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Landscape Assessment Report

18 August 2026

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TERMS AND DEFINITIONS

AEE	Assessment of Environmental Effects
AF	Acid Forming
Asl	Above sea level
AMD	Acid Mine Drainage
Bathurst	Bathurst Resources Limited, including its subsidiary companies – Bathurst Coal Ltd and Buller Coal Ltd, and joint venture BT Mining Ltd
BPCP	Buller Plateaux Continuation Project
BDP	Buller District Plan
BP	Buller Plateaux
BPLS	Buller Plateaux Landscape Study
CHPP	Coal Handling and Processing Plant
CML	Coal Mining Licence
COM	Closure of Mine
CMS	Conservation Management Strategy
CWD	Clean Water Diversion
DOC	Department of Conservation
DP	District Plan
ED	Ecological District
ELF	Engineered Landform
EMP	Environmental Management Plan (noted as presumed in draft)
EPA	Environmental Protection Agency
ESE	Escarpment Extended (Project sub-area)
FTAA	Fast-track Approvals Act
GA	Graphic Attachment (A3 plans/drawings)
Ha	Hectares
HAF	High potential for acid forming (overburden)
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
Km	Kilometres
LA	Landscape Assessment
LCU	Landscape Character Unit
LOM	Life of Mine
LINZ	Land Information New Zealand
M	Metres
MFS	Mount Frederick South (Project sub-area)
MP	Mining permit
MSR	Mussel Shell Reactor
MTB	Mountain bike
NAF	Non-Acid Forming material (soil/overburden)
NZ	New Zealand
ONF	Outstanding Natural Feature
ONL	Outstanding Natural Landscape
PAF	Potentially Acid Forming
PWTP	Passive Water Treatment Plant
RLWP	Regional Land and Water Plan
RMA	Resource Management Plan
RMM	Rough Milne Mitchell
ROM	Run of Mine
RPS	Regional Policy Statement (West Coast)
SASM	Sites of Significance to Māori

S-N	Stockton North (mine area)
SH	State Highway
SNA	Significant Natural Area
SP	Stockpile
TTPP	Te Tai o Poutini Plan
UWHR	Upper Waimangaroa Haul Road
VDT	Vegetation Direct Transfer
WTP	Water Treatment Plant
4WD	Four Wheel Drive

1 EXECUTIVE SUMMARY

Purpose and Scope

This Landscape Assessment Report (LAR) has been prepared by Rough Milne Mitchell Landscape Architects Limited on behalf of Bathurst Resources Limited in support of the proposed Buller Plateaux Continuation Project (BPCP) under the Fast-track Approvals Act 2024 (FTAA). The report assesses the actual and potential landscape and visual effects associated with the continuation and expansion of mining activities across the Buller Plateaux, including the Stockton and Denniston Plateaux, located northeast of Westport having regard to relevant provisions of the Resource Management Act 1991 (RMA), the Buller District Plan (BDP), the Te Tai o Poutini Plan (TTPP) and associated statutory instruments.

This LAR is accompanied by an A3 colour graphic attachment (GA) attached as Appendix B that provides graphic information relating to the Project and a series of Visual Simulations (VS) attached as Appendix C to illustrate visual effects of the Project. These documents are referred to throughout this report.

The BPCP seeks to continue and extend existing mining operations through development of the Stockton Extension (S), Mount Frederick South (MFS), Escarpment Extended (ESE), and the Upper Waimangaroa Haul Road (UWHR), while continuing to utilise the existing Stockton Mine infrastructure and associated processing facilities. The Project is anticipated to extend mining operations for up to 16 years across the Project sub-areas and enable the extraction of approximately 20 million tonnes of coking coal.

Existing Environment

The Buller Plateaux sit within a coastal rural context of Outstanding Natural Landscapes (ONLs 41, 49, 50, 51), and extensive conservation lands.

The Buller Plateaux comprise highly distinctive upland landscapes characterised by dramatic escarpments, elevated plateaux landforms, coal measures, indigenous vegetation, biodiversity, wetlands and tarn systems, strongly influenced by climatic conditions, a sense of memorability, remoteness and naturalness in parts. The landscapes also contain an extensive history of mining and ongoing extractive activity, including active and rehabilitated mine areas, existing haul

roads, historic underground workings, and mining infrastructure that form part of the existing receiving environment.

Landscape values identified within the receiving environment include:

- Significant geomorphic and natural landform characteristics;
- Indigenous ecological and wetland systems;
- Scenic and visual amenity values associated with the plateaux and surrounding landscape context;
- Historic and industrial heritage associations;
- Recreational and tourism values; and
- Very high perceptual qualities relating to scale, openness, remoteness and legibility.

A substantial part of the Stockton Plateau is characterised by large-scale industrial open cast mining and rehabilitation, and areas of intact natural landforms, while the Denniston Plateau exhibits a mixture of natural landforms, regenerating vegetation, post open cast mining landforms, historic mining relics, and popular recreational destinations such as the Denniston heritage area and adjacent tracks.

The assessment identifies that the Project will result in adverse landscape and visual effects arising from vegetation removal, open cast mining, engineered landforms, haul roads, water treatment infrastructure, lighting and associated operational activities.

Effects will vary between the Project sub-areas depending on the scale, visibility, duration and rehabilitation sequencing of each component.

At a Broad-Scale, views of the Project are generally experienced at distance within a large-scale and dynamic landscape context that already contains visible evidence of historic and contemporary mining activity. Consequently, while cumulative effects will occur, the Project is not assessed as fundamentally altering the overall landscape identity or appreciation of the wider Buller landscape.

The most pronounced effects are anticipated to occur at a Project-Scale during active mining phases, particularly within the MFS and ESE sub-areas where mining activities interact with elevated ridgelines and areas of higher natural landscape value. The Stockton Extension and UWHR are assessed as generally resulting in lower levels of landscape effect due to their association with existing mining activity, modified landforms, existing infrastructure corridors and reduced public visibility.

A key component of the Project is the proposed rehabilitation and biodiversity enhancement programme. Rehabilitation is proposed to occur progressively throughout the life of the mine and includes engineered landform shaping, stream reinstatement, wetland creation, vegetation direct transfer, indigenous planting and ecological restoration. The Project also incorporates significant biodiversity initiatives including pest free enclosures and predator control programmes intended to enhance ecological outcomes across the Buller Plateaux.

Rehabilitation Methods and Anticipated Effects

Rehabilitation is a central element of the Project and is staged progressively over the life of mine (LOM) activity. The key methods include:

Engineered Landform (ELF) shaping: Overburden is backfilled and recontoured to create stable, naturalistic landforms that will integrate with surrounding topography, minimising erosion and accommodating hydrological functioning.

Capping and soil management: Selective placement of non-acid forming (NAF) material, supplemented with salvaged topsoil and fines, will establish a suitable growth medium for vegetation.

*Vegetation direct transfer (*VDT)*:* Intact sods of native vegetation, including pākihi wetland and shrubland communities, are directly relocated to mined areas to accelerate ecological recovery and preserve ecosystem integrity.

Active planting: Where VDT is not feasible, native species are propagated and planted to recreate indigenous ecosystems representative of the plateaux environment.

Waterbody and wetland creation: Final voids and quarry excavations will be reshaped as lakes and wetlands, providing both hydrological treatment and new ecological habitats.

Progressive rehabilitation: Rehabilitation is sequenced so that while new areas are disturbed, earlier areas are already in recovery, producing a mosaic of land cover that will increasingly overtime become self-sustaining.

Anticipated effects of rehabilitation

In the short-term (during LOM and up to 10 years post mine closure and rehabilitation), rehabilitation will reduce the scale of exposed highwalls and disturbed landforms. However, landform complexity will be reduced to slopes with an engineered uniformity. Hydrology systems will be reinstated, with streams, tarns, wetlands and areas of rock pavement created where appropriate.

In the medium-term (10-50 years post-closure), vegetation direct transfer and planting will establish to a self-sustaining ecosystem. A greater amount of forest will replace pakihi, shrublands and rock pavement. Overtime a coherent canopy cover will result with colonisation naturally occurring from six months to five years. Within 20 years 50 – 60% vegetation cover will establish and within 30 years canopy cover will be consistent, reducing contrast with adjacent landscapes and reinstating natural character and visual amenity, improving water quality, and providing ecological and recreational opportunities.

In the long-term (50 years post mine closure), rehabilitated landforms are expected to read as integrated with the wider plateau, supporting self-sustaining native ecosystems, improving water quality, and providing ecological and recreational opportunities.

Mitigation and other effects management

Mitigation measures will be undertaken throughout the LOM and include preventative measures such as minimising land disturbance and ecosystem degradation, setback buffers, placement of NAF material, use of VDT, operational controls such as dust suppression etc; and water management.

In addition to rehabilitation, the Project provides pest free enclosures on both Stockton and Denniston Plateaux. These enclosures will preserve and enhance approximately 910.7 ha of intact plateau environments, providing reference ecosystems and long-term protection of landscape values.

Recommended Remediation

Legacy use of access roads and mine infrastructure may support enhanced public recreation and heritage appreciation through interpretation initiatives and retained access for public use.

Assessment of Effects

The visual effects on landscape values are summarised and tabled separately in Appendix A, noting that visual effects contribute to the degree of effects on all attributes / values but particularly those identified as perceptual values.

