IN THE MATTER OF the RMA AND

IN THE MATTER OF an application by Stevenson Mining Limited for resource consents for Te Kuha Mine project

HEARING COMMISSIONERS: Retired Judge RG Whiting (Chairman) Mr John Hudson Mr Terry Archer

HEARD AT:

Westport, between 18 and 28 September 2017

DATE OF DECISION/REPORT: 21 November 2017

DECISION OF THE HEARING COMMISSIONERS

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Determination

[1] The resource consents sought by Stevenson Mining Limited for Te Kuha Mine Project are **granted** subject to the conditions of consent attached to this Decision as **Appendix 1** and as amended by paragraph [203] of this decision.

Part 1 – The application, proposal and consent process

Introduction

[2] Resource consents are sought to enable open-cast coal mining of an approximately 144ha area of land situated on Te Kuha escarpment: spanning the ridge slightly to the east to overlook the Buller gorge; and covering the descending hills to the west that form the backdrop to Westport.

[3] It was alleged by the Applicant that the proposal would provide considerable economic and social value to the West Coast and Buller communities.

[4] Notwithstanding the proposed economic and social benefits, a large number of submissions opposed the applications for resource consent. The main reasons for the opposition were:

- (a) the adverse effects on what is accepted as an area of significant indigenous vegetation and significant habitats of indigenous fauna under s 6(c) of the Resource Management Act (RMA); and
- (b) the adverse effects on what is accepted as an ONL under s 6(b) of the RMA; and
- (c) the adverse visual effects on the landscape contrary to ss 7(c) and 7(f) of the RMA.

Background

[5] Mining Permit 41289 at Te Kuha is a triangular block of land that covers approximately 860ha approximately 12km south-west of the township of Westport, on the West Coast of the South Island. The southern boundary of the permit is situated approximately 2km north of the Buller River as shown in Figure 1.



Figure 1: Location of Te Kuha coal deposit

[6] In 1995 Rangatira Developments Limited purchased this Mining Permit and commenced the process of obtaining land access agreements and resource consents to mine coal at the site. By 2002 access matters relating to the site remained unresolved and the project was not pursued.

[7] In 2010 Stevenson Group Limited and Rangatira Developments entered into a joint venture to undertake further exploration of Te Kuha coal deposit, which resulted in an analysis of geology, mine planning, surveying and resource management activities. In 2012 a detailed drilling programme was carried out in conjunction with geological resource modelling to establish and confirm the quality of the coal resources. The results of this additional investigation indicated that the coal deposits comprise around 4 million tonnes of high quality coking coal, which could be used in a range of industrial applications, including steel production.

[8] In 2012, Te Kuha Limited Partnership was formed. This partnership is a joint venture between Stevenson and Waipere Holdings Limited, who together are considering all of the options in relation to Te Kuha project, including applying for the necessary resource consents to mine a portion of the permit area. The applications were lodged under the heading of "Te Kuha Mine Project."

[9] Stevenson Mining Limited has been appointed as the Project coordinator and mine operator. Stevenson Mining are seeking all necessary resource consents under the RMA (RMA) to undertake mining and all ancillary activities at Te Kuha. Resource Consents will be required from the West Coast Regional Council (WCRC) and Buller District Council (BDC) as the regional and local authorities.

[10] The resource consents required from the WCRC include:

- Land use consent all mining and associated activities, including earthworks, land disturbance and vegetation clearance, removal of overburden and coal, coal crushing and screening, construction of the access/haul road, rehabilitation, and construction and operation of a coal load-out site.
- Land use consent to build structures and undertake activities in, on and over the beds of streams and creeks.
- Water permit diversion and taking of mine water, stormwater and groundwater from within the active pit, access and haul roads, and overburden placement areas.
- **Discharge permit** discharge of treated mine water and stormwater from the treatment system to Camp and West Creeks.
- **Discharge permit** deposition of overburden, limestone, sediment that may contain water treatment chemicals, soil, and other material to engineered landforms and overburden placement areas within the mine disturbance footprint.
- **Discharge permit** discharge of dust, vehicle emissions, and other fugitive emissions to air.¹

[11] The resource consent required from the BDC is as follows:

• Land use consent – all mining and associated activities including earthworks, land disturbance and vegetation clearance, removal of overburden and coal, coal crushing and screening use of hazardous substances, construction of the access/haul road, rehabilitation, and the construction and operation of a coal load-out site.

[12] In accordance with s 125(1) of the RMA, it is requested that the resource consents do not lapse for a period of seven years after the date of commencement of the consents. A duration of thirty-five years is sought for all the WCRC water and discharge permits.

¹ The coal load-out site, as originally proposed, was to be on the mine footprint. It is now proposed to be on land owned by KiwiRail, and discharge permits will be required for that site in addition to the resource consents sought.

[13] The total Project footprint would be approximately 144ha and would include a mine pit and associated infrastructure, water treatment infrastructure, an access/haul road and a coal load-out facility. We set out in Figure 2 an indicative overview of the Project.



Figure 2: Overview of the Proposed Te Kuha Mine Project

- [14] The proposal would be located over three different land parcel/tenures:
 - (a) approximately 12ha of the mine footprint would be located on public conservation land administered by the Department of Conservation (DoC) as stewardship land;
 - (b) approximately 100.14ha of the mine footprint and approximately 28.48ha of the access road would be on land managed by the Buller District Council under the Reserves Act 1977 as Westport Water Conservation Reserve; and

(c) approximately 2.08ha of the coal load-out site would be on land managed by KiwiRail.

[15] The coal resources on the mining permit area have been identified as Brunner Coal Measures, which are also mined on the Denniston and Stockton Plateaus. A lower (deeper) coal measure is also present, and has been identified as part of the Paparoa Coal Measures that are currently mined in the Paparoa Ranges near Greymouth. Both the Brunner and Paparoa Coal Measures are typical of coal deposition environments, consisting largely of sandstone and siltstones, with some minor gravel conglomerate and mudstone components.

[16] The mining footprint is located at the south-western (tail) of the Mt William Range near the mouth of the Lower Buller Gorge.² These ranges form the backdrop and views inland from Westport and the coastal plain in the vicinity of Westport.

[17] The vegetation of the proposed site is considered as one of the least modified examples of Coal Measures vegetation in what is known as the Ngakawau Ecological District and is particularly significant because of the absence of recent fire. These Coal Measure communities of Te Kuha area are part of a vegetation type (Coal Measures vegetation) that is virtually confined to the Ngakawau Ecological District. This vegetation type is typical of ground containing coal deposits and contains a particularly unique combination of species in a complex mosaic of grassland, heathland, shrubland and low forest communities. One of the outstanding features of the Coal Measures vegetation is the very high diversity of communities within a small area.³

[18] The vegetation on the proposed site is considered by all of the expert ecological witnesses to contain areas of significant vegetation and habit of significant indigenous fauna in terms of s 6C of the RMA.⁴

[19] The coastal hill slopes on which the mining footprint is located are components of an area of mostly undeveloped indigenous forest-covered mountain landscape, which has a landscape and visual integrity that is important to the coast's predominant sense of natural character and its visual amenity value.⁵ It is accepted by the landscape experts that the proposed mine site would have a high landscape and visual amenity value within the Buller District, as a component of an indigenous forest-covered mountain range, which is significant for the natural character and scenic beauty it contributes to the most populated part of the district.

² See Brown Landscape and Assessment of Effects Review at [1].

³ See Dr Ussher, Terrestrial ecology review at [2].

⁴ See Caucusing statement – terrestrial ecology, at [2].

⁵ Rough & Milne report at [40] and [41].

Overview of the Project

[20] The mine's proposed layout and stripping sequences, Engineered Land Forms (ELFs), topsoil stockpile areas, access/haul road and proposed coal load-out area are set out in considerable detail in the AEE and the evidence of the Applicant's witnesses.

[21] The maximum disturbance area over the life of the Project is 144ha, which is approximately 15 per cent of the total permit area. This comprises of: 6

- (a) an approximately 112.14ha mine pit and associated infrastructure;
- (b) approximately 1.31ha of ex-pit water treatment infrastructure;
- (c) approximately 28.48ha for the access/haul road; and
- (d) approximately 2.08ha for the coal load-out site.

[22] Key components of the mine footprint include two mine pits (Brunner and Paparoa), overburden placement areas and ELFs, soil stockpile areas, diversion drains and in-pit sumps. Ex-pit water management infrastructure includes a water treatment plant (WTP) and dual pump system.

[23] Coal mining activities will take place in both pits concurrently, however the Brunner pit (mining the Brunner Coal Measures), will need to be completed prior to accessing the area of the Paparoa pit, which sits beneath the Brunner Coal Measures. The Paparoa pit contains the Paparoa Coal Measures.

[24] The mine is planned to produce approximately 4 million tonnes of coal over a 16-year period, with a further ten-year period anticipated for rehabilitation and after-care of the site. Rehabilitation will be carried out progressively during the 16-year mining period.

[25] In general terms, activities associated with the Project area are:

- (a) development of mine infrastructure, including the access/haul road, ex-pit sumps, stormwater and mine water management drains;
- (b) removal of vegetation and soils;
- (c) excavation of overburden and coal;
- (d) transportation, processing and loading-out of coal;

⁶ See Brewster EIC at [9] and following.

- (e) deposition of overburden, soil and rehabilitation material as part of temporary storage and permanent placement within ELFs;
- (f) management of dust;
- (g) water treatment; and
- (h) rehabilitation of the site during and after coal extraction.

[26] The hours of operation for the proposed mine would be from 6.00am to 10.00pm Monday to Saturday from 1 October to 31 March, and 6.00am to 6.00pm Monday to Saturday from 1 April to 30 September. Ms Brewster told us at the hearing that it is proposed for mining to take place only during daylight hours and will thus vary with the seasons, and that it is proposed to mine five days a week. Maintenance activities would take place on Saturdays when required and also mining activity on occasions. The coal load-out hours would be 5.00am to 11.00pm seven days a week.

[27] The expected number of staff required for mining is 58 full-time equivalents (FTEs).

Excavation of overburden and coal

[28] The mine footprint would consist of two open-cast pits – the Brunner and Paparoa pits.

[29] The mine design would be based on mining the individual pits from approximately south to north in strips. These two pits would be mined concurrently, however coal extraction in the Brunner pit would need to be completed before mining in the Paparoa pit advances beneath the Brunner pit.

[30] When required, drilling and blasting would be used to remove overburden and coal, which is standard mining practice in certain geological formations. All blastings would be carried out by an explosives expert company, and explosives would be stored in a magazine off site.

[31] Coal would be extracted and hauled to the mine Run Of Mine (ROM) pad, where it would be crushed and screened. No coal washing would be required as there are no old workings at Te Kuha. The coal once crushed and screened would be stockpiled until being transported to the coal load-out facility.

Water management

[32] The site water management system would include ex-pit sumps and drains, the ex-pit sump system would comprise two sumps:

- (a) the WTP buffer sump, with a storage volume of approximately 16,000m3; and
- (b) the WTP settling pond with a storage volume of approximately 24,000 m³.

[33] Drains would be constructed to separately convey both stormwater and mine water. Diversion channels would also be constructed where necessary to divert clean water around active areas for discharge within their natural catchments downstream of the active mining areas. Diversion channels would be constructed to cater for storm events and to control sediment generation.

[34] The construction of the ex-pit sumps and drains would take place prior to the commencement of pit development and coal excavation to ensure that any stormwater and mine water could be appropriately treated.

Access/haul road

[35] The access/haul road would be approximately 9km long and has been planned to have a gradient that would not exceed 1:10. It has been designed to have minimal effect on the landscape. It is proposed that the road would be constructed as a single-lane road, having a 7m wide carriageway, widening to 10.5m for passing bays at approximately 1km intervals. The passing bays would be 25m long and would include areas for the stockpiling of vegetation and soils.

[36] Cut and fill slopes that result from, and any rock faces that are exposed as a result of, constructing the proposed road would be the first areas to be rehabilitated. Initial rehabilitation would involve direct transfer of vegetation, planting and possibly hydromossing in order to stabilise and/or reduce any visual effects the road may give rise to, such as the visibility of the access road and its associated earthworks from afar. Long-term rehabilitation is proposed to involve reducing the width of the proposed road's carriageway.

Run of Mine coal stockpile and infrastructure area

[37] At the mine site a ROM coal stockpiling area, approximately 50m x 25m and an infrastructure (offices, workshop, etc) approximately 80m by 40m would be prepared by stripping vegetation and soil, which would be utilised for rehabilitation purposes, before being levelled and surfaced with compacted road metal. It is proposed that buildings in this area would have an exterior colour (such as Coloursteel's "Karaka") that would be compatible with the colour of the natural conditions of the Project site and its immediate surroundings. At the end of the life of the mine buildings and bunding would be removed and the site would be fully rehabilitated.

Railway siding and coal load-out site

[38] At the base of the access/haul road, near the southern end of Nine Mile Road, it is proposed to construct on railway land a ROM pad for stockpiling coal as well as a coal load-out loop on the Stillwater-Ngakawau Line. This is described in some detail in the evidence of Mr Mike Copeland for the Applicant. Stockpiled coal is proposed to be loaded onto railway wagons by utilising front-end loaders.

[39] The railway loop would be approximately 400m long and adjacent to the loop would be a flat ROM pad 23-34m wide at the base of a 1:2 cut batter. The coal would be accumulated in several 3-4m high stockpiles from which it would be loaded into coal wagons utilising front-end loaders.

[40] The proposed facility's area would be within 120m of Nine Mile Road, and opposite SH6 across the Buller River at a distance of 650m immediately before the highway enters the Buller Gorge. However, despite the relatively close proximity to SH6, the load-out area and activity would be screened from views from the highway by existing vegetation on both sides of the Buller River.

Removal and rehabilitation of vegetation and soil

[41] The excavation and salvage of soil and vegetation has been factored into mine planning, as these materials would be used in rehabilitation. Topsoil and vegetation would be removed by excavator and loaded into dump trucks. These materials would either be immediately re-used or stockpiled for future use.

[42] Any overburden removed during pit development would be placed in ELFs, either as temporary storage (to be re-handled later in mine sequencing) or to form a final ELF. The key factors considered in developing the strategy for the construction of the ELFs were:

- (a) to minimise the disturbance footprint to minimise the visual effect and impact on high-value ecosystems;
- (b) to enable reinstatement of the ridgeline as early as possible; and
- (c) to best utilise the non-acid forming overburden.

[43] Rehabilitation forms an important part of the mine planning. Rehabilitation would start at the earliest stage of the Project development. It is proposed to adopt many of the proven techniques already used on the West Coast that have been developed over the past 10-20 years. Industry experts in this field have been engaged. Details of the rehabilitation programme are set out in considerable detail in the evidence of Dr Simcock for the Applicant.

[44] It is proposed to use direct transfer (DT) in the rehabilitation as much as practicable. A minimum of 15ha of the mine footprint is allowed for in the mine plan. DT involves gently lifting the vegetation off in sods in a way that maintains the integrity of individual sods, the aim being to transfer any sods directly from the source to its final placement.

[45] Rehabilitation is designed to progressively occur each year and follow the progression of the mine. At the completion of mining the final void would be filled in and the ridgeline reinstated.

Environmental management through conditions of consent

[46] It is proposed that potential adverse effects would be managed through a comprehensive set of consent conditions. The proposed consent conditions have gone through an iterative process as a result of expert caucusing and the hearing process. The latest version is dated 4 October 2017 and is attached as **Appendix 1**.

[47] This final version is considered by all of the experts to represent good practice, having regard to the current state of knowledge as applied to the environmental issues that have arisen in this case. However, we note that in some instances there is some doubt as to the achievement of the environmental outcomes. We will discuss in Part 3 of this decision, where appropriate, the conditions of consent as they apply to the contested issues arising from the potential effects of the proposal.

[48] The proposed conditions of consent set the criteria and methods for the operation of the mine. The conditions also set out in some detail the obligation of the Applicant to provide to the consent authorities for certification a number of management plans that address operational methods and the monitoring of relevant effects. The plans are as follows:

- Contingency and Response and Hazardous Substances Management Plan;
- Construction Management Plan;
- Rehabilitation Management Plan;
- Mine Closure Plan;
- Water Management Plan;
- Overburden Management Plan;
- Dust Management Plan;
- Te Kuha Biodiversity Management Plan;

- Orikaka Habitat Enhancement Management Plan;
- Waste Management Plan; and
- Geotechnical Management Plan.

[49] The conditions of consent specify the objectives for each of the management plans that underlay the conditions. The conditions also set minimum criteria to maintain environmental effects within acceptable limits through various management measures. The outcome of the various management measures is to be monitored to enable any necessary adaptation if required.

Access arrangements

[50] In addition to obtaining the necessary resource consents, because the mine footprint is on both stewardship land and land managed by the Buller District Council as a local purpose water conservation reserve, the Applicant must obtain access arrangements from both the Buller District Council and jointly from the Minister of Energy and the Minister of Conservation under the Crown Minerals Act.

[51] The proposed access road is located on both public and private land. The proposed coal load-out site is situated on KiwiRail land.

[52] An application for an access arrangement was made to the Minister of Conservation on 20 March 2014. Because the mining permit is classified as a "Tier 1" permit under s 61 of the Crown Minerals Act 1991, the decision on the application is to be jointly made by the Minister of Conservation and the Minister of Energy. The access arrangement application to the Ministers of Conservation and Energy involved a public submission and hearing process, which was completed in April 2016. That decision has not yet been made.

[53] On 25 March 2015, an application for an access arrangement was made to the Buller District Council. That application has also yet to be decided, and is awaiting proceedings in the High Court to clarify a matter of statutory interpretation.

[54] These applications for access arrangements are ancillary to, but independent of the applications for resource consent before us. Accordingly, we put them to one side.

<u>The hearing process</u>

Pre-hearing process

[55] The resource consent applications were publicly notified on Wednesday 19 April 2017. The closing date for submissions was 18 May 2017. The Council received a total of 744 submissions, with 715 being joint submissions to the WCRC and the BDC. A list of submitters is attached as **Appendix 2**.

[56] A small portion of the submissions filed (30) were received after the closing date. The hearing panel determined that these late submissions could be accepted pursuant to s 37(2) of the RMA, on the grounds that no other person would be unduly prejudiced by receiving the late submissions.

[57] Of the 744 submissions received:

- (a) a total of 113 supported the proposal;
- (b) a total of 628 opposed or opposed in part the proposal; and
- (c) a total of 3 were neutral to the proposal.

[58] Details of the submissions were set out in the Section 42A report. We summarise the thrust of the submissions hereunder.

Submissions in support

[59] The submissions in support generally identified the economic benefits to the Buller/Westport area. They emphasised that the economic benefits for the local area would be considerable, thus improving the social welfare of the community.

Submissions opposed

[60] The submissions in opposition generally raised issues around:

- (a) the destruction of a high-value natural area and habitat of threatened species;
- (b) the impossibility of rehabilitating the site to its pristine pre-mining position;
- (c) the effects of climate change;
- (d) the effects on the natural value of a highly visible landscape and an agreed outstanding natural landscape;

- (e) the loss of, and effect on, waterways and aquatic habitat;
- (f) the effects of noise and dust; and
- (g) the effects on health.

Neutral submissions

- [61] The neutral submissions were three in number:
 - (a) Community and Public Health were concerned about the issue of dust, impacts on drinking water and impacts on human health, all of which they considered could be addressed by conditions of consent;
 - (b) the Department of Conservation and the Minister for Business, Innovation and Employment made a joint neutral submission:
 - (i) noting the economic benefits of the proposal; and
 - (ii) noting that the site comprises areas of unique and distinctive Coal Measure and several At Risk-Threatened species; and
 - (iii) the proposal would result in several notable adverse effects that could not be avoided, including:
 - the loss of most of the Coal Measure habitat within the mine footprint; and
 - residual adverse effects on several rare and threatened species;
 - (c) KiwiRail Holdings Limited filed a neutral submission to ensure the proposal does not impact on its assets and operations.

[62] As part of the pre-hearing process we issued Memoranda from time to time relating to such matters as:

- (a) an evidence exchange timetable;
- (b) caucusing of expert witnesses;
- (c) procedure at the hearing; and
- (d) setting the hearing schedule.

[63] We carried out a number of site visits. Firstly, we undertook a helicopter flyover of the site and the potentially affected landscape. Secondly, we visited the 14 viewpoints from

which photos of the proposed site were taken for photo simulations. Thirdly, we visited the Stockton mine to view the rehabilitation measures undertaken there. The site visits enabled us to better understand the evidence and submissions.

[64] We received a detailed report under s 42A of the RMA jointly written by the Council officers Ms Rachel Clark for the WCRC and Ms Rebecca Inwood for the BDC.

[65] The hearing took place at Westport over a period of nine days from 18 September to 28 September. We heard opening submissions, and received evidence from the Applicant and the Crown. We received legal submissions on behalf of the Royal Forest & Bird Protection Society of New Zealand. We received verbal submissions from Ms Frida Inta, Ms Linda Grammer, Mr & Mrs Orchard, Ms Jenny Campbell, Ms Rosemary Penwarden, Mr Tim Jones (Coal Action Network Aotearoa), Ms Zella Dowling and Mr Terry Sumner. We also received further written submissions from Mr William Burton, Ms Jane Young and Ms Rebecca Beals (KiwiRail) who were unable to attend the hearing. We then received addendums to the Council's 42A report and heard evidence from Mr Brown and Dr Ussher on behalf of the Council. Finally, we received the closing submissions of counsel for the Applicant on Monday 9 October 2017. We closed the hearing on 18 October 2017.

[66] At the hearing the main issues discussed at some length related to:

- (a) the effects on terrestrial ecology. On this matter we heard from seven expert witnesses. These witnesses caucused and filed a caucusing statement on 13 September 2017; and
- (b) the effects on an ONL and landscape. We heard from two expert landscape witnesses who also caucused and filed a caucusing statement on 13 September 2017.

[67] In coming to our determination, we have taken into account all of the Submissions, the legal submissions, the evidence adduced from 18 witnesses, the AEE and the reports filed by the Council officers. It is not practicable to refer to all the material put before us, as to do so would make our decision unduly large.

Part 2 – The contextual background

[68] In this part of the decision we set out the physical and legal contexts.

The legal and statutory context

Introduction

[69] We set out in this part of the decision the legal context and statutory basis for making our decision on the Applications. We discuss the relevant provisions of the RMA and the statutory instruments. We also discuss a matter of interpretation relevant to the application of the RMA and the provisions of the statutory instruments arising from the decision of the Supreme Court in *King Salmon*⁷ to s 104(1) of the RMA;

Status of the proposed activities

[70] It is common ground that the applications for resource consents are to be "bundled" and considered under the status of discretionary activities. After considering the application we may grant or refuse the applications, and if we grant them may impose conditions under s 108 (s 104B).

Statutory basis for decision

[71] Section 104 of the RMA sets out the matters that we must *have regard to* when considering an application for resource consent. We identify the following as being relevant to the applications:

- (a) Part 2 of the RMA subject to Part 2 (s 104(1));
- (b) any actual and potential effects on the environment section 104(1)(a);
- (c) West Coast Regional Policy Statement section 104(1)(b)(v);
- (d) proposed Regional Policy Statement s 104(1)(b)(v);
- (e) Regional Land and Water Plan -s 104(1)(b)(vi);
- (f) Regional Air Quality Plan s 104(1)(b)(vi);
- (g) Buller District Plan s 104(1)(b)(vi); and

⁷ Environmental Defence Society v NZ King Salmon [2014] NZCPS @ 38.

(h) proposed Buller District Plan – s 104(1)(b)(vi).⁸

[72] The RMA, and the statutory instruments made under it, comprise a hierarchy of instruments with the RMA at the top, down through national and regional policy statements to the relevant plans. All are required to either be consistent with, or give effect to, the higher instruments. The lower order instruments should give substance to the principles in Part 2 by stating objectives and policies that apply to those principles, thus translating the general principles to more specific or focussed objectives and policies.⁹

[73] Thus, the principles set out in Part 2 of the RMA give rise to numerous themes that consistently thread their way down through the hierarchy of statutory documents, usually with increasing detail, through objectives and policies as they apply from a national, regional and then district level. The various themes are the context within which we must consider the effects of the proposal as required by s 104(1)(a). They have their genesis in Part 2 of the RMA.

Part 2 of the RMA

[74] Part 2 is a framework against which all the functions, powers and duties under the RMA are to be exercised for the purpose of giving effect to the Act. There are no qualifications or exceptions. It is well settled that any exercise of discretionary judgement is implicitly to be done for the statutory purpose. The consideration of matters for applications for resource consent, as set out in subsections 104 and 105, is also "*subject to Part 2*". We discuss the appropriate application of the words "*subject to Part 2*" to the provisions of the relevant statutory instruments later in this part of the decision.

[75] We set out s 5, which has been described as the "lodestar" of the RMA in full:

5 Purpose

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- (2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
 - sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
 - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

⁸ It was agreed by all the parties that the PRPS and PBDP were at such an early stage that little weight should be given to them.

⁹ King Salmon at [90].

[76] Section 5 is an enabling provision, setting out the yardstick for normative decisions that will ensure the suitable management of the environment. Section 5 has recently been the subject of discussion by the Supreme Court in *Environmental Defence Society v New Zealand King Salmon*¹⁰. We adopt some of the guiding comments set out in that decision.

[77] Section 5 contemplates environmental preservation and protection as an element of sustainable management of natural and physical resources;¹¹ and protecting the environment from adverse effects of use and development as an aspect (though not the only aspect) of sustainable management.¹²

[78] Although s 5 is not itself an operative provision,¹³ where applicable the other sections of Part 2 (sections 6, 7 and 8) are operative, albeit at the level of general principles, directing those administering the RMA, and elaborating¹⁴ on how s 5 is to be applied in the circumstances described in them.

[79] The Privy Council decision *McGuire v Hastings District Council*¹⁵ requires that decisions made under s 5 are to be directed by ss 6, 7 and 8, which set out strong requirements for the preservation and protection of certain values. Issues under ss 6, 7 and 8 apply from different perspectives and in different combinations of each other, depending on the particular case.

[80] Section 6 of the RMA identifies matters of national importance, and directs all persons exercising functions and powers under the Act to recognise and provide for them. Of them, those relevant include:

- The protection of outstanding natural features and landscapes from inappropriate use and development (s 6(b)); and
- The protection of areas of indigenous vegetation and significant habitats of indigenous fauna (s 6(c)).

[81] The application of these matters, which are described as having national significance, is to serve the Act's purpose of promoting sustainable management. They are not to be achieved at all costs, protection is not an absolute concept, and a reasonable, rather than strict assessment, is called for.¹⁶

¹⁰ [2014] NZCPS at [38].

¹¹ King Salmon at [146].

 $^{^{12}}$ King Salmon at [148].

¹³ King Salmon at [151].

¹⁴ *King Salmon* at [25] and [149].

¹⁵ [2001] NZRMA 557.

¹⁶ Environmental Defence Society v Mangonui County Council, NZLR 257 (CA) 260 at [1089].

[82] **Section 7** of the RMA directs that in achieving the purpose of the Act all persons exercising functions and powers under it are to have particular regard to some eleven listed matters. The following are relevant:

- The maintenance and enhancement of amenity values (s 7(c)).
- Intrinsic values of ecosystems (s 7(d)).
- Maintenance and enhancement of the quality of the environment (s 7(f).

Statutory instruments

[83] The strong directions we have identified in Part 2 generate, as we have said, themes that reverberate through the hierarchy of statutory instruments. We have identified the relevant statutory instruments. We attach as **Appendix 3** to this decision the full text of the relevant objectives and policies of the following statutory instruments:

- (a) the West Coast Regional Policy Statement (made operative on 10 March 2000);
- (b) the proposed West Coast Regional Policy Statement (notified but not yet operative);
- (c) the Land and Water Plan (made operative in May 2014);
- (d) the Regional Air Quality Plan (made operative in July 2002);
- (e) the operative Buller District Plan (made operative on 28 January 2000); and
- (f) the proposed Buller District Plan (notified but not yet operative).

[84] Many of the relevant provisions address the various themes that have their genesis in Part 2 of the RMA.

[85] These themes include provisions relating to important matters that require a determination, including the effects on:

- (a) the economic and social values of the community;
- (b) the effects on terrestrial ecology;
- (c) the effects on landscape and ONLs;
- (d) the effects on water quality;

- (e) the effects of dust;
- (f) the effects of noise; and
- (g) the effects on traffic.

[86] The many provisions pertaining to the above themes have been discussed in some detail in the s 42A report. We do not propose to discuss them here, but will, where appropriate, refer to them when discussing the potential effects on the environment in Part 3 of this decision.

[87] We now propose to discuss the important matter raised in the legal submissions.

Proper approach when applying Part 2 and the statutory instruments, with regard to the exercise of discretion

[88] As we have said, when considering an application for a resource consent for a discretionary activity we must have regard to:

- (a) the actual and potential effects on the environment of allowing the activity (s 104(1)(a)); and
- (b) any relevant provisions of the applicable statutory instruments (s 104(1)(b)).¹⁷

[89] After considering the application under the relevant matters specified in s 104(1), we may grant or refuse the consents. The decision whether to grant or refuse consents is made under s 104B. The decision necessarily entails a judgement that is informed having regard to the matters articulated under s 104.¹⁸

[90] The matters that we are required to have regard to under s 104(1) are prefaced with the words "subject to Part 2". Hitherto, the general approach has been to refer back to Part 2, after an analysis of the facts and the statutory instruments, and come to an *overall broad judgement approach* with reference to Part 2 of the RMA. That approach has been rejected by a decision of the Supreme Court in respect of plan changes, and by the High Court in respect of resource consent applications. Thus, there is authority that reference back to Part 2 and an *overall broad judgement approach* is not always appropriate in the consideration of applications for resource consents.

[91] In the majority decision of *King Salmon*, given by Arnold J, the Supreme Court considered in particular:

¹⁷ Section 104(1)(c), which relates to any other matter, is not relevant in this case. No-one has said that it is.

¹⁸ Sterling v Christchurch City Council [2011] 16 ELRNZ 798 (HC) at [53].

- (a) the overall broad judgement and environmental bottom line approaches to applying s 5 identified in the earlier jurisprudence under the RMA;¹⁹ and
- (b) whether in considering the obligation to give effect to the New Zealand Coastal Policy Statement in s 67(3)(b), or finally determining the plan change at issue, that the Board was required (or indeed permitted) to undertake a similar overall broad judgement exercise having considered all relevant factors, and having regard to the provisions of that document as a whole.²⁰

[92] While the Supreme Court reviewed the previous *overall broad judgement* and environmental *bottom line* jurisprudence around the correct application of s 5, it did not go on to substantially consider or evaluate that issue. We accordingly understand that where an evaluation under Part 2 (and in particular s 5) is required (or permitted), this should continue to involve *an overall broad judgement* as held in *NZ Rail*.²¹

[93] The majority of the Supreme Court in *King Salmon* found that the plan change at issue ... *did not comply with s* 67(3)(b)... *in that it did not give effect to the NZPS*.²² In doing so, it found that in considering whether the NZ Coastal Policy Statement had *been given effect to*, and finally determining the plan change before it, the Board was not entitled, by reference to the principles in Part 2, to carry out a balancing of all relevant interests in order to reach a decision. Rather, the plan change should have been dealt with in terms of the NZ Coastal Policy Statement, without reference back to Part 2. This was primarily because of what the Court considered to be *strongly worded directives* in two of the NZ Coastal Policy Statement policies that were particularly relevant in that case, which the Board found would not be *given effect to* if the plan change was granted.

[94] The Supreme Court provided guidance for decision-making in a plan change application:²³

When dealing with a plan change application, the decision maker must first identify those policies that are relevant, paying careful attention to the way in which they are expressed. Those expressed in more directive terms will carry greater weight than those expressed in less directive terms. Moreover, it may be that a policy is stated in such directive terms that the decisionmaker has no option but to implement it.

[95] *King Salmon* applied to a plan change, and a critical issue has been the extent to which *King Salmon* applies to resource consents. The High Court, in *RG Davidson Family Trust v*

¹⁹ *King Salmon* at [38]-[41].

²⁰ *King Salmon* at [106]-[154].

²¹ NZ Rail Limited v Marlborough District Council, [1994] NZRMA 70.

²² *King Salmon* at [5] and [154].

 $^{^{23}}$ King Salmon at [129].

Marlborough District Council,²⁴ held that the reasoning in *King Salmon* does so apply. Justice Cull summarised the reasoning of the decision in *King Salmon* as follows:²⁵

The Supreme Court overturned the Board's decision. Because the NZCPS was intended to give substance to the provisions of Part 2 of the RMA, there was no need to refer back to Part 2 when considering the plan change. In summary, the Court gave the following reasons for this interpretation:

- (a) there is a reasonably elaborate process for issuing a coastal policy statement, making it implausible for Part 2 to be the ultimate determinant, not the NZPS;
- (b) the NZCPS gives Ministers some control over regional decisions, so it is difficult to see why the RMA would require regional councils to go beyond the NZCPS to Part 2, with Part 2 effectively trumping the NZCPS.

[96] The High Court, in holding that *King Salmon* did apply to resource consents, pointed to the inconsistency of having decision makers more constrained when making plans than in deciding resource consents:²⁶

[76] I find that the reasoning in King Salmon does apply to s 104(1) because the relevant provisions of the planning documents, which include the NZCPS, have already given substance to the principles in Part 2. Where, however, as the Supreme Court held, there has been invalidity, incomplete coverage or uncertainty of meaning within the planning documents, resort to Part 2 should then occur.

[77] I also consider that the Environment Court's decision was consistent with King Salmon and the majority correctly applied it to the different contexts of s 104. I accept Council's submission that it would be inconsistent with the scheme of the RMA and King Salmon to allow regional or district plans to be rendered ineffective by general recourse to Part 2 in deciding resource consent applications. It could result in decision makers being more restrained when making district plans, applying the King Salmon approach, than they would when determining resource consent applications.

[97] In finding that the reasoning in *King Salmon* applied also to s 104(1) of the RMA, Cull J made three key findings:²⁷

- (a) s 5 should not be treated as the primary operative decision-making provision;
- (b) the application of the "overall judgement approach" to decision-making on resource consent applications is rejected; and

²⁴ [2017] NZHC 52.

²⁵ At [69].

²⁶ At [76] and [77].

²⁷ At [74]-[76].

(c) the relevant provisions of the planning documents give substance to the principles in Part 2. There may be resort to Part 2, however, where there is invalidity, incomplete coverage or uncertainty of meaning within the planning instruments.

[98] In this matter, we have an added complication. We have a proposed Regional Policy Statement and a proposed District Plan. Neither of these have completed the hearing process. However, as we have mentioned previously, both are at the stage of development where neither should be given anything more than little weight. Accordingly, all parties agreed that the issue is academic.

[99] Unfortunately, counsel did not suggest a practical way for us to apply the Court directions. Accordingly, we issued Panel Memorandum 5 with a suggested approach for us to follow, inviting counsel to comment on it. We thank counsel for their responses.

[100] Having regard to the above analysis, and having regard to the comments by counsel, we propose to approach our task as follows:

- (a) consider any actual and potential effects on the environment of allowing the activity pursuant to s 104(1)(a). This we address in part 3 of this decision;
- (b) assess our findings on any actual and potential effects against the relevant provisions that address that effect in the statutory instruments, giving careful attention to the way in which the relevant provisions are expressed. This we do in Part 3 of the decision;
- (c) exercise our discretion under s 104B, having regard to our findings in Part 3 and in so doing:
 - (i) undertake an analysis against the Regional Policy Statement and the District Plan. This we do in Part 4;
 - (ii) determine whether we should resort to Part 2 because of any invalidity, incomplete coverage or uncertainty of meaning. This we also do in Part 4; and
 - (iii) make a judgement informed by the matters we are required to consider under s 104(1). This we also do in Part 4 of this decision.

The physical context

The region

[101] The West Coast region of New Zealand extends 600 km from Kahurangi Point in the north to Awarua Point in the south, lying between the Southern Alps in the east and the Tasman Sea in the west. By area it is the third largest region in New Zealand. It is a wild and sparsely populated region with some of the most dramatic scenery in the country. It is an area of soaring mountain peaks, impressive glaciers, tranquil lakes and raging rivers, lush rainforest and a magnificent coastline. The West Coast contains the largest area of protected land of any region in New Zealand and provides access to five of New Zealand's 13 national parks.

[102] Three District Councils lie within the area covered by the West Coast Regional Council, which is headquartered in Greymouth. These are the Buller, Grey and Westland District Councils based in Westport, Greymouth and Hokitika respectively. Grey District is the most populated, with over 13,500, followed by Buller at 10,250 and Westland 8,700.

[103] The economies have been based on extractive industries in the past, although the focus has shifted to include agriculture, horticulture and tourism. Gold was discovered in the Buller River in the late 1850's, leading to the start of the gold rush and the establishment of Westport. This was followed by the establishment of the coal mining industry, which has continued for over a century and remains a dominant force today.

The district

[104] The Buller District is characterised by mountainous terrain and terraced valleys. Granite and sedimentary rocks dominate the Karamea region, and a band of limestone contains many natural features including caves and arches. Further south are the coastal ranges and alpine landscapes including the Paparoa Ranges and the coal plateau. These have a significant influence on the character of the Buller District, forming a dominant backdrop to the coastal edge that contains and defines the inland extent of the fertile flats.

[105] Pastoral farming is predominant along the low lying coastal plains, which varies in width between Charleston and Ngakawau, depending on the proximity of the escarpment to the coastline. Coastal processes are clearly evident along the shoreline, with accretion and erosion giving and taking land along the coastal edge. The coastal edge is backdropped by the extended ranges that form the coastal escarpment.

[106] Parts of the coastal plateaux between the Mokihinui and Buller Rivers contain parts of the District's most modified upland areas, primarily due to current and historical mining

activity. This is most apparent on the Stockton plateau, where mining is ongoing. Restoration of the disturbed landscape has taken place over 200ha, while a further 800ha remain to be restored. The area coincides with the Buller Coalfield, at the southern end of which is the mining permit area associated with the proposed Te Kuha Mine Project. This site is located approximately 12 km south-east of Westport, which is the major town and population centre of the Buller District.

Social and economic context

[107] The West Coast economy was performing well prior to 2012, with growth coming from mining, dairy and tourism. However, the reduction in international coal prices has led to a reduction in the mining workforce, affecting such companies as Solid Energy, which was one of the major coal related employers. Mining jobs in the district reduced by 780 over the three-year period 2013-16, dropping from a high of 1,200. Tourism employment and guest night numbers in Buller increased from 171,000 in 2000 to 251,000 in 2016, although numbers fluctuated over this period. Guest nights on the West Coast are dominated by those in the Westland District having (in 2016) 60.6% of the region's guest nights. The Grey District and Buller District's had (in 2016) 21.1% and 18.3% respectively.

[108] Closure of the Holcim cement plant at Westport led to a loss of 120 jobs in 2016, while mothballing of the OceanaGold gold mine at Reefton and placing several coal mines into care and maintenance has also limited the employment options. When accompanied by reductions in dairy prices, the economic effects are compounded.

[109] Reliance on a few key sectors has exposed the region to sharp drops in the global prices for minerals and milk powder. This downturn since 2012 has not been experienced equally across the region, with Buller being hardest hit.

[110] Mr Copeland summarised the future economic growth by suggesting that it is likely to depend on three key economic drivers of agriculture, mining and tourism, while going on to say in his evidence for the applicant [at 19] that:

Future growth in agriculture employment is likely to be limited by reduced scope for dairy farm conversions, whilst growth in tourism will be affected by a number of factors including economic conditions in overseas and local markets, exchange rates, changes in tourist destination preferences and local and national tourism promotional initiatives.

[111] In addition, the Government has recently announced the Tai Poutini West Coast Economic Development Plan identifying a number of initiatives for seeking to raise economic growth on the West Coast. The Plan includes \$11 million for a new Regional Research Institute that will use innovative research and manufacturing techniques to unlock the potential of New Zealand's mineral resources.²⁸

Landscape context

Coastal landscape

[112] The extensive coastal ridgeline that backdrops the pastoral coastal plains is characterised by dramatic peaks and profiles, which belie the smoothness of the plateaux to the east of the skyline ridge. Both Denniston and Stockton coal measures are characterised by relatively flat expanses, which contrast with the rugged profile of the seaward skyline of the coastal ridge.

[113] This natural profile is now being interrupted in places as areas of mining extend west from the Stockton plateau, breaking the skyline and bringing the disturbance into view from the coastal edge. While limited in its extent, this disturbance brings a change to the coastal character by introducing the physical impacts of mining into the visual character of the coastal landscape, rather than it being hidden on the plateau behind the escarpment cliffs.

[114] Both the Denniston and Stockton plateaux exhibit the ecology and vegetation characteristic of their underlying geology, with varying depths of soils over hard sandstone pavements. This is reflected in the density, height, age and type of vegetation that prevails. Rainfall is high, with ecosystems developed over time to cope with the intensity of extreme downpours and the runoff they generate. Stockton is still actively mined, with coal carried via the aerial ropeway down to the railhead at Ngakawau, while any coal taken from the Denniston plateau is transported by truck down the winding hillside road to Waimangaroa and then dispersed to various markets.

[115] Mt Rochfort to the south of Denniston has a distinctive profile, rising boldly to its peak with huge sandstone outcrops defining the summit. South of the peak, the ridgeline crosses the application site and drops to the Buller River before climbing again to the Buckland Peaks at the northern end of the Paparoa Range. It is on this ridgeline north of the Buller River that Te Kuha application site sits, spanning the ridge slightly to the east to overlook the Buller Gorge, and covering the descending hills to the west that form the backdrop to Westport.

[116] While clearly seen from Westport and the coast, it was agreed by all parties that the application site does not fall within the coastal environment, and in fact lies many kilometres inland from that area (as defined in the Regional Coastal Plan).

