land in Buller Ecological District).

Rarity and distinctiveness

The Denniston Plateau has two Naturally Uncommon Ecosystems (Williams et al. 2007) – boulder fields of acidic rock and pākihi – and three Threatened Ecosystems (Holdaway et al. 2012) – Critically Endangered ephemeral wetlands; Endangered seepages and flushes, and Endangered sandstone erosion pavement. It also supports threatened and at-risk plant species including the bryophyte liverworts *Neogrollea notabilis* (Nationally Endangered), *Saccogynidium decurvum* (Nationally Vulnerable), *Acromastigum mooreanum*, *Schistochila pellucida* and *Pallavicinia rubristipa* (At Risk: Naturally Uncommon) and vascular species North Westland Snow Tussock (*Chionochloa juncea*), the shrub *Dracophyllum densus* and the herb *Centrolepis minima* (At Risk: Naturally Uncommon), Parkinson's rātā (*Metrosideros parkinsonii*) (Nationally Vulnerable) and a distinctive forest association of mountain beech/pink pine forest. It is highly likely that red mistletoe (pikirangi, *Peraxilla tetrapetala*) is present in the beech forests of the Cascade and that the threatened liverwort *Acromastigum verticale* (Nationally Critical) is present.

Feral browsing animals appear to be at very low density and their impacts on the vegetation are inconsequential. Likewise, the plateau environment is inhospitable to and consequently has very low populations of exotic predators so native bird, lizard and invertebrate species are in unusually high numbers within this natural refuge. The Denniston subspecies of the threatened land snail *Powelliphanta patrickensis* (Nationally Endangered) is confined to this conservation area. The plateau has a unique assemblage of lizards with populations of three threatened or at-risk species, two of which have distinctive morphological features not found elsewhere including a striped form of the forest gecko (the only known polymorphic forest gecko in New Zealand) and a yellow morph of the West Coast green gecko. This area supports the largest known population of the threatened West Coast green gecko (*Naultinus tuberculatus*) (Nationally Vulnerable). The high density of the forest gecko (*Mokopirirakau granulatus*) (At Risk: Declining) is not found elsewhere on the West Coast.

The assessment area supports strong populations of threatened and at-risk avifauna: fernbird (mātātā, *Bowdleria punctata*), pipit (*Anthus novaeseelandiae*), great spotted kiwi (roroa, *Apteryx maxima*), kākā (*Nestor meridionalis*), kea (*Nestor notabilis*), kākārīki (yellow-crowned parakeet, *Cyanoramphus auriceps*), and potentially whio (Blue Duck, *Hymenolaimus malacorhynchos*). Surveys for threatened long-tailed bat (*Chalinobus tuberculatus*) (Nationally Critical) haven't been done in the area, but the bats may use the habitat for feeding and roosting. Freshwater threatened species recorded in this assessment area include kōura (*Galaxias brevipinnis*), and redfin bully (*Gobiomorphus huttoni*).

The Denniston Plateau has several 'historically rare' and now threatened ecosystems: Critically Endangered ephemeral wetlands; Endangered seepages and flushes, and Endangered sandstone erosion pavement (found only on the Denniston and Stockton plateaux and Garibaldi Range). It also holds distinctive and threatened vegetation types (notably North Westland Snow Tussock grassland, and mountain beech/pink pine forest) and two threatened and two at-risk species of bryophyte (*Neogrollea notabilis* T).

Ecological context

A large (7540 ha) reasonably compact area which is part of the Buller Coal Plateau. It links the lower altitude coal measures above Te Kuha in the south with the higher and more damaged Stockton coal measure environments in the north. The plateau, with its relatively low predator and browser

numbers, acts as a "source" of threatened species such as kiwi to the "sink" of surrounding lower altitude high pest load forest. The area is adjacent to the large tracts of high value forest in the Orikaka Ecological Area (Morse 1982), the high value Lower Buller Gorge Scenic Reserve (Kelly 1989), Denniston Scenic Reserve (to the north) and the Te Kuha Recommended Area for Protection (Overmars et al. 1998). The area is congruent with the Denniston Plateau West Coast Regional Council Schedule 2 wetland and Denniston Ecological Management Unit.