Physical values: include the surrounding ONLs and conservation land, with distinctive landforms and contiguous native forest cover and native shrublands, underlying geology, hydrology, biodiversity, presence of landmarks, and a coastal setting.

Effects on Physical values: Overall, v**ery high** adverse effects will occur as a result of mining with changes to ridgelines, skylines, landforms, hydrology, geology, reduced vegetation cover and biodiversity over the life of the Project. The exception is the physical disturbance to construct the UWHR, which generally follows an existing road alignment along the Waimangaroa River valley floor.

Perceptual values: include memorable landscapes – landforms and features with high legibility, high natural character, dramatic, dynamic, with transient attributes, overall visual coherence, scenic qualities and a sense of remoteness.

Effects on Perceptual values; During operations, at a Broad-Scale the Project will give rise to at most up to **low** adverse landscape effects from viewpoints along the SH67 coastal corridor and local side roads.

From mine closure and post rehabilitation, at a Broad-Scale adverse effects will reduce to **no** residual effects anticipated 10 –50 years post mine-closure.

During LOM operations (stages 02 – closure), at a Project-Scale effects will range depending on the staging with up to **very high** adverse effects on perceptual values, particularly relating to reduced visual amenity, natural character, legibility, transient values and visual coherence. The landscape will appear to be highly modified.

At mine closure, from a Project-Scale adverse effects will range between **very low** to **very high.** In the medium to long term these effects will continue to progressively reduce and weathering as a natural process will soften physical modifications, with **low to no** residual effects anticipated 10 –50 years post mine-closure.

Associative values: Identified at both a Broad-scale and Project-scale include SASM, a sense of identity linked to mining and West Coast culture, conservation, tourism and recreation. Cultural values relate to maunga, whenua and waters of Te Tai Poutini. Of note there are no

wāhi tapu sites known to Ngāti Waeae wihin the project footprint although taonga species and mahinga kai continue to be of relevance.

Effects on Associative values; Some archaeological and historic features associated with mining culture will be lost or modified. Mitigation includes recording, recovery, interpretation, and offset measures, with opportunities for enhanced public access and interpretation of mining heritage. The Project will add to the long history of mining in the region but that is balanced against ongoing rehabilitation and sanctuary areas, which will retain and enhance landscape integrity in perpetuity.

Spiritual and cultural values will be affected to greater or lesser degrees depending on tangata whenua and individual attitudes and connection to the landscape. For those who identify with a conservation ethos effects will be very high during LOM and likely reduce post mining activity subject to time frames and rehabilitation measures.

The Buller Plateaux is a recognised destination for walking, cycling, heritage-related tourism associated with recreational values. The plateaux contribute to conservation values relating to our national identity and a historical legacy particularly for the local community. Mining will generate short-medium term adverse effects on these values although in relation to economic / social values effects may be appreciated in a positive perspective. Adverse effects will be particularly noticeable on recreational values by restricting public access to Mt Rochfort and some mountain bike (MTB) tracks, will alter the experiential qualities of local tracks and viewshafts, and introduce visual and noise intrusion. However, over time, rehabilitation and offset areas will help restore access and the legacy use of roads and infrastructure may provide opportunities for enhanced recreational access and interpretation post closure[1].

During LOM operations (stages 02 – closure) adverse effects on associative values will range between **very low** up to **high** reducing in the short term (up to 10 years post closure and rehabilitation) to **very low to no** and in the long term to **no** adverse effects**.**

Conclusion

Overall, from the Broad-Scale viewpoints during LOM the Project will result in **no** to **low** adverse effects on landscape values. From the Project-Scale viewpoints during LOM, the Project will result in up to

[1] Rob Greenaway and Associates (2025) Recreation and Tourism Assessment

very high adverse effects on physical, associative and perceptual landscape values including visual amenity and natural character.

During LOM, adverse effects on overall landscape values (physical, perceptual and associative) will range between **low to very high.** However, with decommissioning of buildings and structures, full implementation of staged rehabilitation, mitigation measures, and sanctuary areas, residual effects are expected to be **no** to **moderate - high** within 10 years post closure of mining reducing to **low to very low to no** adverse effects in the medium to long term. Assessed in that context, it is considered that the effects on landscape values of the Buller Plateaux will be mitigated and / or rehabilitated, and consistent with the intent of the RMA, and other statutory provisions relating to landscape.

The assessment concludes that the receiving environment is not a pristine or unmodified landscape, but rather one that has been substantially influenced by both historic and ongoing mining activities. Within this context, the Project has been designed to respond to the existing landscape character and operational context while incorporating rehabilitation and mitigation measures intended to progressively reduce adverse effects over time. Although adverse landscape and visual effects will arise, particularly during operational phases, these effects are assessed as capable of being appropriately managed through the proposed staging of extraction and rehabilitation, rehabilitation methods and mitigation measures.

Overall, the assessment concludes that the BPCP will result in landscape change within the Buller Plateaux; however, subject to the implementation of the proposed rehabilitation, mitigation and biodiversity measures, the Project is capable of achieving acceptable long-term landscape outcomes within the context of an existing and historically modified mining environment

2 INTRODUCTION

Purpose and Scope

The purpose of the Buller Plateaux Continuation Project (BPCP or the Project) is to secure the approvals under the Fast-track Approvals Act (FTAA) necessary to retain the existing infrastructure and mining operations associated with the Stockton Mine (Stockton) and provide access to additional mining areas across the Buller Plateaux.

The Project will cover areas across both the Denniston and Stockton Plateau, collectively referred to as the Buller Plateaux. The Project will comprise mining in three separate sub-areas including Escarpment Extended (ESE), Mount Frederick South (MFS) and Stockton extension (S) connected by a transport corridor referred to as the Upper Waimangaroa Haul Road (UWHR) as well as the continued use of existing infrastructure at Stockton. The Project footprint is presented in Figure 1.

Bathurst Resources Limited, Bathurst Coal Limited, Buller Coal Limited and BT Mining Limited) (together Bathurst) proposes to continue mining operations on the Buller Plateaux for the indicative timelines set out in Table 5-2 of the Project Description.[2]Operations are proposed to continue at Stockton for an extension of 11 years and occur over 16 years for ESE, MFS and UWHR . The Project will enable approximately 20 million tonnes of coking coal to be mined, utilising existing infrastructure facilities to support and extend the mine life of the current Stockton operations. Mining will be by conventional drill and blast, load and haul open pit mining and is a 24 hours per day, 7 days per week operation. It will utilise existing coal handling infrastructure where possible.

The Buller Plateaux is located approximately 15 kilometres northeast of Westport. The land tenure is a mix of Crown land administered by the Department of Conservation (DOC) and Land Information New Zealand (LINZ), private land and land owned by Bathurst. There are a number of existing approvals in place for various components of the Project. A number of these approvals expire in 2027.

Rough Milne Mitchell Landscape Architects (RMM) has been engaged by Bathurst to assess the actual and potential landscape and visual effects on landscape values of the development and mining of coal resources associated with the Project and other related activities

[2] BPCP Summary Project Description. January 2026. Table 5-2

including offset and compensation actions across the wider Buller Plateaux.

The purpose of this report is to identify the landscape and visual amenity values of the various Project sub-areas and identify the potential effects of the development, operation and remediation programmes of the proposed mining activities on those values. This report will inform an Assessment of Environmental Effects (AEE) and complement the FTAA and resource consent applications for the Project.