²⁸ Evidence of Michael Campbell Copeland for Stevenson Mining.

<u>Buller Gorge</u>

[117] When viewed from within the gorge, dense native vegetation covers all the visible hillsides and encloses the road and river. The landform is steep and enfolding, giving a sense of containment within an unspoiled environment. The blue/green of the tall native forest, the presence of the river, the dominance of the landform and the untouched appearance of the entire setting gives this area a sense of being within a pristine environment. The highway itself is the obvious modifying element that prevents such an elevated ranking, but this allows easy access for people to experience the highly natural environment.

[118] Ridgelines throughout the Gorge are characterised by their steeply ascending side slopes and varied topography. When seen in profile, as most of them are when looking up from the road, they appear as having a clean sharp line when seen against the backdropping sky. The profiles are rising and falling rather than smooth and flat, with leading ridges following the same characteristic pattern of sharp edges created by the steepness of the lower hillsides.

[119] It is this ascending and descending profile that characterises the ridges, steeply sided valleys that characterise the landform below the ridges, and dense native vegetation that characterises the landcover. It all combines to give a highly natural appearance, but of a large scale where minor elements such as the road and rail are clearly subordinate to the dominance of the natural environment.

[120] It was agreed by all parties that the Buller Gorge falls within an area of Outstanding Natural Landscape.

Western slopes

[121] When viewed from the west, the landform descends in a far less dramatic fashion than in the gorge. The west facing slopes that descend from the application site down to the flat pasture-covered coastal plains have a rolling appearance before dropping more steeply in their foothills. The skyline ridge climbs steeply from the mouth of the Buller Gorge before taking on a less acute profile as it rises to the north. Steep slopes ascending to several summits are prominent on the skyline, with rises and falls characterising the profile rather than the flatness of the escarpment edge of the Denniston plateau.

[122] Mt Rochfort to the north stands out through its sheer ruggedness and size, while peaks to the south of this and throughout the application site are quite apparent but less pronounced by comparison.

[123] The vegetation has a mosaic of colours and textures, reflecting its age, size and type. Blue/green, khaki, grey/brown and olive are all present. Vegetation cover and colour has been affected by past fires in some areas, with manuka regrowth now dominant overs areas affected by past burning. Geology also affects vegetation type, with coal measure ecosystems thriving on hard pavement and areas of lower fertility.

[124] Combined with the shadows from the contours, historic fire events and geological variations, the hillside can appear to have considerable diversity at close views. However, this is overpowered by the unifying element of the topography's scale and consistency of form and native land cover. While having a diversity of colour and detailed form, these hills define the inland extent of Westport and its coastal plain, dominating the town and the flats through their sheer size and unmodified appearance.

[125] The mining permit area and proposed Te Kuha Mine site are principally seen as an element of these hills within the backdrop to the coastal plain and marine terraces.

[126] The location and extent of any areas of outstanding natural landscape was addressed by the landscape architects for the applicant and council. The areas defined by Mr Brown through work he had undertaken previously were accepted by both, recognising that the scale of assessment for that previous purpose covered the entire district and was not easy to specifically translate to site specific details for the coal mine application. Mr Rough for the applicant understood the agreed position to be as shown by a dashed line in Figure 3 referred to below, with the ONL boundary generally following the ridgeline from Mt Rochfort to Buckland Peaks.

[127] Mr Brown considered the ONL boundary should come slightly west at the Buller River to include the Scenic Reserve on both sides of the river, but both experts had excluded the slopes west of the ridgeline when undertaking their assessment of effects. Mr Brown reconsidered his opinion on this during evidence, but agreed that this should not be taken into consideration as it had not been his position when assessing the effects.

[128] The outcome of this was that both landscape architects agreed that the western facing slopes (excepting a disagreement regarding the small scenic reserve area) were not an outstanding natural landscape in terms of the current application process.

Gateway to the Gorge

[129] South of the application site lies the Buller River and entrance to the Buller Gorge. State Highway 6 winds its way through the gorge, carrying tourists en route to/from Punakaiki

and further afield. Lower Buller Gorge Scenic Reserve lies at the entrance to the Buller Gorge, as shown in Figure 3.



[130] On the northern side of the entrance the scenic reserve is heavily covered in native vegetation that clothes the steeply sloping hillside that rises up from the river towards the application site. This reserve continues on the other side of the river and covers the foothills on the southern side of the highway, enclosing the entrance that was referred to as the Gateway to the Gorge by some during the hearing.

[131] The entrance to the gorge is narrow, following the Buller River, which appears to emerge from the dominant hills and ridges that define the edge of the coastal plains to the north and south. When travelling by road, this emergence from or entrance into the gorge is emphasised by the contrast between the open flat plains and the enclosed winding gorge, which is dominated by the mountain range landforms and tall vegetation cover.

[132] This contrast emphasises the drama of the gateway, which is reinforced by the continuous vegetation cover of the scenic reserve and dominant landform of the ranges north and south of the river. Areas of the application site located on the upper slopes north of the river will be apparent when entering the gateway from the west, contrasting with the unmodified character of landform and land cover.

[133] As discussed above, Mr Brown considered that the area of scenic reserve on both sides of the Buller River should form part of the Buller Gorge outstanding natural landscape, whereas Mr Rough's view was that the dashed line shown in Figure 3 represented this boundary.

Ecological context

[134] Te Kuha deposit lies within the Ngakawau Ecological District, which includes the distinctive coal measures vegetation and exposed sandstone pavement that characterise the Stockton and Denniston plateaux as well as large areas of pakihi, shrubland and forest and much smaller areas of tussockland, herbfield, boulderfield and wetland. The Brunner coal measures cover around 10,300 ha at Stockton and Denniston, where the most extensive vegetation communities on the exposed gently sloping rock pavements are dominated by prostrate shrub and tussock communities.

[135] The uplands of the Stockton and Denniston plateaux have a relatively flat appearance, and are home areas of the Brunner coal measures. This extends south from Denniston to Mt Rochfort and Te Kuha application site, although the northern end of the Paparoa coal measures underlies the southern end of the Brunner coal measures. The ecology is characterised by the underlying sandstone geology, with shallow soil overlays of varying depths in places, or exposed as rockfield pavement in others. Small valleys and more sheltered hollows, where greater soil depth and shelter occur, harbour taller forest, but the vegetation over the wider area is generally limited to lower growing manuka shrubland, mixes of mountain/red/silver/hard beech, yellow silver pine, rimu and regenerating shrubland.

[136] The low fertility soils have evolved their own ecological response to the harsh conditions of wind, high rainfall, cold temperatures and slow growing conditions. The resultant coal measure ecology supports flora and fauna that have adapted to these conditions. Specialised ecosystems have formed that are home to sometimes rare fauna, such as the ringlet butterfly ("At Risk – Relict"), or flora such as beech trees that may be hundreds of years old supporting a distinctive bryophyte community. This bryophyte community is created by the high rainfall and protected habitats created by the weathered and collapsing bedrock ridge under short forest. Te Kuha ridge has three bryophyte species (two being "Nationally Vulnerable") and one lichen species that are classified as "Threatened". In addition, there are ten "At Risk – Naturally Uncommon" species within the survey area. Also, the entire herbfield would need to be removed for mining. This contains the threatened Euphrasia wettsteiniana species, which is restricted to herbfield ecosystems, and preservation of this would be addressed through direct vegetation transfer (discussed later in the decision). Two "Threatened" bird species occur at the proposed mine site (Great spotted kiwi and New Zealand falcon) along with five "At Risk" species (Western weka, South Island fernbird, New

Zealand pipit, Long-tailed cuckoo and South Island rifleman). Invertebrate communities at the site are also predominantly native. No terrestrial invertebrates of conservation concern were found, although surveys detected a previously unknown species of leaf-veined slug.

[137] It was common ground amongst all ecological experts that the vegetation and habitats at Te Kuha are considered to be significant in terms of the s6(c) of the RMA.

[138] The vegetation type, age and height affect its distant appearance, with colour varying depending on the overall make up of each flora type. Yellow green prevails for the grass dominated areas, grey/green typifies the manuka fields, while a mix of vivid and darker green portrays the pink pine and yellow-silver pine collections. Areas of Beech trees take on a darker hue, with the taller specimens more prevalent on the eastern facing slopes within the Buller Gorge catchment.

[139] The application site is fully enclosed by areas with some form of conservation status. To the east lies the Mt Rochfort Conservation Area, to the south is the Lower Buller Gorge Scenic Reserve, to the west is the Ballarat Conservation Area and to the north is the balance of the Westport Water Conservation Reserve. The access road and majority of the application site lie within the water conservation reserve, with the balance (approx. 10ha) of the application site lying within the Mt Rochfort Conservation Area.

[140] In all, 144ha of vegetation would be affected directly by the overall proposal. This includes the mining area itself, the access road and the water treatment infrastructure. This forms part of the larger 470ha area of coal measure vegetation in the vicinity of the proposed Te Kuha Mine site. The habitats present at the proposed mine site are overwhelmingly indigenous and have a very high degree of intactness reflecting the absence of road access and their lack of human disturbance.

[141] Te Kuha site was recommended as an area for protection by the Protected Natural Areas Programme surveys in the 1990s on the basis that in the event it was removed from the local purpose reserve for any reason, its addition to the public conservation estate would increase the level of protection of coal measures habitats. These types of habitat, although found elsewhere (principally in the Mt Rochfort Conservation Area), were considered inadequately protected overall.

<u>Part 3 – Consideration and assessment of actual and potential effects on the</u> <u>environment</u>

Introduction

[142] In this section we consider the actual and potential effects on the environment as we are required to under s 104(1)(a). We also assess our finding on each effect against the specified provisions of the statutory instruments that address that effect. In so doing, we will pay careful attention to the way in which the provisions are expressed, taking account of any directive terms.

[143] We will deal first with the potential effects that we consider to be neutral because the conditions of consent would adequately address any adverse consequences. Secondly, we will deal with the potential effects that we consider to be positive. Thirdly, we will deal with the potential effects that we consider to be adverse.

Potential neutral effects

Effects of climate change

[144] The provisions of s7(i) RMA require us to consider 'The effects of climate change'.

[145] This requires us to consider the actual effects of climate change on this proposal, rather than the effects the proposal may have on climate change itself. We note that a number of submitters mistakenly submitted that we should be considering such effects as the burning of coal. With respect to this issue, Section 3(b)(ii) of the Resource Management (Energy and Climate Change) Amendment Act 2004 explicitly states that local authorities must not consider the effects on climate change of discharges into air of greenhouse gases. The Supreme Court declared in *West Coast ENT Inc v Buller Coal Ltd [2013] NZSC 87* that the climate change effects of burning coal are not a relevant consideration when considering consents to mine coal.

[146] Mr Harvey and Mr Cudmore considered the effects that climate change would have on this proposal in their supplementary evidence when they noted the fifth report of the Intergovernmental Panel on Climate Change (IPCC). The IPCC's worst case predictions through to 2099 are that an average rise in temperatures of 0.8 degrees C over the next 20 years could be expected. The best-case predictions are that temperatures could rise an average of 0.36 degrees over the next 20 years. They applied these assumptions to the National Institute for Water & Atmosphere High Intensity Rainfall data set for Te Kuha mine location. They found the indicative increases in average rainfall intensities to be in the 2% to 6.5% range. They concluded that the probability of primary treated water from the mine site having to by-pass the WTP would increase from 1% of the time to approximately 1.1% of the time.

[147] In our opinion this effect is negligible. We have received no other evidence or permissible submissions on climate change. We conclude that the effects of climate change on this proposal would be minimal.

Groundwater and hydrology

[148] The following extracts have been taken from the s42A report and relate to Groundwater and Hydrology as identified within the WCRC Land and Water Plan.

Surface Water Quantity

The objectives and policies associated with surface water quantity cover matters around retaining water levels sufficient enough to maintain their instream values, natural character and life supporting capacity, while providing for the water needs of the West Coast's industries. The efficient use of water is promoted so as to obtain this.

The proposal involves rehabilitating the landscape so as to minimise any intercatchment transfer thus preserving its aquatic ecology and mauri through the restoration of the land to mimic that before the mining activities as closely as possible. There are no competing water uses and it has been determined in this report that the mine is unlikely to adversely affect the Westport drinking water supply. Any water takes are likely to be non-consumptive in that any water taken would be returned to the catchment close to the take point with no significant loss, as a result the proposal would not be contrary to these objectives and policies.

Groundwater

The objectives and policies of this chapter relate to protecting groundwater quantity and quality and its links to surface water. The deeper groundwater in the area is mostly below the level of the coal but the ephemeral shallow groundwater table has the potential to be impacted in particular by leaching of contaminants to groundwater. Appropriate management plans and consent conditions would ensure the proposal is not contrary to these objectives and policies.

[149] Six creek catchments, with a variety of flow volumes, provide the hydrology source which drains the mine permit area. Two of these (Coal and West Creeks) discharge to the Buller River and the remaining four discharge to the Orowaiti River. Several ephemeral ponds within the mine footprint area would be removed during mine development.

[150] The main impacts on these water courses is that parts of the upper catchment of these creeks would be intercepted by the mine footprint area and then after treatment, would be diverted into Camp and West Creeks which would subsequently increase in flow volumes. Where possible, the Applicant proposes to install clean water drains around the mine pit area and return as much water as possible back into the original water course.
[151] Following mine closure, the original topography would be re-instated to as near as possible to its original form.

[152] Mine impacted water would be directed to a water treatment plant (WTP) via a series of both in-pit and out-of-pit sumps that would store and treat this water before returning it into Camp and West Creeks via a wetland swampy area used for polishing purposes.

[153] Groundwater is provided from two separate sources consisting of a shallow ephemeral system and a deep permanent system. The shallow system feeds the highest levels of the streams and ponds and is rainfall sourced, while the deeper groundwater is pervasive and sits below the coal level except near the ridgeline. Deeper groundwater is sourced through rainfall via secondary infiltration.

[154] Both groundwater sources are generally good quality with near neutral pH and slightly elevated levels of iron and zinc.

[155] In summary, during the operational phase of the mine, four small creeks would reduce their flow while two of the larger creek flows would increase. Following mine closure all of these creeks' catchments would be reinstated following land re-contouring.

[156] We concur with the findings of the s42A report, and consider that the objectives and policies of the Land and Water Plan relating to Surface Water Quantity, would not be compromised. Although temporarily re-directed, the use of the water would be non-consumptive, with the water returned to the Buller River without reduction.

[157] We also consider that the objectives and policies of the Land and Water Plan relating to groundwater and surface water quantity, would be met through compliance with proposed conditions and management plans.

Water quality

[158] Policy 8.3.1 of the Land and Water Plan states:

Surface Water Quality

The objective within this chapter is to maintain or enhance the quality of West Coast's water. Policy 8.3.1 defaults the management of the surface water bodies affected through the TMP proposal as being for aquatic ecosystem purposes.

The aquatic ecosystem (Class AE) is as follows:

1. The natural temperature of the water shall not be changed by more than 30 Celsius,

- 2. The following shall not be allowed if they have an adverse effect on aquatic life:
- Any pH change;
- Any increase in the deposition of matter on the bed of the water body or coastal water;
- Any discharge of a contaminant into the water.
- 3. The concentration of dissolved oxygen shall exceed 80% of saturation concentration;
- 4. There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water.

[159] The policy provisions of the Land and Water Plan, in relation to mining, address the possible discharges of AMD^{29} and state:

4.3.2 To manage earthworks (for example, mining) to avoid effects on the environment where the activity may produce any of the following geochemical processes, above background levels:

- Release of acid rock drainage;
- Precipitation of iron oxides;
- Release of heavy metals.

[160] The policies also set out the matters to have regard to when considering discharges to water. Water quality would be managed by installing appropriate sediment devices and collecting and treating any mine impacted water. Appropriate management plans and consent conditions are proposed to ensure the proposal would not be contrary to these objectives and policies.

[161] Baseline water quality data was obtained from the surface water bodies by CRL Energy Ltd in 2013. Environmental monitoring is continuing which includes both discrete and continuous water quality monitoring.

[162] Water quality in the upper catchments is good but mildly acidic with low pH and low suspended solids. Lowland water quality has more neutral pH and slightly higher suspended solids. The Applicant proposes ongoing monitoring of water quality.

[163] It is expected that the main impacts on water quality as a result of mining are that suspended solids will increase from runoff of stormwater and mine water coming into contact with disturbed and cleared ground, together with changes to pH and chemical composition following leaching of water through overburden and exposed coal.

²⁹ Acid Mine Drainage

[164] Dr James Pope is the General Manager - South Island for CRL Energy Ltd. In his evidence he addressed principally mine drainage chemistry predictions, management and treatment of water including rehabilitation and closure.

[165] Historically coal mining in the Buller district has left a legacy of mine influenced acidic water flowing from previous mines long closed. Much work is being undertaken to correct this acid and metalliferous drainage commonly called acid mine drainage (AMD).

[166] Dr Pope in addressing rock geochemistry, explained that Brunner Coal Measures are typically strongly acid forming and when disturbed by mining form AMD with high concentrations of Aluminium (Al) and Iron (Fe). Paparoa Coal Measures are typically non-acid forming rocks that produce neutral drainage, but both sets of rocks can release a range of other trace elements.

[167] At Te Kuha however and somewhat surprisingly, Dr Pope explained that following the analysis of significant free draining field leach columns of rock samples, the Brunner Coal Measures rock were atypical because they do not have as much potential to release acid as Brunner Coal Measures at other investigated and mined sites on the West Coast. His conclusions were that the acid forming potential of Te Kuha Brunner Coal Measures is less than one sixth of the average for Brunner Coal Measures from other sites.

[168] However, the testing of rock leachate clearly shows that potentially acid forming (PAF) rock and non-acid forming (NAF) rock are both present at Te Kuha and there is an opportunity to use overburden management techniques to prevent acid formation. Dr Pope explained how this could be achieved through engineered land form (ELF) techniques.

[169] Essentially ELFs are designed to ensure that low acid forming rock is not mobilised. This is undertaken by encapsulating PAF rock in a complete cocoon of NAF rock laid over an under-drainage system which collects percolated water and redirects it to the water treatment plant for treatment if required. The approach suggested is to mix limestone with PAF which neutralises any acid. Dr Pope summarised his opinion that mixing NAF with PAF at Te Kuha means that the overburden is unlikely to produce AMD. On questioning, Dr Pope said that the addition of limestone to the ELF was an additional precautionary measure.

[170] Mr Ian Harvey is the Principal Mining Engineer with Golder Associated NZ Limited. Mr Harvey was unable to present his evidence personally as he became ill and his evidence was presented to us by Mr Cudmore.

[171] Mr Harvey recommended a conceptual design of the mine water treatment system that was based on conventional methods commonly employed in the mining industry. This concept would utilise multiple storage components and consists of:

- In-pit primary settlement sumps; discharging to
- An ex-pit WTP buffer sump; ahead of
- An ex-pit WTP settling pond; before
- Discharge of treated water to the receiving environment.

[172] This process includes passive flocculant dosing prior to direction into a large settling pond where flocculated colloidal material settles out as sludge, which is pumped out, de-watered and returned to the mine pit.

[173] Modelling was undertaken for three scenarios of leaching of water through the overburden dumps which included a worst-case scenario, an average scenario and a minimum scenario. In terms of pH, all scenarios showed that the pH values did not fall outside the natural range of pH recorded in the creeks to date. The results of the modelling showed that based on the worst-case scenarios, concentrations of Aluminium(Al), Zinc(Zn) and Nickel(Ni) approach the threshold for impacts on aquatic ecosystems. The Applicant is proposing pH adjustment which would help settle out metal hydroxides within the water treatment plant system. As a result, the Applicant is predicting minimum effects on water quality or in-stream ecosystems. An extensive water monitoring program has been proposed to ensure this is the case.

[174] Mr Roger Cudmore is the Principal Environmental Engineer for Golder Associated NZ Ltd. He advised that he had assisted Mr Harvey in the preparation of his primary evidence and both of them worked together to present supplementary evidence.

[175] In supplementary evidence Mr Cudmore presented a joint report providing additional information on behalf of Mr Harvey and himself. This related to turbidity monitoring locations, mine influenced water flows, discharges bypassing the treatment plant, and climate change effects which we address in the Climate Change section.

[176] Turbidity monitoring was originally proposed to be undertaken at monitoring points TSK 14 and TSK 15 and water turbidity was expected to meet 25 NTU for 95% of the time. Subsequent analysis has shown that the natural turbidity of the creeks exceeds that provision and it is now proposed to relocate this monitoring point for turbidity to the downstream side of the water treatment plant before any further mixing. We accept that the relocation of this monitoring point is both sensible and pragmatic.

[177] Bypassing of the water treatment plant during extreme rainfall events is still not expected to exceed 1% of the time recognising that primary treated mine water is likely to have a lower turbidity level than the receiving streams.

[178] Dr Paul Weber is the Principal Geochemist for O'Kane Consultants and was engaged by WCRC to peer review the geochemical risks with the proposal. In his Geochemistry Review dated 12 December 2016, Dr Weber identified a number of outstanding issues from the application through a Risk Matrix by identifying the task, providing a summary, identifying potential effects and making recommendations.

[179] The issues raised by Dr Weber were included in a s92 request for further information from the Applicant. Dr Weber then reviewed the Applicant's response in a report dated 8 August 2017 and met with the Applicant's experts to try to resolve the remaining issues. Dr Weber concluded that further water quality monitoring would be incorporated into the conditions and many of his other concerns would be incorporated into management plans.

[180] Further information addressing the matters raised by Dr Weber was provided by Dr Pope in his evidence, and it appears to us that all the matters raised by Dr Weber have now been included in conditions and management plans proffered by the Applicant.

[181] We received numerous general submissions expressing concerns over loss of water quality but without any additional evidence for us to consider.

[182] In considering the evidence presented to us, it is our assessment that in terms of Policy 8.3.1:

- Water temperature is not expected to change;
- There should be no changes to the natural pH levels of water, or increase in deposition of matter, or discharge of contaminants which would have an adverse effect on aquatic life;
- We have received no evidence that would indicate that dissolved oxygen levels would exceed 80% of natural saturation or that there would be any biological growths as a result of discharge of contaminants.

[183] In considering Policy 4.3.2 we accept that there will be no adverse effects on the environment from geochemical processes above background levels from acid rock drainage, precipitation of iron oxides, or release of heavy metals.

[184] On this basis we find that the proposal is consistent with the policies and objectives of the Land and Water Plan. We also consider that compliance with the proffered conditions and

management plans would result in the adverse effects of the proposal on water quality being minimal.

<u>Aquatic ecology</u>

[185] The objectives and policies of the relevant statutory instruments require the adverse effects of discharges into water to avoid, remedy or mitigate:

- Any significant adverse effects on aquatic life;
- Any loss of ecological, cultural, aesthetic, amenity and recreational values.

[186] They also seek to preserve aquatic indigenous biodiversity and ecological values, including fish passage.

[187] Boffa Miskell Ltd undertook a study of the assessment of effects on aquatic life in 2016 for the Applicant. They found that the key actual and potential effects on the aquatic ecosystems at Te Kuha would be:

- Loss of aquatic habitat;
- Earthworks and fines that lead to the addition of sediment;
- Contaminant runoff from roads and other infrastructure;
- Potential modifications to downstream flows; and
- Modifications to water quality resulting from discharges from the mine site.

[188] They considered that the minor modifications to catchment flows are not expected to result in any adverse impacts on the aquatic values of the streams. They noted that the streams on site would be rehabilitated and aquatic communities similar to those existing now, are expected to re-colonise the waterways.

[189] As the biota inhabiting West and Coal Creeks are already acclimatized to the lower pH, reductions in pH to 4.0 to 4.5 (the normal range) are not expected to have adverse effects on the biotic communities. In their study they noted that all streams along the access route had migratory fish identified as being present in them.

[190] A separate population study by Boffa Miskell Ltd was undertaken in 2015 on Freshwater Crayfish (koura). They found that koura which were generally in good health

were present throughout the area with greater numbers found in West and Coal Creeks. From this survey they were able to determine any possible collection and rehabilitation plan.

[191] Boffa Miskell surveys and studies found that all the streams in the project area can be considered to be in a natural state with high aquatic values, and the diversity and abundance of fish and macroinvertebrates observed was considered to be within the normal range for unmodified streams on the West Coast.

[192] The Applicant has proffered conditions and management plans which will monitor water quality and that monitoring, together with fish and passage monitoring (which is required for stream crossings along the haul road to ensure fish passage and the upstream populations), should be sufficient to ensure the water quality and fish species and distribution will be maintained.

[193] Mr Jones of Coal Action Network submitted that the effects of climate change through increased rainfall would put fauna under more stress. However, he did not provide any specific evidence to support his view. Ms Grammer made a similar submission that there would be a loss of indigenous aquatic species and habitat.

[194] In our assessment of the evidence, we find that the proposal would be unlikely to have any significant adverse effect on aquatic life, or on ecological values. We also consider in the broad sense that the natural character of the rivers would be preserved and that the effects of the proposal on indigenous biodiversity, ecological values including fish passage would be consistent with the relevant objectives and policies. On this basis we find the effects of the proposal would be minimal.

Geotechnical effects

[195] A significant number of geological studies have been undertaken on Te Kuha geology since 1984. In 2002 Tonkin and Taylor (T & T) undertook an evaluation of slope stability based on existing data. T & T concluded that the existing landslides are extensive, deep seated, and ancient features that have developed due to loss of toe support by erosion over many years. They identified there were two key risks associated with mine development which were reduced stability associated with up-dip highwalls and foundation stability for out of pit sites, but those risks could be managed by design sequenced construction.

[196] In 2012 CRL Energy Ltd undertook a drilling programme which identified the two different coal seams of BCM underlain by a PCM deposit. Golder Associates analysed the drilling samples and prepared a Geotechnical Assessment to accompany the consent application.

[197] In summary, Golder considered it was feasible to undertake coal mining at Te Kuha and a proposed mine plan was prepared by Palaris (2016) which Golder generally considered to be workable, however a number of potential geotechnical risks were identified and required further reassessment and further investigation to support detailed mine design.

[198] Mr Cam Wylie of Resource Development Ltd was commissioned by WCRC to undertake a peer review of the geotechnical aspects of the proposal.

[199] Mr Wylie in his report dated 7 November 2016 found that while the proposal and geotechnical aspect were at 'concept and preliminary stages', which was not unusual, the geotechnical information was thoroughly assessed and risks clearly articulated. He identified a number of information gaps and noted that this site was unique, being situated on an existing landslide.

[200] Mr Wylie concluded in his report that the viability of the proposed mining method was uncertain for the geotechnical conditions and listed his concerns. He also had concerns with regard to the proposed re-handling of waste material noting that 40% of the total rehabilitation area is to be moved in the 10 years following coal extraction. Finally, he expressed concerns on the need for a substantial bond to ensure that all the required rehabilitation works could be undertaken to achieve temporary and final landform.

[201] In his recommendations, Mr Wylie suggested resource consent conditions requiring:

- The development of an alternative mine plan specifically considering the geotechnical conditions;
- Development of an operational recovery mine plan to manage a large slip to allow mine operations to continue;
- Development of an exit plan;
- Provision of a mine closure plan;
- Provision of an adequate bond mechanism to cover the cost of waste re-handling and to meet closure criteria in the event of an early exit from the mine.

[202] Responding to a s92 request for further information the Applicant's experts addressed the matters raised (Palaris and Golder), and Mr Wylie subsequently met with the Applicant's experts to discuss the issues. As a result of that meeting Mr Wylie advised by email that an alternative mine plan is now not required; and alternatives for the re-handling of waste material are also now not required.

[203] Two of the matters raised by Mr Wylie have not been addressed by the Applicant. These are the development of an exit plan in the event that a large slip closes the project, and the development of an operational recovery mine plan to manage a large slip which would allow mine operations to continue. We consider these two matters should be added to Condition 86 to be included in the Geotechnical Management Plan. Accordingly, we direct that Condition 86 be amended as follows (amendments in **bold**):

The Geotechnical Management Plan shall, as a minimum, address the following:

- a) A description of the sequence for ridgeline mining activity, including any measures that will be necessary to mitigate any potential slope instability;
- b) An exit plan in the event that a large slip closes the project;
- c) An operational recovery mine plan to manage a large slip which would allow mine operations to continue;
- d) The management methods used to minimise any fly rock deposition outside of the mine site resulting from blasting activity near the ridgeline;
- e) Details of the monitoring strategy for local slope instability and larger scale deformation throughout the mine site, where required;
- f) The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times;
- g) The training of staff and contractors.

[204] The s42A report concluded that:

If the consents are granted, then conditions will be included requiring a thorough geotechnical assessment be prepared prior to mining commencing in the form of an appropriate management plan and submitted for peer review. Mining cannot commence without approval of the final geotechnical peer review. This would ensure that potential geotechnical issues will be no more than minor.

[205] While we have received a number of submissions relating to removal of landform and the effects on landscapes, we have not received any specific evidential submissions relating to the geotechnical effects that would question or dispute the expert evidence provided.

[206] We note the s42A report which considers the Regional Policy Statement objectives and policies with regards to the effects of the proposal on natural hazards which said:

The objective and policy relating to Natural hazards seek to protect human life and avoid or mitigate possible damage to property and environmental values resulting from natural hazards. Land instability associated with mining adjacent to the ridgeline and general land stability issues associated with mining and its associated infrastructure are considerations that are addressed within the Applicant's AEE. A peer review was undertaken of the stability issues that concluded that natural hazards could be appropriately managed and therefore these issues are consistent with these objectives and policies.

[207] We concur.

[208] We have reviewed the proffered conditions together with proposed management plans and in terms of geotechnical effects, are satisfied in our assessment, that providing these conditions and management plans are implemented, the effects of the proposal on geotechnical effects would be minimal.

<u>Dust</u>

[209] Rule 5 of the Air Quality Plan applies to discharges of contaminants to air from the proposed coal mining activity as shown below:

Rule 5

Unless covered by another rule in this Plan, the discharges of any contaminant into air arising from earthworks, quarrying operations, mining, or cleanfill operations, is a permitted activity provided that the following conditions are met:

Any discharge of smoke, dust; gas or odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property; or

In the case of public amenity areas, any discharge of smoke, dust, gas or odour is not offensive or objectionable beyond the boundary or beyond 50 metres of the discharge, whichever is the lesser.

If an activity is unable to meet the conditions of this rule, then it is a discretionary activity.

[210] The application included, as part of the AEE, a report from Beca Ltd which concluded that as the discharges could meet the provisions of Rule 5 they considered that the activities to be undertaken at the mine and at the coal load-out facility could be considered to be a permitted activity not requiring a resource consent.

[211] Ms Prudence Mary Harwood is a Senior Associate – Environmental Engineering for Beca Ltd. She authored the Beca Ltd. Assessment of Effects of Dust emissions from the proposal, and lodged evidence with the Panel.

[212] Ms Harwood concluded that the proposal was a permitted activity. However, the applicant applied for a resource consent '*To discharge contaminants (dust and other fugitive emissions) to air'*, presumably as a precautionary measure.

[213] Ms Harwood's report addressed the environmental setting of the mine, discussed the surrounding land uses, and discussed the meteorology and background air quality of the mine. In her report section titled 'Discharges and Mitigation Measures' she explained the factors which influence dust generation and discussed how vehicles travelling over exposed surfaces

tend to pulverise and mobilise any surface particles and explained what measures could be implemented to mitigate dust generation.

[214] In her Assessment of Effects, she addressed the potential range of 'nuisance effects' and 'potential health effects' and found that the separation between the proposed mine and the water supply catchment is beyond the distance that dust generated from the mine is expected to travel, and concluded that there would be no measurable adverse effects on the Westport water supply catchment. This matter is further addressed below under the heading Westport Water Supply.

[215] Ms Harwood assessed the anticipated dust effects under the statutory provisions of the RMA, the National Environmental Standards for Ambient Air Quality, The West Coast Regional Policy Statement, the Proposed Regional Policy Statement and the Regional Air Quality Plan, and in each case she found that the proposal, as far as dust emissions were concerned, was either consistent with, in compliance with, or had no more than minor effects on these provisions.

[216] Ms Orchard, in her submission to us, opposed the proposal upon the grounds, in part, of the potential adverse dust effects. She provided extracts from a number of scientific papers and reports focussing on the adverse health effects of inhalation of fine coal dust. Ms Orchard referred to summaries of the distances that coal dust travels based on studies from the USA. She refuted the applicant's assertion that coal dust was confined to the boundaries of the site. She outlined tables and data relating to reduced life expectancy in the Buller district, which in her opinion was directly related to coal dust influences.

[217] Mr Orchard's submission referred to his wife's submission and reiterated the health concerns of coal dust. He overviewed the number of different mining activities which would cause dust to be released into the environment and disputed that sprinklers would adequately suppress dust generation.

[218] In a supplementary response dated 5 October 2017 to conditions and questions raised by the panel, Ms Harwood summarised the proposed dust suppression measures for the 'coal load out' facility. Again, she concluded that, due to the naturally high moisture content (DEM) of the coal, adverse effects would be low.

[219] Ms Harwood, in her supplementary response, also addressed the concerns raised on human health if $PM_{2.5}$ and PM_{10} particulate, which are invisible to the eye, were inhaled. She said these particles were suspected of causing adverse human health if concentrations above guideline levels were inhaled, but did not cause nuisance effects such as the soiling of surfaces or the contamination of water supplies. In this regard she addressed whether or not

 $PM_{2.5}$ or PM_{10} monitoring should be carried out in the vicinity of the Giles Creek catchment in addition to monitoring deposited particulate. Based on the size of dust particulate which is to be expected, together with the distances to the Westport water supply(2.4km) and closest sensitive receptors (houses-4km) away, she believed that the effects on discharges to human health would be negligible.

[220] On this basis, Ms Harwood concluded that additional monitoring of $PM_{2.5}$ and PM_{10} particulates in the vicinity of Giles Creek would serve no useful purpose. She opined that she had reviewed the proposed conditions dated 4 October 2017 for the consent to discharge contaminants to air from the coal mine and coal load-out facility, and confirmed that she supported those.

[221] Our assessment of the effects of dust being generated or likely to be generated from Te Kuha mine, is largely influenced by the comprehensive expert evidence from Ms Harwood. We prefer Ms Harwood's site-specific evidence, including a review of local climatic conditions, and on this basis we find that the effects of dust would be acceptable.

Westport water supply

[222] Westport's water supply is sourced from a creek catchment which forms part of the headwaters of the Orowaiti River. This water is transferred to the reservoirs by a series of underground tunnels and water races over 1,900 m in length. The water is then coagulated for colour removal, treated with lime for pH adjustment and chlorinated. The applicant states, and maps support the view, that Te Kuha mine project is not within the Orowaiti catchment. On this basis the applicant is of the view that there will be no risk to the town water supply.

[223] The applicant's dust assessment, provided by consultant Beca Ltd, considered the potential for dust contamination of the water supply and concluded:

The proposed mine is located more than 2km from the Westport town water supply. The catchment area is considered to be beyond the distance that dust generated from the mine is expected to travel...

[224] While this was the opinion which accompanied the application, the proposal changed to that which relocated the coal processing facility from the coal load-out facility to the coal mine footprint itself.

[225] Ms Harwood provided further evidence stating that dust generated at the coal load-out facility would subsequently reduce the potential for any adverse effects to result at this location; however, the coal processing facilities relocated to the mine footprint would add an extra potential source of dust generated from the mine footprint. Ms Harwood said that the

applicant would use the same dust mitigation measures as originally proposed of water sprays, wind protection, and luffing heads on the coal stacker to minimise drop heights. She noted that the catchment for the Westport water supply was 2.4 km north of the mine area, and considered that the location of the coal processing facility at the mine does not change her assessment of the potential distance that dust is likely to carry from the site.

[226] In conclusion, Ms Harwood considered that the relocation of the coal processing facility to the coal mine site would not result in any significant adverse effects on ambient air quality in the vicinity of the mine or the coal load-out facility.

[227] The s 42A report included a memorandum from BDC's Three Waters Co-ordinator (Mr Murphy), and he considered a more cautious approach should be followed. Based on catchment topography, mine run-off is not expected to impact Giles Creek, being the primary source of the town's water supply. However, Mr Murphy recommended that monitoring of Giles Creek be undertaken to verify that water quality remains unaffected. As regards dust contamination, Mr Murphy considered dust monitoring should be undertaken at appropriate locations to ensure that wind-blown material does not contaminate the water supply catchment, water races, reservoirs or treatment plant.

[228] Royal Forest and Bird made a comprehensive submission following public notification, which included their concerns that the coal mine puts at risk the quality of the Westport water supply: from migratory dust contamination; and from groundwater contamination from discharge from the mine or settling ponds.

[229] The issue of migratory dust from the mine site has been addressed by Ms Harwood. Dr Pope told us that there were two stream gullies and two ridges between Te Kuha and the water management infrastructure. He accordingly anticipated that no surface water from the mine would impact upon the water supply. However, he considered routine monitoring of water quality to ensure no adverse effects. This monitoring would also address any changes to the water quality by seepage of groundwater.

[230] Mr and Ms Orchard were sceptical of the assertions that coal dust would not enter the town water supply, and provided a number of scientific extracts supporting their views.

[231] To address any concerns, the applicant has proffered a further condition (Condition 143) requiring a deposited particulate gauge to be installed into the Giles Creek catchment, and requiring monitoring and reporting to the consent authority based on a recommendation by Mr Murphy – Three Waters Co-ordinator.

[232] It is our assessment that, while the Westport water supply is not within the Orowaiti catchment, the upper headwaters of the South Branch of Giles Creek are adjacent to and

relatively nearby the mine footprint. Based on Ms Harwood's evidence that 10-micron dust particles can travel in a 10 km/hr wind about 1 km, it is our view that finer dust particles (possibly 2.5 microns particles) could travel further, and could possibly migrate into Giles Creek. Ms Harwood's supplementary submission, dated 5 October 2017, concluded that, even if $PM_{2.5}$ or PM_{10} particulate did travel to Giles Creek, where it would be deposited in the particulate deposit gauge for monitoring purposes, appropriate adaptive management actions could then be taken if required.

[233] We are satisfied that sufficient evidence has been provided, together with conditions proffered that provide for dust collection points, monitoring and reporting requirements and that, if necessary, conditions could be changed or modified to ensure the proposal does not cause any adverse effects to Westport's water supply or on human health.

<u>Traffic</u>

[234] With the exception of the internal mine road, little information was included within the application or the AEE relating to traffic movement on public roads. In a s92 request for further information, additional information was provided and the s 42A report has summarised and identified the effects of traffic this proposal would have both on the environment and on the community. There have been no submissions or evidence presented to us that would dispute actual traffic movements proposed or the effects that the traffic would bring.

Construction phase

[235] While there would be no cartage of coal on public roads, vehicles transporting plant and personnel would use the Nine Mile Road to gain access to the internal mine road. During the 50-week construction phase it is estimated that 16 light vehicle movements per day (vm/d) would occur (i.e. one vehicle movement equates to a one-way trip). Up to another 10 light vehicles per day may visit the site on an intermittent basis carrying workers, surveyors, subcontractors etc.

[236] Heavy vehicles carrying earth moving equipment are expected to occur for 20 - 70 days during the same construction phase, which could also include concrete and aggregate being carted. Overall construction related traffic is expected to average 33 vm/d which includes both light and heavy vehicles.

Operation phase

[237] The applicant predicted vehicle movements on Nine Mile Road during the mine's operation based on the fact that mine workers would arrive and return by bus, a matter

confirmed by Ms Brewster. Ms Brewster also updated expected vehicle movements in her evidence when she said that a total number of light vehicles are predicted to result in 18 vm/d and heavy vehicles of 2 vm/d are predicted. Heavy vehicles movements would be for fuel, explosives, cranes and delivery trucks. Overall it is expected that a combined number of 20.6 vm/d will occur.

[238] Input was sought from the Buller District Council Utilities and Services Manager and a report was attached to the s 42A report regarding the road capacity and identification of any safety concerns. The report stated that Nine Mile Road had an annual average daily traffic count of 200 vm/d, and the additional mine traffic would increase to 230 vm/d during the construction phase and to 220 vm/d during the operation phase.

[239] The report author considered that this was a low volume of traffic for a rural road and would not flag any safety issues. It was however suggested that a condition be imposed requiring the upgrade of the Nine Mile Road prior to the mine proceeding. The applicant has included a condition to this effect.

[240] Subject to the roading upgrades being implemented, we concur with the s 42A report that the traffic effects generated by Te Kuha Mine Proposal would be minimal.

<u>Lighting</u>

[241] General rules of the Buller District Plan (BDP) relating to 'Glare and light spill' state:

- 7.9.4. Glare and light spill
- 7.9.4.1 All exterior lighting shall be designed, installed and maintained so that:
- 7.9.4.1.1 Light emitted does not cause a distraction or glare which could create a traffic hazard on any road, or interfere with the correct operation of navigational aids;
- 7.9.4.1.2 There is no adverse effect on residents or activities adjacent to the area being illuminated;
- 7.9.4.2 Any activity shall ensure that no greater than a 10-lux spill (horizontal or vertical) of light shall enter any adjoining property, measured 2.0 metres inside the boundary of the adjoining site.

[242] During the hearing, several submitters raised the issue of light spill from the mine site and the effect this light would have on the night sky. Mr Rough, in his Landscape assessment, said that:

For the most part lighting effects will not be an issue with the exception during early morning and early evening over late autumn, winter and early spring. During these times of the day and year the mine site office, workshops and infrastructure

area will be lit and headlights from vehicles moving within the mine site will be discernible close to the skyline from various viewpoints. Headlights from vehicles using the access road will be visible, particularly during the time staff arrive and depart and from trucks carting coal and other material between the mine site and the rail loadout. It is envisaged that six return vehicle trips per hour will utilise the access road between the mine site and railway siding and headlights will be visible during these trips over the early morning and evening in autumn, winter and spring.

and:

Overall, visual screening provided by earth bunding, vegetation together with buffer zone distances will obscure and minimise any potential adverse lighting effects.