Recreation values

Setting

This area is in a Backcountry-remote zone and has Frontcountry sites that include the historic Denniston Town Walk and the Coalbrookdale Walk and Burnett's Face. Myra's Track is a tramping track providing access to Mt William. The Buller Cycling Club manages and maintains an extensive network of mountain bike tracks across the Denniston Plateau and there are 4WD roads to Mt Rochfort and the historic Sullivan Mine. A concessionaire also maintains a walking track to Lake Rochfort as part of their hydro scheme.

Visitor type and activities typically undertaken

The area is used by people doing short walks, day walks, mountain biking and 4WD.

Access

Access via Denniston Road

As well as the 4wd track to Mt Rochfort, Mackley Road goes through to the Buller River via the Orikaka. This area includes the Denniston Plateau biodiversity enhancement area funded by compensation from the Escarpment Mine. The assessment area includes access to the Escarpment, Cascade and Sullivans Mines and to a telecommunication tower on Mt Rochfort. The old school site includes a boiler associated with a neighbouring dwelling and hot house.

Heritage Values

Historical overview

Dr. Julius von Haast found a valuable seam of bituminous coal at Coalbrookdale in July 1860. He named the location after the mining district in Shropshire. Although the Westport Mining Company long intended mining the Coalbrookdale seam, it was not until the Banbury seam was holed through in 1884 and the rope road could be extended to Coalbrookdale that production started there. After this date the Banbury and Coalbrookdale Mines were worked simultaneously. The men preferred to work in the Coalbrookdale Mine, so places were balloted to give every man a fair chance of a good workplace.

The town of Denniston was formally surveyed in 1885. Its population peaked in 1926 when 910 people were recorded as living there. World War II and the 1952 strike saw a large decline in the population and the school, hospital, last shop and last hotel closed in the 1960s. Very few buildings remain standing

By 1886 the endless rope method of haulage was in use and by 1889 the Coalbrookdale Mine was in full swing. The Coalbrookdale rope road delivered coal to the junction with the main rope road to

the Brakehead at Wooden Bridge. It was 1 mile 60 chains long and laid to a gauge of 2 ft. In 1891 the Coalbrookdale Mine was the first mine in New Zealand to reach a total output of 1,000,000 tons. The Coalbrookdale operation, along with its offspring the Whareatea, had the second largest (after Millerton) set of continuous workings in New Zealand.

The lower Coalbrookdale Valley (approximately 1 km upstream from Burnett's Face) was surveyed as the 'Village of Coalbrookdale' in 1891. All the buildings were close to the rope road, and as there was no other road this track had to be used for access by women and children as well as miners. The population of Coalbrookdale settlement peaked in 1896 when 165 people lived in the valley. Thereafter it declined until in 1926 there were only 64 people left.

In 1926 a 70 m drive to the surface from the depths of the Coalbrookdale Mine was the beginning of the Whareatea (or Wareatea) Mine. This entrance came out beside the Whareatea Stream and was known as the Whareatea entrance but was officially still only part of the Coalbrookdale Mine – the entrance was also known as “The Steps” because of the 142 steps cut from sandstone rock. The new opening provided an air intake and also helped save the considerable time it took for the men working in the Whareatea section to travel underground from the Coalbrookdale entrance. It was at this time that a new road was constructed from Denniston to Whareatea. By the time the aerial ropeway replaced the rope road in 1952, a new stone drive had been driven alongside The Steps entrance on an easier gradient to allow the coal to be taken out by conveyer belt. This also became the new entrance with The Steps opening being relegated to the fandrifft and alternative access. Meanwhile, after World War II, demand for coal had dropped markedly and the Coalbrookdale Mine ceased operations soon after the Ironbridge Mine in 1948. With the demise of the rope road and the stepping up of the Whareatea operation, the Coalbrookdale entrance was closed off and the Whareatea Mine officially took over the 60-year-old underground workings that stretched out for nearly 4 km. The Whareatea Mine was closed in 1971 but reopened eleven years later in 1982 as an underground hydro mine. It has since closed, and much of the above-ground infrastructure has been removed. The entrances remain but have been barred.