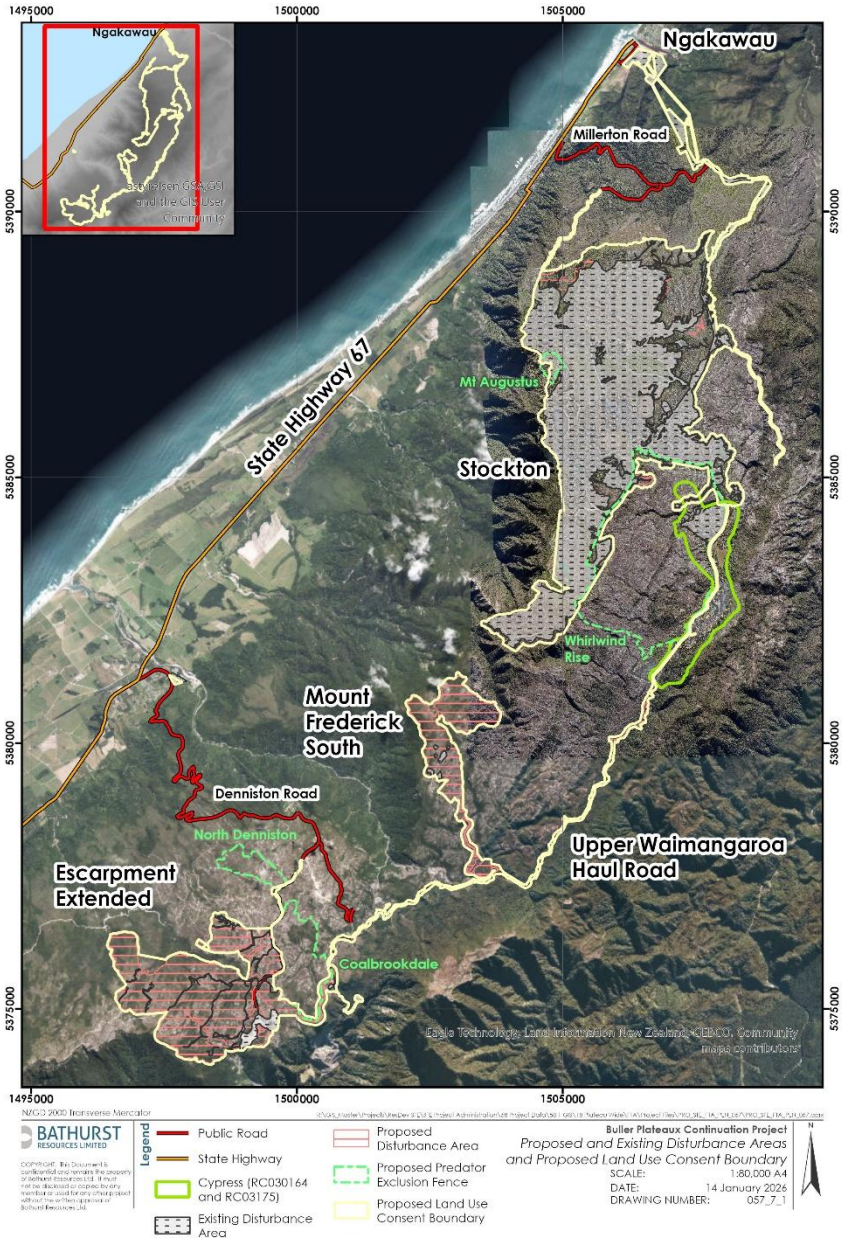

Figure 1. Buller Plateaux Continuation Project Areas

It is understood that the Project will require approvals under the following legislation:

- Resource Management Act 1991 (RMA) – regional and district resource consents;
- Conservation Act 1987 and Reserves Act 1977 – concessions and other permissions;
- Crown Minerals Act 1991– land access arrangements and mining permits;
- Approvals relating to complex fisheries activities under the Freshwater Fisheries Regulations 1983
- Wildlife Act 1953 – approvals; and
- Heritage New Zealand Pouhere Taonga Act 2014 – applications for archaeological authority

The landscape assessment report is formatted as per the following:

- An Executive Summary
- Introduction
- Methodology
- Existing Environment Approach
- An outline of the relevant policy provisions pertinent to landscape matters within the relevant legislation.
- A brief description of the Project sub-areas and proposed mining.
- Introduction to Assessment of Effects on Landscape Values
- The description and identification of landscape values of the receiving environment at both a Broad-Scale and a Project-Scale. The receiving environment is described in terms of the physical attributes as well as the associative and perceptual attributes. The descriptions will include historic, and consented activities, rehabilitation and offset / compensation requirements and activities permitted by the relevant planning instruments. The attributes of the landscape/s are interpreted to determine the landscape values within the receiving environment.
- A visual effects assessment from pertinent viewpoints at a Broad-Scale and Project-Scale.
- An assessment of the actual and potential effects of the Project on landscape values, including natural character and cumulative effects taking into account the historic and consented activities, rehabilitation and offset / compensation requirements and activities permitted by the relevant planning instruments.
- An assessment against the relevant statutory provisions.
- A conclusion.

Appendices
A: Summary Tables of Visual and Landscape Effects
B: Graphic Attachment to Landscape Assessment Report
C: Virtual View Visual Simulation Package
D: RMM Buller Plateaux Landscape Baseline Study
E: Relevant Planning Provisions

This report is accompanied by a colour A3 Graphic Attachment (GA) Pages 1 - 83, attached in Appendix B, that contains maps and aerial images of the Project location, the relevant district plan planning maps, plans of the proposed Project sub-areas and details, including photographs of the Project sub-areas. The GA contains information relating to the extent of the receiving environment illustrated by representative photo-panoramas from Broad-Scale and Project-Scale viewpoints that demonstrate the potential visual effects of the Project.

A series of Visual Simulations that represent the Project from key viewpoints in various stages over the duration of the Project is provided by Virtual View and attached as Appendix C.

The material contained within the GA and the Visual Simulations (VS) are referred to throughout this report as a page and / or viewpoint reference to assist in understanding the nature and scale of the Project.

Code of Conduct

As per the FTAA 2024: Panels Conveners' Practice and Procedure Guidance[3],the author of this report records that they have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. This Landscape Assessment and its accompanying GA is within the author's area of expertise, except where the report states that they rely upon the reports of other experts. The author has not omitted to consider any material facts known to them that might alter or detract from the conclusions reached.

[3] Fast-track Approvals Act 20024: Panels Conveners' Practice and Procedure Guidance. 22 July 2025. 4.1(h).

3 METHODOLOGY

The methodology and terminology used in this report has been informed by the Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines[4]. This report is tailored to suit the nature of the Project and its context, including the framework of the governing legislation.

Statutory Framework

The legislation and plans containing provisions most relevant to the landscape assessment of the Project are outlined in Section 5 below. The RMA forms an important part of the statutory provisions to govern development and ensure long term sustainable environmental, social and economic outcomes. Of most relevance to landscape matters are section 6 as Matters of National Importance relating to ONFLs and section 7 Other Matters relating to managing the use and development and protection of natural and physical resources with particular regard to maintenance and enhancement of amenity values, the quality of the environment etc. The lower order documents give effect to the higher order documents. Collectively the statutory documents guide the focus of the assessment and direct what is relevant and important to consider in terms of the assessment of effects on landscape values.

Background

Both desktop research and field work were carried out to investigate the actual and potential effects of the Project. Further understanding was provided by the various technical reports that assessed the Project and these are referred to throughout this report. The key technical reports that inform this assessment include the various ecological reports and surveys, Recreation and Tourism Assessment, Archaeological and Historic Heritage Report, Cultural Impact Assessment and Proposed Infrastructure Assessment of Environmental Effects - Lighting.

In particular, the following assessment also refers to the Buller Plateaux Landscape Study (BPLS) attached as Appendix D, undertaken by RMM in December 2021.

The BPLS was commissioned by Bathurst as an expert baseline report describing the Denniston and Stockton Plateaux landscapes

[4] 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022.

and identifying and evaluating the existing landscape values of each plateau. The purpose of the landscape study was to assist in understanding the landscape resource and its values to enable the appropriate long-term management of the Buller Plateaux. In particular, the goal was to identify whether or not the plateaux met the thresholds for being identified as an Outstanding Natural Feature or Landscape (ONFL). The information from the BPLS is relied on as background and to inform the content of this assessment.

Site visits to the Buller Plateaux were undertaken in 2021 to compile the BPLS. The BPLS delineated and described the plateaux with reference to site work, technical reports and land data bases as well as evidence prepared over the years by other landscape architects in response to various mining applications. Comprehensive descriptions of the broadscale context of the Buller District and the Buller Plateaux were provided. At a Project-Scale the Stockton and Denniston Plateau were described individually and where appropriate over the Stockton Plateau were characterised into landscape character units (LCU). The LCUs were defined by shared physical characteristics associated with their relief, orientation, vegetation cover, water bodies, land uses and structural content.

The landscape values of each plateaux were identified according to physical, associative and perceptual attributes. Each plateau (i.e. Stockton and Denniston Plateau) was then evaluated to determine whether both or individually the plateaux meet the thresholds of naturalness and significance to be classified as an Outstanding Natural Feature (ONF) or an Outstanding Natural Landscape (ONL).

The BPLS concluded that part of the Stockton Plateau identified as Landscape Character Unit (LCU) 2 and where the MFS Project area is proposed, would meet the threshold as an ONF. The following report reviews this conclusion on the basis of further studies relating to ecology, recreation and historic heritage attributes.

The Project location and its surrounds were revisited on 25 – 27 March 2025. The visit in 2025 was undertaken to determine the extent of the receiving environment, assist in confirming the landscape character and values within the receiving environment and understanding the scope of the Project on the ground and the actual and potential landscape and visual effects that may arise. These visits informed the choice of viewpoints that best illustrate visual effects from publicly accessible locations.

Further understanding of landscape values has relied on the technical team assessments, particularly those relating to recreation, ecology and archaeology, cultural and historic heritage reports and these are referenced accordingly.

Receiving Environment

Existing environment approach

The existing environment is part of the receiving environment against which the effects of the Project will be assessed and goes beyond what is physically present at the site, as it also includes;

a) Historic activities that are either completed and physically present or operate on an ongoing basis pursuant to existing use rights;
b) Activities which are permitted by the relevant planning instruments;
c) Activities which have been authorised by resource consents, to the extent to which they are likely to be implemented; and
d) Rehabilitation and offset/compensation requirements, which need to be implemented through the existing consent/Coal Mining Licence (CML) conditions.