[243] We note that the proposed mine hours of operation have changed throughout the course of the hearing, and on this basis due to the proposed hours now extending over a 6-day weekly period from 6.00am to 10.00pm from 1 October to 31 March (during the summer months), and from 6.00am to 6.00pm from 1 April to 30 September, both vehicle lighting and site lighting is likely to be more apparent.

[244] Referring to the 'coal load-out facility' the applicant has advised that it is now proposed to enable coal trains to be loaded as and when trains become available, and to meet this uncertainty the hours of operation would now be changed to that of 5.00am to 11.00pm seven days per week. However, there is no indication that lighting, other than from the wheeled loaders, would be used for this purpose.

[245] In reviewing the provisions of the BDP relating to 'Glare and light spill' we have been assured that the 'on site' lighting would be directed downward onto work areas as far as practicable away from the Westport township. We are satisfied that light would not cause a distraction or glare to create a traffic hazard or interfere with the correct operation of navigational aids. We are also satisfied that there would be no adverse effects on residents or activities adjacent to the area being illuminated and that there would be no light spill greater than 10 lux entering any adjacent property.

[246] We heard from Mr Patrick during the hearing of his concerns that white or blue lighting has an adverse effect on birds and moths, in that they are attracted to this form of light. His recommendation, which has been included into the applicant's proffered conditions, provide a requirement for lighting to be at the 'orange' end of the spectrum.

[247] We are satisfied that the lighting for the proposal would meet all the requirements contained within the BDP and on that basis the effects of lighting would not be a concern.

Noise

[248] The District Plan noise control provisions are shown below:

7.8.1 The following maximum noise levels measured at the stated times at the boundary of any land used for a residential activity shall not be exceeded:

7.8.1.1	Monday to Friday	8.00 am to 11.00 pm	55 dBA L ₁₀
	Saturday	8.00 am to 6.00 pm	55 dBA L ₁₀
	At all other times including any public holiday		45 dBA L ₁₀
			75 dBA L _{max}

[249] The Applicant has identified the main noise sources from the proposal as being large earth moving machinery used for excavating overburden and coal, blasting, truck movements, and site rehabilitation works within the mine footprint. Road trucks are to be used to transport the coal from the mine site to the rail loadout for temporary storage, with rail wagons to be loaded by means of front-end loaders.

[250] As we have said, proposed operational hours for the mine have changed during the hearing and the proposed hours are now 6.00am to 10.00pm Monday to Saturday from 1 October to 31 March, and 6.00am to 6.00pm Monday to Saturday from 1 April to 30 September. The coal loadout site would operate between the hours of 5.00am to 11.00pm seven days per week. During these operational hours it is expected that one train per day would be loaded over a 2-3-hour period.

[251] We note that the Applicant has scaled down the coal loadout facility from that proposed in the initial application. Via the s92 Response, the Applicant advised that further investigation into the coal loadout requirements has been completed and all coal crushing and screening activities will occur within the mine footprint rather than at the loadout facility.

[252] Marshall Day Acoustics prepared the report included in the application AEE, and following the relocation of the coal processing (crushing) from the coal load-out area to the coal mine itself provided a further report reviewing the noise impacts of the proposal. Their initial assessment indicated that the existing noise environment is sourced from leaf rustle, bird song and water noise with traffic also audible at times, and overall, noise was greatly influenced by weather conditions.

[253] They stated that the main noise source audible at nearby dwellings, once the pit is established, would be vehicles on the haul road. They said that, given that a worst-case noise level of 31 dBA $_{LAeq}$ is predicted from the haul road, any expected noise effects would be

minimal, even if the activity occurred at night time. Any day time noise effects would be negligible. They concluded that operational noise levels would be less than 40dBA L_{Aeq} at the closest noise sensitive locations (ie 2 houses and Scout Lodge - 4 km from mine and 1.5 km from coal load-out facility) and generally less than 30 dBA.

[254] Their subsequent report found that the noise from the mine footprint would have a negligible impact on the overall noise emissions and there would be no changes to noise levels from the mine footprint. They also stated that the overall noise levels from the coal load-out facility to the three nearest assessment locations (2 dwellings and Scout Lodge) would be lower than originally proposed, both at the load-out facility and the assessment areas.

[255] We understand that mine blasting would, at its maximum, not exceed 125 dBA. We note that the nearest residential site is approximately 4 km distant from the proposed mine site. The applicant has proffered additional conditions based on the Australian Standard AS2187.2206 "Explosives- Storage and Use", relating to blasting which include restrictions on hours of blasting operations, maximum sound pressures, and maximum vibration limits. We are satisfied that the conditions proposed meet industry standards and are similar to other blasting conditions imposed on similar consents which have not resulted in adverse effects.

[256] We concur with the s42A report that the effects of noise from the proposal would generally not exceed the provisions of the District Plan, and overall would not result in any adverse effects.

Hazardous substances

[257] The Hazardous Substances and New Organisms Act 1996 (HSNO) and related regulations are the principal legislative controls which address the storage, handling and transportation of hazardous substances.

[258] Section 4.11 of the BDP contains the objectives and policies relating to hazardous substances which include the following relevant policies:

4.11.5.1. Objective

To encourage and promote the safe and efficient handling and disposal of hazardous substances throughout the District.

4.11.6. Policies

4.11.6.1. Compliance with approved codes of practice and national guidelines and standards shall be required for all activities involving the use, storage and transport of hazardous substances.

4.11.6.2. Appropriate contingency planning shall be required for all operators of hazardous facilities, including disposal sites.

[259] Mining activities almost always use hazardous substances such as oils, diesel and explosives. Water treatment systems also use chemicals, and all of these, if not properly contained, may result from time to time in spills or unintentional discharges resulting in adverse effects as these substances escape onto land or into water.

[260] The applicant's proposed conditions require a Contingency and Response and Hazardous Management Plan. These conditions set out in detail as a minimum, a list of specific provisions which that Plan must contain. Based on the contents of that Plan we consider that the proposal '*will encourage and promote the safe and efficient handling and disposal of hazardous substances*' as contained within the BDP Objective.

[261] We also consider that the application of the Contingency and Response and Hazardous Management Plan, together with compliance with the statutory provisions of the HSNO Act would meet the BPD Policies of 4.11.6.1, and 4.11.6.2 above.

[262] We therefore concur with the authors of the s 42A report that the potential adverse effects of the storage and use of hazardous substances would be minimal.

Potential positive effects

Social effects

[263] Section 5 (2) of the Resource Management Act defines the term 'sustainable management' which:

...means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enable people and communities to provide for their social, economic, and cultural wellbeing.

This is underpinned by the definition of the term 'environment' which extends to and includes 'people and communities'.

[264] The Assessment of the Environmental Effects (AEE) explains that while mine construction creates direct economic benefits, there are also indirect impacts arising such as additional jobs and incomes for employees in supermarkets, restaurants and bars as the consequence of additional discretionary spending.

[265] It was accepted that the vast majority of employment opportunities within the Buller district results from the agricultural, mining and tourism sectors. Since 2013 the mining industry (including cement manufacture) has resulted in major employment losses. While

being partially replaced by tourism, employment remains in net deficit and has resulted in many people seeking employment opportunities outside the district.

[266] The applicant has stated that the proposed hours of operation would be 10-12 hours per day for 58 direct full-time employees, over a six-day week which would virtually eliminate 'fly in and fly outers' from obtaining employment at this mine, due to travel time restrictions. Mr Copeland in his evidence said that the proposal, including indirect impacts, would generate within the Buller District 108 full time equivalent jobs encouraging mine staff to be resident in, or near, the Buller district. On this basis he said, the project would help to underpin the local population base with economic benefits in terms of increased economies of scale, greater competition, reduced unemployment (or underemployment) and retention of central government provided services. Such employment opportunities play a significant part in maintaining the social fabric of the Westport community through input into local infrastructure, sporting organisations and other community activities.

[267] In our assessment, we consider that this proposal would bring positive social benefits to the Westport and Buller communities.

Economic effects

[268] The AEE and Mr Copeland's evidence outline the economic benefits of the proposal to the district, which we set out below.

Construction phase

[269] An estimated 30 full time jobs on a 5-day working week for the 12-month mine construction phase. Wages and salaries for these staff estimated at \$2 million per annum. An estimated construction expenditure of \$40 million, with around \$20 million to be spent within the District and a further \$1.3 million to be spent with West Coast businesses outside of the Buller District.

[270] Indirect impacts for the Buller District and West Coast regional economies both in terms of jobs and increased expenditure. For Buller District, the total impact of the proposal (direct plus indirect benefits) is estimated to comprise increased expenditure of \$24.6 million, 56 additional jobs and \$2.9 million in additional wages and salaries. For the West Coast region, an estimated total impact of increased expenditure of \$26.8 million, 61 additional jobs and \$3.1 million in additional wages and salaries.

Operational phase

[271] An estimated 58 full time jobs on a 5-day working week for the 16-year mine life. Wages and salaries for these staff estimated at \$5.8 million per annum. An estimated mining expenditure of \$28 million per annum with approximately \$13 million per annum spent within the District and a further \$6 million spent elsewhere on the West Coast.

[272] Indirect impacts for the Buller District and West Coast regional economies both in terms of additional jobs and increased expenditure. For Buller District, the total impact of the proposal (direct plus indirect benefits) is estimated to comprise increased expenditure of \$16 million per annum, 108 additional jobs and \$8.5 million per annum in additional wages and salaries. For the West Coast region, an estimated increased expenditure of \$23.9 million per annum, 118 additional jobs and \$8.9 million per annum in additional wages and salaries.

[273] At the end of the mine life (16 years) there will be up to a two year and possibly up to 10 years land rehabilitation period providing 6 jobs, combined with direct and indirect expenditure, employment and income effects.

[274] It is acknowledged in the s 42A report that there has been no independent assessment undertaken of the economic, social or community benefits of the proposal, however the applicant's witnesses were questioned extensively by the panel, and maintained their view of the proposed economic benefits of the mine. Mr Franklin, who is the Managing Director of Stevenson Group Ltd, when explaining the specific high quality of the coal found at Te Kuha and their intention to export the coal, said:

A 100- year- old family company would not risk its capital if a project was not viable. We know our costs and we know the margins we need. The likely market for this product is very niche industrial or medical use, so we will more likely be price setters or be contractually committed for a long-term supply and price as opposed to chasing market highs.

[275] Questions were put to Mr Sherwood of MBIE, and he confirmed that the quality of the coal was so high he supported Mr Franklin's assertions as to being a 'price setter' and the specialist market for this coal.

[276] Notwithstanding the positive economic benefits outlined above, we received a number of submissions disputing the claimed economic benefits of this mine and other mines to which applicants have claimed significant economic benefits, with views put forward that fluctuating international prices of coal has resulted in what is locally described as a 'boom and bust' industry. Ms Young in her submission said:

for Te Kuha coal, with little or no attempt to present anything other than a glowing picture of the economic, social and cultural gains that the applicant considers would result from mining.

[277] Ms Inta, in a similar vein when referring to the Escarpment mine economic benefits, said in her submission:

...the Denniston mine was granted consent mainly due to the economic benefits, which 6 years later, have turned out to be almost nil.

[278] Mr Sumner, although opposed to the proposal, said "*The argument that the wages generated and the income injected into the local economy would be a benefit, is true.*"

[279] In support of the mine, local resident Jennifer Sturgess submitted:

I support this proposal for Stevensons mining to open a new mine at Te Kuha. It is critical that employment is created in the Buller region <u>now</u>. Our area is rapidly declining because local residents have to move away to get work. Many shops in Westport have already been affected and had to close their doors. Same in Greymouth. People need to survive, tourism is not the only answer.

[280] In a similar vein another local resident, Marilyn Wearing, maintained in her Submission:

The local economy needs jobs, create funding for infrastructure, so the Westport community can grow. The locals need a voice over the loud minority, we live here.

[281] We note that over the last four years, Buller has faced significant employment losses (in excess of approximately 1000 jobs), and while this mine would not fill the majority of those gaps, we are satisfied that in economic terms, the mine proposal at Te Kuha would help to partially offset some of those losses.

[282] However, we are mindful of the "boom and bust" cycles that the mining industry has been exposed to over previous decades. Clearly, this proposal would be equally vulnerable to those cycles unless the Applicant was able to insulate themselves from such cycles. We heard a considerable amount of evidence that was uncontested to the effect that the quality of the coal proposed to be mined is of an exceptionally high standard because of its high carbon content and low ash / low sulphur content.

[283] We were told that the quality of the coal is such that it could possibly access niche markets such as the extraction of carbon for industrial and medical purposes. However, no evidence was proffered that such markets would be accessed and the more likely use of the coal would be for blending with inferior quality coals. Clearly therefore, we are not able to determine that the Applicant would necessarily be immune from the fluctuation of

international coal prices. At the worst, this could bring about an unanticipated closure of the mine.

[284] Mr Copeland's response was that the bond would be an appropriate cover for any such unfortunate event. However, we do not accept that would be the case. In the event of the mine having to close and the bond being forfeited there would be a considerable imbalance between the positive economic effects and the adverse environmental effects. While rehabilitation may be achieved, there would still be the adverse effects arising from the destruction, or part destruction, of the significant indigenous vegetation. This would not be counterbalanced by an equivalent economic benefit.

[285] In our view, the potential economic benefits from the proposal need to be tempered by the fact that the owner of the mine would to some extent be subject to the international market prices.

[286] We find that the proposal has the potential to provide substantial economic benefits to the Buller district and West Coast region. While the applicant would not be entirely immune from international market prices, the high quality of the coal would cushion the effect of any "boom and bust" cycle.

Assessment of social and economic effects against the statutory instruments

[287] The Regional Policy Statement and District Plan are essentially effects-based documents and contain objectives and policies that address the main environmental issues. Unfortunately, there are no specific objectives and policies that directly address the social and economic wellbeing of the community. The District Plan does provide for the community's economic and social wellbeing in chapter 4.5 "Mineral resources".

[288] Objective 4.5.4.1 of the District Plan states:

To enable people and communities to provide for their economic and social wellbeing through the efficient utilisation and development of mineral resources.

[289] The District Plan does recognise the potential for the efficient development of mineral resources to provide for the social and economic wellbeing of the community.

<u>Potential negative effects</u>

[290] We now propose to discuss the potential negative effects that would result from the proposal. These are:

- (a) the effects on terrestrial ecology; and
- (b) the effects on the identified ONL and on landscape amenity.

[291] A large part of the hearing was devoted to discussing these two issues.

Terrestrial ecology

Introduction

[292] The proposed mine site would be located in part on areas of unique and distinctive Coal Measures and habitat that contains At Risk/Threatened species. Accordingly, there were a large number of submissions in opposition that raised issues around the destruction of such a high value natural area with threatened species.

[293] The submissions maintained that rehabilitation would not be able to mitigate against the loss of such high ecological values, and that the Project would result in permanent and unavoidable adverse effects.

[294] It was not surprising, therefore, that the proposed adverse effects of the mining made up a considerable part of the hearing. We heard lengthy evidence from seven expert witnesses:

- (a) for the Applicant:
 - Dr Gary Bramley on terrestrial ecology; and
 - Dr Robyn Simcock on rehabilitation;

(b) for the Crown:

- Mr Brian Patrick on entomology;
- Dr Rachel McClellan on avifauna; and
- Dr Jane Marshall on botanical values;
- (c) for the Councils:
 - Dr Graeme Ussher on terrestrial ecology.

[295] We also heard detailed legal submissions on behalf of the Applicant, the Crown and Forest & Bird. A number of submitters, in their representations to us, emphasised the irreplaceable and significant losses of ecological values, in particular Ms Zella Downing, Ms Linda Grammer, Mr William Burton, Mr Tim Jones (who represented Coal Action Network Aotearoa) and Ms Rosemary Penwarden.

[296] The six expert witnesses were directed to caucus, and we are grateful for the detailed and comprehensive caucusing statement lodged on 13 September 2017. Further caucusing took place during the hearing to discuss any remaining issues, and in particular the proposed conditions of consent. There was complete agreement on the following matters:

- (a) the existing ecological values of the proposed mine site and surrounds; and
- (b) the ecological impacts of the mining proposal.

[297] There was a measure of agreement as to the methods to avoid, remedy and/or mitigate the ecological impacts. As a result of further caucusing, by the time the hearing was completed there was agreement, with the exception of one matter that we will discuss shortly, that the methods imposed and the conditions of consent reflect best modern practice. However, there remained a measure of disagreement as to the successful outcome of implementing these methods and consequently the significance of those impacts.

The existing ecological values

[298] Te Kuha coal deposit is located south of the Denniston Plateau, and is located near Trig M and the headwaters of West Creek and Coal Creek on the western slopes of the coastal escarpment, which extends from the Buller River north to the Ngakawau River. Both creeks flow west before merging and then entering the Buller River.

[299] The proposed mining area is located at the southern end of the Ngakawau Ecological District, which covers approximately 48,750ha. The District is the only Ecological District in New Zealand defined by the presence of extensive elevated Coal Measures geology with its associated land forms, vegetation and flora, although Coal Measures occur elsewhere.³⁰

[300] There was general agreement among the expert witnesses who appeared at the hearing that Te Kuha site exhibits high ecological values when assessed against the criteria set out in Policy 4.8.7.4 of the BDP for determining significant vegetation and significant habitats of indigenous fauna. They agreed that the proposed site exhibits a very high degree of ecological integrity, with few signs of recent anthropogenic disturbance, and ecological weeds appear limited.

[301] Dr Ussher had this to say:³¹

Coal Measure communities of the Te Kuha area are part of a vegetation type (Coal Measure vegetation) that is virtually confined to the Ngakawau Ecological District.

³⁰ The term "Coal Measures" describes geological sediments laid down in a depositional environment in which coal can form.

³¹ Terrestrial Ecology Review at 2.1.

The vegetation of the proposed Te Kuha mine site is one of the least modified examples of Coal Measure vegetation in the Ngakawau Ecological District and is particularly significant because of the absence of recent fire. Although areas of similar vegetation occur on the Denniston and Stockton plateaux, these areas have been much more substantially affected by human activities... Therefore, the context within which the Te Kuha mine is proposed is one of an ecological landscape characterised by special communities that are recognised as being some of the highest ecological value of their type...

[302] The Mining Permit 41289, within which the proposed mine site sits, covers approximately 884ha, of which approximately 420ha is Coal Measures vegetation. The proposed Te Kuha site comprises approximately 119ha of Coal Measures vegetation out of the approximately 144ha overall footprint of the mine and associated haul road and infrastructure.³² Unfortunately, no-one has calculated the figure for the wider Coal Measures vegetation.

[303] As we have said, agreement was reached by the expert ecologists on the principal existing ecological values within the mine site, which we set out hereunder.

Section 6(c) of the RMA

[304] The proposed mine site contains areas of significant indigenous vegetation and habitats of indigenous fauna in terms of s 6(c) of the RMA.³³ Features include:

- Presence of threatened and rare plants, bryophytes, and invertebrates, birds and lizards;
- Presence of old and complex communities such as the Bryophyte block field, mats under forest canopy;
- Intactness across a wide altitudinal range (few weeds and very little human disturbance);
- Spatial heterogeneity of indigenous communities at small scale;
- Presence of Coal Measures vegetation communities (a naturally, nationally rare ecosystem); and
- Originally uncommon ecosystems types including boulder fields, pakihi, seepages, cliffs and sandstone pavement.

³² See Ussher, Terrestrial Ecology Review at 2.1.

³³ Terrestrial Caucusing Statement at 2.

[305] There are "Threatened" or "At Risk" bryophyte and bryophyte communities.³⁴ Of the 13 "Threatened" or "At Risk" species of bryophytes and lichens found within the mine site, two have been found elsewhere at Te Kuha (outside of the mine site). All occur elsewhere in New Zealand at between two and several other locations.

[306] The forest of Block fields that support mats of bryophyte communities have also been recorded outside of the mine site at Te Kuha, but may not exist elsewhere in New Zealand. Bryophyte data across New Zealand is limited as few people record them because they are small and easily overlooked.

[307] The variety of "At Risk" or otherwise rare bryophytes at Te Kuha is greater than most of the other coal mining projects on the West Coast.

Stagnant water bodies³⁵

[308] Stagnant water bodies are a feature of the proposed mine site, and consideration was given as to whether these could be classified as tarns. Tarns are small mountain and high-country lakes. They form mainly in association with glacial features such as cirque basins and kettleholes, and on a wide range of erosional landforms such as small fault scarps and slumps. Tarns are an "historically rare" ecosystem, but are regarded as "not threatened" by Holdaway et al (2012). Two tarns were identified in the initial 2013 surveys, but on review the experts do not regard them as tarns, rather one is an ephemeral pond and the other a wetland.

The undescribed leaf-veined slug³⁶

[309] The undescribed species of leaf-veined slug has only been found (and photographed) once in Tall Forest within the mine footprint in 2013. There are no other records of this species and nothing is known about its habitat or distribution. No specimens were found in the 2016 surveys. It is unknown if it is naturally restricted to only the mine footprint and immediate surrounding areas. If it is, the mine proposal and associated indirect edge effects may extirpate the only population, rendering this species extinct. It may be distributed outside of the areas potentially affected by this proposal, such as in Tall Forest at least along Te Kuha Ridge and perhaps elsewhere, but this has not been confirmed.

³⁴ Terrestrial Caucusing Statement at 3.

³⁵ Terrestrial Caucusing Statement at 4.

³⁶ Terrestrial Caucusing Statement at 3.

[310] We heard evidence at the hearing related to this invertebrate. Mr Patrick told us that the slug is part of a complex species distributed in the northern South Island that are poorly known and undescribed.³⁷ He considered that it was unlikely that it only occurred in the vicinity of the proposed coal mine site as similar habitat occurs more widely, at least further along the ridge of the proposed mine. He was of the view that further surveys for this species are required in the wider area to provide a context for this discovery.

[311] Dr Bramley considered it most likely that the slug would be found both inside and outside of the mine footprint. Dr Ussher was of the view that the slug is likely to occur within the mine footprint as there is a lot of available habitat.³⁸ He further stated that there was a low likelihood of it being only within the proposed mine footprint. Both Dr Bramley and Dr Ussher agreed with Mr Patrick that further surveys are required, together with management procedures, to manage the slug if required, once more is known about its habitat and distribution.

[312] On the best evidence available to us, we find that the leaf-veined slug is at the least likely, and at the most more than likely, to exist within the proposed mine footprint and outside of the footprint. We are satisfied that there is a lot of available habitat both within the proposed footprint and outside in the wider area for the slug to exist.

[313] In addition to the principal ecological values identified in the Terrestrial Caucusing Statement, we would add the following as a consequence of evidence and discussions at the hearing.

The forest ringlet butterfly

[314] The forest ringlet butterfly is endemic to New Zealand and was formerly nationally distributed across the North Island and the northern third of the South Island.³⁹ Nationally, it has disappeared from all its low available sites. It is New Zealand's rarest butterfly and now has a classification of "At Risk/Relict".

[315] The experts agree that the forest ringlet butterfly is thriving in the area of Te Kuha, and is breeding on *Gahnia* in shaded forest and shrubland. At present only about 20 populations are known nationwide, making the population at Te Kuha a significant site for the conservation of the species.

³⁷ Statement of evidence at [60].

³⁸ Verbal statement at the hearing.

³⁹ Patrick, statement of evidence at [41] and ff.

[316] There was agreement among the experts that a specific management plan should be required by the conditions of consent for the management and monitoring of this species.

<u>Helm's stag beetle</u>

[317] The large, flightless, and slow-moving Helm's stag beetle does not currently have a conservation status. However, it has undergone a demise in numbers and geographic extent.⁴⁰ While the species has a wide distribution over the western South Island and Stewart Island from sea level to just above treeline, it has disappeared from many areas over the last 50 years.

[318] Three adults of the species were found at the proposed Te Kuha site, indicating an important population is present. Again, the experts agree that a specific management plan should be required by the conditions of consent.

<u>Avifauna</u>

[319] According to Dr McClellan, the proposed Te Kuha mine site supports a diverse bird community in a distinctive matrix of Coal Measures habitats.⁴¹ The avifauna assemblage and avifauna habitats at the mine site are ecologically significant using the criteria in the operative Buller District Plan. Dr McClellan was of the view that the unusual mosaic of vegetation types present within the Coal Measures habitats at Te Kuha, and beyond on the Denniston and Stockton plateaux and in the Ngakawau Ecological District, comprises areas of low vegetation, shrubland, wetland, and forest which support a diverse avifauna.

[320] According to the Applicant's AEE, the proposed mining permit area supports at least 33 bird species, including 23 indigenous and 10 introduced species. Two threatened species were identified:

- (a) the great spotted Kiwi (low density, but widespread within the permit area); and
- (b) the New Zealand Falcon.

A number of "At Risk" bird species were also recorded, including the NZ Pipit, South Island Fernbird, South Island Robin, Long-tailed Cuckoo, western Weka, and South Island Rifleman.

⁴⁰ Patrick, statement of evidence at [63] and ff.

⁴¹ Statement of Evidence, at [1].

<u>Herpetofauna</u>

[321] Two lizard species were detected in surveys carried out by the Applicant. These included the native speckled skink and the forest gecko, both of which are classified as "Nationally at Risk".⁴² It was also considered likely by the experts that the West Coast green gecko are at the site. It has a conservation status of "Threatened – Nationally Vulnerable".

[322] The experts agree that the conditions of consent should provide for proposed mitigation actions and management plans to address their presence.

Summary of ecological values

[323] In summary, the site at Te Kuha comprises highly valued indigenous vegetation, which is considered significant in the context of the relevant planning documents and the RMA. The vegetation is located on Brunner Coal Measures geology overlying Paparoa Coal Measures. It has a number of features in common with the Denniston and Stockton plateaux, but exhibits a number of distinguishing features.

[324] Overall, surveys have revealed that the habitats at the wider proposed mine site are almost entirely natural and have a high degree of intactness and ecological integrity, with a near absence of exotic plant species and a relatively low number of exotic fauna species. As we have discussed, there are a number of species of particular conservation concern that make use of the habitat.

The ecological impacts of the mining proposal

[325] The ecology report lodged as part of the Applicant's AEE considered the key adverse effects of the proposal on terrestrial ecology to be the removal of native vegetation within an area characterised by high overall ecology values, high intactness and high ecological integrity.⁴³ This would include the removal of threatened, rare or characterised species, communities and assemblages of native species associated with a rare ecosystem type (Coal Measures vegetation). The removal of these habitats would reduce the amount of habitat available for common species and for species of conservation concern.

[326] Dr Ussher set out in some detail a list of what he considered would be the potential adverse effects of the proposal before considering any on-site remediation and/or mitigation.

⁴² Dr Ussher, Terrestrial Ecological Review at [4].

⁴³ Dr Ussher, Terrestrial Ecology Review, at [2.1].

He then set out a subset of what he considered qualified as significant adverse effects.⁴⁴ The effects he considered qualified as significant adverse effects include:

- (a) the removal of 119ha of Coal Measure ecosystem, which represents a relatively high proportion of this ecosystem type (in the context of existing loss and the future management of this ecosystem type nationally) which is also one of the least affected and most intact areas of Coal Measures vegetation;
- (b) the loss of the high level of intactness and ecological integrity within the southernwestern part of the Mt William Range, ie within the surrounds of the site at Te Kuha;
- (c) the potential loss of a significant portion of the whole known distribution and population of the undescribed species of leaf-veined slug;
- (d) the loss of the only known local population of the nationally threatened plant *Euphrasia Wettsteiniana*;
- (e) the loss of ecologically distinct bryophyte and lichen communities and their habitat over the mine footprint, haul route and associated changes to edge-affected habitat;
- (f) the loss of a significant portion of the known distribution of several nationally threatened and rare bryophytes and lichens; and
- (g) the loss of populations of lizards that may be distinctive, and which are likely to include severally nationally rare or threatened species.

[327] Based on the evidence adduced and discussions held at the hearing, we would add the loss of habitat and populations of the Forest ringlet butterfly and the Helm's stag beetle. The proposal would result in approximately 22km of new edge habitat that would result in changed ecological conditions adversely affecting the surrounding vegetation. This would affect 30ha or more of vegetation, including places where invertebrate, bryophyte and lichen communities or species of conservation significance may reside.

[328] The use of the haul road would lead to the possible introduction of weed plants and non-native bryophytes that could lead to a reduction in overall ecological intactness. It could also lead to increased access of pest animals and predators.

⁴⁴ Using an approach advocated by the Environment Institute of Australia and New Zealand which determines the level of an effect by a combination of the magnitude of the effect and the value of the affected ecological feature.

Mitigation/compensation

[329] When considering the adverse impacts on terrestrial ecology, we are required to take into account the mitigation measures proposed. The Applicant proposes a range of mitigation measures that are set out in the proposed conditions of consent. The measures to address potential adverse effects are particularly provided for in the management plans. In this section of the decision we discuss those that address terrestrial ecology. We were told by Dr Bramwell that the conditions reflect what the Applicant's experts call "an accepted mitigation – hierarchy":

- (a) avoidance/minimisation;
- (b) rehabilitation;
- (c) mitigation; and
- (d) compensation.

Avoidance/minimisation

[330] Recognising that coal mines are necessarily limited to where the coal is located, avoidance and/or minimisation is the focus of the proposed "Construction Management Plan". This Plan focusses on ensuring:

- (a) the overall areas of disturbance are minimised;
- (b) the conservation of over burden, suitable soils and vegetation for rehabilitation;
- (c) the avoidance of materials that could introduce weeds;
- (d) the appropriate environmental monitoring;
- (e) reduced sediment-laden run-off; and
- (f) placement of flexible infrastructure outside of ecological sensitive areas.

Mitigation – on-site rehabilitation

[331] The Applicant proposes an extensive and detailed rehabilitation programme to reduce the extent and severity of adverse effects. The Applicant in its application documents and in the evidence adduced by Dr Simcock has provided an extensive analysis of the functional aspects of rehabilitation including:

- (a) timing and staging in relation to mine schedules;
- (b) the use of direct transfer as a superior method of conserving plant and animal communities;
- (c) practical aspects of revegetation, soil and erosion control;
- (d) biological community restoration in relation to site environmental constraints and opportunities.

[332] Dr Simcock and the Applicant's experts have drawn on many years of experience with nearby mine sites including Strongman, Stockton Plateau and Denniston Plateau open cast coalmines. The rehabilitation objectives, techniques and methods are set out in some considerable detail in the conditions of consent.

[333] The conditions set out the "bottom lines" for the proposed "Rehabilitation Management Plan" which is to be prepared in consultation with the Department of Conservation.

[334] During the hearing we requested that all of the ecological experts participate in caucusing within their areas of expertise to achieve the most practical conditions in accordance with best practice. The conditions speak for themselves and provide for:

- (a) a comprehensive set of eight objectives;
- (b) a set of 23 minimum matters that must be addressed, including:
 - the planning;
 - plant species;
 - construction and rehabilitation methods;
 - the objectives of the Rehabilitation Concept Plan;
 - topography;
 - vegetation techniques;
 - habitat leakage;
 - sources of seeds and plants;
 - erosion control;
 - monitoring methods;
 - management of weed and pest control; and

• personnel and their responsibilities.

[335] According to Dr Simcock,⁴⁵ rehabilitation of the site at Te Kuha as proposed has three priority outcomes:

- (a) to achieve a high certainty of low visual impact;
- (b) to rapidly create stable, erosion-resistant surfaces, with soil cover and root zone that favours seed germination and plant establishment;
- (c) to deliver the three following ecological objectives:
 - footprint minimisation;
 - establishing self-sustaining native vegetation that can develop into a mosaic of vegetation associations resistant to pest plants, pest animals, drought and fire;
 - conserving genetic resources, particularly those of threatened or at-risk plant and animal species within the footprint and outside the footprint.

[336] Because it takes many decades to develop tall forest and soil humus layers, short-term measures of success would be needed that reflect whether or not rehabilitated areas are on the right trajectory to meet the objectives. A set of closure criteria are proposed (condition 30) that represent the conditions under which rehabilitated areas are stable, resistant to weeds, and likely to develop naturally into more complex native ecosystems with minimum human intervention.⁴⁶

[337] Agreement between the ecologists on the rehabilitation closure criteria was reached through caucusing at the hearing. The closure criteria would be used to determine when the bond could be released.

[338] Dr Simcock acknowledged⁴⁷ that the capacity to rehabilitate native ecosystems to their pre-mining state is necessarily limited, particularly for ecosystems that take many decades or centuries to develop.

[339] Dr Ussher had this to say:⁴⁸

The real crux of the restoration problem at Te Kuha is that the current vegetation is the product of a complex mosaic of factors that will not be reproduced after mining. The reality is that high-quality direct transfer is proposed over only a small portion of the Project footprint. The rest of the site will be restored to a vegetation cover

⁴⁵ Summary of evidence at 14.

⁴⁶ Simcock, summary of evidence at [20].

⁴⁷ Summary of evidence at [18] and [19].

⁴⁸ Terrestrial Ecology Review at [3.1].

that may not resemble the pre-mining cover for at least 50 years, and is certain not to provide replacement habitat for diverse plant, bryophyte and animal communities for many more years after that. These effects cannot be considered to be temporary – they are more appropriately regarded as permanent.

The replacement of the existing complex mosaic of communities with a far less complex array of mostly planted communities will not be a like-for-like replacement; rather it will be functionally similar, but less diverse in terms of species, habitats, and fine-scale mosaics. The end result, even if undertaken to the rehabilitation quality described in the AEE, will most likely result in a different complex of species to what is there now, including the likely addition of exotic species (eg bryophytes) and changes to community composition.

[340] However, Dr Ussher acknowledged:⁴⁹

The Rehabilitation Plan and additional information provided by the Applicant provides us with a greater level of assurance that works associated with the restoring ecological values to the post-mined area will be carried out to a high standard in order to achieve quality ecological outcomes.

<u> Mitigation – onsite/offsite – "Te Kuha Biodiversity Management Area"</u>

[341] In addition to the rehabilitation programme, the Applicant proposes to undertake a programme of biodiversity management and habitat enhancement. This would include species relocation and management, and plant, pest, and predator control, both within the mine footprint, and an area immediately outside of the mine footprint. This is proposed to be called 'Te Kuha Biodiversity Management Area' and would consist of an area of 497ha including the mine footprint.

[342] This biodiversity area is proposed as a mitigating measure to address the adverse effects of habitat removal (see conditions 160-179). The conditions of consent require the consent holder to prepare, in consultation with the Department of Conservation and Rūnanga o Ngāti Waewae, a Te Kuha Biodiversity Management Plan, which shall set out the practices, procedures, baseline surveys and monitoring to be adopted.

[343] The Management Plan, which is to be certified by the Councils, shall establish methods and management practices for the salvage and relocation of, enhancement of and monitoring of particular species of ecological concern, together with the rehabilitation of their habitat.

[344] The areas of concern that are to be particularly addressed include:

(a) birds of conservation concern (kiwi, fernbird, robin and pipit as listed in condition 162A);

⁴⁹ Review of section 92 reply at 2.

- (b) lizards;
- (c) bryophytes;
- (d) weeds;
- (e) predators;
- (f) forest ringlet butterfly;
- (g) undescribed leaf-veined slug; and
- (h) Helm's stag beetle.

[345] Additionally, the Applicant proposes, under the Augier principle, to accept a condition (condition 160A) that it not apply for any consent for earthworks or mining-related activities within Te Kuha Biodiversity Management Area during the life of the consent.

Mitigation – offsite – the Orikaka Habitat Enhancement Area

[346] The experts agree that the long-term loss of, or significant changes to the Coal Measures vegetation, invertebrate communities, ecological integrity and connectivity cannot be rehabilitated or formally offset.

[347] It is agreed that the proposal would also affect populations of between three and five species of vascular plants, forest ringlet butterfly, the leaf-veined slug and up to 13 bryophytes and one lichen of conservation concern, for which the proposed management actions are largely untested and for which the outcomes remain unknown.

[348] The Applicant proposes that this potential loss should be the subject of environmental compensation.

[349] Accordingly, off-site mitigation and/or compensation to address the residual adverse effects is proposed, being an area comprising approximately 5,000ha at Orikaka to be managed for biodiversity benefits.

[350] Conditions 180 to 183 provide for the preparation of an "Orikaka Habitat Enhancement Plan". The overall objectives of this plan are to enhance the population of birds and invertebrates within the habitat enhancement area for a period of 35 years from the date of the commencement of the consent.
[351] Dr Bramley considers⁵⁰ that for some species, such as great spotted Kiwi or, more generally, forest birds, achieving no net loss is achievable by enhancing the bird population at Orikaka. Specifically, he is of the opinion that no net loss can be achieved for birds (including great spotted Kiwi, forest birds, South Island Fernbird, New Zealand Pipit) and lizards.

[352] Dr Bramley set out in some detail the results of an ecological survey undertaken in the late 1990s.⁵¹ He extrapolated his view of enhanced ecological outcomes for birds, invertebrates, bats and lizards that would be achieved as a result of the ecosystem management proposed. Dr McClellan was critical of Dr Bramley's figures. There was some merit in her criticism. However, she did not provide us with any alternative figures, but we recognise the difficulty of calculating any such enhancement figures. We are satisfied that Dr Bramley's figures are indicative and suggest to us that there is more than likely to be an offset for avifauna and herpetofauna.

[353] We agree with Dr Ussher, who acknowledged at the hearing that the Orikaka Enhancement Area would likely provide conservation benefits for a wide range of species, including species present at Te Kuha and species not present at Te Kuha, some of which are threatened and of conservation concern. Dr Ussher considered that the scale of management would be meaningful in a national context. He was of the opinion:⁵²

The benefits to the target species' population in the Orikaka are intended to (in part) compensate for effects on the same species within the Te Kuha mine site. The mine site is small relative to the size of the Orikaka Management Area. The improvements to populations in the Orikaka would therefore need to be only small over that large area to provide the necessary equivalent gains.

[354] There was some criticism by the Crown experts that the 35-year management regimes for Te Kuha Biodiversity Management Plan and the Orikaka Habitat Enhancement Plan was not long enough, and suggested a 50-year management period to be more appropriate. To address this, the Applicant has agreed to a requirement to provide a report to the District Council about whether any additional or different actions or management measures are necessary to meet the objectives of the two management plans. The report would also include funding and duration of the management measures. This report is to be provided no later than 15 years from the start of management activities in those areas. Drs Bramley, Simcock and Ussher agree that, by that time, it would be clear if the rehabilitation and management is proceeding as anticipated.⁵³ This would enable decisions to be made about the length of time that management should continue.

⁵⁰ Summary of evidence at [73].

⁵¹ Summary of evidence at [88].

⁵² Memorandum dated 16 October 2017 at [8.1].

⁵³ Bramley, rebuttal evidence at [47].

[355] There is one more matter that we need to address with regard to the Orikaka Habitat Enhancement Management Plan. Condition 183(h) states:

Outcome monitoring of populations of great spotted Kiwi, South Island Kaka, South Island Robin, Blue duck, Long-tailed bat, fernbird and invertebrates, with the objectives of detecting population increases expected as a result of measuring changes that may occur due to the pest management undertaken across the site in accordance with these conditions of consent.

[356] Dr McClellan, for the Crown, sought that the words "detecting population increases expected" be deleted and replaced with the words "achieving statistically significant improvements in abundance and/or productivity for the bird species listed" and deletion of the words "measuring changes that may occur due to".

[357] Dr Bramley and Dr Ussher⁵⁴ consider that such an amendment is inappropriate, as experience with monitoring at the Escarpment mine and elsewhere has shown that demonstrating a statistically significant increase in formal terms is impracticable.

[358] We agree with Dr Bramley and Dr Ussher and are satisfied with condition 183(h), which requires outcome monitoring with the objective of detecting population increases expected because of the pest management undertaken. In our view the condition is both adequate and practical.

Evaluation of terrestrial ecological impacts

[359] As we have said, the ecological experts all agree that:

- (a) the existing ecological values at Te Kuha are significant, and worthy of protection under s 6(c) of the RMA;
- (b) the rehabilitation measures proposed reflect best practice;
- (c) the mitigation measures relating to the management of specific species represent good practice;
- (d) the compensation/offset package at Orikaka would be meaningful in a local and national context; and
- (e) there would be residual ecological loss.

[360] Where the experts disagreed was on the effectiveness of the mitigation, rehabilitation and compensation measures proposed to balance the ecological loss. The experts addressed

⁵⁴ See Memorandum dated 13 October 2017.

this aspect of the matter in their caucusing statement by scoring the likelihood of achieving specific rehabilitated outcomes. There was a considerable variance between the experts in their scoring.

[361] To address this issue, we directed the experts with the appropriate expertise to caucus in an endeavour to reach agreement on the closure criteria set out in condition 30. Agreement was reached, and is reflected in the Table set out in condition 30(b) in attached **Appendix 1**. While there was agreement as to the criteria, there was still some doubt as to the likelihood of the closure criteria being met within the anticipated timeframe of 35 years. To address this, the Applicant has agreed that the consent authorities only release the bond when rehabilitation closure in accordance with condition 30(b) has been met.

[362] This gives us greater confidence in the rehabilitation programme achieving the best practical result. Having said that, we are conscious of the agreed fact that the rehabilitated result would not be a direct substitute for what exists now.

[363] We have set out what the experts have agreed are the principal ecological values and the potential effects on those values. We summarise hereunder the identified potential adverse ecological effects and the measures to be taken to address them.