A further mine, the Plateau or Sullivan, was opened 1.6 km north of Whareatea along the aerial system in 1953. This was the first fully mechanised mine in the country, using belt and chain conveyors underground rather than a trucking rail system. By 1986 a new hydro mine named Sullivan West was in full production and operated until 1996. Equipment was salvaged for use at other sites and heritage items were given to museums.

The Escarpment State Mine opened in 1963 and was managed in conjunction with Whareatea. In 1979 the Escarpment became the first State hydro mine at Denniston and closed in 1982. A dam was later built across the main entrance to supply water for hydro mining at the Whareatea.

Sites recorded

Heritage New Zealand Listed Category 1 historic place (List # 7049). Extent runs from the base of the incline to the centre of activities at the brakehead and then continues along the route to major mining areas at Burnett's Face and Coalbrookdale.

29 recorded archaeological sites:

K29/57 Denniston town	L29/88 miners' track	L29/90 water supply for hospital
L29/87 quarry and associated features	L29/89 house site	L29/93 drystone bridge abutments

L29/25 house site	L29/26 terrace	L29/29 hotel site
L29/39 Burnetts Face settlement	L29/36 house terrace	L29/24 Coalbrookdale rope road
L29/30 three terrace house sites	L29/27 house terrace	L29/31 house terrace
L29/32 Geordie Settlement terraces	L29/28 house terrace	L29/33 house terrace
L29/34 three small house terraces	L29/35 house terrace	K29/77 remains of Lake Rochfort power scheme
L29/86 Cascade Fanhouse	L29/48 benched track	L29/49 earth cored dam
K29/72 Whareatea Extended Mine	K29/73 Plateau Mine	K29/74 Crawford Party coal mine
K29/75 Escarpment Mine	L29/37 Coalbrookdale building foundations, tramways, fan house, dams	
K29/98 Sullivan Mine	K29/99 Sullivan West Mine	

Actively conserved heritage places:

Denniston aerial tensioner (Equipment ID: 100040003)	Denniston bowling green (Equipment ID: 100030175)
McGlenns Dam (Equipment ID: 100039780)	Roperoad (Equipment ID: 100038732)
Whareatea aerial tower (Equipment ID: 100088493)	Whareatea drive and steps (Equipment ID: 100039109)
Coalbrookdale and Cascade Mines (Functional location: DS-34-105-2022)	

Heritage values

Denniston holds a major place in the history of the coal mining industry in New Zealand through the sustained quality and quantity of its output and the special features associated with its operation. The first mine to operate from the Buller coal plateau, it led the way for others to open in this rich field. The technological ingenuity of its incline transport system demonstrated that it was economically viable to mine coal from such an inaccessible location.

The mines' associated settlements have a unique social history because of their location in this isolated and desolate place on the exposed edge of plateau 600 metres above sea level. The primitive nature of the early housing reflects the privations endured by the first workers and their families. Residents' effort to make their confined lives more pleasant is found in their provisions for sports and leisure with the sites of tennis courts, recreation grounds, and swimming baths, etc. still identifiable. Today Denniston itself is a ghost town with a handful of residents where over 800 people once lived. Only remnants of houses and other buildings survive in the other settled areas.

It was a hard life for workers in and around these mines and there was frequent conflict with management through their efforts to improve conditions. A significant feature of Denniston's history was the formation of the first formal coal miners' union here in 1884, an action which encouraged the establishment of further unions through New Zealand. There were strong links between the activities of this union and the formation of the Labour Party.

Along with the remains of the Whareatea Mine, the remains of the Escarpment, Sullivan and Sullivan West provide an excellent example of mid-late twentieth century mining technology and

infrastructure. These contrast to the remains of the nineteenth century mines on the plateau and are also an important part of the ongoing story of the search for coal, not to mention the development of new mines and the changes in mining technology.

Modifying factors

The school building is no longer there but there are likely to be subsurface archaeological remains. The historic coalmining landscape at Denniston spans a depth of time, with all periods of mining represented, and is more complete than any other in New Zealand – much remains of mine sites from all periods and some of these remains are rare. As an industrial archaeological mining landscape Denniston is without peer and it is one of New Zealand’s most important industrial archaeological landscapes.

Permissions summary

Two access arrangements, one of which is largely undeveloped but covers 106 ha and one of which is rehabilitating towards closure and covers 83 ha.

Map (aerial photo)