Land Use Activities

For the purposes of assessing the effects of land use activities, the existing environment includes:

a) On the Stockton Plateau, currently an active working mine and a partly rehabilitated mine site, which has been rehabilitated to the extent required by the existing CML prior to the expiry of the CML This is the environment which would be in place if additional consents for further mining or rehabilitation were not granted;
b) On the Denniston Plateau, a site as physically present, including the evidence of historic mining activities, the Escarpment Mine currently under care and maintenance and ultimately rehabilitated, and associated changes to the landscape and vegetation;
c) At the Cypress and No 2 South mine sites, active working mines, which present as open cast pits, but will be rehabilitated over time, with full rehabilitation in place by the expiry of the current consents in 2040 (Cypress) and 2046 (No 2 South);
d) Across the Proposed Land Use Consent Boundary for the Project, all historic mining activities, which legally took place prior to the Coal Mines Act 1979 and the RMA approvals being required. This includes historic underground mining, historic buildings, the aerial ropeway, and the underground fire at the Millerton Mine, which has been burning since 1926;

e) Buildings currently located in the Project Area, which were authorised by the CML and ACMLs and which in accordance with the CML and ACMLs can be retained after the completion of mining;
f) To some extent, the activities within those buildings such as noise or lighting where existing use rights exist; and
g) Any activities permitted by the BDP, RLWP and TTPP.

All residual effects from the carrying out of the consented works under the CMLs, following rehabilitation, will form part of the existing environment. This will result in an existing environment which has been impacted by mining activities but has largely (other than parts of the Stockton CML, Escarpment, Cypress Mine and No 2 South) been rehabilitated in accordance with existing CML conditions and resource consent conditions.

Of note is that the coal processing from the proposed mining at Stockton, MFS and ESE on the Denniston Plateau will utilise the existing mine infrastructure at the existing Stockton Mine and at Ngakawau, with the Aerial Ropeway linking the Ngakawau Rail Loadout to the Stockton Mine.

These facilities in addition to the ongoing Stockton mining and rehabilitation up to the end of 2027 and the Cypress Mine are not anticipated to change and as they form part of the existing environment, they have not been considered in this landscape assessment except to the extent they form part of the legal receiving environment. Similarly, the Escarpment Mine on the Denniston Plateau currently under care and maintenance is considered to form part of the legal receiving environment.

For parts of the Project, the environment will not be a pristine, untouched environment, but will include a modified and rehabilitated environment compared to that which is currently physically present.

This assessment **excludes** consideration and assessment of the:

(b) Already consented activities within the Project Area at No 2 and Cypress mines; and
(c) Already consented activities occurring outside of the Project Area.

Cumulative Effects

The FTAA requires consent applications to include an assessment of the activity's effects (including cumulative effects) on the environment.

Cumulative effects are those which arise over time or in combination with other effects[5]. This means that if a consented activity has adverse effects and the proposed activity also has an adverse effect, which would add to the existing effects then assessments must have regard to the combined effects of both activities.

This assessment considers the potential landscape effects of mining and associated activities being undertaken simultaneously across both the Denniston and Stockton Plateaux in the Project sub-areas.

Scope and Purpose

The ultimate reason for assessing landscapes is to manage landscape values, noting that landscape values depend on context – landscapes are valued for different types of reasons in different situations[6]. Identifying each landscape's values is fundamental to its management, noting *that landscape values are managed through the physical attributes that embody the values*[7].

This report is based on the professional judgement and expert opinion of the author **without** direct input from community consultation.

While community consultation is assumed to be embedded in the statutory and policy framework that applies to the Project area (particularly in regard to the BDP, TTPP and conservation areas managed by DOC) and information contained within the recreation, cultural impact assessment and historic heritage reports, it is understood that specific community consultation on the Project has been undertaken by others and feedback incorporated into the overall application.

Assessing Landscapes

The conceptual framework[8] used in this assessment gathers factors into broad areas of:

a) the natural and physical resources of the landscape (including the scientific understanding of those resources)

[5] RMA (1991) (3)(d) Meaning of effect

[6] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Paragraph 2.36

[7] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Paragraph 5.29

[8] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Paragraph 5.48

b) how the attributes of those resources and their values may be perceived and cognitively processed (contributing to wider experiential and aesthetic values)
c) the associations that people and communities make with and among the resources and their attributes and values (including those associations based on their social, economic, aesthetic and cultural conditions).

It is important to note that landscape character and values arise from the interaction between the landscape's physical, associative and perceptual dimensions / attributes. Importantly landscape values depend on certain physical attributes[9]. Physical, associative and perceptual dimensions are initially experienced visually (as well as through other senses), cognitively processed and interpreted as values by an individual.

Some of the physical attributes may convey values associated with natural science attributes and these have been based on the assessment of experts with relevant scientific knowledge. Other technical reports have provided information relied on to determine landscape values pertaining to the plateaux in relation to recreation, culture and historic heritage and these have been referenced throughout this report with references listed in full on page 190.

The landscapes are described in terms of these dimensions where:

Physical means both the natural and human features, and the action (and interaction) of natural and human processes over time. Typical physical factors include geology, topography, hydrology, ecology, climate, vegetation, biological elements, settlement patterns, buildings, heritage features and tāngata whenua features within the landscape.

Perceptual means both direct sensory experience and broader interpretation through the senses (mostly visual) filtered by cognitive influences (education, age, culture etc). Typical perceptual factors include a geomorphic legibility (how obviously a landscape expresses the processes of formation), wayfinding and mental maps (orientation or visual clarity of landmarks, routes, nodes, edges, and areas of different character), memorability, coherence (the extent to which patterns reinforce each other, for example between human patterns and underlying natural landscape), aesthetic qualities and views.

Perceptual values are derived from an aspect of the experience of the complex relationship between the individual and the environment, the

[9] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Paragraph 5.06

individual's appreciation of the aesthetic characteristics[10] of the environment, and the evaluation of the total experience influenced by value systems and beliefs, knowledge, the activity engaged in, and imagination. For the purposes of this assessment, amenity[11] generally stems from a visual understanding of the physical dimensions of the landscape, that are interpreted and cognitively processed to realise associative and perceptual characteristics, qualities and values.

Associative means the intangible things that influence how places are perceived – such as history, identity, customs, laws, narratives, creation stories, and activities specifically associated with the qualities of a landscape. Typical associative factors include cultural (tangata whenua) and historic values, as well as shared and recognised attributes such as recreational opportunities. Associative values are derived from the response of the community and why they find meaning and value in the landscape.

The site visits established that in order to understand and assess the effects on landscape values, the receiving environment was best defined and described at the most appropriate landscape 'unit of analysis'. While acknowledging that landscapes form a perceptual continuum, for assessment purposes landscapes are defined according to boundaries such that they have 'a sense of inner coherence and unity' (Lyle, 1999)[12]. The landscape unit of analysis are referred to as 'Broad-Scale' and 'Project-Scale'. At a Project-Scale landscape character units (LCU) 1 – 3 relate to the Stockton Plateau. Refer GA, Page 10.

Assessment Scale

The two scales are selected because they are functional in serving an analytical purpose at the lowest level that provides a sufficient explanation of the Project. Of relevance to note is that the landscape scale of assessment is influential in determining the relative magnitude or significance of effects. Inevitably assessment at a Project-Scale will tend to overemphasise the effects associated with the Project on the plateaux landscape values.

Accordingly, the following report is structured and divided into sections that define and describe the receiving environment at the Broad-Scale

[10] Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022.

[11] RMA (1991) Amenity is defined as meaning those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes.

[12] Lyle,JT(1985). Design for Human Ecosystems. Van Nostrand Reinhold. New York

and the Project-Scale and also identifies the landscape values at both scales. Refer GA, Page 04 and 13.

The Broad-Scale and Project-Scale environments are illustrated by photographs and photo-panorama viewpoints. Refer GA, Pages 14-25 and VSs, Pages 1 – 135.

The **Broad-Scale** landscape comprises the outer extent of the receiving environment, which extends along the coast between Mokihinui and Buckland Peaks and includes Westport, the pastoral strip between the coastline, the dramatic coastline, the adjacent conservation areas, National Parks and the mountainous backdrop that contains the plateaux. The Project will be experienced visually at a distance by the majority of people within the Broad-Scale receiving environment from State Highway (SH) 67 and is therefore described and assessed from a number of publicly accessible viewpoints at key locations within this environment.

The **Project-Scale** consists of the plateaux landscapes identified as Denniston and Stockton that have definite boundaries, which are small enough to be perceived and understood in their entirety and extends to the immediate vicinity of the plateaux. The exception is for the Stockton Plateau, which is further divided into LCUs due to its differing topography, orientation and land use to assist with an understanding of the landscape and its values. Refer GA, Page 10.

The Project-Scale extends to cover that area within which the mining activity, related infrastructure and roads will be established. The Project-Scale provides a clear understanding of the extent of the Project sub-areas and mining activity and is therefore described and assessed using the rating scale outlined below from publicly accessible viewpoint locations within and from immediate vantage points overlooking the plateaux.

Scale of Effects

Table 1 outlines the rating scales that are referred to in this report to identify the existing level of value and the degree of adverse effects on landscape values arising from the Project and what the rating scale equates to under the RMA.

Table 1. The seven-point landscape and visual effects rating scale.[13]

Very Low	Low	Low - moderate	Moderate	Moderate - high	High	Very High
Less than Minor	Minor		More than Minor		Significant	

NOTE. This assessment excludes consideration of the existing infrastructure that is proposed to remain in place for the duration of the Project, including the coal processing plant at Ngakawau and on the Stockton Plateau.