[364] The relevant principal ecological effects include:

- (a) the loss of Coal Measure vegetation (which is a mosaic of vegetation types, including herb field, shrub land and rock field);
- (b) a loss of forest (which contains a range of species including bryophytes); and
- (c) loss of habitats for:
 - (i) kiwi;
 - (ii) lizards;
 - (iii) forest birds;
 - (iv) forest ringlet butterfly;
 - (v) leaf-veined slug; and
 - (vi) Helm's stag beetle.

[365] Firstly, to directly address the ecological losses, it is proposed to carry out a comprehensive rehabilitation programme undertaken with current best practice. However, as Dr Ussher pointed out,⁵⁵ the existing complex mosaic of communities would be replaced with

⁵⁵ Terrestrial Ecological Review at [3.1].

a far less complex array of mostly planted communities and would not be a like-for-like replacement. It would be functionally similar, but less diverse.

[366] We also agree with Dr Ussher that, even with the best realistic outcomes from the proposed rehabilitation programme, there would still be substantial, residual adverse effects on ecological values.

[367] Secondly, to address these residual values that would remain after successful rehabilitation, the Applicant proposes to manage Te Kuha Biodiversity Management Area and the Orikaka Habitat Enhancement Area. As we have discussed, the management of these areas would provide some set-offs on a like-for-like replacement for some flora and fauna. It would also provide compensation for those ecological losses that could not be replaced with a like-for-like replacement, and in this regard could be treated as a positive effect to balance against the unavoidable losses.

[368] To address specifically the habitat loss of the named fauna, the conditions of consent provide that Te Kuha Rehabilitation Management Plan shall specifically provide for the management of the named fauna by way of salvage and relocation, and specific management in the wider enhancement areas.

[369] One possible area of concern relates to the leaf-veined slug. Mr Patrick, the acknowledged expert on invertebrates, considered the conditions presented at the hearing were adequate. However, at Dr Ussher's request, the conditions have been strengthened to address the uncertainty about the population distribution. These new conditions, agreed with Dr Ussher, now address this uncertainty.⁵⁶ Before vegetation disturbance in the mine area can start, the Applicant will need to demonstrate that appropriate searches have located (or not) additional habitat for the slug. Mining operations cannot commence until successful management measures are in place to protect the habitat of the slug.

[370] After a careful consideration of all of the matters we have discussed at some length, we find that the terrestrial ecological effects would be significant in the short term, but would decrease gradually over time. Dr Ussher suggests⁵⁷ that a timeframe of at least 20-30 years should be envisaged for a "self-containing" cover to be established and for longer (100+ years) before such plantings may provide habitat for invertebrates, bryophytes, lichens and birds of conservation importance. But, there is no guarantee of this.

⁵⁶ Conditions 177A and 177B.

⁵⁷ Terrestrial Ecological Review at [3.3].

Assessment against the relevant statutory instruments

[371] The relevant statutory instruments are the West Coast Regional Policy Statement and the Buller District Plan.

[372] The Regional Policy Statement addresses the RMA directions in ss 7 and 6, relating to habitat and landscapes, together in Chapter 9. Section 6 of the RMA provides, among other things, that outstanding natural features and landscapes, significant indigenous vegetation and significant habits of indigenous fauna, are matters of national importance. Section 7 requires that particular regard be given to other matters such as intrinsic value of ecosystems, maintenance and enhancement of amenity values and enhancement of environmental quality.

[373] In this section, we discuss the issues that arise out of vegetation and habitat modification. In the next section we discuss the issues that arise out of landscape modification.

[374] The Regional Policy Statement has one objective relevant to areas of indigenous fauna:

Objective 9.1

To protect areas of significant indigenous vegetation and significant habits of indigenous fauna.

The objective simply reflects s 6(c) of the RMA.

[375] The policy that implements the objective is in similar terms:

Policy 9.2

Recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna.

The objective then sets out matters to be considered as a guide for determining whether areas of indigenous vegetation and/or habitats of indigenous fauna are "significant", an issue that was not in dispute.

[376] The Regional Policy Statement effectively restates s 6(c) of the RMA. We thus looked for guidance from the District Plan for more specific or focussed objectives and policies derived from the general principle enunciated in s 6(c). Objective 4.8.6.1 states:

To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and recognise their importance to the character and quality of the natural and physical environment and to the wellbeing of the people and communities in Buller.

[377] Policy 4.8.7.7, which implements the objective, says:

To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate use, subdivision and development.

[378] The objective and policy take the matter no further than the general principle enunciated in s 6(c).

[379] Policy 4.8.7.4 sets out nine criteria that are to be used as guidelines to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna pursuant to s 6(c) of the RMA. As we have discussed, the experts all agree that the proposed mine site is within an area of significant indigenous vegetation and significant habitats of indigenous fauna in accordance with that criteria.

[380] We agree with Mr Anderson that the provisions are directive and there is no need to refer back to Part 2 when assessing the ecological effects against the District Plan. However, as we have said, the policy and objective effectively mirror s 6(c) of the RMA.

[381] As Mr Anderson pointed out, the word "**protect**" has been defined in *Royal Forest & Bird Protection Society of New Zealand Inc v New Plymouth District Council*⁵⁸ by the Environment Court as follows:

[63] It will be seen that s 6(c) identifies the protection of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance. The word protection is not defined in the RMA. We use it in the sense identified in decisions such as *Environmental Defence Society v Maunganui County Council* and *Port Otago Limited v Dunedin City Council* as meaning to keep safe from harm, injury or damage. The only gloss we would put on that meaning is that it is implicit in the concept of protection that adequate protection is required.

[382] The last sentence of the above quote is a clear indication that the Court did not consider "protect" to be an absolute concept. In fact, to do so would be contrary to the Court of Appeal,⁵⁹ which held that matters of national significance set out in s 6 of the RMA are not to be achieved at all costs, that protection is not an absolute concept, and a reasonable, rather than strict assessment, is called for.

[383] We note that the proposed site is situated within the Rural Character Area of the Plan, a matter emphasised by Mr Christensen for the Applicant. However, we are of the view that this does not lessen or weaken the clear directive set out in Objective 4.8.6.1.

[384] We agree with Mr Christensen that we are not concerned with just the proposed mine site or footprint, but the protection of the significant ecological area within which the

⁵⁸ [2015] NZEnvC 219.

⁵⁹ Environmental Defence Society v Maunganui County Council, NZLR 257 (CA) 260 at [1089].

proposed site would be situated. Unfortunately, no such area of significance was identified by the experts.

[385] The proposed mine site would be within the Ngakawau Ecological District which, we were told, is the only ecological district defined by the presence of Coal Measures geology. The district covers approximately 48,750ha. We were also told that the proposed site was within an area of Coal Measure vegetation that extended beyond the site in the wider Te Kuha area and beyond. However, we were not given an estimate of the size of such an area.

[386] We approach our task by assessing whether the relevant area of significant vegetation and significant habitat areas are, overall, adequately protected by the proposal, having regard to the rehabilitation, mitigation and off-set measures we have discussed. Whether there would be adequate protection should be assessed over the long term.

[387] It appears to us from the evidence that the Coal Measure vegetation at the site is of primary importance. We therefore propose to assess the adequacy of the protection required by the District Plan provisions against the extant Coal Measures vegetation. Unfortunately, as we have said, no specific figure was provided to us as to the amount of Coal Measure vegetation that is extant.

[388] Dr Bramley⁶⁰ stated that in 2012 he calculated the extent of Coal Measures on the Stockton and Denniston Plateaux which was present in pre-human times at 10,311ha. He calculated this for the purposes of the hearing in relation to the Mt William North application by Solid Energy New Zealand Ltd. He concluded that if that project was consented, approximately 7,612ha would remain, which then equated to 74 percent.

⁶⁰ Rebuttal evidence at [30].

Vegetation Type	Within the Mine footprint (ha)	Within the Access Road (ha)	Within the Water Treatment Area (ha)	Total within Footprint (ha)	Total Extent within Local Coal Measures Vegetation (ha)
Herbfield	0.3	0	0	0.3	0.3
Manuka - Dracophyllum rockland	3.8	0	0.3	4.1	15.7
Manuka shrubland	15.5	10.2	2.5	18.2	104.7
Mountain beech/yellow silver pine - pink forest	72.9	4.9	0.5	78.3	233.2
Rimu - red beech - silver beech forest	0.6	0	0	0.6	2.9
Slips/bare ground	0.08	0	0	0.08	0.2
Ephemeral Pond	0.07	0	0	0.07	0.07
Yellow silver pine - manuka shrubland	14.9	0	0	14.9	42.6
Rimu/hard beech forest	0	2.2	0	2.2	71.1
Total*	108.15	17.3	3.3	118.8	470.8

[389] He also told us⁶¹ that based on his 2012 analysis for the Mt William North application, he considered it most likely that around 60 percent, or more, of most Coal Measure vegetation would remain in terms of the wider Coal Measures vegetation. It was unclear to us what he meant by 'wider' Coal Measures vegetation. Of one thing we are certain. A significant area of Coal Measures vegetation would remain undisturbed by the proposal.

[390] Dr Bramley estimated the specific type of Coal Measures vegetation that would likely be disturbed at Te Kuha, and compared it with the existing vegetation in the following table: ⁶²

[391] Dr Bramley said:

As discussed in Mitchell Partnerships Limited (2013), the amount of clearance proposed at Te Kuha is not sufficient to place any of the vegetation types described and considered here at unacceptably high risk of total removal: more than 20% of all the vegetation types recorded will remain within the Ngakawau Ecological District where large amounts of most vegetation types are protected. Furthermore, with the exception of herbfields and the ephemeral pond, more than 20% of each vegetation type would remain within the larger (471 ha) patch of coal measures vegetation at Te Kuha.

[392] With respect to the herbfield, Dr Bramley was of the view that intact transfer was the most likely method to ensure its survival.

⁶¹ Rebuttal evidence at [38].

⁶² AEE Appendix 11, page 96.

[393] In addition, we note that the Applicant proposes to increase the size of Te Kuha Biodiversity Management Area to include all the remaining Coal Measures within the mining permit it holds. Additionally, it has accepted a condition that it not apply for any consent for earthworks or mining related activities within the management area.

[394] Many vegetation types, such as areas of forest (including bryophytes) affected by the proposal are present throughout the area outside the mine footprint. The habitats of forest, birds, lizards, butterflies and invertebrates (with one possible exception) within the footprint are also present in the wider Coal Measures near to the site (within the enlarged Te Kuha Biodiversity Management Area), and within the Orikaka Habitat Enhancement Area. For this reason, the rehabilitation, management and enhancement measures proposed for those areas mitigate the effects on those habitats because they are in a form of like-for-like.

[395] Mr Anderson submitted that protection could not be achieved in light of the evidence relating to the leaf-veined slug. We have discussed the evidence relating to the slug, and have found that it is very likely the slug exists within and without the proposed mine site. Both Mr Patrick and Dr Ussher were involved in strengthening the conditions that now address the uncertainty surrounding the leaf-veined slug.

[396] We find that the areas of significant vegetation, and the habitats of significant indigenous fauna would, in the long term, be adequately protected in terms of the District Plan and s 6(c) of the RMA due to:

- (a) the relatively significant area of Coal Measures vegetation, both at Te Kuha and in the wider escarpment area, that would remain undisturbed, and which would meet the guideline criteria set out in Policy 4.8.7.4 of the District Plan for identifying areas of significant vegetation and significant habitats of indigenous fauna;
- (b) the benefits over time of the rehabilitation measures proposed;
- (c) the fact that the Coal Measures vegetation within the 497ha area of Te Kuha Biodiversity Management Area would be protected by the Applicant agreeing not to apply for any vegetation disturbance during the life of the consent;
- (d) the enhancement and protection measures proposed by Te Kuha Biodiversity Management Plan;
- (e) the salvage, relocation and enhancement measures proposed for the ecological species by the management of Te Kuha Biodiversity Management Area; and

(f) the like-for-like offsets, particularly for birds and lizards, proposed by the management of the Orikaka Habitat Enhancement Area.

Landscape and visual amenity effects

[397] The west coast region has a long tradition of extractive industry, with timber, gold, coal and other minerals contributing to this. Mapping of the coast's coal deposits show the extensive Brunner Coal Measures to the north of Westport and Paparoa Coal Measures to the south. Their layered coincidence at Te Kuha adds to the attraction of the application site. Coal from both measures can be accessed at different depths through a single excavation under the northern portion of the site, while Paparoa Coal Measures are accessed in the southern portion and Brunner Coal Measures are accessed in the western portion. This dual layering was discovered during focused site investigations carried out by the applicant, which revealed the presence of high quality coal from both measures at different depths. This was helpfully illustrated by Dr Pope for the Applicant with a computer graphics movie showing the location and depth of the coal seams as revealed by the drilling locations and depths.

[398] The landscape effects as assessed by the Applicant were inexorably linked to the ecological effects as assessed by Drs Simcock and Bramley, and their jointly prepared rehabilitation plan. While the details of the ecological effects are considered under that section of the decision, they link inextricably with the entire mine planning process and were considered by the applicant's landscape architect, Mr Rough, in his evidence and its graphic supplement.

[399] Of particular importance is the Ecological Rehabilitation Concept Plan, being the same plan contained in both his supplement and Dr Simcock's evidence. A comparison between this plan and the existing vegetation plan (Figure 23 AEE) reveals the reduction in complexity of landform and vegetation types that will occur from the current diversity. However, that is to be expected considering the existing vegetation has never been modified and contains age and composition profiles that represent this state.

[400] The Ecological Rehabilitation Concept Plan is simpler in terms of topographic variation, with the spinal ridgeline being flatter and the steeper undulations being lessened. The ecological diversity is also reduced, with an emphasis on three rehabilitation units of Forest, Shrubland and Rockfield taking prominence and canopy cover with pioneer species being a primary aim.

[401] The importance of this matter in terms of landscape effects is recognised as the first objective of the Rehabilitation Management Plan, which is 'to achieve a high certainty of low

*visual impact (i.e., high landscape naturalness)*⁶³. The relevance of this to landscape effects is twofold: biophysical factors are an integral component of landscape assessment, and visual effects are influenced by the vegetation mosaic of colour, texture, profile and complexity.

[402] The two landscape architects (Mr Brown as peer reviewer for Council and Mr Rough as landscape architect for the applicant) were joined in their caucus in the preparation of their joint caucus statement by Dr Ussher (as ecological peer reviewer for Council), who provided an up-date on ecology matters. Based on the ecologists' feedback, it was agreed that rehabilitation would conceal most of the project's impacts within 35 - 50 years. However, the landscape and amenity effects over this period and beyond remained a point of disagreement.

[403] Both landscape architects support the use of plant species within the Rehabilitation Management Plan that utilise colours and textures which closely resemble the existing vegetation mosaic.

[404] To carry out his landscape assessment, Mr Rough used a 6-point assessment table, with descriptors ranging from 'none' to 'severe', which Mr Brown accepted. Each point on the ranking scale had a definition, which guided his conclusions. Generally, moderate to substantial adverse visual effects were anticipated by both experts during operation of the mine, although Mr Brown considered that such effects would be severe at the mine's most obvious phase for views from the SH6 Norris Creek viewpoint 10, and substantial for the photo-simulations encompassing the view towards Te Kuha and the mouth of the Lower Buller Gorge (viewpoint 14). He also differed from Mr Rough in his opinion on effects within the Buller Gorge and from the Buckland Peaks.

[405] Both also generally agreed on the visual effects after remediation, classifying them mainly as reducing to negligible – moderate after rehabilitation, although Mr Brown considered long term effects slightly greater than Mr Rough in relation to several viewpoints. Mr Rough used a 35+ year timeframe for his rehabilitation assessment, which was accepted by Mr Brown.

[406] While there were viewpoint specific differences between experts related to operational and resultant effects, the main difference in opinion was in the effect on landscape character and associated amenity values that the mine would have over its operational life and beyond. Mr Brown expressed his concerns about the landscape and visual effects of the application when considering viewpoint 14, as commented in the caucus statement [at p4]:

The reason for this opinion is that SB considers that the mine and access road would disrupt a landscape that is otherwise hall-marked by the continuity of native forest and vegetation cover across hillslopes and ridges which frame both the

⁶³ Summary of Evidence of Dr Robyn Simcock, para 14

Buller River and the entry to the Lower Buller Gorge. The mine would disrupt the high levels of naturalness and coherence presently found in this landscape and the effects identified relate to the quality of that change, rather than the quantum of mine and road that is visible.'.

[407] In his opinion, the effects would be 'substantial' during the most obvious phase and would reduce to 'slight' - 'negligible' on a permanent basis.

[408] Mr Rough had a slightly different opinion in relation to viewpoint 14 (the entry to the lower Buller Gorge), considering the operational effect to be 'moderate', with this reducing to 'negligible' after rehabilitation. Two reasons he cited for this are the fact that the visible area of disturbance occupies a relatively small percentage of the upper portion of the view, and that rehabilitation will effectively restore the visual character. In his evidence [at 79] he states:

In essence, the rehabilitated mining area on the upper slopes will appear natural looking as soon as a revegetated cover has become established. Over time, as the areas of revegetation mature, lasting effects of the project on natural character and visual amenity, as experienced from Viewpoint 14 and its proximity, will be negligible.

[409] Other differences in terms of scale of effect were apparent between the experts regarding effects on the ONL as seen from within the Buller Gorge at viewpoint 11, which is located on the highway just east of Ohikanui River bridge. While they agreed on the 'substantial' operational visual effects, they disagreed on significance of the effects on the ONL.

[410] Mr Rough acknowledged in his evidence that the benched ridgeline resulting from strip mining would be most prominent and would result in significant effects on natural character and amenity. He went on to say [at 86] that:

Mining activity will detract from the experience of travelling westwards through the Lower Buller Gorge because in no other views of hills and skyline ridges will there be landscape and visual effects caused by human activity. As I have outlined above, the adverse effects resulting from mining will, however, be temporary as the skyline will, throughout the life of the mine, be rehabilitated.

[411] When presenting at the hearing, he reiterated mitigating factors mentioned in his evidence that mining is confined to a small section of the eastern edge of the ONL, the exposure time for a motorist travelling through the Gorge would be approximately 45 seconds (at 70kph), the view would only be gained when travelling west (unless stopped at the layby) and there were other modifying elements in the view such as the road, bridge and railway.

⁶⁴ Caucusing statement by technical experts- landscape & visual effects, p4

[412] He concluded that the ridge would eventually appear, to all intents and purposes, natural, albeit in the form of a somewhat less complex skyline no longer characterised by a distinctive rock outcrop. Also, he was not convinced that the relatively small amount of mining activity that would be apparent from Viewpoint 11 and its vicinity would leave a permanent impression on visitors.

[413] Mr Brown was of the view that mining on the ridgeline would have an impact on the characteristics and values of areas of the ONL, which includes the Lower Buller Gorge Scenic Reserve and extends into the Mt Rochfort Conservation Area. He went on to identify what he considered the key landscape characteristics and values that would be impacted by the mine proposal⁶⁵:

...these include the very high levels of naturalness, expressiveness, aesthetic appeal, legibility, coherence and integrity associated with the Lower Buller Gorge, which, together with other characteristics and values, would be seriously affected by the proposed coal mine and access road.

[414] The other characteristics and values referred to were those listed more fully by Mr Brown in his evidence, with the following key ones put to Mr Rough at the hearing:

- the skyline of the south-western Mount William Range;
- the profile and form of the Buller Gorge's western 'mouth';
- the continuity and intactness of the vegetation cover;
- the interaction of this vegetation with exposed regolith near Te Kuha ridge crests;
- the seamless merger of this vegetation with the wider expanse of forest;
- the high, overall level of naturalness;
- the highly expressive nature of the same area's landforms; and
- the very significant aesthetic appeal of views up and down the Buller River corridor associated with views from near the Gorge Mouth and from within the Gorge itself.

[415] To this list Mr Rough also added the characteristics of the clear fast flowing river and the exposed shingle beaches. He agreed with this summation, reiterating his view that the mine would have a substantial effect on natural character that would reduce to slight-negligible after remediation.

⁶⁵ Mr S Brown, Final Landscape Report 17 October 2016, p23

[416] At this point we note the use of the term 'natural character' by Mr Rough throughout his assessment and evidence. This term is usually used in relation to s6(a) and the coastal environment, but it was agreed that the site was located well outside the coastal environment as defined by the Regional Coastal Plan. Mr Rough confirmed that his use of the term was synonymous with the term 'naturalness', which is more commonly used in relation to s6(b), although we acknowledge the conjunctive use of the term within the RPS at policy 9.1

[417] When considering the relative opinions of the two landscape experts, who are in reasonably close agreement on the scale of effects as seen from many viewpoints before and after the operational phase of the mine, it becomes apparent that the remaining differences relate to the wider perceptual and associational aspects of the physical intervention that the mining would entail. These are succinctly expressed when Mr Brown's opinion is outlined [at page 5] in the caucus statement:

Even if there is effective rehabilitation in the long term, the mine will have a significant impact on the integrity and values of the ONL for decades to come, and rehabilitation will not completely offset these concerns. SB [Stephen Brown] considers that the project will result in a fundamental change to part of the ONL and surrounding landscapes, and cannot accommodate the scale of these changes, regardless of rehabilitation.

PR [Peter Rough]- Satisfied that rehabilitation of the landforms and revegetation on the physical effects and perceptions of ONL will be acceptable.

[418] While this reference relates to the ONL, the difference in opinions reflects that already outlined above when discussing viewpoint 14, where a similar disparity existed. In that situation, which was focused on views towards the Buller Gorge rather than within it, Mr Brown had the view that:

...the mine and access road would disrupt a landscape that is otherwise hallmarked by the continuity of native forest and vegetation cover across hillslopes and ridges which frame both the Buller River and the entry to the Lower Buller Gorge. The mine would disrupt the high levels of naturalness and coherence presently found in this landscape and the effects identified relate to the quality of that change, rather than the quantum of mine and road that is visible.

Evaluation

[419] When considered against the agreed characteristics and values listed above, and the characterisation outlined earlier in the decision, it is apparent that the operational phase of the proposal would have substantial adverse effects on landscape and amenity values both on the ONL within the Buller Gorge and on the amenity landscape outside the Buller Gorge. This was agreed by the experts and is also accepted by the panel.

[420] It was also agreed by the experts, and accepted by the panel, that the rehabilitation phase should be considered in the 35+ year timeframe, with the applicant accepting that if the ecological conditions had not been met in that time then mine closure could not occur until they were met. The conditions of consent require implementation of the Ecological Rehabilitation Concept Plan, including in terms of its Rehabilitation Units and Vegetation Types. The conditions include canopy closure.

[421] The landscape experts agreed that they do not have different interpretations of ecological rehabilitation and mitigation, that they support the use of plant species within the Rehabilitation Management Plan that utilise colours and textures which closely resemble the existing vegetation mosaic, and that the simulations are adequate for the assessment purposes⁶⁶.

[422] Relatedly, ecological rehabilitation is inextricably linked to landscape restoration in both a visual and physical sense. It is apparent that while visual restoration may be achieved in terms of land cover, the experts differ on the proposal's landscape effects.

[423] The fundamental difference relates to the inability of ecological restoration to put back what has never been disturbed, and the disruption this would cause to the current high levels of naturalness and coherence.

[424] In terms of the Buller District Plan, the level of disruption of outstanding landscapes and natural features is measured against the effects on the distinctive characteristics and values and the requirement to protect these. It is not absolute, with the associated policy discouraging activities which would significantly alter the character of outstanding landscapes.

[425] It is acknowledged that rehabilitation would not restore what will be lost within the timeframe considered in the assessment. However, protection of the landscape characteristics and values is assessed against the project after mitigation. These characteristics relate to the landform's scale and dominance, unmodified landcover, naturalness, coherence and memorability.

[426] While modifications to the landform would occur, with reforming and revegetation, an alternative landform would develop that integrates with the remaining landform, allowing the resultant to retain its characteristic dominance and scale. This factor would be protected.

[427] While substantial modification would be made to the land cover, rehabilitation would ensure restoration of a canopy cover that represents the colours and textures which closely

⁶⁶ Landscape caucus statement p3

resemble the existing vegetation mosaic, as adequately represented in the simulations for the assessment purposes.⁶⁷ The visual mosaic would be protected, which would contribute towards not significantly altering the visual character of the outstanding landscapes.

[428] Mr Brown was of the view that the mine would have a significant impact on the integrity and values of the ONL for decades to come and rehabilitation would not completely offset these concerns⁶⁸. However, a more comprehensive suite of measures does contribute, including avoidance/minimisation, rehabilitation, mitigation and compensation.

[429] The landscape values of naturalness and coherence would remain affected on the site in an ongoing sense beyond operational completion, but not to the extent that they would be significantly affected.⁶⁹

[430] We find:

- (a) that the adverse effects on the ONL would, in the short term, be severe/substantial.In the long term they would reduce over time to moderate slight; and
- (b) that the adverse effects on landscape and amenity would, in the short term, be severe/substantial. In the long term they would reduce over time to moderate slight.

Assessment against the relevant statutory instruments

[431] When assessing our findings of the potential effects on the ONL and on landscape characteristics and values against the relevant statutory provisions, we consider first the relevant provisions of the Regional Policy Statement. As we have said, the RMA directions relating to habitat and landscape are discussed together in Chapter 9 of the Policy Statement.

The Regional Policy Statement

[432] There is no objective that directly relates to landscape per se. Objective 9.3 seeks to preserve the natural character of the wetlands, lakes and rivers. Policy 9.1 seeks to protect outstanding natural features and landscapes from inappropriate subdivision, use and development.

[433] Policy 9.1 then sets out matters to be considered when deciding whether subdivision, use and development are appropriate. Of relevance to this matter are:

⁶⁷ Ibid

⁶⁸ Ibid p5

⁶⁹ Brown Final Landscape Review 17 October 2016. Table page 19.

- (a) the extent of sporadic development and its effects on natural character;
- (b) the degree and significance of actual, potential and cumulative effects on natural character that arise;
- (c) the practicality of locating any subdivision, use or development away from the areas of significant indigenous vegetation and significant habitats of indigenous fauna (Policy 9.2), the coastal environment, wetlands, lakes, and rivers and their margins, where adverse effects on natural character can be avoided, remedied or mitigated to a greater degree or extent;
- (d) where rehabilitation plantings are required, the practicality of using indigenous species, preferably of locally derived stock.
- [434] The relevant objectives and policies of the Buller District Plan state:

Objective 4.9.3.1: To protect the distinctive character and unique values of outstanding landscapes and natural features.

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

[435] Again, in our view, the objective and policy set out above, do not provide additional guidance to us over and above s 6(b) of the Act. The policy appears to limit the application of the objective to activities which would significantly alter the character of outstanding landscapes. Such a limitation does reinforce our view that the word "protect" is not to be interpreted as an absolute concept, and a reasonable, rather that strict assessment is called for.

[436] We have found the character and unique values of naturalness and coherence would be significantly adversely affected in the short term, and remain affected in the long term, but to a reduced degree. The issue is whether this would result in the protection of those values. We note that s 6(b), unlike s 6(c) which refers to 'areas', refers specifically to the protection of 'natural features' and 'landscapes'. Similarly, the objective in the Plan refers to the protection of 'distinctive character' and 'unique values'.

[437] The distinctive character and the unique values of the escarpment within which the proposal would sit, have been assessed by the landscape architects and discussed by us. For there to be adequate protection of the landscape values, we must be satisfied that those values would subsist notwithstanding the adverse effects and subsist in the long term. We are conscious of the relevant matters to be considered in deciding whether development is appropriate under Policy 9.1 of the Regional Policy Statement, particularly the extent of the

proposal's effect on natural character, and the degree and significance of such effects. In this regard we note:

- (a) mining is confined to a small section of the eastern edge of the ONL;
- (b) the ridge would appear, for all intents and purposes, natural, although in a less complex form;
- (c) biological factors would be, in part, rehabilitated; and
- (d) visual effects would be ameliorated by rehabilitation, where it is proposed to use plant species that utilise colours and textures that closely resemble the existing vegetation mosaic.

[438] As we have said, Mr Brown is of the view that the mine would have a significant impact on the integrity and values of the ONL for decades to come, and rehabilitation would not completely offset these concerns. However, we are satisfied that, in the long term, the change to the landscape quality would diminish, and the levels of naturalness and coherence presently found in the landscape would be restored sufficiently for those characteristics to be adequately protected.

Part 4 - evaluation and determination under s 104B

<u>Evaluation</u>

[439] We are now required to exercise our discretion whether to grant or refuse consent under s 104B of the RMA. This necessarily entails a judgement that is informed having regard to the matters detailed under s 104, which in this case involve us, subject to Part 2, having regard to:

- (a) any actual potential effect on the environment (s 104(1)(a); and
- (b) the relevant statutory instruments, namely:
 - (i) the West Coast Regional Policy Statement; and
 - (ii) the Buller District Plan (s 104(1)(b)).

[440] The relevant statutory instruments are effects-based. Thus, the subject matter of subsections 1(a) and (b) overlap in that the actual and potential effects on the environment of allowing the proposal are the subject of matter of objectives and policies addressing those effects. It is for us to decide the weight that should be given to the matters in subsections (1)(a) and (b).

[441] The proposal includes a comprehensive suite of draft conditions. These conditions define the scope and extent, both of the effects of the proposal, and how those effects are to be addressed. When determining the effects of the proposal and assessing those effects against the relevant provisions of the statutory instruments, we do so having regard to the conditions as set out in **Appendix 1**.

[442] Following *King Salmon* and *Davidson Family Trust*, we propose to take the settled provisions of the Regional Policy Statement and District Plan as giving effect to Part 2 of the RMA. We are of the view that there is no need to refer back to Part 2.

[443] We propose in this section to:

- (a) set out our findings on the actual and potential effects on the environment of allowing the proposal;
- (b) set out our assessment of those effects against the relevant provisions of the statutory instruments; and
- (c) come to a judgement informed by the relevant matters articulated under s 104.

[444] We have addressed in some detail the actual and potential effects on the environment of allowing the proposal in Part 3 of the body of this Report and Decision. In this section, for the purposes of clarity we summarise our findings. First, we found that a number of potential effects would adequately be addressed by the proposed conditions of consent as set out in **Appendix 1**. Those matters included:

- (a) effects of climate change;
- (b) groundwater and hydrology;
- (c) water quality;
- (d) aquatic ecology;
- (e) geotechnical effects;
- (f) dust;
- (g) Westport water supply;
- (h) traffic;
- (i) lighting;
- (j) noise; and
- (k) hazardous substances.

[445] With regard to all of those matters, we have found that, subject to the proposed conditions of consent, there would be little or no adverse effects. At the very least they would be negligible. We are satisfied that the management regimes proposed in the conditions of consent could be adequately adapted to meet any possible contingencies. Accordingly, we treat these matters as being neutral in the exercise of our discretion.

[446] Secondly, we have found that there would likely be substantial positive economic and social benefits that would accrue to the Buller District and the West Coast region, to the advantage of their communities. Mr Copeland had this to say:⁷⁰

The Te Kuha Mine Project's construction, operation and rehabilitation activities will provide a much-needed stimulus to the local Buller district and West Coast economies. The Project will create nett economic benefits, and enhance the economic wellbeing of the Buller and West Coast communities by increasing expenditure, employment and incomes in the respective local economies.

⁷⁰ Summary of evidence at [34].

[447] We have also found that a compensation benefit would accrue from the management of the Orikaka Habitat Enhancement Area.

[448] Thirdly, we have found that, in two respects, there would be severe to substantial adverse effects in the short term, reducing to moderate - slight over time. This is with respect to:

- (a) the effects on significant indigenous vegetation and habitat of indigenous fauna; and
- (b) the effects on the identified ONL and the landscape and visual amenity values.

[449] We have assessed our findings on effects against the specific provisions of the Regional Policy Statement and the District Plan that relate to the particular effect. We found that the effects of the Proposal would be consistent with the relevant provisions. We have found that, while the proposal would generate adverse effects on the matters referred to above, the conditions of consent would ensure adequate protection of them as is required in the two statutory documents.

[450] In exercising our discretion whether to grant or decline the consents, we see no need to refer back to Part 2. We consider the District Plan provisions addressing landscape and visual effects are complete and fully guide us in what the Plan indicates is an appropriate development in terms of s 6(b). The objectives and policies in relation to ecology reiterate s 6(c).

[451] When we look at the statutory instruments as a whole, we obtain more guidance. Policy 9.1 of the RPS, to which we have already referred, sets out matters to be considered when deciding whether a development is appropriate. Two matters are of some importance, they are:

- (a) the practicality of locating the development away from the significant areas of vegetation or habitat; and
- (b) the extent to which the development provides a public benefit.

[452] We also note s 4.5 of the District Plan headed "Mineral resources". Objective 4.5.4.1 states:

To enable people and communities to provide for their economic and social wellbeing through the efficient utilisation and development of mineral resources.

[453] The Proposal would enable people and communities to provide for their economic and social wellbeing. This must be done while avoiding, remedying or mitigating adverse effects, and with the requirement that the mine site be rehabilitated where practical. Some guidance can be found from the "Explanation/reasons" which says:⁷¹

The objectives recognise that mineral resources within the district represent resources of significance to the district, the utilisation and management of these representing a key issue that has been addressed in the District Plan. The policies reflect the need to ensure that the impact of mineral-related activities on environmental quality, including land and water resources, is avoided, remedied or mitigated.

The District Plan seeks to ensure an appropriate balancing as between providing for the economic and social wellbeing of the community and ensuring that the impact of mining activities is mitigated.

[454] We note the following comment: 72

The Council is particularly concerned about long-term effects on resources while recognising that mining, by its very nature, will generally have some short-term effects.

[455] In balancing the matters required under the statutory instruments, we are conscious of the fact that, over the last four years, Buller has faced significant employment losses (in excess of approximately 1,000 redundancies). While the mine would not fill the gap, we are satisfied that, in economic terms, the mine proposal at Te Kuha would help to potentially offset some of those losses.

[456] Undoubtedly there would be adverse effects, but those adverse effects would be tempered considerably over time by the mitigation, rehabilitation and compensation measures proposed. At the end of the day, the vegetation and habitats, and the ONL and landscape, would retain the necessary characteristics to ensure their significant status is protected.

[457] Accordingly, for the reasons set out in this decision, we grant the resource consents as sought, subject to the conditions of consent attached as **Appendix 1**.

⁷¹ 4.5.7 of Buller District Plan.

⁷² 4.5.7.1 of Buller District Plan.

Determination

[458] The resource consents sought by Stevenson Mining Limited for Te Kuha Mine Project are granted subject to the conditions of consent attached to this Decision as **Appendix 1** and as amended by paragraph [203] of this decision.

the and ?

Gordon Whiting (Chairman)

J.R. Mudan

John Hudson

- Ann

Terry Archer

List of appendices:

- 1. Conditions of consent version dated 4 October 2017
- 2. List of submitters
- 3. Relevant provisions of statutory instruments

APPENDIX 1

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ATTACHMENTS 1 TO 5

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Definitions

"AMD" means acid and metalliferous drainage.

"Access Road" means the road from the coal load-out site to the mine pit.

"Completion of Closure" means rehabilitation of the mine site such that (a) to (d) of Condition 30 have all been demonstrated by the Consent Holder, to the satisfaction of the Consent Authorities, to have been met.

"Completion of Biodiversity Enhancement" means compliance with Conditions 160 to 181 of RC160038 relating to the Te Kuha Biodiversity Management Plan and the Orikaka Habitat Enhancement Plan.

"Construction" for the purposes of Conditions 46, 47 and 48 means earthworks that occur prior to the commencement of mining operations.

"Construction phase" for the purposes of Conditions 46, 47, 48 includes all construction activities up until the time that coal is extracted from the pits on a continuous basis.

"Certification" means that the management plan contains the necessary information specified in the management plan condition and meets all the requirements set out in more specific conditions of consent.

"DT" means vegetation direct transfer.

"ELF" means an engineered landform.

"Mining operations" commence when the water treatment facilities have been constructed and commissioned. Mining activity or mining activities has the same meaning as mining operations.

"NAF" means non-acid forming.

"PAF" means potentially acid forming.

"Te Kuha Mine Project" and "mine site" means all areas of disturbance, including the Access Road, the mine pit, ex-pit sumps, and the coal load-out site.

Method of Operations

- 1. All activities authorised by these consents shall be undertaken generally in accordance with the information contained in the Application and Assessment of Environmental Effects dated April 2017 and all supporting technical documents and plans, as provided to the Consent Authorities, except where inconsistent with these conditions, in which case the conditions shall prevail.
- 2. The Consent Holder shall ensure that the development of the mine site, including all mining areas, overburden disposal areas, ELF underdrainage systems, ex-pit sumps, the construction of all earth bunds, diversion channels, roads, tracks, stream crossings and rail load-out site is supervised by appropriately qualified engineers. A Chartered Professional Engineer shall be retained to review the design and engineering of all such areas and any associated structures to ensure that they are constructed in accordance with current accepted engineering practices. Evidence of the compliance with this condition shall, if requested by the Consent Authorities, be submitted to the Consent Authorities in the form of a certificate from a Chartered Professional Engineer.
- 3. The Consent Holder shall ensure all key staff and contractors are made aware of the conditions of these resource consents to ensure compliance with those conditions.
- 4. Prior to undertaking any of the activities authorised by these consents, the Consent Holder shall appoint an Environmental Manager, or equivalent position. The Consent Holder shall ensure an Environmental Manager is employed at all times during all mining operations (including all rehabilitation activities).
- 5. The Environmental Manager shall:
 - a) Be a full-time employee of the Consent Holder;
 - b) Report directly to the Mine Manager, making recommendations for improving environmental management and outcomes where necessary; and
 - c) Operate in an objective manner with a view to ensuring the Consent Holder meets the conditions of these consents, including monitoring, reporting, rehabilitation and biodiversity management.
- 6. The Consent Holder shall ensure that the recommendations of the Environmental Manager under Condition 5 shall be taken into account and given effect to in mine planning and mining operations) except where, and only to the extent that, the recommendations might be contrary to the Consent Holder's obligations under the Health and Safety at Work Act 2015 (and all associated legislation).

Complaints and Non-compliance

7. The Consent Holder shall maintain and keep a complaints register for any complaints received in relation to the activities authorised by these consents. The register shall record:

- d) The date, time and duration of the incident that has resulted in a complaint;
- e) The location of the complainant when the incident was detected;
- f) The possible cause of the incident; and
- g) Any corrective action taken by the Consent Holder in response to the complaint including the timing of that corrective action.
- 8. The complaints register shall be made available to the relevant Consent Authority within 48 hours of any formal request from the Consent Authority being received by the Consent Holder.
- 9. The Consent Holder, upon receipt of any complaint reported to it by the relevant Consent Authority, shall promptly investigate the complaint, take action to remedy or mitigate the complaint, and inform the Consent Authority of the details of the cause of the complaint and the action taken within 48 hours of receiving the report of the complaint.
- 10. Unless otherwise stated within these consents, in the event of any breach of the conditions of these consents, the Consent Holder shall notify the Consent Authority within 48 hours of the breach being detected. Within seven days, or a longer period agreed to in writing by the Consent Authority, of any breach, the Consent Holder shall provide written notification to the Consent Authority that explains the cause of the breach and, if the cause was within the control of the Consent Holder, the steps which were taken to remedy the breach and also the steps which will be taken to prevent any future occurrence of the breach.

Notification of Exercise of Consent

- 11. The Consent Holder shall notify the Consent Authorities in writing of:
 - a) The intention to exercise any consent at least three months prior to, but not more than 12 months prior to, the commencement of any activities authorised by these consents; and
 - b) The date that activities authorised by these consents first commence; and
 - c) The intention to complete mining activities three months prior to the cessation of mining activities; and
 - d) The date mining activities cease.
- 12. The Consent Holder shall notify the Consent Authorities in writing of the expected date of Completion of and Closure of the Site (in terms of Condition 30) at least two years prior to that date.

Lapsing of Consents

13. Pursuant to Section 125(1) of the Act these resource consents shall lapse on the expiry of ten years after their dates of commencement unless any of the consents have been given effect to before the end of that period, or the relevant Consent Authority has granted an extension to the lapsing date under Section 125(1)(b) of the Act.

Review of Conditions

- 14. Pursuant to Section 128(1) of the Act, the Consent Authorities may review any of the conditions of these consents by serving notice on the Consent Holder within a period of three months, commencing on each anniversary of the date of commencement of these consents for any of the following purposes:
 - a) To deal with any adverse effect on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage.
 - b) In relation to discharge permits, to require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
 - c) To assess the appropriateness of imposed compliance standards, monitoring parameters, monitoring regimes and monitoring frequencies and to alter these accordingly.
 - d) To ensure that any management plan required by these conditions is implemented and gives effect to conditions of these consents.
- 15. Pursuant to Section 128(1) of the Act, the Consent Authority may review Conditions 160, 172 and 181 of RC160038 by serving notice on the Consent Holder within a period of three months following receipt of the report required by Condition 161 of RC160038 for the purpose of ensuring that the objectives of the Te Kuha Biodiversity Management Plan and the Orikaka Habitat Enhancement Plan required by Conditions 162 and 180 of RC160038 are met.
- 16. Pursuant to Section 128(1) of the Act, the Consent Authority may review Condition 176 of RC160038 by serving notice on the Consent Holder within a period of one month following receipt of the report required by Condition 177 of RC160038 for the purpose of including any management measures necessary to ensure that the objectives of the section on undescribed leaf-veined slugs in the Te Kuha Biodiversity Management Plan are met.

Bond

17. At all times the Consent Holder shall provide and maintain in favour of the Consent Authorities a bond or bonds to:

- a) Secure the compliance by the Consent Holder with the conditions of these consents, including the conditions relating to the Te Kuha Biodiversity Management Plan and the Orikaka Habitat Enhancement Plan;
- b) Secure the completion of rehabilitation and closure in accordance with the Rehabilitation Management, Water Management and Mine Closure Plans; and
- c) Enable the Consent Authorities to monitor any adverse effect on the environment that may arise from the exercise of the consents including monitoring anything which is to be done to avoid, remedy, mitigate or compensate an adverse effect.