Landscape Effects - Issues

The potential landscape effects arising from the Project include the following:

- Changes to physical attributes removing, replacing (rehabilitation) or adversely affecting geological features, complex natural topography, hydrology, rock pavement surfaces, vegetation, biodiversity, habitats and fauna of value, wetlands / tarns and historic mining.
- Changes to physical attributes, the extraction activity and processes including dust, noise, lighting, traffic, AMD, rehabilitation etc that will affect perceptual / sensory values, including natural character, amenity, aesthetic and scenic outlook, visual coherence, a sense of remoteness, memorability and legibility.
- Changes to physical attributes and the extraction activity and processes including dust, noise, traffic, AMD, rehabilitation, access etc that will affect associative values relating to cultural and historical heritage, conservation ideology, tourism, intergenerational mining connections and recreational opportunities.

The key aspects of determining effects will be the area of disturbance, and the duration of disturbance and timeframes for active mining and rehabilitation. Therefore, landscape effects will change as the Project progresses through different stages. The staging of mining and timeframes for the establishment of the rehabilitation are therefore of key relevance to this Assessment.

Effects on landscape values are assessed for each Project sub-area but initially informed by a visual assessment undertaken at both the

13 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Page 140.

Broad-Scale and Project-Scale receiving environment. The visual assessment is undertaken upfront as a separate section for practical purposes to inform the assessment of effects on landscape values noting that "*a visual effect is an effect on landscape values experienced visually. Visual effects are a subset of landscape effects. A visual assessment is one method to help understand landscape effects*." [14] Physical, associative and perceptual dimensions are each experienced visually (and through other senses) and values stem from the cognitive processing of an individual. However, effects on landscape values do not have to be visible to be an effect.

In part, landscape values experienced visually are captured by the term 'amenity'[15] and include a scenic outlook (views to physical features of interest, skylines, coastlines etc), but also inform many other values such as legibility, natural character, memorability and visual coherence of the landscape, cultural and spiritual values and identity etc.

Further information to support the landscape assessment is provided by Visual Simulations (VS) of the Project. These have been prepared by Virtual View 3D Visualisation Specialists[16] based on modelling provided by Bathurst showing pre and post mining landforms, mine staging, and rehabilitation. These VSs are used to illustrate the staging and sequential rehabilitation at key points relating to landscape effects (ie ridgeline intrusion, visibility etc) from representative viewpoints and vary for each sub-area, noting that viewpoints are excluded if no view to the Project will be obtained. The Stockton extension is not illustrated by the VS due to lack of public views and the context – as an extension on the periphery of the currently active Stockton mine.

The ESE VSs show stages 02, 06, 16 (at mine closure and full rehabilitation) and medium term post mine closure and rehabilitation from viewpoints 13, 14, 15, 16, 17 and 18.

The MFS VSs show stages 02, 06 / 08, 12 (at mine closure and full rehabilitation) and medium term post mine closure and rehabilitation from viewpoints 14, 16, 17 and 18. The choice of viewpoints shows the sequence of rehabilitation, long term ecological recovery and also ensures that cumulative effects are captured for assessment.

14 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Page 135.

15 Amenity values are defined in the Act as:…*those natural or physical qualities and characteristics of an area that contributes to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*.

16 Virtual View. Visual Simulations and Methodolgy. Refer Appendix C

The staging of extraction and sequential nature of the rehabilitation means that once some areas of the Project will be rehabilitated during LOM, and other areas will still be subject to mining activities with rehabilitation yet to commence, noting the ongoing rehabilitation programme[17] once all mining has ceased.

Rehabilitation monitoring, maintenance and active water treatment will continue for approximately 10 – 15 years post mining and rehabilitation completion, or for Stockton in collaboration with the Crown, at which time the mine areas will be relinquished. Note that public access to various areas of the plateau will depend on landowner agreement, ongoing rehabilitation and public safety.

The time frames used in this report are consistent with and relate to the ecological time frames for vegetation establishment and ecological recovery. This means that the short term equates to a period of 10 years after mine closure and post rehabilitation, noting that, vegetation establishment and maturity will continue beyond this period in the medium term (10 – 50 years) during which time the landscape will become self-sustaining and in the long term (over 50 years).

The LAR relies on the ecological information provided in various Ecological Solutions reports to inform the existing landscape values relating to biodiversity, natural character, etc. Pertinent sections of the Ecological Solutions reports have been extrapolated below under Section 5. Project Description at 5.5 Ecological Management Plan / Biodiversity Package / Pest Free Enclosures and 5.6 Rehabilitation to aid an understanding of the rehabilitation process and outcomes for the purposes of this assessment.

[17] BPCP Summary Project Description. January 2026. Table 5-2

4 RELEVANT POLICY PROVISIONS

This report has been prepared to assess the actual and potential landscape and visual effects of the proposed development as required in Schedule 5, Clause 7(b) in the FTAA 2024.[18]

The purpose of the FTAA is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.[19] The proposed Project is listed in Schedule 2 of the FTAA as one of 149 projects with significant regional or national benefits.

Other key statutory and planning documents provide important direction in relation to matters that need to be addressed when undertaking a landscape and visual assessment. Those of relevance to the landscape assessment of the Project include:

- Fast-track Approvals Act 2024
- Crown Minerals Act 1991
- Conservation Act 1987
- Reserves Act 1977
- Heritage New Zealand Pouhere Taonga Act 2014
- Resource Management Act (RMA) 1991
- West Coast Regional Policy Statement (RPS) 2020
- West Coast Regional Land and Water Plan (RLWP) May 2014 (Identifies Schedule 2 Wetlands on the Buller Plateaux as Denniston Plateau NGAP051 – 143)
- West Coast Conservation Management Strategy (CMS) 2010-2020
- Buller District Plan (BDP
- Te Tai o Poutini Plan (TTPP) Decisions Version

The Project is located within the Buller District, and therefore, is subject to the provisions of the District Plan/s. The District Plans give effect to the RMA and provide the policy framework against which the proposal has been evaluated.

The operative BDP has been reviewed and the new District Plan, TTPP, which is the proposed combined District Plan for the Buller, Grey and Westland Districts, is currently subject to appeal with hearings held in 2026. Provisions of the TTPP that are not appealed are now operative. The Project must therefore be assessed under

[18] Fast Track Approval Act. Page 140 - 141.

[19] Fast Track Approval Act.

the relevant provisions of both the operative BDP and the proposed TTPP (Appeals Version).

Non-statutory documents provide valuable information relating to the importance of landscapes and natural and man-made features and issues relating to their management. Relevant non-statutory documents concerning features in the locality of the Project include:

- New Zealand Geo-Preservation Inventory
- Ecological Regions and Districts Of NZ

Refer Appendix E for full outline of statutory considerations relevant to this Landscape Assessment. Rather than considering individual objectives and policies, the Project is assessed against the general themes relating to landscape matters outlined in the various statutory and planning documents in Section 11 below.

5 THE PROJECT DESCRIPTION

Introduction

The Project seeks to enable a mix of ongoing and new mining activities on areas of the Buller Plateaux (being both the Denniston and Stockton Plateau) utilising existing infrastructure facilities at the Stockton Mine for mining undertaken within the Project sub-areas and the Ngakawau Rail Loadout facility.

Mining will be conventional drill and blast, load and haul open pit mining and will operate 24 hours a day over a seven-day week. It will include rehabilitation and ongoing treatment of the historic environmental liabilities, including acid mine drainage (AMD).

The Summary Project Description is provided with the FTAA application[20] and should be referenced for a complete understanding of the proposal.

The Project is divided into various sub-areas and of these, the four sub-areas that contain new mining activities and the pest free enclosures are relevant to this landscape assessment as having the potential for effects on landscape values:

- Stockton extension (Stockton)
- Mount Frederick South (MFS)
- Escarpment Extended (ESE)
- Upper Waimangaroa Haul Road (UWHR) transport corridor
- Pest free enclosures at Mt Augustus (14.6 ha); Whirlwind Rise (694.5 ha); North Denniston (47.3 ha); and Coalbrookdale (154.3 ha)

The sequencing of activities within each Project sub-area and the proposed timeline is indicated in the Table below (referenced from the Summary Project Description, Table 5-2.)

[20] Bathurst Resources Limited (2025) Buller Plateaux Continuation Project. Project Description (version 3)

Table 1. Sequencing of Activities and Proposed Timeline

Site	Development Phase	Operations	Last Coal Mining	Rehabilitation Completion	Rehabilitation Monitoring, Maintenance and Active Water Treatment	
Stockton	N/A	Extension of 11 years	FY37	FY46	Ongoing in collaboration with the Crown	Relinquishment
ESE	Commencing FY27	16 Years	FY42	FY45	Approximately 15 years	
MFS	Commencing FY27	16 Years	FY42	FY43	Approximately 10 years	
UWHR	Commencing FY27	16 Years	N/A	FY45	Approximately 10 years	

A summary for the Project sub-areas is provided below and includes the key details pertinent to the Landscape Assessment (LA). The GA (refer Appendix B) contains graphic material relevant to this LA on Pages 04-82.

Each Project sub-area is contained within a disturbance area. A generic 20 metre (m) offset has been provided around the disturbance areas with variable allowances in areas where more investigative activities are required or where topography may be beneficial to place ex-pit items like soil stockpiles, laydown areas, pipe yards etc. In some places the buffer varies in width to avoid any disturbance to areas of ecological values, such as the tarn north of Billo Stream, the ridgelines along Deep Stream and / or natural water channels.

The mitigation, including offset and rehabilitation approaches are described below because these aspects of the Project will be undertaken in all the Project sub-areas and underpin the LA.