Advice note: A bond is required by both the Buller District Council and the West Coast Regional Council. The Consent Authorities will accept a "joint bond" that secures compliance with the consents for the mine granted by both Councils.

- 18. The amount (quantum) of the bond may vary from time to time but at any given time shall be sufficient to cover the estimated cost at that time (including any contingency) of compliance with all conditions, including (but not limited to):
 - a) Compliance with the obligations in Conditions 162 to 181 of RC160038 for the Te Kuha Biodiversity Management Area and Orikaka Habitat Enhancement Area;
 - b) Demolition and removal of plant and buildings;
 - c) Mine site clean-up, including removal and disposal of contaminated soil;
 - Rehabilitation by re-contouring, compaction control, spreading sub-soils and topsoil, re-vegetation and pest plant and animal control until the closure criteria in Condition 30 are met;
 - e) Stabilisation of earthworks and landforms (erosion control);
 - f) Rehabilitation of watercourses disturbed by mining activities, including the installation of erosion protection works where necessary;
 - g) Active water quality treatment until the closure criteria in Condition 30 are met and maintenance of passive water treatment facilities, if required, such that Condition 116 of RC-2016-0098-04 shall continue to be met in perpetuity;
 - h) Construction and erosion protection of drainage facilities;
 - i) Rehabilitation of access road and maintenance of roads and water tables of any agreed residual roads;
 - j) Environmental and geotechnical monitoring and reporting;
 - k) Staff costs; and

- I) Administration and operating costs.
- 19. The Consent Holder shall not exercise these consents until the bond or bonds referred to in Condition 17 is executed by the Consent Holder and guarantor and deposited with the Consent Authorities.
- 20. Notwithstanding Condition 22, the Consent Holder shall provide a bond or bonds for the quantum for a minimum term of three years, such term to be renewed for a minimum of a further three years (or such other term as may be agreed to between the Consent Holder and the Consent Authorities) on each anniversary of the date activities authorised by these consents first commence as notified under either Condition 11(a) or subsequently under Condition 11(b) (the "date of renewal"). The term of the bond shall be renewed until "Completion of Closure of the Site" and "Completion of Biodiversity Enhancement" in accordance with Conditions 160 to 181 of RC160038 is achieved.
- 21. Unless the bond is a cash bond, the performance of the conditions of the bond shall be guaranteed by a guarantor acceptable to the Consent Authorities. The guarantor shall bind itself to pay for the carrying out and completion of any condition in the event of any default of the Consent Holder.
- 22. If the Consent Holder is unable at any time to arrange a guarantor for the quantum as set out in Condition 20, the Consent Holder will provide a cash bond or bonds for the quantum within 60 days of the date of the renewal referred to in Condition 20.
- 23. The bond shall be in a form acceptable to the Consent Authorities.
- 24. The bond shall provide that the Consent Holder remains liable under the Resource Management Act 1991 for any non-compliance with any condition(s) of these consents which occurs before expiry of these consents and which become apparent during or after the expiry of the relevant consent.
- 25. The Consent Holder shall provide the Consent Authorities with a report which recommends the amount of the initial bond quantum at the time it gives notice to the Consent Authorities under Condition 11(a). The initial bond quantum shall be reviewed and set by the Consent Authority within 30 days of the receipt of the report and thereafter, for replacement bonds, within 30 days of receipt of each bond review report required under Condition 26. Notification of the quantum of the bond under this condition shall be in writing by the Consent Authorities to the Consent Holder.
- 26. The initial bond quantum shall be determined by a suitably qualified specialist acceptable to the Consent Authorities, based on matters contained in the first Annual Work Plan and the management plans required by these consents. Thereafter, the same specialist, or an alternate specialist acceptable to the Consent Authorities, shall review and prepare a report for the parties on the bond quantum at yearly intervals, but using the Annual Work Plan for the coming twelve months and the latest versions of the management plans required by these consents. If the reviewed bond quantum is

higher than the current bond quantum, then the bond quantum shall be adjusted accordingly within 30 days of the parties receiving the report, unless the Consent Holder invokes Condition 27.

- Should the Consent Holder not agree with the amount of the bond fixed by the 27. Consent Authorities under Condition 26 then the matter shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996. Arbitration shall be commenced by written notice ("Notice of Arbitration") by the Consent Holder to the Consent Authorities advising that the amount of the bond is disputed, such notice to be given within 14 days of the date that the report under Condition 26 has been received. If the parties cannot agree upon an arbitrator within 7 days of the Notice of Arbitration, then an arbitrator shall be appointed by the President of the Institute of Professional Engineers of New Zealand. Such arbitrator shall give an award in writing to the parties within 30 days after his or her appointment (the "date of arbitration decision"), unless the parties both agree that the date of arbitration decision shall be extended. The Consent Holder shall bear the full and reasonable costs incurred by the parties in connection with this arbitration. In all other respects, the provisions of the Arbitration Act 1996 shall apply. Pending the outcome of that arbitration, and subject to Condition 28, the existing bond shall continue in force. That sum shall be adjusted in accordance with the arbitration decision.
- 28. If the decision of the arbitrator is not made available by the date of arbitration decision referred to in Condition 27, then the amount of the bond shall be the sum fixed by the Consent Authorities under Condition 26 until such time as the arbitrator does give an award in writing to the parties. At that time, the amount of the bond shall be adjusted in accordance with the arbitration decision.
- 29. The bond may be varied, cancelled, or renewed at any time by agreement between the Consent Holder and the Consent Authorities provided that cancellation will not be agreed to unless a further or new bond acceptable to the Consent Authorities is available to replace immediately that which is to be cancelled.
- 30. The Consent Authorities shall release the bond on the Completion of Closure of the Site, except for the amount required to secure the compliance by the Consent Holder with Conditions 160 to 181 RC160038 relating to the Te Kuha Biodiversity Management Area and Orikaka Habitat Enhancement Area. "Completion of Closure of the Site" means rehabilitation of the site such that Conditions (a) to (d) below have all been demonstrated by the Consent Holder, to the satisfaction of the Consent Authorities, to have been met:
 - a) Finished landform closure: The finished landform requirements set out in Condition 49 have been met.
 - b) Rehabilitation closure: Closure of the Te Kuha Mine Project shall be achieved when the closure criteria in the table below have been met and maintained for a minimum period of five years.

Vegetation /ecosystem type	Plant cover ^{*1}	No. of Native Plant species (diversity) ^{*2}	Rock cover Coarse wood cover	Monitoring Plot size	Rationale
Herbfield	 > 80% including rocks < 10% soil or sediment 	> 80% of baseline	< 10% rock No wood cover	1 m ²	Herbfields are sometimes in areas with rocks; rocks are useful to cover sediment and exclude weeds. DT is the only method for rehabilitating herbfields so high diversity is expected.
Rockfield	A maximum of 30% < 10% sediment or fines <10 mm diameter	n/a	 > 50% rock < 70% rock <200 m² contiguous area 	20 m ²	Rockfields are used for habitat (lizard) and landscape outcomes (highlighting ridgelines and creating heterogeneity); some plants are therefore important as part of habitat creation but there is no minimum cover proposed. Fines allow weed establishment, diameter of 'fines' is set at 10 mm given high rainfall.
Shrubland (ecosystem types under 3 m height)	> 75% including rock	DT: > 70% of baseline Planted: > 30% of baseline	< 33% rock < 10% wood	4 m ²	Large boulders create valuable shelter and hydrological variation. Species diversity for DT areas is much higher than for planted areas because many more plants survive. Minimum cover includes all groundcover plants, so no minimum height is specified. Cover also includes rock as these are permanent and important to create variation in ecosystem and habitat for some lichens, lizards.
Forest All forests	An average of at least 75% > 0.5 m height No less than 60% > 0.5 m height in any plot	 > 1000 beech and/or podocarp trees > 1 m tall/ha. Adventive native seedlings 	< 10% rock < 25% wood	100 to 400 m ²	Forests are expected to be > 5 m height in long term so are less vulnerable to most weeds at a lower 'closure' plant cover. A minimum density of 'keystone' species is required in sites where these species would be expected, to short-cut succession. No diversity criteria due to early canopy closure supressing recruitment. Coarse wood and stumps are ecologically valuable and highly desirable.

Weeds Sites below 500 m ASL	< 5% on average No plots > 10%	N/A	N/A	As above	Lower sites may have existing non-native plants and weeds in seed bank and/or are much more exposed to wind or bird –dispersed weeds.
Weeds above 500 m	< 5% on average No plots > 10% No visible flowering or seeding	N/A	N/A	As above	Applicable to whole site except tall forest: all woody non-native plants; and listed herbaceous plants that are not naturally found in the Ngakawau Ecological District.
Load-out site	No less than exists on the site now	N/A	N/A		While the site is currently weed infested, after rehabilitation the site is not worse off or in a state that may endanger surrounding areas through propagule dispersal.

*1 Plant cover only includes vascular plants (not mosses and bryophytes). All values given are means over all plots measured, and a minima or maxima for any individual plots is also provided *2 This is a measure of the native plant species diversity compared with pre-mining diversity. It excludes non-native species. The native species diversity will be measured in direct transfer vegetation immediately prior to transfer.

Note i: The above criteria will be measured in randomly located plots stratified (quadrats) by landform, vegetation type and rehabilitation method and may be stratified by age.

Note ii: % cover is defined as the percentage of the ground within a quadrat which is occupied by the above-ground parts of plants when viewed from above.

Note iii: Coarse wood is defined as wood with a diameter > 100 mm; boulders/stones are defined as having a diameter > 100 mm; native plants are defined as those found in the Ngakawau Ecological District within a similar altitudinal range or those found in the vicinity of the Te Kuha Mine Project area pre-mining.

Note iv: Height is measured as standing height excluding the flowering stems.

Note v: Weeds are non-native woody species and those woody herbaceous and bryophyte species identified as weeds in the current version of the Rehabilitation Management Plan.

Note vi: Weeds in herbfields includes species not characteristic of herbfields.

The rehabilitation and enhancement assessment for Completion of Closure of the Site shall be undertaken and/or audited by a suitably experienced and qualified ecologist.

- c) Water management closure: Water compliance limits in Condition 116 of RC-2016-0098-04 shall not be exceeded in the preceding 36 month period without active water treatment or with passive water treatment technologies.
- d) Compliance with all other conditions of these consents, except Conditions 160 to 181 of RC160038 relating to the Te Kuha Biodiversity Management Plan and Orikaka Habitat Enhancement Plan, can be demonstrated at the time of Completion of Closure of the Site.
- 31. All costs relating to the bond shall be paid by the Consent Holder.
- 32. The Consent Holder shall not undertake any mining activities if:
 - a) Notice of arbitration has not been given under Condition 27, and the bond quantum required under Condition 26 has not been provided to the Consent Authorities within 30 days of the review date referred to in Condition 26; or
 - b) Notice of arbitration has been given under Condition 27, and
 - i. the bond quantum determined by arbitration has not been provided to the Consent Authority within 30 days of the date of arbitration decision referred to in Condition 27 or
 - ii. in accordance with Condition 28, the bond quantum fixed under Condition 26 has not been provided to the Consent Authorities within 40 days of the appointment of the arbitrator referred to in Condition 27;

whichever occurs first; or

- c) The term of the bond has not been renewed for a further term in accordance with Condition 20.
- 33. Section 109 of the Act shall apply to any bond.
- 34. Where a cash bond is paid, any interest which is earned on the deposit shall accrue to the Consent Authorities and when the deposit is repaid to the Consent Holder the Consent Holder shall be entitled to receive all interest (less resident withholding tax and any bank fees) together with the deposit sum unless the Consent Authorities have had to use the deposit sum (or part of it) in remedying any non-compliance with these consents, in which case the Consent Authorities will provide the Consent Holder with a full breakdown of interest earned and the costs of remedying the non-compliance.
Management Plans

- 35. At least two months prior to undertaking any activities authorised by these consents, the Consent Holder shall provide to the Consent Authorities for certification the following management plans prepared in accordance with Conditions 43, 46, and 49, Condition 85 of RC-2016-0098-01, Condition 121 of RC-2016-0098-04, Condition 127 of RC-2016-0098-05, Condition 140 of RC-2016-0098-06, and Conditions 162, 178 and 182 of RC160038.
 - Contingency and Response and Hazardous Substances Management Plan
 - Construction Management Plan
 - Rehabilitation Management Plan
 - Geotechnical Management Plan
 - Water Management Plan
 - Overburden Management Plan
 - Dust Management Plan
 - Te Kuha Biodiversity Management Plan
 - Orikaka Habitat Enhancement Plan
 - Waste Management Plan
- 36. Construction activity shall not commence until the management plans required in Condition 35 have been certified by the Consent Authorities. If the Consent Authorities have not advised the Consent Holder in writing whether it has certified a management plan required under Condition 35 within two months of receipt of the management plan, then the Consent Holder may commence activities in accordance with the management plan unless the Consent Authorities advises the Consent Holder that it refuses to certify the management plan on the grounds that it fails to meet one or more conditions of consent.
- 37. Subject to any other conditions of these consents, all activities shall be undertaken in accordance with the latest version of the management plans.
- 38. The management plans may be reviewed at any time by the Consent Holder and may be amended accordingly to consider:
 - a) Any required actions identified as a result of monitoring under these consents; and/or
 - b) Any changes required as a result of actions identified in the Annual Work Plans.
- 39. The management plans shall be reviewed within one month by the Consent Holder upon written request by the Consent Authorities for either of the purposes set out in Condition 38(a) or 38(b) above.
- 40. The Consent Holder shall consult with the Department of Conservation regarding any proposed changes to the Rehabilitation Management Plan and Mine Closure Plan.

- 41. The management plans shall not be amended in a way that contravenes the objectives set out for the respective management plans.
- 42. A copy of the latest version of the management plans shall be kept on site at all times and all key personnel shall be made aware of each management plans' contents, including all amendments and updates to the plans.

Contingency and Response and Hazardous Substances Management Plan

- 43. A Contingency and Response and Hazardous Substances Management Plan shall be prepared that sets out:
 - a) The procedures to be followed by the Consent Holder and parties under its control in the event of accidents or other events that may result in adverse environmental effects; and
 - b) Practices and procedures to be adopted to ensure that hazardous substances are managed so that their storage and use is carried out safely and will not adversely affect the environment.
- 44. The Contingency and Response and Hazardous Substances Management Plan shall, as a minimum, include the following:
 - a) A list of all hazardous substances and potentially contaminating materials held onsite, their storage and handling procedures and the procedures to be adopted in the event of spillage of any of these substances or materials.
 - b) Preventative measures and actions to be taken with regard to rupture or spillage from any pipeline, container, tanker or store tank used at the mine site.
 - c) Preventative measures and actions to be taken with regard to spillages during transportation of hazardous substances within the mine site.
 - d) Emergency response procedures and emergency contacts during the event of power failure, fire, disaster or natural event.
 - e) The personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
 - f) The training of staff and contractors, which shall include identification of contractors' responsibility and liability for non-compliance with consent conditions.
 - g) Provide details on the inspection and maintenance regime for mine plant, vehicles and equipment, sumps and washdown pads.
- 45. The Consent Holder shall deal with accidents or events requiring an emergency response in accordance with the Contingency and Response and Hazardous Substances Management Plan.

Construction Management Plan

- 46. A Construction Management Plan shall be prepared that sets out the practices and procedures to be adopted to ensure that all resource consent conditions relating to earthworks during the construction phase are complied with.
- 47. The Construction Management Plan shall provide for the following objectives:
 - a) To minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways, including methods to avoid grey duck and fernbird nests, where practicable
 - b) To ensure the conservation of overburden, suitable soils/root zone materials and vegetation for subsequent use for backfilling and rehabilitation.
 - c) Avoid use of materials that introduce weeds/non-native plants to the mine site.
 - d) To ensure that appropriate monitoring and reporting of all construction activities is undertaken in accordance with the resource consent conditions.
 - e) To minimise sediment generation and sediment laden runoff.
- 48. The Construction Management Plan shall, as a minimum, include the following:
 - a) A description of the sequence for construction of the access road, coal load-out site, ex-pit sumps, and all other construction activities authorised by these consents.
 - b) A description of how any PAF materials will be identified and managed during this construction phase.
 - c) A description of the sequence of construction of sediment control facilities and water management systems including diversion drains.
 - d) A description of the means by which the site boundary shall be marked and maintained so as to prevent any disturbance outside the mine site footprint.
 - e) A description of the earthwork procedures to be used to ensure the stability of the access road and all landforms during construction, and measures to be used to avoid erosion and minimise runoff and sediment generation.
 - f) A description of the specific sediment control measures to be used.
 - g) Any earthworks activities outside the limits of the water management system and the process of selection of the appropriate control to minimise sediment generation.

- h) A description of the procedures that will minimise the risk of introducing unwanted weeds to the mine site and/or spreading weeds throughout worked areas of the mine site.
- i) A description of the documentation and information management and approvals processes to be used in implementing the plan, and a description of the process for monitoring performance and changes to the plan based on monitoring activity.
- j) The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
- k) The training of staff and contractors in regard to the methods to be used and procedures to be followed to ensure compliance with these consent conditions.
- I) The means by which visual effects of the access road will be minimised. During design and construction of those parts of the access road visible from Viewpoints 1 (E487470.13, N 376031.81), 2 (E 1483672.02, N 5376631), 10 (E 1485128.94, N 5368956.21) and 14 (E 1487246.15, N 5368287.54), a suitability qualified and experienced landscape architect shall advise the Consent Holder on detailed cut and fill requirements, slope of batters and landscape treatment of the access road alignment. The Consent Holder shall confirm with the Consent Authority the areas visible from these locations prior to the commencement of the construction of the access road.

Rehabilitation and Rehabilitation Management Plan

- 49. A Rehabilitation Management Plan shall be prepared, in consultation with the Department of Conservation, to achieve an outcome generally in accordance with the Rehabilitation Concept Plan (Attachment 1) appended to the conditions, and in accordance with the following objectives:
 - a) Ensure stable, topographically and hydrologically variable, erosion-resistant surfaces that minimise ongoing erosion and prevent loss of growth media (soil) from rehabilitated areas to surface waters.
 - b) Ensure management of wood, plant, NAF rock, boulders, soil and root-zone resources to maximise their potential for use in rehabilitation, including provision of logs and stumps for kiwi habitat.
 - c) Minimise the area affected by mining and associated activities by confining overburden and buffering adjacent undisturbed areas from any vegetation clearance, therefore maximising their condition, contributions to rehabilitation and ecological resilience.
 - d) Establish root zones and topography that support targeted native ecosystems and ecosystem mosaics and support a high degree of naturalness in the short and longer term. Naturalness means landforms will not include permanent highwalls, pit lakes or extensive linear features.

- e) Establish self-sustaining, locally-characteristic native vegetation that can naturally develop into a mosaic of native vegetation associations resistant to fire, weeds and pests.
- f) Conserve the genetic resources of plant species (including bryophytes), particularly those considered at-risk or threatened, both within and outside the footprint.
- g) To prevent plant pests establishing at the site so far as is reasonably possible, and otherwise to identify and control weeds and pests on the site so that that site closure criteria can be achieved.
- h) Provide habitat and connectivity of habitat that will develop in the longer term to be suitable for roroa, lizards, Forest Ringlet butterflies and other native fauna.
- 50. The Rehabilitation Management Plan shall, as a minimum, address the following:
 - aa) How the baseline state of plant species diversity for possible DT removal of yellowsilver pine shrubland and herbfield will be characterised including sampling methods and techniques, in order to provide an accurate basis against which closure criteria in Condition 30 can be assessed.
 - a) How the rehabilitation objectives set out in Condition 49 are to be achieved; and rehabilitation methods considering the constraints placed on rehabilitation planning at the mine, including constraints on vegetation growth, soil availability, climatic constraints, slopes, aspects and local soil and overburden characteristics.
 - b) Preferred species and methods for rehabilitation, vascular and non-vascular plant salvage and nursery propagation, and any specific indigenous species that should not be used for rehabilitation and propagation.
 - c) The construction methods and/or rehabilitation methods to be used to minimise the potential adverse effects of vegetation removed for the access route, including treatment of cut faces and batters, and methods to minimise adverse effects on adjoining plant communities (particularly bryophytes and lichens) and fauna.
 - d) The Rehabilitation Concept Plan (Attachment 1) appended to these conditions, the objectives of which shall be to provide:
 - i. Reinstatement of the ridgeline;
 - ii. Terrestrial habitat linkages to adjacent areas;
 - iii. Aquatic habitat linkages enabling in-stream flora and fauna to re-establish in new stream channels;

- iv. Varied topography, across the ELF to create a topographic pattern that abuts natural ground levels and that integrates with surrounding existing topography, creates habitat diversity, and avoids an engineered appearance; and
- v. For incorporation of rock features in the finished landform and placement of salvaged weathered boulders within all ecosystems as far as practicable.
- vi. A requirement that the Consent Holder maximise the amount of vegetation direct transfer as much as reasonably practicable, but in any event to provide for a minimum of 15 ha of vegetation direct transfer (not including the access road), including a minimum of 1 ha of yellow silver pine-manuka shrubland, 8 ha of mountain beech podocarp forest, and 500 m² of herbfield. In addition to the above, direct transfer of yellow silver pine-manuka shrubland shall be prioritised as much as practicable.
- vii.For the creation of several small ponds within the areas to be rehabilitated with a total area of at least 50 m². These ponds are to be clustered in one or more small groups, isolated from watercourses, and disconnected from each other.
- e) Revegetation techniques shall include the following methods:
 - i. The methods to be used to achieve the maximum practicable amount of vegetation direct transfer.
 - ii. The management practices associated with the identification, prioritisation, salvage, stripping and stockpiling of all rehabilitation resources identified above.
 - iii. Identification of the key pest plant and pest animal species (including nonnative bryophytes), their distribution, and the management principles adopted in the mine planning stages with respect to weed and pest control.
 - iv. The range of revegetation and erosion control techniques that shall be applied and the order of priority.
 - v. Methods for monitoring the success of rehabilitation of vegetation on major landforms and the success of particular vegetation types, following vegetation establishment. Such monitoring shall be undertaken at least three-yearly intervals until rehabilitation closure is achieved. Trigger point methods for active intervention following each monitoring exercise shall be included.
 - vi. The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
 - vii. The training and induction of staff and contractors.
 - viii. Provision for reducing fire risk.

- ix. Complementing surrounding land surface colours through plant species selection and strategic placement of rock field with mulches and weathered sandstone boulders.
- x. Placement of weathered boulders within direct transfer to enhance the density of sheltered, high-humidity zones for bryophytes.
- xi. Inclusion of small ponded areas within suitable rockland and shrubland rehabilitation units to enhance habitat for birds and invertebrates.
- xii. Inclusion of boulders, rocks and woody material including logs and stumps to provide habitat for fauna and a diversity of microsites for plant establishment.
- 50A In designing the final ridgeline profile, the Consent Holder shall engage a suitably qualified and experienced landscape architect to advise on the utilisation of fill material and rock to create a new skyline ridge that has as much complex geomorphological character as is reasonably practicable.
- 51. The Consent Holder shall, as far as practicable, ensure that rehabilitation is carried out so that the performance of any modified landform, watercourse, or any permanent structures and facilities under a Probable Maximum Flood or Maximum Credible Earthquake do not result in damage to landforms or structures greater than those that would have occurred under natural slope and landform conditions.
- 52. The Consent Holder shall undertake progressive rehabilitation of all disturbed areas as areas of practical working size become available, in accordance with the Rehabilitation Management Plan.
- 53. Hydro-seeding of exotic grasses shall only be applied where there is a significant risk of soil loss and/or sediment generation and where there is no other effective erosion control method available.
- 54. Seed and plant resources shall be genetically sourced from the locality or Ngakawau Ecological District from at least 500 metres above sea level, except for plants used on the access road below 500 metres above sea level.
- 55. Any material used to surface roads, or for erosion control shall be assessed for potential to introduce non-native plant species.
- 56. The Rehabilitation Management Plan shall be drafted and/or audited by a suitably experienced and qualified ecologist and a suitably experienced and qualified landscape architect.

Mine Closure Plan

- 57. Immediately following the cessation of activities under these consents, the Consent Holder shall initiate and maintain a programme of mine closure in accordance with the Mine Closure Plan prepared in accordance with Condition 58.
- 58. Within 12 months of undertaking any mining activities authorised by these consents, a Mine Closure Plan shall be prepared, in consultation with the Department of Conservation, that sets out the practices and procedures to be adopted to ensure that closure of the site can be achieved in accordance with the conditions of these consents, including the stated targets in Condition 30.
- 59. The Mine Closure Plan shall address the following:
 - a) The design and development of a new drainage system for the backfilled pit areas and overburden placement areas.
 - b) The activities required to dis-establish those diversion drains, culverts and structures that will not remain as permanent watercourses after mine closure.
 - c) The water management steps required at mine closure, including treatment of water if required, and the disposal of any AMD treatment sludge.
 - d) The structures (including engineered landforms) that will remain after mine closure.
 - e) The dis-establishment and rehabilitation of the ex-pit sumps, access road and coal load-out site.
 - f) Any continued rehabilitation, monitoring and weed, animal pest and fire control required post mine closure.
 - g) Long term performance monitoring of the ELFs and any water treatment systems.
 - h) Any infrastructure that will remain after closure, i.e. access roads.
 - i) The relevant personnel who will be responsible for plan implementation, such that the provisions of the plan can be implemented at all times.
 - j) The training of staff.

Annual Work Plan

- 60. Before exercising these consents, and annually at least one month prior to each anniversary of the commencement of the consents, the Consent Holder shall submit for certification an Annual Work Plan to the Consent Authorities.
- 61. The Annual Work Plan shall include:

- a) A description of all the mining operations, mitigation measures, rehabilitation (including the amount of soil stockpiled and the amount of DT completed), placement of overburden, monitoring and reporting carried out in the preceding 12 months.
- b) A description of all the mining operations, mitigation measures and rehabilitation (including an estimate of soil volumes potentially available for use in rehabilitation and the amount of DT planned), placement of overburden, monitoring and reporting intended to be carried out in the forthcoming 12 months, with an approximate timetable of events.
- c) Long-term projections and intentions for mining operations in relation to the future exercise of these consents.
- d) An explanation of any departure from any previous Annual Work Plan in the next 12 months.
- e) A description and analysis of any unexpected adverse effect on the environment that has arisen as a result of the exercise of these consents in the last 12 months and the steps taken to rectify it, and the results of those steps.
- f) Identification of any issues that have arisen or are expected to arise as a result of operations, geological conditions or monitoring results.
- g) A summary of any complaints received, responses and the mitigation measures adopted.
- h) Plans or aerial photographs showing the current footprint of all works and structures.
- Report on compliance with the management plans prepared under Conditions 43, 46, and 49, Condition 85 of RC-2016-0098-01, Condition 121 of RC-2016-0098-04, Condition 127 of RC-2016-0098-05, Condition 140 of RC-2016-0098-06, and Conditions 162, 178 and 182 of RC160038.
- 62. The Consent Holder shall provide the Consent Authorities with any further information, or report, which the Consent Authorities may reasonably request after reviewing any Annual Work Plan. This information or report shall be provided in the time and manner required by the Consent Authorities on a reasonable request basis.
- 63. The Annual Work Plan shall comply with all other conditions of these consents and the Consent Holder shall exercise these consents in accordance with the Annual Work Plan.
- 64. The Consent Holder may, at any time, amend and resubmit an Annual Work Plan to the Consent Authorities provided it complies with all other conditions of these consents.

Environmental Monitoring Plan and Report

- 65. The Consent Holder shall, prior to the exercise of any of these consents, prepare an Environmental Monitoring Plan. This Plan shall be submitted to the Consent Authority for certification and shall set out a schedule of monitoring to be undertaken, and requirements for reporting of the results in accordance with the conditions of these consents.
- 66. The Consent Holder shall prepare and submit to the Consent Authority an Annual Environmental Monitoring Report one month prior to each anniversary of the commencement of these consents.
- 67. As a minimum, the Annual Environmental Monitoring Report shall:
 - a) Detail all environmental monitoring undertaken to ensure compliance with the conditions of these consents, including environmental monitoring within the mine site, and monitoring relating to progress, results and outcomes of biodiversity management and habitat enhancement programmes within the Te Kuha and Orikaka sites.
 - b) Summarise all the data collected, as required under the Environmental Monitoring Plan and any other condition of these consents. This should include graphical presentation, statistical summations of monitoring data and critically analyse the information in terms of compliance and environmental effects.
 - c) Highlight and discuss any important environmental trends.
 - d) Compare results obtained over the reporting period with the results that were predicted to occur during the pre-mining investigations and the results obtained from previous reporting periods.
 - e) Report and discuss any operational difficulties, changes or improvements in relation to the water treatment system.
 - f) Report and discuss any difficulties in compliance with, and breaches of, the conditions of these consents and the measures adopted to rectify problems.
 - g) List any maintenance works needed, proposed or undertaken to ensure compliance with these conditions of the consents or to facilitate operations.
 - h) Progress towards achieving the closure criteria set out in Conditions 30, 165(a) and 167(d).

Community Liaison Meeting

- 68. On two occasions in the first year in which these consents are exercised and thereafter on one occasion per year throughout the duration of the consents, the Consent Holder shall publicly advertise and convene a public community liaison meeting in Westport, to present the results of monitoring undertaken over the previous year, compliance with consent conditions, a summary of mining operations proposed for the next year, and any proposed changes to the management or operation of the mine site. Notice of the meeting shall also be sent to representatives of the following parties:
 - The Consent Authorities
 - Department of Conservation
 - West Coast Tai Poutini Conservation Board
 - Te Runanga O Ngati Waewae
- 69. The purpose of the Community Liaison Group shall include but not be limited to the following:
 - a) To facilitate effective working relationships and mutual trust between the local community and the Consent Holder (including its contractors);
 - b) To promote the free flow of information between the local community, the Consent Holder, the contractors and the Consent Authorities, to try to anticipate and resolve any potential issues before they arise; and
 - c) To discuss the results of monitoring.

Advice note: If it is not possible to establish a Community Liaison Group through lack of interest or participation from the local community, then such failure to do so shall not be deemed a breach of these conditions.

Technical Reviewers

- 70. The Consent Holder shall pay the actual and reasonable costs of technical reviewers if they are appointed by the Consent Authority for the following purposes and in accordance with these conditions.
- 71. The primary functions of the technical reviewers (individually or jointly) in relation to these consents are to:
 - a) Provide input into the development and review of the management plans and Annual Work Plans, and any changes to those plans made under Condition 35;
 - b) Assess whether the biodiversity management and habitat enhancement measures are achieving the objectives and outcomes sought;

- c) Assess whether rehabilitation is achieving the objectives of the Rehabilitation Management Plan;
- d) Ensure that civil and geotechnical engineering is designed and constructed appropriately; and
- e) Based on any reviews and assessments carried out under Conditions 71(a) to (d), if considered necessary, to make recommendations for improving environmental management and outcomes.
- 72. The Consent Holder shall provide the technical reviewers, if appointed, with such information in relation to rehabilitation, habitat enhancement and biodiversity management, pest control, water quality, overburden management, mine closure and Annual Work Plans that the Consent Authority requests, and shall afford the technical reviewers full access to the mine site at all reasonable times.
- 73. The technical reviewers, if appointed, shall report directly to the Consent Authority in writing and make such recommendations as they see fit on all matters that arise during their reviews.

WEST COAST REGIONAL COUNCIL

RC-2016-0098-01	Open cast coal mining and associated activities including
Land Use Consent	earthworks, land disturbance and vegetation clearance,
	removal of overburden and coal, construct engineered landforms, construction of access road, rehabilitation and construction and operation of a coal load-out site (including access, rail siding and a rail load-out site).

RC-2016-0098-01 has a term of 35 years and is subject to the following conditions:

- 74. The Consent Holder shall undertake the activities authorised by this consent in accordance with the conditions of these consents.
- 75. All activities authorised by this consent shall be implemented under the supervision of a person(s) with appropriate experience in the supervision of civil engineering construction works.
- 76. The maximum total disturbance area shall be limited to 144 ha which includes the mine footprint, ex-pit water treatment infrastructure, the access road, and coal load-out site.
- 77. The Consent Holder shall ensure that all vegetation clearance and earthworks are progressive and that the smallest area possible is cleared using methods that cause the least disturbance to surrounding vegetation.
- 78. The Consent Holder shall ensure that no area is cleared of vegetation without being excavated or re-vegetated in accordance with the Rehabilitation Management Plan for a period of more than 24 months, unless that area is required to be maintained in a non-vegetated state for the purposes of infrastructure, site access, water management, geochemical, or geotechnical requirements.
- 79. Unless otherwise stated in this consent, all sediment control practices during construction of the diversion drains shall be undertaken in accordance with the principles outlined in the document prepared by the Auckland Regional Council, Guideline Document 2016/005 (GD05), June 2016 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".
- 80. There shall be no removal of overburden for the purposes of exposing coal until such time as the water management system is constructed and operating.
- 81. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent, and for any erosion control and energy dissipation works, which become necessary as a consequence of the exercise of this consent.

- 82. The Consent Holder shall, prior to the exercise of this consent, and thereafter annually, report details of the areas to be cleared, and the procedures to be used, in disposing of the cleared material in accordance with the Annual Work Plan prepared under Condition 60.
- 83. The Consent Holder shall avoid, to the greatest extent practicable, side-casting of material alongside the access road.
- 84. All roads shall be adequately serviced with water tables, cut-offs and culverts to control surface water runoff and minimise the scouring of road surfaces, water tables, cut-offs and culvert outfalls. The minimum design standards for such facilities shall be such that they will convey, or contain, the runoff from and continue to function in rainfall events up to at least the 10% Annual Exceedance Probability ("AEP") critical (10-minute duration) storm event.

Geotechnical Management Plan

- 85. A Geotechnical Management Plan shall be prepared that sets out the practices and procedures to ensure that any potential slope instability is appropriately managed to enable Completion of Closure to occur in accordance with Condition 30.
- 86. The Geotechnical Management Plan shall, as a minimum, address the following:
 - a) A description of the sequence for ridgeline mining activity, including any measures that will be necessary to mitigate any potential slope instability;
 - b) An exit plan in the event that a large slip closes the project;
 - c) An operational recovery mine plan to manage a large slip which would allow mine operations to continue;
 - d) The management methods used to minimise any fly rock deposition outside of the mine site resulting from blasting activity near the ridgeline;
 - e) Details of the monitoring strategy for local slope instability and larger scale deformation throughout the mine site, where required;
 - f) The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
 - g) The training of staff and contractors.

RC-2016-0098-02To build structures and undertake activities in, on, or over the
beds of streams and creeks.

RC-2016-0098-02 has a term of 35 years and is subject to the following conditions:

- 87. The Consent Holder shall undertake the activities authorised by this consent in accordance with the conditions of these consents.
- 88. All activities authorised by this consent shall be implemented under the supervision of a person(s) with appropriate experience in the supervision of civil engineering construction works.
- 89. The Consent Holder shall ensure that all works authorised by this consent are progressive and that the smallest area possible is disturbed using methods that cause least disturbance to waterways and vegetation outside the areas being cleared.
- 90. The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of this consent, and for any erosion control and energy dissipation works, which become necessary as a consequence of the exercise of this consent.
- 91. The Consent Holder shall ensure that all activities authorised by this consent are carried out so that machinery activity in the bed of any waterway is kept to a minimum.
- 92. Unless otherwise stated in this consent, all sediment control practices during construction of the diversion drains shall be undertaken in accordance with the principles outlined in the document prepared by the Auckland Regional Council, Guidance Document 2016/005 (GD05), June 2016 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".
- 93. The Consent Holder shall ensure that, to the greatest extent practicable, structures built under this consent do not cause erosion or scour of stream beds or river banks or impede fish passage.
- 94. There shall be no refuelling or maintenance (barring breakdown) of equipment or machinery within five metres of any surface waterway.
- 95. To avoid the spread of Didymo, no equipment shall be used in the exercise of this consent that has been used previously to undertake activities in any water body known to contain Didymo, unless that equipment has been thoroughly cleaned in accordance with the attached Biosecurity New Zealand document titled "Don't Spread Didymo".
- 96. All equipment refuelling, lubrication and mechanical repairs shall be undertaken in an area that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur. No refuelling or lubrication shall be undertaken on the bed of any stream or creek.

RC-2016-0098-03	To div	vert, tak	e and	use mi	ne wa	ter, storr	nwater,	, and g	groundwater
Water Permit	from	within	the	active	pit,	access	road,	and	overburden
	place	ment are	eas.						

RC-2016-0098-03 to have terms of 35 years and are subject to the following conditions:

- 97. The Consent Holder shall undertake the activities authorised by these consents in accordance with the conditions of these consents.
- 98. No water from mining and overburden disposal areas shall be discharged to natural water without being first diverted to the water management and treatment system.
- 99. The activities authorised by these consents include diversion, stream crossing, and erosion control required for the initial development of the site infrastructure or its ongoing development and which are:
 - a) required to enable construction works to commence; or
 - b) required to manage water and stormwater and control sediment generation during construction; or
 - c) required during the construction of and prior to the completion of the site water management system; or
 - d) required during the operation of the site water management system to extend, upgrade or modify the system and other infrastructure.
 - e) included in the latest Annual Work Plan.
- 100. The Consent Holder shall undertake the activities authorised by these consents in accordance with the provisions of the current Construction Management Plan prepared in accordance with Condition 46.
- 101. All stormwater runoff from construction areas shall be directed through sediment control facilities prior to discharge to natural watercourses.
- 102. Activities authorised by these consents shall be carried out in general accordance and as relevant with the principles outlined in the document prepared by the Auckland Regional Council, Guideline Document 2016/005 (GD05) "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".
- 103. Specific works and design controls for the activities authorised by these consents shall be included in the Construction Management Plan prepared in accordance with Condition 46.
- 104. A description of the activities undertaken in reliance on these consents (which identifies the works undertaken, the control measures applied and the success of

those control measures) shall be included in the Annual Work Plan required to be prepared in accordance with Condition 60.

- 105. The Consent Holder shall remove sediment/fines from the sediment control facilities as required, to ensure the effective operation of those facilities. The Consent Holder shall keep a record of all maintenance carried out on the sediment control facilities, including when sediment/fines were removed and where they were disposed.
- 106. The final design of all diversion drains, underdrains and water management treatment facilities and structures shall take into account any changes to rainfall predicted for the duration of these consents as a result of climate change.
- 107. The ex-pit sumps shall be designed by an appropriately qualified and experienced engineer. The design specifications for the construction shall be supplied to the Consent Authority with the first Annual Work Plan prepared in accordance with Condition 60.
- 108. The Consent Holder shall rehabilitate and re-vegetate, where practicable, all disturbed areas of land associated with the exercise of these consents as soon as practicable after completion of the works.
- 109. The Consent Holder shall comply with the Resource Management (Measurement and Reporting of Water Takes) Regulations should the rate of take be greater than 5 litres per second, and be for consumptive purposes.

RC-2016-0098-04	To discharge treated mine water and stormwater from the water
Water Permit	treatment system to Camp and West Creeks.

RC-2016-0098-04 have terms of 35 years and are subject to the following conditions:

- 110. The Consent Holder shall undertake the activities authorised by these consents in accordance with the conditions of these consents.
- 111. No water from mine operational areas, access roads, overburden placement sites and soil stockpiles shall be discharged to natural waters without first passing through the water management and treatment system.
- 112. For the purposes of these consents, the water management and treatment system consists of the system of drains, ELF underdrains, diversions, sumps and pumps within the sub-catchments of Coal Creek Northern, Landslide Creek, Camp Creek, West Creek, Little Cascade and Southern Te Kuha.
- 113. Baseline water quality sampling at Sites 1 and 2 shall be undertaken at least three months prior to any land disturbance in the catchment and shall continue until the catchment has been rehabilitated. Turbidity, electrical conductivity and pH shall be monitored continuously via telemetry, and two weekly for the parameters listed in Condition 116 of this resource consent.
- 114. The collection, analysis and preservation of all samples collected in accordance with these conditions (excluding aquatic ecology monitoring) shall be undertaken using the Standard Methods for the Examination of Water and Wastewater (23rd Edition) from the American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF), or equivalent or superseding methods.
- 115. The sampling and sample analysis required by these conditions shall be undertaken on contract to the Consent Holder by an appropriately qualified independent person or persons who shall not be a director or employee of the Consent Holder.

116. The Consent Holder shall undertake a water quality monitoring programme at Sites 1 and 2 and at the water treatment plant discharge point in accordance with the table below. These monitoring locations are outlined in Attachment 2 appended to these conditions. The discharge into West and Camp Creeks from the ex-pit water treatment system shall not cause the trigger limits outlined in the table below to be exceeded at the applicable monitoring location.

Parameter	Frequency	Trigger Limits	Monitoring Location
рН	Continuous (telemetered)	-	Sites 1 (West Creek) and 2 (Camp Creek)
Conductivity	Continuous (telemetered)	-	Sites 1 (West Creek) and 2 (Camp Creek)
Turbidity	Continuous (telemetered)	25 NTU 95% of the time	Water treatment plant discharge point
Total Suspended Solids	Two weekly for the first 2 years extending to monthly by agreement with Consent Authority	-	Sites 1 (West Creek) and 2 (Camp Creek)
Dissolved Aluminium	Two weekly for the first 2 years extending to monthly by agreement with Consent Authority	0.5 mg/L 90% of the time (rolling 20 samples)	Sites 1 (West Creek) and 2 (Camp Creek)
Dissolved Zinc	Two weekly for the first 2 years extending to monthly by agreement with Consent Authority	0.1 mg/L* 90% of the time (rolling 20 samples)	Sites 1 (West Creek) and 2 (Camp Creek)
Dissolved Nickel	Two weekly for the first 2 years extending to monthly by agreement with Consent Authority	0.05 mg/L* 90% of the time (rolling 20 samples)	Sites 1 (West Creek) and 2 (Camp Creek)

*Where the compliance limit (Australian and New Zealand Guidelines for Fresh and Marine Water Quality 95% TV) is modified by the hardness algorithm: TV(H/30)^{0.85}

- 117. The discharge shall not give rise to the following effects at monitoring Sites 1 and 2:
 - a) Any conspicuous oil or grease films, scums or foams, or floatable or suspended material;
 - b) Any visible sedimentation on the bed of the stream; and/or
 - c) Any conspicuous change in colour of visual clarity.