Specific Exclusions from Landscape Assessment

Of note is that the coal processing from the proposed mining at Stockton Extension, MFS and ESE on the Denniston Plateau will utilise the existing mine infrastructure at the existing Stockton Mine and at Ngakawau, with the Aerial Ropeway linking the Ngakawau Rail Loadout to the Stockton Mine[21].

[21] Bathurst Resources Limited (January 2026) Buller Plateaux Continuation Project. Summary Project Description, Existing Stockton Infrastructure, Section 1.7.3

These facilities in addition to the ongoing Stockton mining and rehabilitation up to end of 2027 and the Cypress Mine are not anticipated to change and as they form part of the existing environment, they have been excluded from this landscape assessment except to the extent they form part of the legal receiving environment or result in cumulative effects. Similarly, the Escarpment Mine on the Denniston Plateau currently under care and maintenance is considered to form part of the legal receiving environment. These exclusions recognise a receiving environment that is a highly modified landscape shaped by a long history of extractive use.

5.1 Stockton Extension

The extension to the Stockton Mine is described in the Project Description[22]. The Stockton Extension mining will be within the Rural Zone and under the TTPP will be within the Buller Coalfield Zone. Physical access to the Stockton Mine will continue via the public Millerton Road to the mine gate and thereafter via Burma Road.

Post 2027, Bathurst proposes to mine additional areas within the existing CML at the northern edge of the plateau over a period of 11 years, continue using the existing infrastructure and facilities at the Stockton Mine, and carry out further excavation activities in the existing A-Drive Borrow Pit to provide roading aggregate and weathered granite for ongoing site rehabilitation and maintenance activities.

The disturbance areas for Stockton Extension are shown on GA, Page 31. The existing A Drive Borrow Pits are also shown and will extend over a disturbance area of 31ha.

The Stockton Extension will occur in three separate locations extending the existing current mining activities within the Rockies North-Hope Lyons, and Millerton West and East mining blocks, in addition to the A-Drive Borrow Pits #1 – 3 (GA, Pages 30 and 31). The proposed mine areas contain underground historic mine workings (GA, Page 29) that are characterised by mine fires from previous underground mining that will be extinguished during the extraction of waste rock and coal.

Mining will occur 24/7 with lighting comprising vehicle lights and mobile lighting including free standing poles at 8 – 12m height or mobile lighting towers at 12m in height.

[22] Bathurst Resources Limited (January 2026) Buller Plateaux Continuation Project. Summary Project Description, Stockton, Section 1.7.9

Mining will occur over five stages in these separate locations (refer GA, Page 32). The A-Drive Borrow pit #1 will occur in stages 1 and 2 and be completed with pit # 2 and 3 continuing until the end of the Project to supply weathered granite for road maintenance, drainage and final landform capping and shaping of ELFs.

The Rockies North mine area will be mined down-slope from north to south through areas of historic underground workings with completion in about Stage 5.

The Hope Lyons mine area will be mined concurrently in an upper and lower block separated by a gully and fault structure with completion in about FY32.

Millerton mine area will be mined north to south then eastward through zones of historic underground mine working and extinguishing historic underground fires with completion in Stage 5.

Water management will involve in-pit sumps and permanent sumps established in final pit voids at topographic low points. Existing water treatment infrastructure will be retained and maintained until fully rehabilitated and water discharge quality meets the defined rehabilitation completion criteria. AMD management focuses on betterment to achieve improvement in downstream water quality.

While excluded from consideration within this LA, the rehabilitation will also include decommissioning and removal of infrastructure that is not identified as having potential values for future land-use, or heritage significance subject to future landholders', or managers' preferences and approach. Haul roads will be narrowed and maintained to a standard appropriate for the intended post-mining land-use and maintenance.

Vegetation rehabilitation will be completed progressively over the Stockton Extension sub-areas and will optimise the use of natural material including VDT, topsoil and slash material. Refer GA, Page 34 showing vegetation rehabilitation in relation to the final landform.

The total disturbance area of the Stockton Extension will be approximately 31ha (52.0ha including the ecological setback). The proposed final landform will be rehabilitated as approximately:

- 5.0ha of rehabilitated highwalls / coalfloor;
- 1.0ha of tall forest
- 4.5ha of beech forest
- 4.0ha of manuka dominated shrubland
- <1ha of flax dominated shrubland
- 2.0ha pākihi

- 10.5ha of rockfield rehabilitation;
- balance area of tarns / wetland and water infrastructure;

5.2 Mount Frederick South (MFS)

The MFS mine is described in the Project Description contained in the Application at Section 1.9[23]. In brief, MFS is located on the southern part of the Stockton Plateau approximately 1km southwest of the Mount Frederick mining area within the Stockton Mine. It lies within both Mining Permit (MP) 41515 and Exploration Permit (EP) 61157 on Crown Land administered by LINZ and DOC. Under the BDP and TTPP, MFS will be within the Open Space Zone.

There are historic underground mines in this area dating back to the late 1800s. Refer GA, Pages 44 – 53. MFS will be accessed via the UWHR. All coal will be transported via the UWHR from MFS to the Stockton CHPP for processing or directly to the ROM loadout pad using mine trucks.

The estimated consenting footprint will be approximately 216ha with a disturbance area of 170ha and buffer area of 41ha.

MFS will be mined in two pits: West and East Pits. The MFS development stages and rehabilitation sequence are shown on Page 48. The initial development stage will focus on establishing site access and supporting infrastructure, beginning at the UWHR intersection and working towards the West Pit and will include the following elements:

- Soil and vegetation removal and storage
- Construction of a 3.4km access road (mainly in cut) up to 10 – 16m wide from the UWHR intersection to the West Pit
- Three river crossings with culverts across Waimangarora River, and Deep Creek Tributary, and a 50m long bridge over Deep Stream (GA, Pages 44 and 48)
- Infrastructure immediately south of West Pit area to include staff facilities with toilets etc as a series of portacom modules up to 4m in height, WTP silo, fuel tanks and generator.
- Lighting, fixed to structures or mobile lighting including free standing poles at 8 – 12m height or mobile lighting towers at 12m in height

[23] Bathurst Resources Limited (January 2026) Buller Plateaux Continuation Project. Summary Project Description, MFS, Section 1.9.

- Water treatment facilities (1.5ha) and management including sumps, culverts, diversion drains and channels (GA, Page 47)
- Haul roads (max width of 24m) between pits and infrastructure
- Pits – East (51ha) and West (42ha) of Billo Stream
- Overburden ELFs
- Coal stockpile transfer area and excess cut stockpile on western bank of UWHR

Mining will occur over 13 stages and is described in detail[24], but will generally proceed south – north from the West Pit to the East Pit, Refer GA, Page 48. The Waimangaroa River gorge ridgeline will be marginally intruded in stages 04 - 06, with active mining and rehabilitation of the West Pit completed at stage 9 except for water treatment and management areas and infrastructure including the haul road. Mining will progress across Billo Stream at Stage 6 to the East Pit and will continue until Stage 13. Refer GA, Page 48.

Post closure the haul road will be narrowed and water treatment infrastructure will be retained until rehabilitation is complete and meets the required water quality limits or vegetation establishment criteria.

The proposed final landform[25] (refer GA, Page 50) will include approximately 170ha of rehabilitation inclusive of and will result in:

- 99ha of native ecosystem;
- 22ha of rehabilitated highwalls;
- 11ha of rockfield rehabilitation and coal floor;
- 18ha of wetlands / tarns;
- 3ha of infrastructure; and
- 22ha of water infrastructure

The rehabilitated vegetation will be made up of tall forest, beech forest, pakihi, riparian vegetation, shrubland (flax dominated), shrubland (maunka dominated), wetlands and tarns.

[24] Bathurst Resources Limited (January 2026) Buller Plateaux Continuation Project. Summary Project Description, MFS, Section 1.9.

[25] Bathurst Resources Limited. (January 2026) Rehabilitation Management Plan. Table 4:Final Landform within the Project Area

5.3 Upper Waimangaroa Haul Road (UWHR)

The UWHR[26] will be located in the Waimangaroa River valley and will lie within Crown Land administered by either LINZ or DOC. Refer GA, Pages 55 – 65.

The UWHR is a transport corridor proposed alongside the upper Waimangaroa River to provide a link between the Denniston and Stockton Plateaux for coal haulage. This haul road will enable ESE and MFS coal to be processed, washed, sized and blended at Stockton prior to transport to the Ngakawau Rail Loadout for export.

The construction is expected to take between 18 months up to two years. The UWHR will be approximately 19 km in length, of which 15 km will be an upgrade of existing roads or tracks currently referred to as the Cedar Creek Road and the Cascade Mine Road (GA, Page 56). The remaining 4 km will be across previously undisturbed areas covered in a range of native habitat linking to the Cypress Mine consent area and adjacent the ESE infrastructure.