Advice Note: For the purposes of this condition a conspicuous change in water colour will be deemed to be a change in hue of greater than 10 points on the Munsell scale and a conspicuous change in water clarity will be deemed to be a reduction of greater than 40% in water clarity as measured by the black disc method or with the Consent Authority's agreement a NIWA water clarity tube.

- 118. The consent holder will collect water quality samples every three months under low flow conditions (flows below the median flow) from all six sub-catchments (Coal Creek Northern, Landslide Creek, Camp Creek, West Creek, Little Cascade and Southern Te Kuha) immediately downstream of mining activities and monitor for the following parameters: pH, conductivity, turbidity, and dissolved metals including iron, aluminium, arsenic, cobalt, cadmium, chromium, copper, manganese, nickel, lead, zinc, and other potential contaminants including nitrate (NO₃) and sulphate (SO₄).
- 119. The results from Condition 116 shall be provided on a monthly basis to the Consent Authority_and also be included within the Annual Environmental Monitoring Report required to be prepared in accordance with Condition 66. The results from Condition 118 shall be included within the Annual Environmental Monitoring Report. These results shall be subject to technical peer review. Should unforeseen impacts on water quality arise, they will be handled with an adaptive management approach that will be agreed between the Consent Authority (or their technical peer reviewer) and the Consent Holder.
- 120. An ecological monitoring programme shall be undertaken in accordance with the table below and at Sites 1, 2, 3 and 4 as shown on Attachment 2 appended to these conditions, and at a control site to be agreed with the Consent Authority. The results from this monitoring programme shall be included within the Annual Environmental Monitoring Report required to be prepared in accordance with Condition 66.

Parameter	Unit	Frequency
Periphyton	% cover	Monthly
Periphyton	Diversity	Twice-yearly
Periphyton productivity	Chla and AFDW	Twice-yearly
Macroinvertebrates	Diversity and abundance	Twice-yearly
Fish	Diversity and abundance	Twice-yearly

Habitat	Protocol	Twice-yearly

Chla = Chlorophyll a; AFDW = Ash Free Dry Weight

Water Management Plan

- 121. A Water Management Plan shall be prepared that sets out the practices and procedures to be adopted to ensure compliance with the conditions of these consents.
- 122. The Water Management Plan shall, as a minimum, address the following matters:
 - a) The scheduling of activities required as operations at the site commence to ensure that all watercourses are protected from the start of construction activities and the conditions of the consents can be met.
 - b) The location, operation and design criteria of the key features of the water management system, including ex-pit and in-pit sumps, ELF underdrains and collection sumps, clean water cut-off drains, underdrains, the water treatment plant, and water treatment plant sludge management.
 - c) The inspection and maintenance schedules of the water management system which will be carried out to ensure that management practices are working effectively and to identify any further management, maintenance, or treatment requirements.
 - d) The proposed monitoring of the discharge to West and Camp Creeks including the trigger limits/criteria for implementing mitigation measures to ensure compliance with the water quality conditions of the consents.
 - e) The methods used to collect and store water samples and any specialised techniques required.
 - f) An outline of the analysis and reporting of the results obtained from the water quality monitoring.
 - g) Contingency measures dealing with water-related issues, power failure, spills, natural events, non-compliance and any unforeseen events.
 - h) The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
 - i) The training of staff and contractors.
- 123. The Consent Holder shall only discharge water treatment chemicals into the in-pit and ex-pit sumps unless otherwise approved in writing by the Consent Authority.

RC-2016-0098-05	The deposition of overburden material and waste rock
Discharge Permit	containing potentially acid-forming material, and the associated
	discharge of contaminants onto land from the overburden
	material and waste rock.

RC-2016-0098-05 has a term of 35 years and is subject to the following conditions:

- 125. The Consent Holder shall undertake the activities authorised by this consent in accordance with the conditions of these consents.
- 126. The Consent Holder shall ensure that the diversion and drainage systems associated with the overburden placement areas are installed and operational prior to the deposition of any overburden and waste rock to the overburden placement areas.

Overburden Management Plan

- 127. An Overburden Management Plan shall be prepared that sets out the practices and procedures to ensure the correct classification of stripped overburden of varying geology or geochemistry and the correct fill scheduling and destination with appropriate rock/chemistry type.
- 128. The Overburden Management Plan shall, as a minimum, address the following:
 - a) Details of the proposed overburden geochemical classification scheme, testing procedures, and visual identification techniques to be used in order to classify the material for appropriate placement either within overburden engineered landforms (ELFs) or for use elsewhere within the mine footprint.
 - b) An outline of ELF construction methods, underdrainage, scheduling and overburden placement, and clean water diversion to minimise oxygen ingress.
 - c) A description of the monitoring programme to confirm the methods in (b) above are similarly effective to other sites where this approach has been adopted.
 - d) Monitoring, documentation and data management procedures required to implement the plan.
 - e) The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
 - f) The training of staff and contractors.
 - g) Methods to minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
 - h) Methods to ensure the conservation of overburden, suitable soils/root zone materials and vegetation for subsequent use for backfilling and rehabilitation.

- i) The avoidance of use of materials that introduce weeds/non-native plants to the mine site.
- j) A description of the means by which the site boundary shall be marked and maintained so as to prevent any disturbance outside the mine site footprint.
- 129. No overburden shall be removed or disposed of unless it has been classified and provision made for its acceptance at overburden placement areas in accordance with the conditions of this consent and the protocols outlined in the Overburden Management Plan, prepared in accordance with Condition 127 of this resource consent.
- 130. The backfill of the pits shall be designed such that its performance under a Probable Maximum Flood or Maximum Credible Earthquake does not result in loss of containment of the PAF and Low PAF material.
- 131. Before commencing construction activities, the Consent Holder shall commission a suitably qualified and experienced professional engineer to undertake a detailed site investigation and prepare a design for the overburden placement areas. The investigation and design shall include the following:
 - a) Foundation permeability beneath the proposed overburden placement areas with particular emphasis on local groundwater profiles, potential seepage and mitigation measures;
 - b) Overburden placement area proportions and dimensions including side and top slopes;
 - c) Deposition procedures to enhance drainage and the construction of seal layers with associated drainage;
 - d) The seepage interception and drainage system; and
 - e) Recommendations for monitoring and construction of the overburden placement areas.
- 132. The overburden placement landform shall be designed to best practice standards and shall be peer reviewed by an appropriately qualified and experienced engineer such that the drainage systems will ensure the passage of a 1% AEP flood flow.
- 133. On completion of the investigation and design required by Condition 132, the Consent Holder shall provide to the Consent Authority a report containing the results of the investigation and the proposed design for the overburden placement areas.
- 134. An appropriately qualified professional engineer experienced in the construction of overburden and waste rock filled structures shall supervise the construction of the overburden placement areas.

135. Evidence of the compliance with the designs and recommendations in the report required by Condition 132 of this consent during construction, operations and decommissioning shall be submitted to the Consent Authority in the form of a certificate from a professional engineer, with confirmation that the design has been peer reviewed by a technical expert approved by the Consent Authority or a Chartered Professional Engineer.

RC-2016-0098-06 has a term of 35 years and is subject to the following conditions:

- 138. The Consent Holder shall undertake the activities authorised by this consent in accordance with the conditions of these consents.
- 139. The Consent Holder shall operate mining, coal loadout, and associated processes and other operations in such a manner to ensure that emission of dust is reduced to a practicable minimum.

Dust Management Plan

- 140. A Dust Management Plan shall be prepared and adhered to that sets out the practices and procedures to be adopted to minimise the effects of air discharges.
- 141. The Dust Management Plan shall, as a minimum, address the following matters:
 - a) Identification of all sources of dust and other discharges and their potential impacts at the mine site and the coal loadout facility.
 - b) Any significant changes/alterations throughout the life of the project that may result in changes to the quantity and nature of dust and other discharges to air.
 - c) Techniques and methods which will be used to avoid or minimise off site visible discharges to air, including the use of water sprays where necessary, and the programme for rehabilitation and revegetation of areas of the site to minimise dust emissions.
 - d) Training of operators and contractors in the effective techniques and methods to help minimise dust emissions.
 - e) Contact details for key site personnel
 - f) A procedure for dealing with complaints
 - g) Monitoring procedures
 - h) Reporting and procedures for review of the DMP
- 142. Monitoring of wind speed and direction shall be undertaken at a representative site of proposed dust generation activities at the mine pit area at a location to be agreed by the Consent Authority prior to commencement. Records shall be kept and shall be made available to the Consent Authority upon request.

- 143. A deposited particulate gauge shall be installed and maintained in the Giles Creek catchment at a location to be agreed by the Consent Authority prior to commencement of mining operations in the pit area.
- 144. Monitoring of insoluble deposited particulate rates shall be undertaken from the date mining operations commence in the pit area in accordance with ISO/DIS 4222.2 Air quality Measurement of atmospheric dustfall Horizontal deposit gauge method. Analysis shall also determine the coal content of each sample using the Nuclear Reaction Analysis and Proton Induced X-Ray Emission Spectroscopy (PIXE) measurements in accordance with the general principles specified in: Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air Compendium Method IO-3.6 "Determination of metals in ambient particulate matter using proton induced X-ray emission (PIXE) spectroscopy". Centre for Environmental Research Information Office of Research and Development U.S. Environmental Protection Agency Cincinnati, OH 45268. June 1999.
- 144A. These results shall be reported to the Consent Authority on a monthly basis. If the results demonstrate for at least twelve samples that there is no coal content in the samples, the monitoring may cease with the written approval of the Consent Authority. If any coal content is present in the samples, the Consent Holder shall adjust the operations and management plan to avoid the deposition of coal content, and shall continue monitoring in accordance with this condition.

BULLER DISTRICT COUNCIL

RC160038	Open cast coal mining and associated activities including
Land use consent	earthworks, land disturbance and vegetation clearance, removal
	of overburden and coal, use of hazardous substances, construction of access road, rehabilitation and construction and operation of a coal load-out site (including access, rail siding and a rail load-out site).

General

- 143. The colours to be used for all buildings and structures shall be recessive and nonreflective and shall be certified by the Manager Environmental Services, Buller District Council, prior to construction.
- 144. The hours of mining operations shall be restricted to 6am to 10pm, Monday to Saturday from 1st October to 31st March and 6am to 6pm, Monday to Saturday from 1st April to 30th September. For the purposes of this condition, mining operations means construction, overburden stripping, stockpiling, coal processing, coal winning and transport to coal load-out site. The restriction on the hours of operation excludes any works required for emergency maintenance works or for works required for consent compliance and monitoring purposes.
- 145. The hours of operation of the coal load-out site shall be restricted to 5am to 11pm, Monday to Sunday. The restriction on the hours of operation excludes any works required for emergency maintenance works or for works required for consent compliance and monitoring purposes.
- 146. The maximum speed limit on the access road shall be 60 kilometres per hour.
- 147. The maximum total disturbance area shall be limited to 144 ha which includes the mine footprint, ex-pit water treatment infrastructure, the access road, and coal load-out site as shown on Attachment 3 appended to these conditions.
- 148. Prior to commencement of mining activities and construction of the loadout facility, the Consent Holder shall undertake works necessary to upgrade Nine Mile Road from reference point (RP) 6.5 to the end of the legal road to accommodate the intended use by the Consent Holder. All works must be designed by a Chartered Professional Engineer addressing the road construction and solution to the treatment of the ford to allow large transporters and heavy vehicles to traverse. The design is to be approved by the Manager Utilities and Services prior to physical works commencing. Any required works must be undertaken by a Council Approved Contractor and a 1c Completion Certificate from a Chartered Professional Engineer must be supplied to Councils Manager Utilities and Services upon completion of works.

Lighting

149. The Consent Holder shall undertake appropriate mitigation measures, including but not limited to, utilisation of lighting at the orange end of the spectrum, screens, shields, hoods and fences to ensure glare and light spill is minimised so as not to create a nuisance to residents, traffic, or to act as a distraction to wildlife. As far as practicable, lighting shall be directed away from the Westport township.

Blasting

- 150. Blasting shall be restricted to 7am to 7pm, Monday to Saturday from 1st October to 31st March and 8am to 5pm, Monday to Saturday from 1st April to 30th September .
- 151. Details of all blasts shall be entered into a record book kept for that purpose and shall be available to the Consent Authority upon request.

151A During blasting the Consent Holder shall ensure that air blast overpressure conforms with the recommendations outlined in the Australian Standard AS2187.22006 "Explosives – Storage and Use"; whereby all noise created by the use of explosives measured at a location agreed with the Consent Authority at the coal loadout facility shall not exceed a peak overall sound pressure of 120dB linear peak for 95% of the time, with a maximum peak of 125 dB.

151B During blasting the Consent Holder shall ensure that ground vibration limits conforms to the recommendations outlined in the Australian Standard AS2187.22006 "Explosives – Storage and Use"; whereby peak particle velocity does not exceed 10 millimetres per second, at a location agreed with the Consent Authority at the coal loadout facility.

Accidental Discovery Protocol

- 152. In the event of an accidental discovery of archaeological material not identified by the archaeological survey, the following steps will be followed:
 - a) All work in the immediate vicinity of the material will cease immediately.
 - b) The Consent Holder will take immediate steps to secure the site (e.g. tape it off) to ensure the archaeological remains are undisturbed and the site is safe in terms of health and safety requirements. Work may continue outside of the secured site area.
 - c) If the material is confirmed as being archaeological under the terms of the Heritage New Zealand Pouhere Taonga Act 2014, the Consent Holder shall ensure that an archaeological assessment is carried out by a qualified archaeologist, and if appropriate, an archaeological authority is obtained from the Heritage New Zealand before work resumes.
 - d) If burials, human remains/koiwi tangata are uncovered, the Area Archaeologist of Heritage New Zealand, the New Zealand Police and the Iwi representative for the

area shall be contacted immediately. The area shall be treated with discretion and respect and the koiwi tangata/human remains dealt with according to New Zealand law and tikanga.

e) Works at the site area shall not recommence until an archaeological assessment has been made, all archaeological material has been dealt with appropriately, and statutory requirements are met. All parties shall work towards enabling work to recommence in the shortest possible timeframe while ensuring that archaeological and cultural requirements are complied with.

Cultural Heritage and Liaison Plan

- 153. The Consent Holder shall prepare, in consultation with Te Rūnanga O Ngāti Waewae, and provide to the Consent Authority a Cultural Heritage and Liaison Plan. The purpose of the Cultural Heritage and Liaison Plan shall be to ensure that any cultural materials found within the disturbance footprint are evaluated and if necessary, protected. The Plan may be amended during the term of this consent, in consultation with the Te Rūnanga O Ngāti Waewae and the Consent Authority and provided the key outcomes are achieved.
- 154. The Cultural Heritage and Liaison Plan shall discuss cultural connections to the Te Kuha Mine Project area and its surrounds and will identify any sites of particular cultural significance. The Plan will describe the protocols should mining uncover any artefact or material that may be of early origin.

Noise

- 155. Subject to the express provisions of this condition the noise level, shall be measured and assessed in accordance with the requirements of New Zealand Standards NZS 6801:2008 Measurement of Environmental Sound and NZS 6802:2008 Acoustics Environmental Sound. In particular, the provisions of NZS 6802:2008, 5 dB corrections for noise with special audible characteristics shall apply to noise measurements and assessments.
- 156. The L₁₀ level as measured at the boundary of a property not owned by the Consent Holder, or the notional boundary of any existing dwelling not owned by the Consent Holder, shall not exceed the following limits, except by mutual agreement:

Monday-Friday - 8.00am to 11.00pm	55 dBA L ₁₀
Saturday - 8.00am to 6.00pm	55 dBA L ₁₀
At all other times including any public holiday	45 dBA L_{10} and
	75 dBA L _{max}

157. The notional boundary of any dwelling shall, for the purpose of this condition, shall be a point 20 metres from the most exposed façade of the dwelling.

- 158. All equipment and machinery shall be regularly maintained to ensure noise levels are as low as reasonably attainable but at no time shall they exceed the levels permitted by the consent.
- 159. During the constructional phase of the mining operation, noise levels shall comply with the recommended upper limits for levels of construction work noise received in residential areas listed in NZS 6803:2008 Acoustics Construction Noise at the boundary of any property not owned by the Consent Holder, or the notional boundary of any existing dwelling not owned by the Consent Holder.

Biodiversity Management and Habitat Enhancement

- 160. The Consent Holder shall undertake a programme of biodiversity management and habitat enhancement, including species relocation and management and plant pest and predator control in accordance with these conditions within:
 - a) the area shown in Attachment 4 appended to these conditions (the Te Kuha Biodiversity Management Area); and
 - b) An area in the Orikaka Ecological Area shown in Attachment 5 appended to these conditions (the Orikaka Habitat Enhancement Area).
- 160A From the commencement date of these consents, the Consent Holder shall make no application for resource consent for earthworks or mining related activities within the the Kuha Biodiversity Management Area shown in Attachment 4.
- 161. No later than 15 years after the commencement of management activities in the Te Kuha Biodiversity Management Area and the Orikaka Habitat Enhancement Area, the Consent Holder shall provide to the Consent Authority a report from an independent appropriately qualified expert which sets out whether any additional or different actions or management measures, including funding and duration of management measures, are necessary to continue to meet the objectives of the Te Kuha Biodiversity Management Plan and Orikaka Habitat Enhancement Plan required by Conditions 162 and 178 of RC160038.

Te Kuha Biodiversity Management Area

- 162. A Te Kuha Biodiversity Management Plan shall be prepared in consultation with the Department of Conservation and Rūnanga o Ngāti Waewae, and shall set out the practices, procedures, baseline surveys and monitoring to be adopted to ensure compliance with the conditions of this consent and how the objectives set out in these conditions will be achieved.
- 162A The target species for management within the Te Kuha Biodiversity Management Area shall be great spotted kiwi, South Island robin, fernbird, pipit, lizards and the forest ringlet butterfly, Helm's stag beetle and the leaf-veined slug.

- 163. The Te Kuha Biodiversity Management Plan shall include the following sections, the objectives and provisions for which are set out in these conditions:
 - a) Birds of conservation concern (roroa, fernbird, robin and pipit as listed in Condition 162A)
 - b) Lizards
 - c) Bryophytes
 - d) Weeds
 - e) Predators
 - f) Forest Ringlet Butterfly
 - g) Undescribed Leaf-veined Slug
 - h) Helm's Stag Beetle
- 163A The Te Kuha Biodiversity Management Plan shall also include, in each relevant section, how the baseline state of the target species listed in Condition 163 will be characterised, the purpose of which is to estimate their natural abundance and inform future management decisions to provide an accurate basis against which change towards the objectives of the plan can be assessed.

Birds of Conservation Concern

- 164. The objectives of the section of the Plan dealing with the birds of conservation concern listed in Condition 162A shall be to:
 - a) Mitigate the effects from mining activities on the habitats of birds of conservation concern;
 - b) Minimise the effects from mining activities on the habitats of birds of conservation concern living within or immediately alongside Te Kuha Mine; and
 - c) Maintain population of birds of conversation concern within the Te Kuha Biodiversity Management Area shown in Attachment 4 while mining operations are in progress, and until such time as rehabilitated habitats at the former mine site support their return.
- 165. The section of the Plan dealing with birds of conservation concern shall, as a minimum, address:
 - a) Managing the rehabilitation of habitat in the mined area so that it maximises reoccupation by birds of conservation concern;
 - b) Monitoring the population of birds of conservation concern in the Te Kuha Biodiversity Management Area to determine to what level the population is maintained by the predator control programme; and
 - c) Measures to be used in the event that objectives of this section of the Plan are not being achieved, such as reviewing the size of the Te Kuha Biodiversity Management Area or implementing protective rearing until these targets are achieved.

Lizards

- 166. The objective of the section of the Plan dealing with lizards shall be to mitigate any adverse effects at the population level for lizards in the vicinity of the mining area while mining operations are in progress, and until such time as rehabilitated habitats at the former mine site support the return of lizards:
- 167. The section of the Plan dealing with lizards shall, as a minimum, address:
 - a) Salvage and relocation of lizards from the mine site, including relocation methodologies and handling practices;
 - b) Methods to identify potential release sites for salvaged lizard populations; and
 - c) Monitoring methods to determine the effectiveness of pest control and the extent and timing of lizard re-location back to the formerly mined site.
 - d) Managing the rehabilitation of habitat in the mined area so that it maximises reoccupation by lizards.

Bryophytes

- 168. The objective of the section of the Plan dealing with bryophytes shall be to develop and employ a range of management tools for lichens and bryophytes intended to mitigate any adverse effects at the population level for those species in the vicinity of the mining area while mining operations are in progress.
- 169. The section of the Plan dealing with bryophytes shall, as a minimum, address:
 - a) Protocols for salvage of plants and habitat, spore and fragment collection and propagation;
 - b) Relocation of bryophytes and lichens and their habitats;
 - c) Buffering of habitats to maintain microclimates at newly exposed edges;
 - d) Monitoring of bryophyte habitats to inform location selection for bryophyte transferral;
 - e) Monitoring of transferred bryophytes and lichens to determine their survival and the effectiveness of relocations; and
 - f) Regular reporting to inform future bryophyte and lichen management.

Weeds

170. The objectives of the section of the Plan dealing with weeds, including non-vascular weeds, shall be to prevent the establishment of new weed species and to maintain the

distribution and abundance of existing weeds at the site at very low levels so that weeds do not impair natural succession of native vegetation cover in the medium to long term:

171. The section of the Plan dealing with weeds shall set out the methods and practices which will be employed to achieve the objectives of this section of the Plan, including ensuring that any machinery used for rehabilitation activities or movement of soil is cleaned before and after use to minimise the potential for weed species to be introduced onto or off the site.

Predators

- 172. The objectives of the section of the Plan dealing with predators shall be to enhance the survival rates of indigenous fauna within the Te Kuha Biodiversity Management Area for a period of 35 years from the date of commencement of this consent.
- 173. The section of the Plan dealing with predators shall, as a minimum, address:
 - a) How the Consent Holder will control rats, stoats and possums in the Te Kuha Biodiversity Management Area to low levels consistent with improved breeding success for the target native species;
 - b) Intervention triggers which ensure predator management is timely and effective at reducing predator densities; and
 - c) Monitoring to ensure the Consent Holder can demonstrate compliance with the requirements of this section of the Plan.

Forest Ringlet Butterfly

- 174. The objectives of the section of the Plan dealing with Forest Ringlet Butterfly shall be to develop and employ a range of management tools for forest ringlet butterflies intended to mitigate any adverse effects at the population level in the vicinity of the mining area while mining operations are in progress.
- 175. The section of the Plan dealing with Forest Ringlet Butterfly shall, as a minimum, address:
 - a) Survey and monitoring of forest ringlet butterflies in the forests surrounding the mine site;
 - b) Monitoring of exotic wasps and their control if necessary;
 - c) Buffering of habitats to maintain microclimates at newly exposed edges;
 - d) Monitoring of transferred Gahnia plants to determine their survival and their use by forest ringlets;

- e) Propagation and planting of Gahnia in the appropriate places as part of site rehabilitation; and
- f) Annual reporting to inform future butterfly management.

Undescribed Leaf-veined Slugs

- 176. The objectives of the section of the Plan dealing with the undescribed leaf-veined slugs shall be to set out the methods to be used to undertake a survey to assess the distribution of undescribed leaf-veined slugs within the mine pit area (excluding the access road) and similar vegetation communities beyond the mine pit area, the purpose of which is to enable the Consent Holder to develop and employ any necessary management measures for the slugs to mitigate any adverse effects at the population level in the vicinity of the mining area while mining operations are in progress.
- 177. Prior to any earthworks commencing within the mine pit area, the Consent Holder shall provide to the Consent Authority a report from an independent appropriately qualified expert which sets out:
 - a) The results of the survey required by Condition 176; and
 - b) The management measures proposed, or the reason why management measures are not proposed, for the undescribed leaf-veined slugs to mitigate any adverse effects at the population level in the vicinity of the mine pit area while mining operations are in progress.
- 177A In the event that the survey required by Condition 176 does not detect the leaf veined slug beyond the mine pit area, but does detect individuals within the mine pit area, evidence of successful relocation of leaf-veined slugs to similar habitat immediately alongside the mine site and survival of at least 60% of those slugs transferred for a period of at least three months.
- 177B No vegetation removal or disturbance to potential habitat of the undescribed species of leaf-veined slug in the mine pit area shall occur until the Consent Authority has certified that Condition 177A has been complied with.

Helm's Stag Beetle

- 178. The objectives of the section of the Plan dealing with Helm's Stag beetle shall be to develop and employ a range of management tools for beetles intended to mitigate any adverse effects at the population level in the vicinity of the mining area while mining operations are in progress.
- 179. The section of the Plan dealing with Helm's Stag beetle shall be to set out the methods to be used in relation to salvage and relocation.

Orikaka Habitat Enhancement Area

- 180. An Orikaka Habitat Enhancement Plan shall be prepared in consultation with the Department of Conservation and Rūnanga o Ngāti Waewae, and shall set out the practices, procedures, and baseline surveys and monitoring to be adopted to ensure compliance with the conditions of this consent and how the objectives set out in these conditions will be achieved.
- 181. The overall objective of the Orikaka Habitat Enhancement Plan is to provide compensation for any coal measures vegetation and other key biodiversity attributes which cannot be effectively mitigated by monitoring and enhancing populations of birds and invertebrates within the Orikaka Habitat Enhancement Area for a period of 35 years from the date of commencement of this consent.
- 182. The target species for which population enhancement is sought include Great Spotted Kiwi, South Island Kaka, South Island Robin, Blue Duck, Longtailed Bat, Fernbird and invertebrates.
- 183. The Orikaka Habitat Enhancement Plan shall, as a minimum, address the following:
 - a) how the weed and animal pest control measures will be coordinated with any other control measures carried out in adjacent areas;
 - b) Identification of weed and animal pests to be controlled and the areas over which they will be controlled;
 - c) how the baseline state of the target species listed in Condition 182 will be characterised, the purpose of which is to estimate their natural abundance and inform future management decisions to provide an accurate basis against which change towards the objectives of the plan set out in Condition 181 can be assessed.
 - d) quantifying weed and animal pest targets to be achieved and the means of measuring the targets;
 - e) identifying the invertebrate species to be monitored;
 - f) control methods targeting possums, stoats and rats including the aerial application of 1080 or equivalent effective toxin.
 - g) monitoring of numbers of possums, rats and stoats; and
 - h) outcome monitoring of populations of Great Spotted Kiwi, South Island Kaka, South Island Robin, Blue Duck, Longtailed Bat, Fernbird and invertebrates, with the objective of detecting population increases expected as a result of the pest management undertaken across the site in accordance with these conditions of consent.

Waste Management Plan

- 184. A Waste Management Plan shall be prepared for the purpose of minimising the waste and litter generated during mining, to maximise recycling and reuse opportunities, to avoid or minimise any pollution risk associated with the waste generated and disposed of at the site, and to assist with pest control.
- 185. The Waste Management Plan shall, as a minimum:
 - a) identify the nature and volume of waste generated at the site;
 - b) describe the methods to manage waste generation and to reuse or recycle materials where feasible; and
 - c) describe the transport and disposal of waste off site.

Financial Contribution

- 186. A financial contribution of cash shall be paid to the Consent Authority for the provision of reserves and facilities, as provided for in Part 8 of the Buller District Plan. The calculation for assessing the financial contribution shall be 0.5% of the total value of the development. The Consent Holder shall advise the Consent Authority of the value of the proposed development, and shall pay the cash amount of the contribution to the Consent Authority prior to the commencement of any works authorised by this consent. The calculation of the financial contribution shall be based on the estimated costs of the following components of the activity:
 - a) Construction of buildings (i.e. total cost of all buildings, excluding plant inside buildings); and
 - b) Formation of the access road (excluding roads within the pits); and
 - c) Costs associated with the removal of vegetation (excluding the costs of direct transfer and costs of planting vegetation and other rehabilitation).


Attachment 1: Rehabilitation Concept Plan

Attachment 1

Contours - Finished Surface Ridgeline - Finished Surface

Streams (LINZ)

Inferred Flow Path

Predicted Flow Path

Disturbance Area

Forest Rockfield

Shrubland

Herbfield

Manuka shrubland

Rimu/hard beech forest

Slips/bare ground

Legend

- -

Rehab Units

Vegetation







Attachment 3: Disturbance areas associated with the Te Kuha Mine Project



Attachment 4: Te Kuha Biodiversity Management Area



Attachment 5: Orikaka Habitat Enhancement Area

APPENDIX 2

Name	Date Received	Response	Submitted to	Appearing
350 Aotearoa - Christchurch Branch	19/05/2017	Oppose	Both	No Response
Adams, Howard F	17/05/2017	Oppose	Both	No
Adams, Vicky	19/05/2017	Oppose	Both	No
Aiken, Gail	18/05/2017	Oppose	Both	No
Alder, Simon	17/05/2017	Oppose	Both	No
Alexander, Jarrod	17/05/2017	Oppose	Both	No
Allen, Elizabeth	17/05/2017	Oppose	Both	No
Allen, Sophie	18/05/2017	Oppose	Both	No
Anderson, Deborah	18/05/2017	Oppose	Both	No
Anderson, Garry Wayne	18/05/2017	Support	BDC	No
Anderson, Jane	18/05/2017	Oppose	Both	No
Aotearoa, Mereana	18/05/2017	Oppose	Both	No
Arnoux, Rosemary	18/05/2017	Oppose	Both	No
Arps, Robyn Kay	16/05/2017	Oppose	Both	No
Ash, Christopher John	17/05/2017	Support	Both	No
Ashby, Jen	18/05/2017	Oppose	Both	No
Atikinson Shaun	17/05/2017	Oppose	Both	No
Avison Linda	17/05/2017	Oppose	Both	No
Backes Claire	18/05/2017	Oppose	Both	No
Baigent-Mercer Dean	18/05/2017	Oppose	Both	No
Bailey Emily	18/05/2017	Oppose	Both	Yes
Bailey, Lucy	18/05/2017	Oppose	Both	No
Bainbridge Kathryn Lee	16/05/2017	Support	Both	No
Bainbridge, Warren James	16/05/2017	Support	Both	No
Baker Knystina	17/05/2017	Oppose	Both	No
Baker Natalie	19/05/2017	Oppose	Both	No
Baker Reece	17/05/2017	Oppose	Both	No
Baker Trish	17/05/2017	Oppose	Both	No
Balfour-Smith 1ill	17/05/2017	Oppose	Both	No
Ball Graeme	18/05/2017	Oppose	Both	No
Barber James	17/05/2017	Oppose	Both	No
Bares Josh	18/05/2017	Suppose	Both	Yes
Barfoot Cushla	17/05/2017	Onnose	Both	No
Barnes Denise	17/05/2017	Oppose	Both	No
Barnes Ivan	17/05/2017	Oppose	Both	No
Barrett, Brent	17/05/2017	Oppose	Both	No
Barrett Leslie	18/05/2017	Oppose	Both	No
Barry, John Michael	17/05/2017	Support	Both	No
Bartley, Denis	18/05/2017	Oppose	Both	No
Barton, Mels	17/05/2017	Oppose	Both	No
Barwood, Robin	17/05/2017	Oppose	Both	No
Baskett, Pat	17/05/2017	Oppose	Both	No
Baxendell, Annette	18/05/2017	Oppose	Both	No
Baxter, Lucinda	18/05/2017	Oppose	Both	No
Baylis, Charlie	17/05/2017	Oppose	Both	No
Beaver Peter	18/05/2017	Oppose	Both	No
Becker Jack Jav	10/05/2017	Support	WCRC	No
Bedford, Elizabeth	17/05/2017	Oppose	Both	No
Beevors, Michele	18/05/2017	Oppose	Both	No
Behrend, Maren	18/05/2017	Oppose	Both	No
Behrnes, Scott	17/05/2017	Oppose	Both	No
Bell, Daphne	17/05/2017	Oppose	Both	No

Belshaw, Anthony	17/05/2017	Oppose	Both	No
Belt, Jeff	17/05/2017	Oppose	Both	No
Bergamini, Grant Watson	17/05/2017	Support	Both	No
Birchfield, Andrew Lee	18/05/2017	Support	Both	Yes
Birchfield, Christopher Paul	18/05/2017	Support	Both	Yes
Birchfield, Evan Raymond	18/05/2017	Support	Both	Yes
Birchfield, Jane Marie	18/05/2017	Support	Both	Yes
Birchfield, Maxine Elizabeth	18/05/2017	Support	Both	Yes
Birchfield, Paul Evan	18/05/2017	Support	Both	Yes
Birchfield, Samantha Elizabeth Joyce	18/05/2017	Support	Both	Yes
Birdsall, Sally	18/05/2017	Oppose	Both	No
Bishop, Frances	17/05/2017	Oppose	Both	No
Biss, Rod	17/05/2017	Oppose	Both	No
Black, Lewis	17/05/2017	Oppose	Both	No
Blacktopp - Brian William & Joan Maree	17/05/2017	Support	Both	No
Blance, Peter	15/05/2017	Support	BDC	No
Blay, Margaret	17/05/2017	Oppose	Both	No
Blissett, Heather	17/05/2017	Oppose	Both	No
Boardman, Melissa	19/05/2017	Oppose	Both	No
Bobsien, Guenter	17/05/2017	Oppose	Both	No
Bonham-Carter, Susan	17/05/2017	Support	Both	No Response
Bonisch, Paul Robert	17/05/2017	Support	Both	No
Boulle, Michelle	18/05/2017	Oppose	Both	No
Box, Wade	18/05/2017	Oppose	Both	No
Boxall, Bill	17/05/2017	Oppose	Both	No
Boyd, Leo	18/05/2017	Oppose	Both	No
Boves, Oli	17/05/2017	Oppose	Both	No
Bracegirdle, Anna	17/05/2017	Oppose	Both	No
Bradford, Stephen	17/05/2017	Oppose	Both	No
Brady, Anne	17/05/2017	Oppose	Both	No
Brady, Janet	17/05/2017	Oppose	Both	No
Breeze, Daniel John	18/05/2017	Support	Both	Yes
Brickell, Romilly	17/05/2017	Oppose	Both	No
Broadhead, Kathy	17/05/2017	Oppose	Both	No
Broady, Paul	18/05/2017	Oppose	Both	No
Brown, Andrew	17/05/2017	Oppose	Both	No
Brown, Ben	17/05/2017	Oppose	Both	No
Brown, Julie	18/05/2017	Oppose	Both	No
Browne, Margaret	18/05/2017	Oppose	Both	No
Buchanan, Sam	18/05/2017	Oppose	Both	No
Buller Electricity Limited	17/05/2017	Support	Both	No
Burgers, Albie	17/05/2017	Oppose	Both	No
Burkett, Louise	18/05/2017	Oppose	Both	No
Burns, Elizabeth	17/05/2017	Oppose	Both	No
Burrows, Amanda	16/05/2017	Oppose	Both	No
Burry Kate	17/05/2017	Oppose	Both	No
Burtenshaw Niki	17/05/2017	Oppose	Both	No
Burton William James	08/05/2017	Oppose	Both	Yes
Byrd Jacki	18/05/2017	Oppose	Both	No
Caldwell Susan	17/05/2017	Oppose	Both	No
Camden Mike	18/05/2017	Oppose	Both	No
Cameron Gillian	18/05/2017	Oppose	Both	No
Campbell Jenny	19/05/2017	Onnose	Both	No
Campbell Katrina	18/05/2017	Onpose	Both	No
Campbell Leighton Andrew	18/05/2017	Support	Both	Yes
Campbell Mayine	18/05/2017	Onnose	Both	No
Campbell, Maxille	10/03/2017	oppose	DOUT	NU

Carew, Caitlin	17/05/2017	Oppose	Both	No
Carman, Andrew	17/05/2017	Oppose	Both	No
Carpenter, Vicki	18/05/2017	Oppose	Both	No
Carroll, Dwayne	17/05/2017	Oppose	Both	No
Cartwright, Tamara	09/05/2017	Oppose	Both	No
Cauchi, Jennifer	17/05/2017	Oppose	Both	No
Cavgill, John	18/05/2017	Oppose	Both	No
Chapman, Robert Kerry	18/05/2017	Support	Both	Yes
Charles, Tazmyn	18/05/2017	Oppose	Both	No
Cherry, Brent	18/05/2017	Oppose	Both	No
Cheung Catherine	17/05/2017	Oppose	Both	No
Child, Philip Michael	15/05/2017	Support	Both	No
Chilvers David	18/05/2017	Oppose	Both	No
Chisholm, Lana	18/05/2017	Oppose	Both	No
Chisnall Frin	17/05/2017	Oppose	Both	No
Clare Selina	18/05/2017	Onnose	Both	No
Clarke Malcolm	17/05/2017	Oppose	Both	No
Clausen Nina	17/05/2017	Oppose	Both	No
Climate Justice Taranaki Incorporated	17/05/2017	Oppose	Both	No
Coal Action Network Actearoa Incorporated	18/05/2017	Oppose	Both	Yes
Coburn Michelle	17/05/2017	Oppose	Both	No
Cochrane Adrian	17/05/2017	Oppose	Both	No
Cole Cimino	17/05/2017	Oppose	Both	No
Cole Josh	17/05/2017	Oppose	Both	No
Coleman Angela	17/05/2017	Oppose	Both	No
Coleman, Janice Caroline	15/05/2017	Support	Both	No
Coleman, Leann	10/05/2017	Support	Both	No
Coll Chris	18/05/2017	Support	Both	Vec
Coll Jan	18/05/2017	Support	Both	Ves
Collen Rose	18/05/2017	Oppose	Both	No
Collier, Catherine	17/05/2017	Oppose	Both	No
Collins Kimberley	17/05/2017	Oppose	Both	No
Community and Public Health	17/05/2017	Neutral	Both	Vec
Cook Andrew William	17/05/2017	Support	Both	No
Cookson Christopher	17/05/2017	Oppose	Both	No
Corbett Sonia	17/05/2017	Oppose	Both	No
Corpich Jack Peter Harrison	18/05/2017	Support	Both	Vec
Court Philip	17/05/2017	Oppose	Both	No
Coward Toroca Lillian	16/05/2017	Oppose	Both	No
Cowell Tomiko	10/05/2017	Oppose	Both	No
Cowell, Yoshiko	18/05/2017	Oppose	Both	No
Cowen Justin	18/05/2017	Oppose	Both	No
Cowen, Justin	10/05/2017	Oppose	Both	No
Cov. Tyler	17/05/2017	Oppose	Both	No
Crabb Anno	17/05/2017	Oppose	Both	No
Crawford-Zachernuk Briany	17/05/2017	Oppose	Both	No
Crawchaw, Poter	17/05/2017	Oppose	Both	No
Crickett Stacy	17/05/2017	Support	Both	No
Crov Susan	17/05/2017	Onnose	Both	No
Crundwell Steven	17/05/2017	Oppose	Both	No
Cullen Buchanan	18/05/2017	Oppose	Both	No
Dahl Docemany	18/05/2017	Oppose	Both	No
Daily Mark	10/05/2017	Support	WCPC	No
Daily Maureen	10/05/2017	Support	WCPC	No Pesponso
Danyin Niall	17/05/2017	Oppose	Both	No
Davidson lackie	18/05/2017	Oppose	Both	No
Davidour, Jackie	10/00/201/	oppose	Douri	110

Davis, Victoria	18/05/2017	Oppose	Both	No
Daw, Hilda	17/05/2017	Oppose	Both	No
De Lu, Katia	18/05/2017	Oppose	Both	No
De Vent, Barry	17/05/2017	Oppose	Both	No
Deans, Fenella	17/05/2017	Oppose	Both	No
Dee, Mike	17/05/2017	Oppose	Both	No
Del Perugia, Jessica	16/05/2017	Oppose	Both	No
Demirbas, Yasir	17/05/2017	Oppose	Both	No
Denley, Julian James	17/05/2017	Support	Both	No
Dennewill, Donovan	19/05/2017	Oppose	Both	No
Dennis. Heather I orraine	15/05/2017	Support	Both	No
Dennis, Jessie	18/05/2017	Oppose	Both	No
Department of Conservation and Ministry	18/05/2017	Neutral	Both	Yes
Desfour, Gregory	17/05/2017	Oppose	Both	No
DeVantier, Lyndon	17/05/2017	Oppose	Both	No
Dillon Mary	17/05/2017	Oppose	Both	No
Diskin Evvonne Marie	19/05/2017	Support	Both	No
Doerner Michael	18/05/2017	Onnose	Both	No
Dommisse Elvira	18/05/2017	Oppose	Both	No
Donnison Clive	17/05/2017	Oppose	Both	No
Dooley Flizabeth	17/05/2017	Oppose	Both	No
Douglas Maurice William	10/05/2017	Suppose	WCRC	No
Downing Zella	18/05/2017	Oppose	WCRC	Vec
Dover Elise	17/05/2017	Oppose	Both	No
Drace Charles	17/05/2017	Oppose	Both	No
Drake Paul	18/05/2017	Oppose	Both	No
Driver Barry	17/05/2017	Oppose	Both	No
Drnasin Amie	17/05/2017	Oppose	Both	No
Drury Clare	17/05/2017	Oppose	Both	No
Drusdale Pamela	17/05/2017	Oppose	Both	No
du Toit Jackie	17/05/2017	Oppose	Both	No
Ducat Michelle	18/05/2017	Oppose	Both	No
Dumbar Michael	19/05/2017	Oppose	Both	No
Duncan Shane Thomas	18/05/2017	Suppose	Both	Vec
Dungey Bernadette	17/05/2017	Oppose	Both	No
Dunkley - Tony & Zenia	18/05/2017	Oppose	Both	No
Dunlon Adrienne	17/05/2017	Oppose	Both	No
Dunn Kevin	18/05/2017	Oppose	Both	No
Dyson Isabel	18/05/2017	Oppose	Both	No
Eagles Nick	17/05/2017	Oppose	Both	No
Easton Jenny	17/05/2017	Oppose	Both	No
Easton, Jenny	17/05/2017	Oppose	Both	No
Ellov Pobert Maxwell	17/05/2017	Support	WCPC	No
Elphide Jock	10/05/2017	Opposo	Roth	No
Elwell Sutton Doul	19/05/2017	Oppose	Both	No
Environment and Concervation Organisati	18/05/2017	Oppose	Both	Voc
Erikson Kirsten	17/05/2017	Oppose	Both	No
Envold Marioko	17/05/2017	Oppose	Both	No
Evens Ruth	17/05/2017	Oppose	Both	No
Evans, Ruth	16/05/2017	Oppose	Both	No
Evals, Julicyallie Evre Dachel	10/05/2017	Oppose	Both	No
Eairweather Stefan	17/05/2017	Oppose	Both	No
Falloon Michael	17/05/2017	Oppose	Both	No
Fargubarson lanet	18/05/2017	Oppose	Both	No
Ferguson Jane	18/05/2017	Oppose	Both	No
Ferguson, Thomas	18/05/2017	Oppose	Both	No
r cryuson, mornas	10/03/2017	oppose	DOUT	110

Ferguson, Tony	18/05/2017	Oppose	WCRC	No
Ferguson, Wendy	18/05/2017	Oppose	Both	No
Fick, Philip	17/05/2017	Support	Both	No
Field, Ants	17/05/2017	Oppose	Both	No
Finkle, Alexandra	17/05/2017	Oppose	Both	No
Fisher, Jaun	17/05/2017	Oppose	Both	No
Fitter, Julian	17/05/2017	Oppose	Both	No
Fitzsimons, Bevin	17/05/2017	Oppose	Both	No
Fitzsimons, Matt	16/05/2017	Oppose	Both	No
Flavell-Johnson, Alex	17/05/2017	Oppose	Both	No
Fleming, Jean	17/05/2017	Oppose	Both	No
Foord, Daniel Mark	18/05/2017	Support	Both	Yes
Ford, Csilla	18/05/2017	Oppose	Both	No
Ford, Daniel	17/05/2017	Oppose	Both	No
Forde, Tara	18/05/2017	Oppose	Both	No
Fowler Wendy	16/05/2017	Oppose	Both	No
Frear, Annie	17/05/2017	Oppose	Both	No
Frieling Kirsten	17/05/2017	Oppose	Both	No
Frorien - Paul and Sharleen	19/05/2017	Support	Both	No Response
Gabrielsen, Chloe	17/05/2017	Onnose	Both	No
Gains Paul	17/05/2017	Oppose	Both	No
Gallagher Helen	15/05/2017	Support	Both	No
Gardner Ashley	17/05/2017	Onnose	Both	No
Gardner, Ashey	16/05/2017	Oppose	Both	No
Garland Lisa	17/05/2017	Suppose	Both	No
Geers April-Rose	18/05/2017	Onnose	Both	No
Genn Glenda	17/05/2017	Oppose	Both	No
Gerbault Joshua	17/05/2017	Oppose	Both	No
Gething Margaret	18/05/2017	Oppose	Both	No
Gibbons Brad	17/05/2017	Oppose	Both	No
Gibbs Catherine	17/05/2017	Oppose	Both	No
Gibson Jacqueline	17/05/2017	Oppose	Both	No
Gibson Steven Gordon	17/05/2017	Suppose	Both	No
Gillard Clare	18/05/2017	Onnose	Both	No
Gillett Steven	17/05/2017	Oppose	Both	No
Gilmore Linda	17/05/2017	Oppose	Both	No
Glass Charles Beyan	18/05/2017	Support	Both	Vec
Gledbill Tom	18/05/2017	Oppose	Both	No
Goile Helen	18/05/2017	Oppose	Both	No
Going-Mills Tayla	17/05/2017	Oppose	Both	No
Goodier Victoria	17/05/2017	Oppose	Both	No
Goodman Tom	17/05/2017	Oppose	Both	No
Gould Michael	05/05/2017	Oppose	Both	No
Grace Wiremu	18/05/2017	Oppose	Both	No
Graham Boh	17/05/2017	Oppose	Both	No
Grammer Linda	17/05/2017	Oppose	Both	Voc
Graves Dylan	18/05/2017	Oppose	Both	No
Graves, Dyian	17/05/2017	Oppose	Both	No
Greatley, Simon Pohert	17/05/2017	Support	WCPC	No Pesnonse
Greaves, Kenneth Albert	17/05/2017	Support	Both	No Response
Green Celia	18/05/2017	Oppose	Both	No
Green Hannah	17/05/2017	Oppose	Both	No
Groot Marco	17/05/2017	Oppose	Both	No
Groundwater Lyppie	17/05/2017	Oppose	Both	No
Guundwaler, Lynnie	17/05/2017	Oppose	Both	No
Habib Andre	17/05/2017	Oppose	Both	No
Habib, Alluic	1//03/201/	oppose	DOUT	UVI

Hack, Tania	17/05/2017	Oppose	Both	No
Hager, Amanda	17/05/2017	Oppose	Both	No
Hall, Adrian	17/05/2017	Oppose	Both	No
Hall, Graeme Peter	18/05/2017	Support	WCRC	Yes
Hall, Susan	18/05/2017	Oppose	Both	No
Hamilton, Anna	17/05/2017	Oppose	Both	No
Hamling, Guy	17/05/2017	Oppose	Both	No
Hanafin, Nick	18/05/2017	Oppose	Both	No
Hansen, Ken	17/05/2017	Oppose	Both	No
Harcourt James	17/05/2017	Oppose	Both	No
Haretuku Caroline	18/05/2017	Oppose	Both	No
Harris locelyn	17/05/2017	Oppose	Both	No
Harrison Michael	17/05/2017	Suppose	Both	No
Hatfield Anthea	17/05/2017	Onnose	Both	No
Haves Rowan	17/05/2017	Suppose	Both	No
Hebewerth Carola	18/05/2017	Oppose	Both	No
Henderson Rebessa	16/05/2017	Oppose	Both	No
Henov Wade Mel ead	10/05/2017	Cuppose	Both	Noc
Henley, Stuart Norman	10/05/2017	Support	Both	No
Hiele, Studit Norman	19/05/2017	Support	PDC	Noc
Hicks, Kaliyi	17/05/2017	Support	DUC	res
Hickey-Elliott, Andree	1//05/2017	Oppose	BOUI	NO
HICKIOFO, Ella	10/05/2017	Oppose	Both	NO
Higgins, Jane	17/05/2017	Oppose	Both	INO No
Higgott, Frank	1//05/2017	Oppose	Both	NO
Higgs, Samantha	18/05/2017	Oppose	Both	No
Hill, Martin John	10/05/2017	Support	Both	No
Hindin, Lucette	1//05/201/	Oppose	Both	No
Hodgson, Nolan	17/05/2017	Oppose	Both	No
Hoeata, Chloe	17/05/2017	Oppose	Both	No
Holland, Liz	17/05/2017	Oppose	Both	No
Holt, Thomas	10/05/2017	Support	Both	No
Holton, Terry	17/05/2017	Oppose	Both	No
Houghton, Conor	16/05/2017	Oppose	Both	No
Houghton, James	17/05/2017	Oppose	Both	No
Howan, Mary	17/05/2017	Oppose	Both	No
Howard, Ailsa	18/05/2017	Oppose	Both	No
Howard, Peter	17/05/2017	Oppose	Both	No
Howcroft, Philippa	16/05/2017	Oppose	Both	No
Hubbard - Marvin and Terisha	19/05/2017	Oppose	Both	No
Hullah, Carol	17/05/2017	Oppose	Both	No
Humphrey, Rowena	18/05/2017	Oppose	Both	No
Hunze, Arvid	17/05/2017	Oppose	Both	No
Hurford, Charles	19/05/2017	Oppose	Both	No
Hyde, Benjamin Godfrey	22/05/2017	Support	Both	Yes
Inman, Robert	18/05/2017	Oppose	Both	No
Insley, Sheree Mary Jane	16/05/2017	Oppose	Both	No
Inta, Elena Heather	15/05/2017	Oppose	Both	No
Inta, Frida	17/05/2017	Oppose	Both	No
Ireland, Peter	18/05/2017	Oppose	Both	No
Isara, Mariana	18/05/2017	Oppose	Both	No
Jack, Sarah	17/05/2017	Oppose	Both	No
Jackson, Brent	18/05/2017	Oppose	Both	No
Jackson, Ruth	17/05/2017	Oppose	Both	No
Jane, Julie	17/05/2017	Oppose	Both	No
Jefferies, Margaret	17/05/2017	Oppose	Both	No
Jenkin, Elise	18/05/2017	Oppose	Both	No

Jenks, Matthew	18/05/2017	Oppose	Both	No
Jennings, Christopher John	18/05/2017	Oppose	Both	No
Jennings, Elizabeth	18/05/2017	Oppose	Both	No
Jennings, Victoria Alexandra Ruth	18/05/2017	Oppose	Both	No
Johns, Sue	17/05/2017	Oppose	Both	No
Johnson Bros. Transport (2006) Limited	17/05/2017	Support	Both	No
Johnson, Margaret	17/05/2017	Oppose	Both	No
Johnstone, Christine	17/05/2017	Oppose	Both	No
loice. Al	18/05/2017	Oppose	Both	No
Jones, Allie	17/05/2017	Oppose	Both	No
Iones Gary Paul	18/05/2017	Support	Both	Yes
Jones, Hemi	18/05/2017	Oppose	Both	No
lones loel	22/05/2017	Support	WCRC	Yes
Jones Robyn	18/05/2017	Oppose	Both	No
lones Tim	18/05/2017	Oppose	Both	No
Kahui Fran	17/05/2017	Oppose	Both	No
Kamenkovic Jasmina	17/05/2017	Oppose	Both	No
Kane Patricia	19/05/2017	Oppose	Both	No
Kauwhata Deborah	18/05/2017	Oppose	Both	No
Kave Brenda	17/05/2017	Oppose	Both	No
Kelleher Sharlene	18/05/2017	Oppose	Both	No
Keller Richard	17/05/2017	Oppose	Both	No
Kelly Mick	10/05/2017	Oppose	Both	No
Kelly Simon	17/05/2017	Oppose	Both	No
Kennedy Samuel	17/05/2017	Oppose	Both	No
Kerr Jennifer	17/05/2017	Oppose	Both	No
Korclako Liz	10/05/2017	Oppose	Both	No
Keys Ken	17/05/2017	Oppose	Both	No
Kilduff Linda	10/05/2017	Oppose	Both	No
King Ange	17/05/2017	Oppose	Both	No
Kirk Jonny	17/05/2017	Oppose	Both	No
Kink, Jehny KiwiDail Holdings Limited	17/05/2017	Noutral	Both	Voc
KiwiKali Holdings Limited	17/05/2017	Opposo	Both	No
Knighthridge Marge	17/05/2017	Oppose	Dotth	No
Knightbridge, Margo	17/05/2017	Oppose	DOUII	NO
Kilowies, Russell	17/05/2017	Oppose	DOUII	NO
Koning Kata	17/05/2017	Oppose	DOUII	NO
Korlan, Alex	17/05/2017	Oppose	DULII	No
Kuldi, Alex	1//05/2017	Oppose	DULII	No
Kroel, Pduille	10/05/2017	Oppose	DOUII	NO
Ldifu, Tessa	19/05/2017	Oppose	DOUII	NO
Lake, Babs	17/05/2017	Oppose	Both	INO No
Lamberton, Lisa	18/05/2017	Oppose	Both	NO No
Landman, Jane	18/05/2017	Oppose	Both	NO
Latham, Alison	17/05/2017	Oppose	Both	INO
Laytham, Pamela	1//05/201/	Oppose	Both	No
Leach, Ray Ross	18/05/2017	Support	Both	Yes
Leckinger, Richard	18/05/2017	Oppose	Both	No
Lee, Michael	18/05/2017	Support	Both	Yes
Leuty, Megan	17/05/2017	Oppose	Both	INO
Lewis, Andrea	1//05/201/	Oppose	BOTH	INO
Lewis, Ari	1//05/201/	Oppose	Both	NO
Lewis, Cheryi	18/05/2017	Oppose	BOTH	INO
LODD, Glenis	18/05/2017	Oppose	Both	NO
Lockett, Denise	19/05/2017	Oppose	Both	INO
Long, Jenny	1//05/201/	Oppose	Both	INO
Loomis, Jean	18/05/2017	Oppose	Both	NO

Loomis, Moana	18/05/2017	Oppose	Both	No
Loomis, Terrence	17/05/2017	Oppose	Both	No
Lorenz, Brigitte	17/05/2017	Oppose	Both	No
Lorier, Janice	18/05/2017	Oppose	Both	No
Loughrey, Ralph	17/05/2017	Oppose	Both	No
Luby, Margie	17/05/2017	Oppose	Both	No
Ludwig, Flaine	19/05/2017	Oppose	Both	No
Lumber Land Building Market Limited	17/05/2017	Support	Both	No
Lusk Hugh	17/05/2017	Onnose	Both	No
Lvon Derek	17/05/2017	Suppose	WCRC	No
Lytle Denise	17/05/2017	Onnose	Both	No
MacDonell Barry	17/05/2017	Suppose	Both	No
Macfie Cathy	17/05/2017	Oppose	Both	No
MacKinnon Rod	17/05/2017	Oppose	Both	No
MacKinnon, William Donald	18/05/2017	Support	Both	Vec
Maclean Alistair	17/05/2017	Oppose	Both	No
MacMurray, Hugh	12/05/2017	Oppose	Both	No
Mander Neil	10/05/2017	Oppose	Dotth	No
Manara Daymond James	19/05/2017	Oppose	DULII	NO
Manara, Kaymonu James	18/05/2017	Support	DOUII	Yes
Manera, Iodd	18/05/2017	Support	Both	Yes
Mark, Alan Francis	18/05/2017	Oppose	Both	NO
Marks, Janet	18/05/2017	Oppose	Both	No
Marshall, Elaine Jane	1//05/201/	Oppose	Both	No
Marshall, Lily	17/05/2017	Oppose	Both	No
Martin & Co Westport Limited	17/05/2017	Support	Both	No Response
Martin, Judith	18/05/2017	Oppose	Both	No
Martyn, Cynthia	17/05/2017	Support	Both	No
Martyn, Michael John	17/05/2017	Support	Both	No
Mason, Polly	17/05/2017	Oppose	Both	No
Mathieson, Grant Robert	18/05/2017	Support	Both	Yes
Matthews, Margaret	18/05/2017	Oppose	Both	No
Mauppin, Kim	17/05/2017	Oppose	Both	No
Maxwell, Andrew	18/05/2017	Oppose	Both	No
Maxwell, Maggie	17/05/2017	Oppose	Both	No
May, Lynne Margaret	17/05/2017	Support	Both	No
May, Mark Anthony	17/05/2017	Support	WCRC	No
McConkey, Philip	17/05/2017	Oppose	Both	No
McCutcheon, Susie	17/05/2017	Oppose	Both	No
Mcdonald, Alistair	18/05/2017	Oppose	Both	No
McDonald, Mary	18/05/2017	Oppose	Both	No
McGlynn, Mike	17/05/2017	Oppose	Both	No
McGrath, William	18/05/2017	Oppose	Both	No
Mcgregor, Heloise	17/05/2017	Oppose	Both	No
McKenzie, Craig Neill	16/05/2017	Oppose	Both	No
McKinlay, Andrew	17/05/2017	Oppose	Both	No
McKinnon, Neil	17/05/2017	Oppose	Both	No
McLaughlin, William Edwin James	18/05/2017	Support	Both	Yes
McLean, Belinda	17/05/2017	Oppose	Both	No
McLean, Peter	17/05/2017	Oppose	Both	No
McNabb, Linda	18/05/2017	Oppose	Both	No
McRae, Lynn	17/05/2017	Oppose	Both	No
McStay, Renata	17/05/2017	Oppose	Both	No
McTaggart, Malcolm James	17/05/2017	Support	BDC	No Resnonse
McVeagh lo	18/05/2017	Oppose	Both	No
Mear Mark	18/05/2017	Oppose	Both	No
Mechen Nicola	18/05/2017	Oppose	Both	No
	10/03/201/	oppose	DOUL	110

Meek - David John and Elizabeth Ann	16/05/2017	Oppose	Both	No
Menkes, David	18/05/2017	Oppose	Both	No
Micoud, Florence	17/05/2017	Oppose	Both	No
Mikkelsen, Elisabeth	17/05/2017	Oppose	Both	No
Miles, Maria	8/05/2017	Support	BDC	No
Miles, William	17/05/2017	Oppose	Both	No
Millar, Ash	17/05/2017	Oppose	Both	No
Miller, Ron	17/05/2017	Oppose	Both	No
Mills, Rob	17/05/2017	Oppose	Both	No
Milne, Alec	17/05/2017	Oppose	Both	No
Minerals West Coast Trust	17/05/2017	Support	Both	Yes
Miorelli, Flavia	17/05/2017	Oppose	Both	No
Mitchell, David Charles	17/05/2017	Support	Both	No Response
Moir. Ian	17/05/2017	Oppose	Both	No
Molloy, Darren	17/05/2017	Oppose	Both	No
Mollov Harvey	18/05/2017	Oppose	Both	No
Montague. Charlie	18/05/2017	Oppose	Both	No
Moore Helen	18/05/2017	Oppose	Both	No
Moore John	18/05/2017	Oppose	Both	No
Moore Margaret	17/05/2017	Oppose	Both	No
Moore Rosalind	17/05/2017	Oppose	Both	No
Moran Muriel	18/05/2017	Oppose	Both	No
Morani Franca	18/05/2017	Oppose	Both	No
Morrissev Genna	18/05/2017	Oppose	Both	No
Morrow Leone	18/05/2017	Oppose	Both	No
Morse Valerie	17/05/2017	Oppose	Both	No
Moult Daniel	16/05/2017	Oppose	Both	No
Mountier Frances	17/05/2017	Oppose	Both	No
Mulholland Patrick	17/05/2017	Oppose	Both	No
Mulholland, Pey Steven	17/05/2017	Support	Both	No
Mulyany Sean	17/05/2017	Onnose	Both	No
Mummery Donna	18/05/2017	Oppose	Both	No
Murphy loe	17/05/2017	Oppose	Both	No
Muskee Vyonne	17/05/2017	Oppose	Both	No
Nairn Caroline Pose	17/05/2017	Support	WCPC	No
Neale Donna	17/05/2017	Onnose	Both	No
Nelson Sue	17/05/2017	Oppose	Both	No
Newbould Alistair	18/05/2017	Oppose	Both	No
Newman Ann	18/05/2017	Oppose	Both	No
Nicholson Dinna	10/05/2017	Oppose	Both	No
Nolan Michael	10/05/2017	Support	Both	Voc
North Michael	10/05/2017	Oppose	Both	No
	10/05/2017	Oppose	Both	No
O'Callaghan Rogan	10/05/2017	Oppose	DULII	No
O'Canpar, Dava	17/05/2017	Cuppose	DULII	No
O'Connor Katia	17/05/2017	Support	DUUI	NO
O'Connor, Radie	17/05/2017	Oppose	DULII	NO
O'Koofa, Tani Lagann	10/05/2017	Oppose	DULII	NO
Oldham Bront Edward	17/05/2017	Support	DULII	NO
	10/05/2017	Support	DUC	NO
Olerenshaw, Deter	10/05/2017	Oppose	DULII	No
Oloop Jop	10/05/2017	Oppose	DULII	NO
Oisell, Jell	10/05/2017	Cuppose	DULII	NO
Ousthuizen, Maruis	1//05/201/	Support	DOLLI	INO Voc
Orchard, Alistair David	02/05/2017	Oppose	WCRC	res
Original Jane Marion	02/05/2017	Oppose	VVCKC Dath	res
Urica New Zealand Limited - Mining Servi	18/05/2017	Support	ROLU	res

Osborne, Jonny	17/05/2017	Oppose	Both	No
Osipova, Robin	17/05/2017	Oppose	Both	No
Owsley, Abby	18/05/2017	Oppose	Both	No
Page, Emily	18/05/2017	Oppose	Both	No
Paice, Chris	17/05/2017	Oppose	Both	No
Pak, Nick	17/05/2017	Oppose	Both	No
Palmer, Stephanie	18/05/2017	Oppose	Both	No
Parry, Carla	17/05/2017	Oppose	Both	No
Parry, Rachel	18/05/2017	Oppose	Both	No
Parsons, P	17/05/2017	Oppose	Both	No
Parton, Beverley	17/05/2017	Oppose	Both	No
Pate, David	19/05/2017	Oppose	Both	No
Paton Nicola	18/05/2017	Oppose	Both	No
Pearson - Graham and Lyn	19/05/2017	Oppose	Both	No
Pedersen Holly	18/05/2017	Oppose	Both	No
Pedersen Janemaria	18/05/2017	Oppose	Both	No
Pell Anthony	17/05/2017	Support	Both	No
Penman Sue	17/05/2017	Onnose	Both	No
Penwarden Rosemary	18/05/2017	Oppose	Both	Yes
Perkins Inger	18/05/2017	Oppose	Both	No
Peterson John Leonard	17/05/2017	Suppose	Both	No
Petterson Craig	18/05/2017	Onnose	Both	No
Phillipps Bronwyn	17/05/2017	Oppose	Both	No
Philling Flan	17/05/2017	Oppose	Both	No
Pierstorff Klaus	17/05/2017	Oppose	Both	No
Pinkney Bradley	08/05/2017	Oppose	WCRC	No
Pirc Jerri	18/05/2017	Oppose	Both	No
Pitiroj Daimon	17/05/2017	Oppose	Both	No
Plesner Flaine	18/05/2017	Oppose	Both	No
Plunket Levie	17/05/2017	Oppose	Both	No
Pocock Ashley	17/05/2017	Oppose	Both	No
Pollard Simon	17/05/2017	Oppose	Both	No
Pollitt George	16/05/2017	Oppose	Both	No
Pollock Catherine	17/05/2017	Oppose	Both	No
Pollock, Gillian	17/05/2017	Oppose	Both	Vec
Pollock, Timothy Scott	16/05/2017	Oppose	Both	No
Pool Frank	17/05/2017	Oppose	Both	No
Pone Pamela	17/05/2017	Oppose	Both	No
Poschl Korbinian	17/05/2017	Oppose	Both	No
Poularain Clare	17/05/2017	Oppose	Both	No
Proceed Fueta	17/05/2017	Support	Both	No
Preddy, George	17/05/2017	Oppose	Both	No
Price Arthur	18/05/2017	Oppose	Both	No
Drice Jan	18/05/2017	Oppose	Both	No
Provost Shyam	17/05/2017	Oppose	Both	No
Pruparetty Jean-Louis	16/05/2017	Oppose	Both	No
Pulbam Bryan	10/05/2017	Oppose	Both	No Perpense
Purda Lulu	17/05/2017	Oppose	Both	No
Radford Piet	17/05/2017	Oppose	Both	No
Pailton John	17/05/2017	Oppose	Both	No
Dameka Frana	17/05/2017	Oppose	Both	No
Dandell Sally	17/05/2017	Oppose	Both	No
Dankin-Hirst Dyan	17/05/2017	Oppose	Both	No
Ranson Chris	18/05/2017	Oppose	Both	No
Rawiri Havley	18/05/2017	Oppose	Both	No
Deddich Daul	17/05/2017	Oppose	Both	No
Readish, Faul	1//03/201/	oppose	DOUT	110

Redmond, Savannah	17/05/2017	Oppose	Both	No
Reed, Stephen Andrew	10/05/2017	Support	WCRC	No
Reedy, Monica Katrine	18/05/2017	Oppose	Both	No
Rehu, Mason Kevin	17/05/2017	Support	WCRC	No
Renauist, Rocky	17/05/2017	Oppose	Both	No
Richards, Eric	17/05/2017	Oppose	Both	No
Richardson, Alan	18/05/2017	Oppose	Both	No
Richardson, Jeanette	17/05/2017	Oppose	Both	No
Ridden-Harper, Andrew	17/05/2017	Oppose	Both	No
Ringgaard, Line	17/05/2017	Oppose	Both	No
Rishworth, Sara	17/05/2017	Oppose	Both	No
Roberts, Alan John	18/05/2017	Support	Both	Yes
Roberts, Sarah	18/05/2017	Oppose	Both	No
Robertson, Amber	17/05/2017	Oppose	Both	No
Robertson, Jodie	17/05/2017	Oppose	Both	No
Robinson, Toni	17/05/2017	Oppose	Both	No
Robinson, Yvonne	17/05/2017	Oppose	Both	No
Rockies Mining Limited	18/05/2017	Support	Both	No
Rodighiero, Giulia	17/05/2017	Oppose	Both	No
Rogers, Anna	17/05/2017	Oppose	Both	No
Royal Forest and Bird Protection Society o	12/05/2017	Oppose	Both	Yes
Rushton Nathan	18/05/2017	Oppose	Both	No
Russell David	17/05/2017	Oppose	Both	No
Sampson Fhony	18/05/2017	Oppose	Both	No
Santa Barbara Jeff	17/05/2017	Oppose	Both	No
Saver Bill	17/05/2017	Oppose	Both	No
Schaw Tatvana	17/05/2017	Oppose	Both	No
Schneider Simon	17/05/2017	Oppose	Both	No
Schuurman Vicki	17/05/2017	Oppose	Both	No
Schwill Mira	17/05/2017	Oppose	Both	No
Searle David Errol	18/05/2017	Suppose	Both	Yes
Seddon Karin	17/05/2017	Oppose	Both	No
Senanavake Pubudu	17/05/2017	Oppose	Both	No
Seve Lecley	18/05/2017	Oppose	Both	No
Shaw Anna	17/05/2017	Oppose	Both	No
Shaw, Glenn	17/05/2017	Oppose	Both	No
Shaw, Dauline	17/05/2017	Oppose	Both	No
Shaw, I duine	17/05/2017	Oppose	Both	No
Shenpard David	18/05/2017	Oppose	Both	No
Sherlock Pobert	18/05/2017	Oppose	Both	Voc
Shichmanian Elaine	17/05/2017	Oppose	Both	No
Signer Urs	12/05/2017	Oppose	Both	No
Silvenwood Neil	17/05/2017	Oppose	Both	No
Silverwood, Nell	17/05/2017	Oppose	Both	NO
Simpson, Evan John	10/05/2017	Support	Both	Voc
Simpson, Evan John	10/05/2017	Oppose	Doth	No
Simpson, Renneur	19/05/2017	Oppose	DULII	NO
Silicidii, Gdvili	17/05/2017	Oppose	DUUI	No
Singers, Karen	1//05/2017	Oppose	DULII	NO
Siligh, Supriya	10/05/2017	Oppose		NO
Skillon, Dean	17/05/2017	Support	WCRC Dath	NO
Silidit, KUSellidfy	16/05/2017	Oppose	DULII	NO
Silliul, DdVlu Cmith, Hannah	10/05/2017	Oppose	DULII	NO
Silliun, Hannan Smith, Iamia Alavandar	10/05/2017	Oppose	DUII	INO Voc
Smith Katia	10/05/2017	Support	DOLLI	res
Smith, Katle	1//05/201/	Oppose	Both	INO No
Smith, Steve	18/05/201/	Oppose	ROLU	INO

Sole, Matthew	17/05/2017	Oppose	Both	No
Solly, Mervyn John	08/05/2017	Support	Both	No
Sommerville, Sue	18/05/2017	Oppose	Both	No
Sorensen, Hanne	17/05/2017	Oppose	Both	No
Spain, Kiri	16/05/2017	Oppose	Both	No
Spence, Gordon	17/05/2017	Oppose	Both	No
Squires, Kervn	18/05/2017	Oppose	Both	No
Stack, Pamela	17/05/2017	Oppose	Both	No
Stannard Norman	18/05/2017	Oppose	Both	No
Stein Patricia	18/05/2017	Oppose	Both	No
Stewart Frin	17/05/2017	Onnose	Both	No
Stewart Mark	17/05/2017	Oppose	Both	No
Stokes Andrew	17/05/2017	Oppose	Both	No
Stolte Ottilie	17/05/2017	Oppose	Both	No
Strachan Grant	17/05/2017	Oppose	Both	No
Strathdee Barbara	17/05/2017	Oppose	Both	No
Strathdee, Bachel Lise	17/05/2017	Oppose	Both	No
Strong Delia	16/05/2017	Oppose	Both	No
Stuart Alan	18/05/2017	Support	Both	Vec
Sturgess Jennifer Christine	17/05/2017	Support	BDC	No
Sumper Terny	18/05/2017	Oppose	Both	Vec
Sur Nic	18/05/2017	Oppose	Both	No
Sutch Helen	10/05/2017	Oppose	Both	No
Sutherland Androw	17/05/2017	Oppose	Both	No
Sutherland, Andrew	19/05/2017	Oppose	Both	No
Swemmer Dichard	18/05/2017	Oppose	Both	No
Syme Catherine	17/05/2017	Oppose	Both	No
Syllie, Cathenne Szybowski, Apoushka	16/05/2017	Oppose	Both	No
Tait Megan	17/05/2017	Oppose	Both	No
Taka Bruce	17/05/2017	Oppose	Both	No
Tamihana-Bryce Jacon	17/05/2017	Oppose	Both	No
Tangarga Tanga	17/05/2017	Oppose	Both	No
Tantiklis Thom	17/05/2017	Oppose	Both	No
Tapunis, mom	17/05/2017	Oppose	Both	No
Tauchar Jachua	17/05/2017	Oppose	Both	No
Taucher, Jeshua	17/05/2017	Oppose	Both	No
Taylor, Chaz	18/05/2017	Oppose	Both	No
Taylor, Lilli	17/05/2017	Oppose	Both	No
Taylor, Tom Tappycon Alan	17/05/2017	Oppose	Both	No
Thatchar Alan	19/05/2017	Oppose	Both	No
Thatcher, Aldri Thomas Bridgot	17/05/2017	Oppose	Both	No
Thomas, loromy	17/05/2017	Cuppose	Doth	No
Thomas, Sereiny	17/05/2017	Oppose	DULII	No
Thomas, Sdill	17/05/2017	Oppose	DOUII	NO
	18/05/2017	Support	DOUII	res
Thompson, Joanne	17/05/2017	Oppose	BOUI	NO
Thomson, Micheal James	18/05/2017	Support	Both	NO
Thomson, Sean	18/05/2017	Oppose	BOUI	NO
Thome, Tony James	17/05/2017	Support	DOUII	NO
Thorpe, Karen	18/05/2017	Oppose	BOUI	NO
Tinlower, Bevan	19/05/2017	Oppose	Both	NO
Trequethe Neire Courteeu	17/05/2017	Oppose	DULII	NO
	10/05/2017	Oppose	DULII	NO
Tunnialiffa Michael	10/05/2017	Oppose	DOUTI	NO
	18/05/2017	Oppose	BOTH	INO No
I Urek, Gabriella	17/05/2017	Oppose	BOTH	INO No
Unkovich, Pam	1//05/201/	Oppose	ROLU	INO

Utting, Genevieve	17/05/2017	Oppose	Both	No
Vali, Kristiina	17/05/2017	Oppose	Both	No
Van Brakel, Annette	17/05/2017	Oppose	Both	No
Van Den Bos, Therese	19/05/2017	Oppose	Both	No
van den Hoven, Dorothy	17/05/2017	Oppose	Both	No
Van der Haas, Marianne	18/05/2017	Oppose	Both	No
van der Meer, Joris	18/05/2017	Oppose	Both	No
van der Spek, Erik	18/05/2017	Oppose	Both	No
van Rvn. Audrev	17/05/2017	Oppose	Both	No
van Sabben, Ans	17/05/2017	Oppose	Both	No
van Schie, Teio	18/05/2017	Oppose	Both	No
van Woerkom. Theo	16/05/2017	Oppose	Both	No
van Zeist. Annette	18/05/2017	Oppose	Both	No
Vaughan, Janet	18/05/2017	Oppose	Both	No
Venable, Justin	17/05/2017	Oppose	Both	No
Vincent, Susanne	17/05/2017	Oppose	Both	No
Visch Clarisse	18/05/2017	Oppose	Both	No
Vollehreat Kris	17/05/2017	Oppose	Both	No
Waghorn Kate	18/05/2017	Oppose	Both	No
Waldvogel Joan	17/05/2017	Oppose	Both	No
Wallace Gavin James	18/05/2017	Suppose	Both	Yes
Wallingford Sonhia	17/05/2017	Onnose	Both	No
Walsh John Edmund	08/05/2017	Suppose	Both	No
Walsh, Sonn Edmand	16/05/2017	Oppore	Both	No
Ward Melva	18/05/2017	Oppose	Both	No
Ward Noel	18/05/2017	Oppose	Both	No
Wards Tan	18/05/2017	Oppose	Both	No
Ware Sandra	17/05/2017	Oppose	Both	No
Warren Mary Ellen	17/05/2017	Oppose	Both	No
Washington Susan	17/05/2017	Oppose	Both	No
Watson, Peter	18/05/2017	Oppose	Both	No
Wauchop, Kate	17/05/2017	Oppose	Both	No
Wearing, Dale Jeffrey	17/05/2017	Support	BDC	No
Wearing, Holly	17/05/2017	Support	BDC	No
Wearing, Marilyn Ann	17/05/2017	Support	BDC	No
Wedekind, Richard	18/05/2017	Oppose	Both	No
Weggery, Jane	17/05/2017	Oppose	Both	No
Weller, Adam	18/05/2017	Oppose	Both	No
Wells, Robin	18/05/2017	Oppose	Both	No
Wesley, Richard	18/05/2017	Oppose	Both	No
Wesley-Land, Kylie	18/05/2017	Oppose	Both	No
Wheeldon, Brian	17/05/2017	Oppose	Both	No
Wheeler, Donna Helen	16/05/2017	Oppose	Both	No
Whiteside, Annette	18/05/2017	Oppose	Both	No
Whitmore, Jill	18/05/2017	Oppose	Both	No
Whitmore, Peter	18/05/2017	Oppose	Both	No
Whittaker, Helen	17/05/2017	Oppose	Both	No
Wiegand, Carlo	17/05/2017	Oppose	Both	No
Wilkinson, Maggie	17/05/2017	Oppose	Both	No
Wilkinson, Vivienne	18/05/2017	Oppose	Both	No
Willey, Matthew	19/05/2017	Oppose	Both	No
Williams, Christian	18/05/2017	Oppose	Both	No
Williams, Jain Johnston	17/05/2017	Support	Both	No
Williams, Shannon	18/05/2017	Oppose	Both	No
Williams, Warren	17/05/2017	Oppose	Both	No
Wilson, Annie	17/05/2017	Oppose	Both	No
	and the second			

Wilson, Charma	18/05/2017	Oppose	Both	No
Wilson, Jade	16/05/2017	Oppose	Both	No
Wilson, Kerry-Jayne	17/05/2017	Oppose	Both	No
Wilson, Mary	17/05/2017	Oppose	Both	No
Wilson, William Shaun	18/05/2017	Support	Both	Yes
Wistrand, Asta	17/05/2017	Oppose	Both	No
Wood, Melissa	18/05/2017	Oppose	Both	No
Woods, Jillian	17/05/2017	Oppose	Both	No
Worth, Alison	17/05/2017	Oppose	Both	No
Wrathall, Vallance	18/05/2017	Oppose	Both	No
Wright, Jenefer	17/05/2017	Oppose	Both	No
Wrightson, Amala	17/05/2017	Oppose	Both	No
Wylde, Ross	17/05/2017	Support	Both	No
Xiong, Cathy	18/05/2017	Oppose	Both	No
Yates, Deborah	17/05/2017	Oppose	Both	No
Yeates, Malcolm	17/05/2017	Oppose	Both	No
Yolland, Kate	19/05/2017	Oppose	Both	No
Young, Stuart	16/05/2017	Oppose	Both	No
Young, Susan Jane	16/05/2017	Oppose	Both	Yes
Zhong, Lisa	17/05/2017	Oppose	Both	No

APPENDIX 3A

Regional Policy Statement

Objectives

5.1: To take into account the principles of the Treaty of Waitangi in the exercise of functions and powers under the Resource Management Act.

5.2: (a) Recognise and provide for the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga within the West Coast Region.

(b) To have particular regard to kaitiakitanga in the management of the use, development and protection of natural and physical resources in the West Coast Region.

Policies

5.1.1 The principles of the Treaty of Waitangi will be taken into account in the sustainable management of natural and physical resources in the West Coast Region.

5.2.1 Provide for the protection of ancestral land, waahi tapu water, sites and other taonga in consultation with Poutini Ngai Tahu.

5.2.2 Promote resource management decisions and practices which accommodate the economic, cultural and spiritual values which are the basis for the special relationship between Poutini Ngai Tahu and their taonga.

5.2.3 Recognise the role of kaitiakitanga in the management of natural and physical resources on the West Coast.

Objectives

6: To avoid, remedy or mitigate actual or potential adverse effects of resource use, development or protection on heritage and archaeological sites and values that contribute to the West Coast's distinctive character and sense of identity.

Policies

6.1 Promote the identification and protection of heritage values of the region, which include the following:

- a) Archaeological sites;
- b) Places or areas of special historical, cultural or architectural interest or significance;
- c) Places or areas of intrinsic, recreational or amenity value or of visual appeal.

Objectives

7.1 The sustainable management of soil to meet a range of uses, including the reasonably foreseeable needs of future generations and the prevention of further long-term degradation of the soil resource; and to maintain or restore the soil quality factors that contribute to its life supporting capacity including:

- a) Soil depth, structure and fertility;
- b) Soil fauna;
- c) Organic matter; and to retain soils of ecological, scientific or cultural value.

7.2 To avoid, remedy or mitigate degradation of water resources and aquatic ecosystems resulting from the instability, or use or development, of the beds and banks of rivers.

Policies

7. To sustain the potential of the soil and water to meet the reasonably foreseeable needs of future generations, activities will be managed so that adverse effects are avoided, remedied or mitigated, including those effects caused by:

- a) Erosion, soil loss or the potential for soil loss;
- b) Instability of river channels, land and structures;
- c) Contamination of soil, groundwater and surface water;
- d) Long term decline in life supporting capacity of soil and land;
- e) (e) Decline in the quality of aquatic ecosystems and other instream values;
- f) Damage to the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
- g) Damage to ecosystems, including the quality of aquatic ecosystems and other instream values, landscapes and habitats;
- h) Increased flooding and runoff.

Objectives

8.1.1 To manage the quantity of the Region's water resources so as to:

- a) Meet the needs of a range of uses, including the reasonably foreseeable needs of future generations; and
- b) Safeguard the life-supporting capacity of water and related ecosystems.

8.2.1 To maintain, and where water quality is degraded, enhance the quality of the region's surface, ground and coastal water resources by:

- a) Recognising and providing for the relationship of Poutini Ngai Tahu and their culture and tradition with their ancestral water;
- b) Ensuring that land and water resources are used and managed so that their life supporting capacity, intrinsic, amenity, recreational and cultural values are maintained or enhanced by :
 - i. Sufficient flow or levels in natural water bodies to achieve desired water quality; and
 - ii. Avoid, remedy or mitigate the adverse effects of soil loss, erosion and the contamination of water bodies with chemicals, sediment, bacteria or nutrients.

Policies

8.1.1 When making decisions over water levels or river flows, or allocating water, the Regional Council will consider the following matters:

- a) The natural availability of the water resource or natural range of levels and/or flows;
- b) The existing and reasonably foreseeable future demands on water resources;
- c) Conservation of water and its efficient allocation and use;
- d) The relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
- e) The potential demand for water resources which could have an effect the following:
 - a. Recreational, amenity and intrinsic ecological values,
 - b. Ecological and aquatic values,
 - c. Indigenous flora and fauna.

- f) Habitats of trout and salmon;
- g) When allocating surface water resources, residual flows are sufficient to maintain or enhance the life supporting capacity of aquatic habitats and provide for aquatic, amenity and habitat values;
- h) Existing allocations to resource users and reliance on these for their continued operations;
- i) Cumulative effects of water extraction; and
- j) The relationship between water quantity and water quality and the effects that water abstraction may have on the ability of a water body to assimilate waste.

8.2.1 Avoid, remedy or mitigate the adverse effects of discharges into surface, coastal and ground water particularly where these cause or are likely to cause:

- a) Risks to human health;
- b) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
- c) Any conspicuous change in the colour or visual clarity;
- d) Any emission of objectionable odours;
- e) The rendering of fresh water unsuitable for consumption by farm animals;
- f) Any significant adverse effects on aquatic life;
- g) Loss of ecological, cultural, aesthetic, fishery, amenity and recreational values; and
- h) The relationship of Poutini Ngai Tahu and their culture and traditions with ancestral water and other taonga to be compromised.