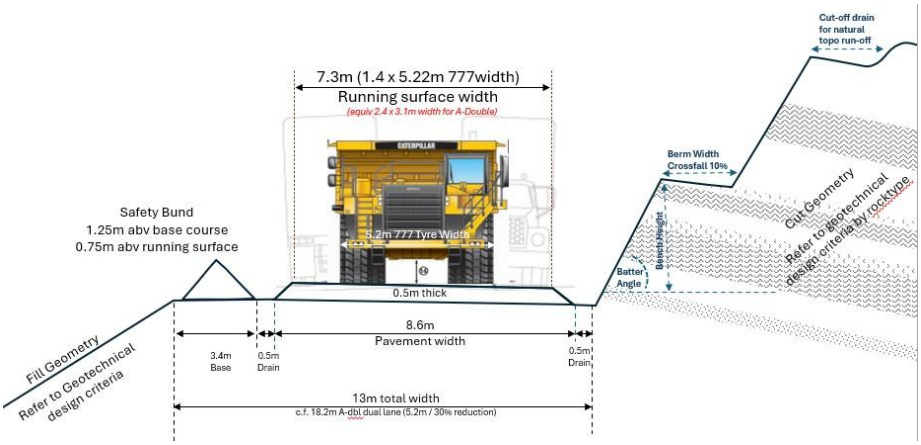

Figure 2. Typical UWHR Cross Section

The UWHR will be 8.6m wide for dual lane haulage operations with an additional width allowance for surface drainage and safety bunds. Part of the road corridor will also provide a 1 – 1.5m wide pedestrian / cycle access to the Mackley Track where it currently exists. The coal haulage operations will be conducted 24 hours per day, seven days a week. Dust suppression will be managed using two dedicated water trucks. The general public will have restricted access to the UWHR on a managed basis.

[26] Bathurst Resources Limited (January 2026) Buller Plateaux Continuation Project. Summary Project Description, UWHR, Section 1.10.

The total disturbance area will be 44.8ha (87.6ha including the ecological setback). The UWHR will be largely unsealed except on steep gradients and include the following elements:

- Culverts and sediment sumps
- Safety bund
- Laydown areas
- Road cuts
- Pedestrian / Cycleway

Most cut will be on the southeast side of the haul road with fill required to the northwest where some areas of fill will be likely alongside the Waimangaroa River corridor. Soil and slash produced in constructing the road will be stockpiled and used in progressive rehabilitation of road cuttings and bulk fill areas. The riparian margins to the Waimangaroa River will remain intact except where the UWHR connects to the MFS haul road and coal load out area.

The cut and fill sections will be battered and stepped depending on the geometry and batter height. There will be culverts and sumps required along the length of the UWHR where various tributaries flow downhill from Mt William Range.

At mine closure the running surface road width will be narrowed to 5 m wide with shoulders reprofiled and revegetated. The proposed final landform will include approximately 9ha of rehabilitation (to a native ecosystem), which is comprised of half the road pavement width (5ha) plus laydown areas along the length of the UWHR (3.4ha). This excludes the sediment control sumps as road drainage is proposed to be left post closure to control the run-off from the remaining road surface.

The UWHR will continue to be used for maintenance access (rehabilitation vegetation and AMD) post mining and will transition to a combination of recreational use and ongoing Transpower access up to at least the Mackley Track intersection, subject to landowner agreement and approvals.

5.4 Escarpment Extended (ESE)

ESE will be located on the Denniston Plateau on Crown land, which is part of the Mount Rochfort Conservation Area administered by DOC. Refer GA, Pages 67 – 83.

ESE will include areas covered by the existing Escarpment Mine (currently under care and maintenance), Whareatea West MP 60138 and the Sullivan CML. The Waimangaroa Storage Yard which is

located at the bottom of Denniston Road also forms part of the ESE Project sub-area.

ESE will be accessed via the Denniston Road up to the Denniston Brakehead and heritage area then via the Whareatea Mine Road. The access and supply roads will have an 8m wide running surface within a 15m wide access corridor. The Whareatea Road from Denniston to the mine grate will be gravel and speeds restricted to 40km/hour.

During operations, the ESE Run of Mine (ROM) coal (coal loadout) will be transported to the Stockton CHPP via the UWHR.

During operations, the current access to the Mt Rochfort repeater will be progressively realigned. Access to the repeater will however be maintained throughout the various stages of mining. It is anticipated that Mt Rochfort access will necessitate travel through operating work areas on occasion necessitating an escort through operational areas.

The total disturbance area of ESE will extend over 460ha with an allowance of 82ha as a buffer area (542ha including buffer) across the southwestern part of the Denniston Plateau to the Whareatea River gorge. The ESE will encompass the active Escarpment Mine pit footprint and extend over part of the plateau where previous underground historic mining has occurred.

The ESE mine development will include the following four key infrastructure areas with the following facilities:

- **Gatehouse / Admin Office Area** including a series of portacom buildings used for security gate controls, administration office areas and amenities, structural steel frame sheds as emergency response buildings and emergency vehicle parking.
  Buildings are between 4 – 6m in height. Lighting will consist of 5 x 8m poles with 200W LED lights.

- **Central Infrastructure Area (CIA)** Stages 1 and 2 with a 4 bay HME workshop, bath house, warehousing, washdown areas, fuel tanks, tyre bays, main maintenance facilities, offices, water treatment plant and ponds etc. The highest lime storage silo (WTP) is 12.8m and other tanks will be 8m in height.
  Buildings will be a mix of structural steel portal frame sheds, container shelters, and / or portacom modules between 4 – 15m in height.
  The Mine Operation, Dispatch and Bathhouse building, the 4 bay Mine Production Workshop, the Mine Contractor Workshop, the Warehouse Building and the Tyrebay Building

will breach the maximum 500m^2 area for buildings in the Rural Zone under the BDP.
Lighting will consist of 10 x 8m poles with 400W LED lights.

- **Coal Haulage Infrastructure Area (CHIA)** will be located south and east of the Central Infrastructure Area. The stockpiling area will be approximately 6ha and capable of storing stockpiles up to 4m in height. The facilities will include the Coal Haulage Washdown, Office, Workshop and Fuel Tanks. Buildings will be a mix of structural steel portal frame sheds, and / or portacom modules between 4 – 8m in height.
  The Coal Haulage Workshop will be 600m^2 and 8.0m in height and breach the maximum 500m^2 area for buildings in the Rural Zone under the BDP.
  Lighting will consist of 12m poles with 420W amber LED lights.

- [redacted]

All buildings / structures will be clad in earth toned, low reflectance value colorsteel or a similar recessive coloured material.
Other components of the ESE project area include:

- Water treatment facilities, management, sumps, culverts, diversion drains and channels
- Haul roads between pits and infrastructure
- Pits
- Overburden ELFs
- Escarpment Borrow Pit located between the Gatehouse and the central infrastructure area (GA, Page 70).
- Lighting mobile lighting towers at 12m in height

The indicative staging and final landform design plans are set out in the BPCP - Summary Project Description, January 2026 and also illustrated in the GA on Pages 71 and 73.

The initial development stage will include the initial infrastructure elements listed above including the Borrow Pit and the Coal Stockpile Area, which will continue throughout the life of mining operations to supply aggregate demand for road sheeting and maintenance periodically as required. Thereafter stage 1 mining will progress west with the bulk of mining occurring south of the Whareatea River and the Sullivan ELF located north of the Whareatea River. Subsequent mining stages progress west up to stage 7 which simultaneously progresses northwest towards and beyond Conglomerate Stream and southeast, towards the ridgeline and boundary with ONL41.

Due to the topography ESE will affect three water catchment areas:

- Rapid Stream Catchment
- Cascade Creek Catchment
- Whareatea River Catchment

Both Rapid Stream and Cascade Creek catchments are affected by untreated historic underground workings with mine contaminated water. Details of the proposed water treatment for all catchments are included in the CBPCP – Summary Project Description and include active and passive water treatment to improve water quality as in-pit water management and overburden and AMD management.
Of relevance is the Clean Water Diversion of Trent Stream, which will direct water towards both the Whareatea catchment and the Cascade catchment during mining operations.

The proposed final landform[27] will include approximately 588ha of total rehabilitation, inclusive of:

- 303ha of native ecosystem
- 42ha of rehabilitated highwalls
- 64ha of wetlands / tarns
- 69ha of rockfield rehabilitation
- 3ha of water infrastructure
- 13ha of sumps
- 80ha of returned natural ground, as undisturbed area, and
- 13ha of built infrastructure (including retained roading network)

The final landform will comprise a hill up to 795masl between Trent Stream and the headwaters of the Whareatea River, areas of wetland

[27] [27] Bathurst Resources Limited. (January 2026) Rehabilitation Management Plan. Table 4:Final Landform within the Project Area

tarns, rockfield rehabilitation and the sump forming the Borrow Pit lake.

5.5 Ecological Management Plan / Biodiversity Package / Pest Free Enclosures

The predator control operations that are part of the existing Cypress consent conditions are required to be carried out in the following areas:

(a) The 1,990-hectare (approximately) Snail Enhancement Area (SEA) targeting rats, possums and if necessary, thrushes.
(b) The 1,000ha Oparara Kiwi Treatment Area (KTA) targeting possums, rats and stoats.
(c) Cypress Mine site control (230 hectares approximately) targeting possums and hares.
(d) The 8,200ha Wider Habitat Enhancement Area (WHEA) targeting predominantly possums but also rats and stoats periodically.

In addition to the consent conditions, four fenced pest free enclosures are proposed to enclose and protect approximately 910.7ha of coal measure habitat. They are located on the Stockton Plateau at Mt Augustus (14.6ha) and Whirlwind Rise (694.5ha) and Denniston Plateau at North Denniston (47.3ha) and Coalbrookdale (154.3ha). The Pest Free Enclosures are outlined on pages 35 and 74 of the GA.