8.2.2 To maintain, enhance or restore water quality in surface, coastal and ground water, taking into account:

- a) The public uses of water resources;
- b) The sensitivity of the receiving waters to adverse effects;
- c) The current state of technical knowledge and treatment and disposal options for discharges;
- d) Existing lawful discharges;
- e) The relationship of Poutini Ngai Tahu and their culture and traditions with ancestral water; and
- f) The setting of progressively higher water quality standards water bodies that are unacceptably degraded.

8.2.3 To promote, where appropriate, well-vegetated riparian margins while considering the need to reduce threats caused by flooding and erosion.

8.2.4 To manage land use practices in order to avoid, remedy or mitigate the entry of soil, silt and other contaminants into the region's water bodies.

Objectives

9.1 To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.

9.3 To preserve the natural character of the wetlands, lakes and rivers.

Policies

9.1 Preserve the natural character of the West Coast's wetlands, lakes and rivers and their margins and protect them, and outstanding natural features and landscapes, from inappropriate subdivision, use and development.

In deciding whether subdivision, use and development are inappropriate matters to be considered will include the following:

- a) The degree to which the adverse effects of the discharge of contaminants can be avoided, remedied or mitigated, through provision of adequate services, particularly the disposal of wastes;
- b) The extent of sporadic development and its effects on natural character;
- c) The degree and significance of actual, potential and cumulative effects on natural character that arise;
- d) The extent to which the subdivision, use and development recognises and provides for the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
- e) The practicality of locating any subdivision, use or development away from the areas of significant indigenous vegetation and significant habitats of indigenous fauna (policy 9.2), the coastal environment, wetlands, lakes, and rivers and their margins, where adverse effects on natural character can be avoided, remedied or mitigated to a greater degree or extent;
- f) The extent to which any subdivision, use or development provides a public benefit;
- g) The degree to which the subdivision, use or development will be threatened by, or contribute to, the occurrence of natural hazards; and
- h) Where rehabilitation plantings are required, the practicality of using indigenous species, preferably of locally derived stock.

In deciding whether a natural feature or landscape is outstanding matters to be considered will include the following:

- a) Its use, value or degree of representativeness of/for scenic, amenity, recreational, heritage, intrinsic and scientific purposes;
- b) Its association with areas of significant indigenous vegetation and significant habitats of indigenous fauna (see policy 9.2);
- c) The significance of its association with the coastal environment, wetlands, lakes and rivers and their margins;
- d) The relationship of tangata whenua and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; and
- e) The inclusion or exclusion of a water body from a water conservation order.

9.2 Recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna. Matters to be considered as a guide for decision making include those that follow, any one of which may determine whether areas of indigenous vegetation and/or habitats of indigenous fauna are "significant".

- a) The desirability for their protection by statute or covenant;
- b) Protection status, including reserves created under the West Coast Accord;
- c) The degree to which the area is representative of an association of species or an ecosystem that is typical of the region;
- d) The likelihood of the area retaining its viability, quality and integrity of processes over a long time period;
- e) The presence or absence of an indigenous species or community of indigenous species that is rare or threatened regionally or nationally;
- f) The degree to which the area is distinctive in terms of indigenous species that are unusual, endemic, or that reach a distribution limit in the region;
- g) The extent to which the area has been modified from a natural state or affected by weeds or pest species;
- h) Its connection with other areas of significant indigenous vegetation or significant habitats of indigenous fauna;
- i) Its contribution to the avoidance or mitigation of natural hazards;
- j) Its use or value on a local, regional or national scale for public access, recreation, amenity and heritage purposes;

- k) The relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu, mahinga kai and other taonga;
- I) The contribution of the area or habitat to maintenance and enhancement of ecological and reproductive processes water quality, water flow and soil conservation;
- m) The relationship of the area or habitat to any water body included in a water conservation order;
- n) Whether they occur near wetlands and estuaries;
- o) The importance to migratory species, including whitebait; and
- p) The relevance of ecological districts in relation to matters (c), (e) and (f).

9.6 Promote the containment and reduction of noxious and potentially noxious pests and weeds in situations where they cause, or are likely to cause, adverse effects, including:

- a) Destruction or degradation of indigenous flora or fauna;
- b) Reduction in biodiversity;
- c) Land instability; and
- d) Spread within waterways.

Objectives

11. The protection of human life and the avoidance or mitigation of damage to property and environmental values resulting from natural hazards.

Policies

11.1 Promote appropriate responses when a natural hazard is possible, likely to occur or imminent including:

- a) Timely warning and advice;
- b) Evacuation of people and stock from high risk areas;
- c) Mobilisation of rescue and welfare groups; and
- d) Identification of at risk areas.

11.2 Recognise the risks to proposed and existing development from natural hazards and promote measures to reduce this risk to an acceptable level. Where necessary further development in hazard-prone areas will be restricted (refer Policy1.3).

11.3 Consult with people and communities directly affected when making decisions on levels of risk from natural hazards. When making decisions on levels of risk matters to be considered will include:

- a) The probability of occurrence, magnitude and location of events;
- b) The potential consequence of an event including potential loss of life, injury, social and economic disruption, civil defence implications and cost to the community;
- c) The measures proposed to avoid or mitigate the effects of the event, the degree of mitigation they will provide and effects on the environment from adopting such measures;
- d) The benefits and costs of alternative mitigation measures; and
- e) The possibility of locating activities away from areas at risk.

The Regional Council will carry out a review of particular local authority responsibilities for the development of objectives, policies and methods for the avoidance or mitigation of natural hazards. This review will be carried out in consultation with the region's territorial authorities to determine the need for re-assigning responsibility. Until this review is completed responsibilities for the control of the use of the land for the purpose of the avoidance or mitigation of natural hazards shall remain where they lie. Pending the outcome of the review above, where local authority responsibility for

natural hazard management is not clear, the Regional Council shall retain primary responsibility as provided under section 62(1) (ha) of the Act.

The outcome of this review will be notified as a change to this RPS, as provided for in the First Schedule of the Act. Territorial authorities are responsible under section 36 of the Building Act for imposing building controls in areas known to be subject to natural hazards.

With respect to the CMA, section 30(1) (d) of the Act states that the control of the use of land for the purpose of avoidance and mitigation of natural hazards is a function of the Regional Council, in conjunction with the Minister of Conservation.

Objectives

13.2 Maintenance or improvement of air quality at or to levels that safeguard human health, environmental quality and amenity values.

Policies

13.2 Standards in the Ambient Air Quality Guidelines will be used as the lowest allowable limit of air quality on the West Coast.

Minerals

Objectives

16.1 Options for the evaluation, use and development of mineral resources are not unnecessarily hindered while other natural and physical resources are sustainably managed.

16.2 The ability to evaluate mineral resources is protected.

Policies

16.1 Recognise known mineral resources and have regard to the effects of changes in land use patterns on potential options to extract them when making resource management decisions.

16.2 Recognise that the extraction of mineral resources may be incompatible with other land uses and vice versa.

16.3 Ensure that the adverse effects of the extraction of mineral resources are managed in a manner that is consistent with objectives, policies and other provisions elsewhere in this RPS.

APPENDIX 3B

Proposed Regional Policy Statement

Objectives

2.1 To take into account the principles of the Treaty of Waitangi in the exercise of functions and powers under the RMA.

2.2 Recognise and provide for the relationship of Poutini Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga within the West Coast Region.

Policies

2.2 In consultation with Poutini Ngāi Tahu, provide for the protection of ancestral land, wāhi tapu, water, sites, and other taonga from the adverse effects of activities, in a manner which is consistent with the purpose of the RMA.

2.3 The special relationship that Poutini Ngāi Tahu have with te taiao (the environment), and their economic, cultural, and spiritual values, including their role as kaitiaki, will be given particular consideration in resource management decisions and practices.

Objectives

4.1 To enable sustainable and resilient communities on the West Coast.

Policies

4.1 To manage the West Coast's natural and physical resources in a way that enables a range of economic activities to occur, prioritising activities likely to provide substantial employment that benefits the long term sustainability of the region's communities.

Objectives

5.1 To recognise the role of resource use and development on the West Coast and its contribution to enabling people and communities to provide for their social, economic and cultural wellbeing.

5.2 To recognise that the use and development of natural resources may be incompatible with other land uses, in some situations and locations.

Policies

5.1 Recognition will be given in resource management processes to the role of resource use and development on the West Coast and its contribution to enabling people and communities to provide for their economic, social and cultural wellbeing.

5.2 To recognise that natural and physical resources important for the West Coast's economy need to be protected from significant negative impacts of new subdivision, use and development, and land protection with particular emphasis on either:

a) Reverse sensitivity for:

- i) primary production activities;
- ii) industrial and commercial activities;
- iii) minerals extraction*;
- iv) significant tourism infrastructure; and

v) existing and planned regionally significant infrastructure.

b) Sterilisation of:

- i) land with significant mineral resource; or
- ii) land which is likely to be needed for regionally significant infrastructure.

*Minerals extraction includes aggregates and other mining activities.

Objectives

7.2 Recognising the need to protect significant indigenous vegetation and significant habitat of native fauna, while encouraging the Crown to acquire ownership of any areas located on private land, while ensuring the proportion of private land to conservation land in the region does not decrease.

Policies

7.1 Adverse effects on significant indigenous vegetation, significant habitat of native fauna, and outstanding natural character arising from the use and development of natural resources will be avoided, remedied or mitigated via Regional and District Plans and resource consent processes.

Objectives

8.1 Achieve the integrated management of fresh water and the subdivision, use and development of land within catchments.

8.3 Provide for a range of land and water uses to enable the economic, social and cultural wellbeing of West Coast communities while avoiding, remedying or mitigating adverse effects on the environment.

Policies

8.1 Adverse effects on water arising from subdivision, use or development of land will be avoided, remedied or mitigated via Regional and District Plans and resource consent processes.

Objectives

10.2 To allow discharges to air which are part of activities contributing to the social, economic, and cultural wellbeing of people and communities on the West Coast, while managing adverse effects of those discharges on air quality and other values.

Policies

10.2 Management of adverse effects of the discharge of contaminants to air shall include consideration of the following:

- a) Reverse sensitivity, including the siting of inappropriate development;
- b) Use of technology, codes of practice, and industry standards; and,
- c) Best practicable option.

Objectives

11.1 The risks and impacts of natural hazard events on people, communities, property, infrastructure and our regional economy are avoided or minimised.

Policies

11.1 Reduce the susceptibility of the West Coast community and environment to natural hazards by improving planning, responsibility and community awareness for the avoidance and mitigation of natural hazards.

11.2 New subdivision, use and development should be located and designed so that the need for hazard protection works is avoided. Where necessary, further development in hazard-prone areas will be restricted.

11.4 The appropriateness of works and activities designed to modify natural hazard processes and events will be assessed by reference to:

- a) The levels of risk and the likely increase in disaster or risk potential;
- b) The costs and benefits to people and the community;
- c) The potential effects of the works on the environment; and
- d) The effectiveness of the works or activities and the practicality of alternative means, including the relocation of existing development or infrastructure away from areas of natural hazard risk.

APPENDIX 3C

Land and Water Plan

4.2.1 To avoid remedy or mitigate adverse effects from land disturbance so that the region's water and soil resources are sustainably managed.

Explanation

Land disturbance can cause adverse effects on both the land and water environments. The Objective seeks to ensure that the provisions within this Plan minimise the likelihood of significant impact on water quality and quantity, soil conservation, property, and infrastructure.

Land disturbance activities can impact on the water quality of adjacent water bodies due to the input of sediments and/or nutrients and will be managed in such a way to avoid or mitigate these effects. Sediment and/or nutrient inputs can cause changes to the characteristics of the receiving water which render the water body unusable and potentially allow harmful pathogens to reach levels where they affect human health.

Stock access to the coastal environment, wetlands, lakes and rivers and their margins can have significant adverse effects on soil conservation, land stability, water quality, in stream values, and the health and function of margins.

4.3.1 To manage the disturbance of land and vegetation in order to avoid remedy or mitigate any adverse effects on:

- (a) The stability of land (e.g. slumping, subsidence, or erosion), river banks, and riverbeds and coastal margins;
- (b) Water quality, including clarity, turbidity, and temperature changes, and in stream values;
- (c) Changes in water level including water table;
- (d) Public access to rivers, lakes, and their margins and the coast;
- (e) Natural character, and aquatic ecosystems;
- (f) Soil depth and soil fertility;
- (g) The integrity of property, structures, or effects upon the operation or maintenance of regionally significant infrastructure;
- (h) Cultural and recreational values; and
- (i) Significant indigenous vegetation and significant habitats of indigenous fauna.

Explanation

This Policy covers the range of factors or values that will be considered when assessing resource consent applications. This Policy is an overarching policy which should be applied in conjunction with other policies in this Chapter.

While this Chapter of the Plan concerns land that is outside riverbeds, it is important that the effects of disturbance of land on rivers are considered. Land use activities can cause accelerated erosion to occur. Productivity of eroded land is diminished and significant flow on effects may be produced. Policy 5.4.1 therefore, seeks to avoid or minimise soil losses and erosion from land use activities on land prone to erosion. It also covers activities in the Greymouth Earthworks Control Area (Schedule 4).

The Council has as one of its functions, the establishment, review and implementation of objectives, policies and other methods to maintain indigenous biological diversity. It is the function of the District

Councils to control the use, subdivision, and development of land to maintain indigenous biological diversity.

In this Plan, the maintenance and enhancement of water quality, in stream values and the retention of riparian vegetation contributes to maintaining indigenous biological diversity of the coastal environment, wetlands, lakes and rivers and their margins.

Policy 9.2 of the Regional Policy Statement for the West Coast will be applied when deciding whether indigenous vegetation or habitat of indigenous fauna are significant for the purposes of 4.3.1(i).

4.3.2 To manage earthworks (for example, mining) to avoid effects on the environment where the activity may produce any of the following geochemical processes, above background levels:

- a) Release of acid rock drainage;
- b) Precipitation of iron oxides;
- c) Release of heavy metals.

Explanation

The potential environmental effect of hard rock mining is predetermined by the geology of the material being excavated or disturbed. This may be overburden, tailings, or product. High concentrations of sulphur often occur in geological units such as Brunner Coal Measures and can result in acid rock drainage which lowers the pH enabling the solubilisation of heavy metals or metalloids such as aluminium, arsenic, copper, lead, and zinc.

The acid and heavy metals released into surface waters can cause adverse effects on aquatic life either by direct toxic response, contact with acidic water (usually less than pH 4.0), or by removal of habitat due to metal precipitation, in particular iron flocs. Hard rock mining associated with both gold and coal mining can result in acid rock drainage and the release of heavy metals or metalloids such as arsenic or antimony into the environment if the waste rock is not managed to avoid this.

4.3.3 To manage the disturbance of riparian margins to:

- (a) Maintain or enhance water quality (including clarity, turbidity, and temperature), and in-stream values, (including aquatic ecosystems);
- (b) Promote soil conservation;
- (c) Ensure that existing public access to water bodies is maintained or enhanced;
- (d) Protect the natural character of the coastal environment, wetlands, and lakes and rivers and their margins, from inappropriate use and development;
- (e) Enable the maintenance and safe operation of regionally significant infrastructure.

Explanation

Riparian margins enable management of activities within a defined area and they are different to esplanade reserves or esplanade strips. They are areas where controls on land use activities are in place, primarily for soil conservation, water quality control, erosion control, natural hazard avoidance, and the protection of the beds of rivers, lakes, and wetlands. Unlike esplanade reserves or strips they do not affect land ownership or create public access or other interests in the land. Where riparian margins are disturbed to facilitate public access to water bodies, the location of such access should be determined having consideration to public health and safety, particularly where proximate to regionally significant infrastructure.

Managing the margins of water bodies (Policy 4.3.3) is an effective tool in reducing adverse effects on water bodies because the margins can be used to filter nutrients and microbes, and trap fine sediment. It may maintain and enhance amenity values. Inappropriate use of land in close proximity to water bodies can contribute to sediment loading, bank erosion, and increased run off.

Land and vegetation disturbance which causes the loss of riparian vegetation can adversely affect the healthy functioning of rivers and aquatic habitats. Maintaining and enhancing aquatic ecosystems contributes to maintaining indigenous biological diversity.

4.3.10 To encourage the retention, maintenance, or planting of appropriate riparian vegetation.

Explanation

Riparian vegetation can have significant benefits in maintaining and enhancing water quality by stabilising the banks against erosion and by filtering and trapping the overland flow of sediment, phosphorous and faecal matter. Riparian vegetation also contributes to the maintenance of indigenous biological diversity by providing shade and keeping water cool and providing a source of food for aquatic life.

It is recognised that the establishment of riparian vegetation is not always appropriate if it enables the establishment or introduction of pest plants and animals, impedes public access or reduces the flood carrying capacity or causes adverse effects on the stability and performance of infrastructure. Information is available from the Council regarding guidelines and industry best practice for managing riparian vegetation.

5.2.1 To avoid, remedy, or mitigate the adverse effects of lake and riverbed activities on:

- (a) The stability of beds, banks, and structures;
- (b) The flood carrying capacity of rivers;
- (c) The natural character of wetlands, lakes and rivers and their margins;
- (d) Indigenous biodiversity and ecological values, including fish passage;
- (e) Amenity, heritage, and cultural values;
- (f) Sports fish habitat values;
- (g) Water quality;
- (h) Navigation; and
- (i) Regionally significant infrastructure.

Explanation

The construction, maintenance, alteration, or removal of in stream structures and bed disturbance activities can cause adverse effects on the West Coast environment, existing infrastructure, and other lawful uses. The Objective seeks to ensure that the provisions within this Plan minimise the likelihood of significant impacts while meeting the requirements of Section 5 of the RMA, which stipulates that natural and physical resources be sustainably managed and the requirements of Section 6 which require matters of national importance to be recognised and provided for.

- 5.3.2 To manage bed disturbance, reclamation, deposition and the use, erection, extension, reconstruction, maintenance, alteration, demolition, or removal of structures in, on, under, or over the bed of any lake or river, so that the activity does not cause or contribute to significant adverse effects on:
 - (a) The stability of beds and banks;
 - (b) The capacity of rivers to carry flood flow;
 - (c) Heritage, amenity or cultural values;
 - (d) Water quality;
 - (e) Existing structures or existing uses;
 - (f) Navigational safety;
 - (g) Aquatic ecosystem values (including habitat values and fish passage);
 - (h) The natural character of the coastal environment, wetlands, rivers and lakes and their margins;
 - (i) Significant indigenous vegetation and significant habitats of indigenous fauna.

Explanation

This Policy recognises the need for controls by way of regional rules to ensure that stability of riverbeds and banks is safeguarded, the capability of rivers to carry water is not impeded when in flood, and that other adverse effects are addressed appropriately.

Policy 9.2 of the Regional Policy Statement for the West Coast will be applied when deciding whether indigenous vegetation or habitat of indigenous fauna are significant for the purposes of 4.3.2(i).

10.2.1 To sustain existing uses of the West Coast's groundwater, by protecting water quantity and quality and avoiding depleting surface water flows.

Explanation

Groundwater is an important resource in certain areas of the West Coast as it provides water for domestic and public water supply, stock drinking water, industry and irrigation. This Objective seeks to sustain these consumptive uses for the continued benefit of present and future generations.

10.3.1 In managing any activity involving the taking of groundwater to ensure that adverse effects are avoided, remedied, or mitigated.

Explanation

Groundwater and surface water can be adversely affected by the taking of groundwater. This requires consideration of connectivity and transmissivity between water bodies. When considering these activities, regard must be had to avoiding, remedying or mitigating adverse effects.

7.2.1 To retain flows and water levels in water bodies sufficient to maintain their in stream values, natural character, and life supporting capacity.

Explanation

This Objective seeks to maintain sufficient flows and water levels in rivers and other water bodies to provide for in stream values, natural character, and life supporting capacity.

7.2.2 To provide for the water needs of the West Coast's industries, network utility operators, and community water supplies.

Explanation

The economic, social and cultural wellbeing of the West Coast's people and communities rely on their access to securing suitable quantities of water. Network utility operators also require access to water to ensure the continued maintenance and operation of infrastructural networks thereby providing for the economic, social, and cultural wellbeing of the West Coast's people and communities. The present and reasonably foreseeable needs for water will need to be met, provided any adverse effects are sustainably managed. This includes existing users who rely on current takes of water, as well as future users.

7.2.3 To promote the efficient use of water.

Explanation

Efficient use of water occurs when the volume of water taken is sufficient to meet the needs of the use, with the least possible wastage, or overestimation of need.

7.3.1 Takes from rivers where the total volume of water allocated is less than 20% of the river's mean annual low flow will require no minimum flow.

Explanation

Water in a river may already be allocated to a number of uses including lawfully established takes, takes that are permitted under the Rules of this Plan, and takes provided for under Section 14 of the RMA. When only a small proportion of the available water in a river is taken, there is little need for a consent condition restricting use at low flows because of the low risk of adverse effects due to the taking. The costs of administering minimum flows are high, and it is not cost effective to set minimum flows on takes that have a low risk of causing effects. The need for gauging's to determine mean annual low flow (MALF) will be at the discretion of Council staff. MALF is determined at the point of take, but needs to take account of the cumulative water takes at other points in the catchment. Once calculated, the MALF for a river will be fixed for the duration of the plan. For smaller streams with high in stream values the location and rate of take and the seasonal timing of the take can be controlled by conditions on the consent.

Note: General policies for the management of flows are outlined in Policies 7.3.1-7.3.7, while specific Policies for the management of flows associated with the run of the river dams are outlined in Policies 7.3.8-7.3.14. For other dam schemes, Policies 7.3.1-7.3.7 may apply as well.

7.3.6 To promote the efficient use of water and to consider the need to cap the overall allocation from any water body.

Explanation

The efficient use of water will be assessed on a case by case basis as it is not possible to establish a definition of efficiency that is appropriate or applicable for all potential water. For irrigation applications rate of take should be determined based on area to be irrigated, soil type, and vegetation.

In the future, demand for water may necessitate a cap on further allocation. If this is deemed necessary, the Council will formally resolve that no further permits to take water will be granted in that catchment.

7.3.7 To monitor the taking and use of water, requiring the volume and rate of take to be measured as or where appropriate.

Monitoring water use enables better management of the resource. For significant takes, Council may require the instantaneous rate and weekly volume to be monitored. Monitoring is unlikely to be useful for short term or non-consumptive takes.

7.3.14 When considering diversions associated with disturbance of riverbeds, priority will be given to avoiding, in preference to remedying or mitigating, adverse effects on surface flows.

Explanation

When considering diversion associated with riverbed disturbance, priority must be given to avoiding adverse effects, in preference to remedying or mitigating them. The avoidance of adverse effects on the quantity of surface flows will be sought in the first instance.

Where adverse effects are considered to be unavoidable, a resource consent may be declined or, if granted, may be subject to conditions requiring unavoidable adverse effects to be remedied, mitigated, or appropriate financial contribution made.

The West Coast has a history of diversions associated with mining of riverbeds, where subsequent to the re-instatement of the river to its original course, post-mining, flows disappear into gravels.

7.3A.1 When considering any application the consent authority must have regard to the following matters:

- (a) the extent to which the change would adversely affect safeguarding the lifesupporting capacity of freshwater and of any associated ecosystem; and
- (b) the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.

8.2.1 To maintain or enhance the quality of the West Coast's water

8.3.1. The West Coast Regional Council will manage the swimming areas identified in Schedule 9 for contact recreation purposes (Class CR) and all other surface water bodies in the region for aquatic ecosystem purposes (Class AE).

Explanation

Aquatic ecosystem and contact recreation standards are set in the Third Schedule of the RMA (see below). Contact recreation water bodies are identified in Schedule 9, and all other water bodies will be managed for aquatic ecosystem purposes. AE and CR classes do not exclude other water quality classes being applied if identified as appropriate through the resource consent process.

- Class AE Water (being water managed for aquatic ecosystem purposes)
 - (1) The natural temperature of the water shall not be changed by more than 3° Celsius.
 - (2) The following shall not be allowed if they have an adverse effect on aquatic life: (a) Any pH change:
 - (b) Any increase in the deposition of matter on the bed of the water body or coastal water;
 - (c) Any discharge of a contaminant into the water.
 - (3) The concentration of dissolved oxygen shall exceed 80% of saturation concentration
 - (4) There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water
- Class CR Water (being water managed for contact recreation purposes)
 - (1) The visual clarity of the water shall not be so low as to be unsuitable for bathing.
 - (2) The water shall not be rendered unsuitable for bathing by the presence of contaminants.
 - (3) There shall be no biological growths as a result of any discharges of a contaminant into the water.

In some streams on the West Coast the AE standards are unable to be met due to high acidity (both naturally occurring and caused by historic mining activities). This is reflected in Policy 8.3.2.

- 8.3.5 When considering applications for resource consents to discharge contaminants to water to have regard to:
 - (a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects;
 - (b) The financial implications, and the effects on the environment of the proposed method of discharge when compared with other options;
 - (c) The current environmental mitigation technology and the likelihood that the proposed method can be successfully applied;
 - (d) The cumulative effects of discharges of contaminants and the assimilative capacity of the water body and actual or potential effects in the coastal marine area; and
 - (e) Any relevant industry codes of practice or guidelines relating to the management of potential discharges.

Explanation

When considering the avoidance, remedy, or mitigation of the adverse effects of the discharge of contaminants to land or water under a resource consent, the Council will consider matters identified in (a) to (d) in the Policy. This ensures the recognition of any environmental mitigation technology constraint upon the adoption of alternative treatment or discharge methods, and the best practicable option, cumulative effects and assimilative capacity, and downstream effects on the coastal marine area. With respect to (a) for example, discharges from alluvial mining operations are often temporary in nature. They can be constructed ponds which form part of the treatment system and can occur with minimal effect.

8.3.6 Mixing zones will be required for the discharge of contaminants to water. These will be limited to the extent necessary to take account of:

- (a) Water quality classes;
- (b) The size and sensitivity of the receiving environment;
- (c) The matters identified in Policy 3.3.1;
- (d) The physical processes acting on the area of discharge; and
- (e) The particular discharge, including contaminant type, concentration, and volume.

Explanation

Discharges of contaminants authorised under resource consents must meet any water quality standard set in respect of receiving waters after "reasonable mixing". Reasonable mixing occurs in a mixing zone, an accepted area of non-compliance. Matters (a) to (e) of the Policy will be considered in the determination of the size of any mixing zone. In some cases devices may need to be installed to accelerate mixing.

- 8.3A.1 When considering any application for a discharge the consent authority must have regard to the following matters:
 - (a) The extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water; and
 - (b) The extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.
- 13.2.1 To ensure that the adverse effects from the discharge of liquid contaminants into or onto land, on water and soil quality, social, cultural, and amenity values, and human health are avoided, remedied, or mitigated.
- 13.3.1 To ensure that the discharge of liquid contaminants into or onto land is of a nature or at a rate that does not exceed the ability of the land to assimilate the contaminant, and does not result in soil contamination.

Regional Air Quality Plan

Objectives

- 7.3.1 The protection of human health, property, structures and ecosystems from the adverse effects of discharges of dust to air.
- 7.4.1 Adverse effects of the deposition of dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the significant restriction of visibility or the soiling of property.

Explanation

The aim of this policy is to avoid, remedy or mitigate adverse effects arising from the discharge of dust, including significant effects on visibility and the soiling of property. The presence of deposited dust can result in a loss of amenities, inconvenience, and disruption to outdoor activities.

Policies

7.4.2 Adverse effects of suspended dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the impairment of human health.

Explanation

This policy addresses the need to avoid problems associated with the discharge of suspended dust. The adverse effects of suspended dust may include acute and chronic effects on human health.

7.4.3 In assessing offensive or objectionable effects from discharges of dust, the Regional Council will take into account the following factors:

- Frequency of dust discharges;
- Intensity of dust discharges;
- Duration of dust discharges;
- Offensiveness of the odour;
- Extent of dust discharges (suspended and deposited);
- Location of dust discharges.

Explanation

This policy provides guidance on the factors that will be taken into account when considering whether a dust discharge is offensive or objectionable. For example, the effects of the same discharge to air of dust may be different, depending on the location of the discharge and the sensitivity of the receiving environment. This policy provides for these factors to be considered, in relation to the management of adverse effects from dust.
RELEVANT OBJECTIVES & POLICIES FROM THE OPERATIVE BDP

Section 4.2 - Infrastructure		
Objective 4.2.5.1	To provide for the efficient development, operation and maintenance of infrastructure throughout the District, while avoiding, remedying or mitigating adverse effects.	
Policy 4.2.6.3	To utilise a roading hierarchy which enables the effects of activities on the roading resource to be avoided, remedied or mitigated depending on the status of the road in the hierarchy.	
Section 4.4 – Rural Land and Wa	ater Resource	
Objective 4.4.4.1	To ensure that the overall integrity and character of the rural environment and productivity of rural land resources is protected while enabling rural communities to provide for their social, economic and cultural wellbeing.	
Policy 4.4.5.1	A wide range of compatible activities which do not individually or cumulatively adversely affect the sustainability of rural land resources shall be generally permitted to locate in the rural area.	
Policy 4.4.5.2	Sustainable land management practices which maintain and/or enhance the productive values of soils and amenities and character of the rural area shall be encouraged and promoted.	
Objective 4.4.13.1	Promote land use activities which maintain or improve the water quality of the District's rivers and do not adversely affect water quantity, in order to safeguard the life supporting capacity of water.	
Policy 14.4.14.2	Significant ecological, cultural and heritage sites related to the water resource shall be recognised and wherever possible protected through the encouragement of integrated land management practices.	
Policy 4.4.14.4	The protection of water resources from adverse effects of land based activities shall be encouraged and promoted.	

Policy 4.4.14.7	To protect and enhance riparian margins adjacent to rivers, streams, lakes, wetlands and the coast for the purposes of:
	(i) Maintenance of the natural character of waterways, natural habitats and water quality including the mitigation of adverse effects of contaminant discharges and other natural and aesthetic and amenity values associated with the adjacent waterway.
	(ii) Public recreation.
	(iii) Public access.
Section 4.5 Minoral Resources	(IV) Maintenance of bank stability and reduction in sedimentation.
Section 4.5 – Mineral Resources	
Objective 4.5.4.1	To enable people and communities to provide for their economic and social wellbeing through the efficient utilisation and development of mineral resources.
Objective 4.5.4.2	To safeguard the life supporting capacity of air, water, soil and ecosystems and avoid, remedy or mitigate adverse effects from the use and development of mineral resources.
Policy 4.5.5.1	The adverse effects of activities related to the utilisation of mineral resources shall be avoided, remedied or mitigated.
Policy 4.5.5.2	The rehabilitation of mining sites shall be required where practicable.
Policy 4.5.5.3	Co-ordination and liaison with the West Coast Regional Council shall be maintained on matters relating to mining activities where water resources and soil conservation are affected.
Policy 4.5.5.4	To enable the investigation of the District's known mineral potential and the utilisation of mineral resources of regional significance while safeguarding the life supporting capacity of air, water, soil and ecosystems and ensuring the adverse effects of activities related to the investigation and utilisation of mineral resources are avoided, remedied or mitigated.
Policy 4.5.5.5	To require mineral resource related activities to incorporate measures to protect water quality and ecosystems, and provide for the rehabilitation of disturbed areas to generally their original

	condition or another suitable condition as approved by Council.
Policy 4.5.5.6	When rehabilitation plantings are carried out pursuant to a resource consent, preference should be given to the use of indigenous species where appropriate, with a further preference for local genetic stock where indigenous species are to be used.
Section 4.6 – Cultural/Hi	storic Resources
Objective 4.6.7.1	To protect places and sites of historical and cultural value from the adverse effects of land use activities and to ensure where appropriate, access to historic and cultural sites is maintained and enhanced.
Policy 4.6.8.1	A close and on-going relationship with tangata whenua and the Council shall be maintained, including the maintenance of confidential records in ways which accord with the tikanga of tangata whenua of known waahi tapu.
Policy 4.6.8.2	Evaluate and protect heritage resources by identifying those resources of historic, cultural or architectural value or of special significance to the District.
Policy 4.6.8.3	As and when cultural and/or historical sites of importance to tangata whenua are identified by respective Kaitiaki in Buller District, the Council shall facilitate the recording of such sites in ways which accord with the tikanga of local iwi.
Policy 4.6.8.4	Assessment of resource consent applications shall include their potential impact on known places of historic and/or cultural value.
Policy 4.6.8.5	Continued access to sites of special cultural significance to tangata whenua shall be supported.
Policy 4.6.8.6	Upon accidental discovery of urupa or skeletal remains, consultation with the tangata whenua shall be required.

Section 4.8 – Ecosystems and Natural Habitats		
Objective 4.8.6.1	To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to recognise their importance to the character and quality of the natural and physical environment and to the wellbeing of the people and communities in Buller.	
Policy 4.8.7.1	The adverse effects of land use activities on natural habitats and ecosystems shall be taken into account when considering development proposals which impact on these areas.	
Policy 4.8.7.2	The protection and enhancement of the natural values of wetlands, estuarine habitats, whitebait spawning areas, significant indigenous vegetation and significant habitats of indigenous fauna shall be encouraged.	
Policy 4.8.7.4	For the purposes of Section 6(c) of the Resource Management Act 1991, the following criteria will be used as guidelines to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna.	
	1. Representativeness: The area is one of the best examples of an association of species which is typical of the ecological district.	
	2. Distinctiveness: The area has indigenous species or an association of indigenous species which is unusual or rare in the ecological district, or endemic, or reaches its distribution limit.	
	3. Intactness: The area has a cover of predominantly indigenous vegetation, is little modified by human activity, and is not affected in a major way by weed or pest species.	
	adjacent indigenous habitat is larger than 5ha; or in the case of natural wetlands is larger than 1ha in size.	
	 Protected Status: The area has been set aside by statute or covenant for protection or preservation. 	
	6. Connectivity: The area is connected to one or more other significant areas in a way (through ecological processes) which make a major contribution to the overall functioning of those areas.	
	7. Threat: The area supports an indigenous species or community of species which is	

	 threatened within the ecological district or ecological region or threatened nationally. 8. Migratory Habitat: The area is important as habitat for significant migratory species or for feeding, breeding or other vulnerable stages of indigenous species, including indigenous freshwater fish. 9. Scientific or Cultural Value: The area is a scientific reference area, is listed as a geopreservation site, or has significant amenity value. 	
Policy 4.8.7.6	 In the interim the Council will make decisions on resource consent applications which recognise and provide for the protection of: 1. Significant indigenous vegetation and indigenous habitat; 2. Natural values associated with riparian margins. 	
Policy 4.8.7.7	To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate use, subdivision and development.	
Policy 4.8.7.8	To encourage the retention of existing indigenous vegetation on the margins of waterways, wetlands and the coast and the enhancement of these areas through the use of indigenous vegetation were rehabilitation plantings are to be carried out.	
Section 4.9 – Landscapes a	nd Natural Features	
Objective 4.9.3.1	To protect the distinctive character and unique values of outstanding landscapes and natural features.	
Policy 4.9.4.1	To discourage activities which would significantly alter the character of outstanding landscapes.	
Policy 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.	
Section 4.11 – Hazardous Substances		
Objective 4.11.5.1	To encourage and promote the safe and efficient handling and disposal of hazardous substances throughout the District.	

Policy 4.11.6.1	Compliance with approved codes of practice and national guidelines and standards shall be required for all activities involving the use, storage and transport of hazardous substances.
Policy 4.11.6.2	Appropriate contingency planning shall be required for all operators of hazardous facilities, including disposal sites.

OBJECTIVES & POLICIES FROM THE PROPOSED BDP

Section 2.1 – Culture &	Heritage
Objective 1	To identify examples of buildings, sites and structures that reflect the district's heritage and cultural values, and to provide for the management of those resources in a way that sustains the social, cultural and economic well-being of communities.
Policy 3	To evaluate, in any application for resource consent in relation to a building, site or structure recorded in this Plan, the values the item(s) are listed for, and the extent to which the proposed activities provide for the economic, social and cultural well-being of the affected community.
Section 2.2 – Hazardous	s Substances & Contaminated Land
Objective 1	To protect the environment from the adverse effects and risks arising from subdivision, land use and development activities involving hazardous substances.
Policy 1	Activities and facilities involving the use and storage of hazardous substances shall be designed, located, constructed and operated so as to minimise risk to people and the environment.
Section 2.3 – Mineral Re	esources
Objective 1	To enable mineral extraction activities that provide economic and social benefits to the community, in a manner that avoids, remedies or mitigates adverse effects on the environment.
Policy 2	To manage mineral extraction activities in order to ensure that operations avoid, remedy or mitigate adverse effects on the ecological, landscape, heritage and amenity values of surrounding areas and on the amenity values of existing residential areas.
Policy 4	To ensure that during and after mineral exploration and extraction activities, sites are progressively rehabilitated to enable the establishment of a land use appropriate to the area.

Section 2.7 – The Natural Environment		
Objective 1	To enable appropriate subdivision, use and development within areas of significant vegetation and significant habitats of indigenous fauna, where indigenous biodiversity is maintained.	
Objective 2	To enable appropriate subdivision, use and development of waterbodies, wetlands and their margins where adverse effects on significant natural character, ecological, recreational, amenity, and cultural values are avoided or mitigated.	
Objectve 3	To recognise the economic, social and cultural well-being of people, and in particular the rural community, depends on, amongst other things, making reasonable use of land.	
Objective 4	To enable appropriate subdivision, use and development where the adverse effects on areas of Outstanding Natural Features and Landscapes are avoided or mitigated.	
Policy 1	To promote the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna through the resource consent process.	
Policy 2	To identify areas of significant indigenous vegetation and significant habitats of indigenous fauna, which are significant for one or more of the following reasons:	
	 Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas. 	
	• Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district.	
	 Rarity/Distinctiveness Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in the Region, or relevant land environment, ecological district, or 	

	freshwater environment.
	• Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district.
	• The site contains indigenous vegetation or an indigenous species at its distribution limit within the West Coast Region or nationally.
	• Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.
	 Diversity and Pattern Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.
	 Ecological Context Vegetation or habitat of indigenous fauna that provides or contributes to an important ecological linkage or network, or provides an important buffering function.
	• A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal system.
	• Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges form predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently).
Policy 3	To maintain indigenous biodiversity values having regard to the following matters in determining appropriate subdivision, use and development:
	(a) Actual or potential impacts on the significance of the affected area and on ecological values (including habitat, vegetation and fauna), cultural, intrinsic and/or amenity values

	 (b) The sustainability of the habitat or area of vegetation proposed to be modified or damaged or any adjoining habitat or area of vegetation to an area proposed to be affected. (c) The representativeness of the affected vegetation or habitat and impact on its interrelationship or continuity with other habitats or areas of indigenous vegetation. (d) Whether the affected area retains the presence of rare or distinctive, threatened or at risk, indigenous flora or fauna species. (e) The extent to which the proposal is the minimum necessary to protect significant indigenous vegetation and significant habitats of indigenous fauna. (f) Where the adverse effects cannot be adequately avoided or mitigated, ensuring any residual effects that are more than minor, are offset in a similar ecological context (in accordance with best practice principles) to achieve no 'net loss' of indigenous biodiversity. (g) The social and economic benefits to be derived from the use and development of the affected area.
Policy 6	To avoid or mitigate the adverse effects of subdivision, use and development, that would detract from or compromise significant natural character, ecological functioning, recreational, amenity and cultural values of waterbodies, wetlands and their margins
Policy 10	 To identify Outstanding Natural Features and Landscapes of the district, which contribute to the distinctive character and visual amenity of the district, through consideration of biophysical, sensory and associative values including: Natural science values; Legibility values; Aesthetic values Transient values; Cultural values Shared and recognised values; and

	Historic values.
Policy 11	To manage the scale, location and design of subdivision, use and development within Outstanding Natural Features and Landscapes and determine its appropriateness based on the following:
	a) The value, importance or significance of the feature or landscape at the local, regional or national level;
	 b) The degree and significance of actual or potential adverse effects on outstanding natural features and landscapes, including cumulative effects, and the efficacy of measure to avoid, remedy or mitigate such effects;
	 c) The benefits to be derived from the use and development at the local, regional and national scale;
	d) The degree of existing modification of the natural feature or landscape from its natural character;
	 e) The vulnerability of a natural feature or landscape to change, and its capacity to accommodate change, without compromising the value of the feature or landscape; f) The need for the proposed activity to occur in the particular location.
Section 2.8 – The Rur	al Environment
Objective 1	To provide for a range of activities that maintain the amenity and rural character values of the rural environment, while recognising that parts of the rural environment are also a productive working environment.
Policy 1	To provide for a wide range of activities within the Rural Zone while ensuring that rural areas remain productive.
Policy 3	To enable a variety of activities to occur within rural areas while maintaining character and amenity values by ensuring that the scale and siting of development:
	 a) Maintains a dominance of open space and plantings over buildings; b) Maintains privacy and rural outlook for residential dwellings; c) Achieves an appropriate level of compatibility with existing development and/or the surrounding area;

	 Avoids, remedies or mitigates effects on the amenity of existing residential activities being exposed to noise and adverse light emissions at night; and Minimises adverse visual effects if sited on prominent ridges or immediately adjacent to public roads.
Policy 4	To recognise that the rural environment may be the most appropriate location for some utility, industrial or commercial uses to establish, provided the character and amenity of the rural environment is maintained.
Section 2.9 - Transport	
Objective 1	To recognise the benefits of and to provide for a safe and efficient transportation network, where additions to the network are not detrimental to the existing network, and to avoid, remedy or mitigate adverse effects on the surrounding environment.
Policy 1	To maintain a hierarchy of roads in the district which categorises roads by their function, and to use this framework to enhance transport efficiency.
Policy 3	To have regard to the safety and efficiency of the roading network for all modes of transport, including vehicles, pedestrians and cyclists.
Policy 5	To recognise the district's rail network as an important strategic link and to ensure the safe and efficient operation of this resource is not compromised by the effects of surrounding land use activities.