The pest exclusion fenced areas underwent a site selection analysis with criteria including high priority habitats, densities of fauna, reduction of fence build impacts. The fences will be built in a staged manner to coincide with disturbance and construction activities[28]. The fences will be 1.9 – 2.0m in height with timber posts, 316 stainless steel mesh and total approximately 24km[29]. The fences will have a lifetime of 40 – 50 years. The majority of the fencelines will traverse existing roads and tracks with the remainder requiring establishment achieved by bulldozing a 3m wide bench with short sections across streams and cliffs requiring construction by hand building.

The pest free enclosures contain a range of vegetation types and landforms and many of the plateaux faunal ‘hotspots’.

Pest-exclusion fencing on the Buller Plateaux will create secure, predator- and ungulate-free refugia in recognised high

[28] Alliance Ecology (2025) Residual Effects Management Report. Section 6.5

[29] PestProof Fences Ltd (2025) Pest Exclusion Fencing Feasibility Report, Denniston and Stockton Plateaux

priority habitats. By enabling eradication and long-term prevention of reinvasion, these fenced sanctuaries are expected to deliver the most reliable and enduring biodiversity gains in the plateaux landscape, especially for species that are highly sensitive to even low predator densities[30].

5.6 Rehabilitation

Current site rehabilitation requirements at Stockton are set out in the conditions of the CML[31] and rehabilitation has been undertaken in accordance with the 'Stockton Rehabilitation Design Guidelines' (Bartlett et al. 2002). These guidelines are essentially a staged process/method developed to ensure rehabilitation occurs as per the requirements of the Coal Mining Licence conditions. The rehabilitation undertaken under these guidelines has been approved and signed off by the Council and the Crown

The objective of the rehabilitation programme is to leave the site safe and geotechnically stable post-mining, incorporate landforms that are sympathetic to surrounding landscapes, and to encourage an indigenous, self-sustaining, and diverse vegetation cover and ecosystem[32].

The following is proposed as part of the rehabilitation for the BPCP and text is taken from the Ecological Solutions Limited reports[33]. All Project sub-areas will follow a typical sequence of rehabilitation broken into three stages:

1. Final landform shaping
2. Capping and topsoil spreading
3. Vegetation planting, or vegetation direct transfer (VDT), and ongoing maintenance.

One of the goals of rehabilitation is to create vegetation patterns across the created landform which mimic the natural patterns to the extent practicable, including stream restoration / reinstatement and the establishment of riparian margins.

[30] Alliance Ecology (2025) Residual Effects Management Report. Section 6.5

[31] EcoSolutions. 2026. Rehabilitation Outcomes Report. V11. Table 1 Conditions Relevant to Rehabilitation from the Stockton Mine CML 37-150 Consent

[32] Rehabilitation Management Plan (January 2026) Goals and Objectives 1.5

[33] EcoLogical Solutions (2025). Terrestrial Ecological Impact Assessment Report and Rehabilitation Management Plan

It is understood that rehabilitation will occur progressively during LOM, essentially following the mine staging of extraction. In other words, the areas mined first will be those that are rehabilitated first.

Initial stages will allow for overburden and stockpiles until the pit can be backfilled, final landform shaped (ELFs) and prepared for planting or VDT from subsequent extraction stages.

The engineered landforms (ELFs) will be contoured (slope, elevation and aspect), compacted and capped by non-acid-forming rock and a growth medium with different profiles depending on the vegetation type (shrubland / pākihi and tarn cover, forest cover, rock field cover, enhanced rock field cover) proposed on the vegetation rehabilitation plans.

The ELFs will include a variety of slopes, which are suitable for revegetation by VDT or direct planting. The flat and gentle slopes will be most suitable for VDT and slopes less than 20^0 most suitable for planting.

Slopes exceeding 20^0 will be restricted to highwalls, which are cut into bedrock and terraced or stepped with batter slopes of 38^0 ,10 – 15m in height and 10 - 15m wide benches for planting where access allows. Hydro-mulching and seeding (broadcast of seeds by hand or machine) will be used on highwalls, where vegetation is required with limited accessibility for planting or VDT. Hydroseeding mix should contain moss mix with fragments of herbs as well as seeds of mānuka, koromiko, mountain flax.

An example of rock wall and rehabilitation planting is shown below in Photo A.

Photo A. Example of a rock face / highwall and surrounding rehabilitation on the Stockton Plateau

According to the Ecological Solutions Rehabilitation Management Plan 2026, streams will be reinstated and where possible and / or pragmatic, will introduce the following characteristics; a sinuous alignment, accommodating a flood plain, rock substrate, a variety of habitat types (pools, runs, riffles, waterfalls and undercut banks) and sandy and cobble bases. Riparian vegetation will consist of VDT edges, woody debris and planting for shade.
The Project will result in the loss of 17.2km of streams (Earth Sciences New Zealand 2026). Rehabilitation will reinstate 20.9km of streams[34].

Revegetation will be expedited through the direct transfer of material where possible including:

- VDT
- Salvaged plants
- Soil and biomass (jumble dump)
- Planting of nursery raised seedlings
- Seeding of exotic grasses

The vegetation rehabilitation plans have taken into account the slope requirements and other drivers of vegetation patterns to locate vegetation types on the post mining ELFs including elevation, topography, altitude, and slope aspect.

Ultimately, the vegetation type that develops will be strongly influenced by soil, slope and aspect according to the growth requirements of the particular species present. The slope will be pre-determined by the topography of the ELF, and this will inform the location of rehabilitation including VDT and planting of forest. Pākihi vegetation will be primarily placed on flat and poorly drained locations, shrubland on gentle to moderate slopes, with forest placed on all slopes, though this will be predominantly moderate slopes.

The original vegetation within the disturbance footprints of the Project includes three forest types, six shrubland types and four low vegetation types, as well as bare rock, cleared vegetation and water as shown in the Table below[35].

Following rehabilitation of the Project sub-areas, there will be eleven different vegetation/land cover types distributed across the affected area, including three forest types, five shrubland types, rockfield, and wetlands/tarns. Some infrastructure elements, including roads and water treatment solutions, will also be retained[36].

[34] Ecological Solutions. Rehabilitation Management Plan. 2026. Section 6.10 Stream Reinstatement.

[35] BCPCP_EcoLogical Solutions.Rehabilitation Management Plan.6.0

[36] BCPCP_EcoLogical Solutions.Rehabilitation Management Plan.6.0

Table 2. Extent of each pre-mining and post-mining vegetation type within the BPCP Disturbance Area.

Pre-mining Vegetation Type	Amount removed (ha)	Post-mining Vegetation Type	Extent (includes VDT and planting (ha)[37]
Forest	**188.1**		**248.6**
Mixed beech-podocarp-broadleaved forest	5.5	Tall forest	7.2
Southern rātā-mountain beech-podocarp forest	177.1	Beech forest (a)	234.2
Silver beech-mountain beech forest	5.5	Beech forest (b)	7.3
Shrubland	**214.2**		**125.7**
Mānuka-mountain beech-podocarp shrubland	84.7	Mānuka shrubland (a)	52.8
Mānuka/Gahnia-wire rush shrubland	9.2	Mānuka shrubland (b)	5.7
Shrubland with exotic component	12.5		
Mānuka-tussock-wire rush shrubland	104.2	Pākihi	64.9
Mānuka-mountain flax/wire rush shrubland	3.7	Flax shrubland (a)	2.3
Low vegetation	**216.4**		**130.1**
Low pākihi	213.9	Pākihi	129.1
Tussock-mountain flax shrubland	1.7	Flax shrubland (b)	1.0
Exotic grassland	0.8		
Non-vegetated land cover	**135.5**		
Bare rock	63.6		
Vegetation cleared	69.8		
Water	2.1		
Rehabilitated highwall			**68.8**
Rockfield			**91.1**
Total	**754.24**		**664.5**

The examples of vegetation rehabilitation that are intended to be employed within the Project sub-areas are illustrated by photographs of successfully rehabilitated areas within Stockton. Examples of existing

[37] The extent of each vegetation type proposed for rehab is based on the final landforms ('Native ecosystem', 'wetland/ tarns', 'rehabilitated highwall' and 'Rockfield' extent) (Shapefiles released 5 December 2025) within the Disturbance area (Shapefiles release 15 October 2025) of Stockton, Mount Frederick South, Upper Waimangaroa Haul Road and Extended Escarpment. It takes into account the slope of the final landform to dictate if the landform will support wetlands (<5°), Shrublands (5-15°) or forest (>15°).

vegetation types within the Project sub-areas are also found in the Rehabilitation Management Plan[38].

The Rehabilitation Management Plan sets out rehabilitation goals, objectives and closure criteria for the Project sub-areas relevant to terrestrial ecology. The specific procedures for rehabilitation for VDT, wetland/tarns, highwalls and stream restoration are set out in the Rehabilitation Management Plan at section 6.10[39]. Further details on the rehabilitation of specific vegetation types (forest, shrubland, pākihi and bare rock) are also provided.
These sections aid an understanding of the rehabilitation process and outcomes for the purposes of LA.

One of the key points for LA is that the original vegetation within the disturbance footprints of the Project is highly diverse in terms of species composition, recognised as 12 habitat types, including three forest types, five shrubland types and three low vegetation types, and one rocky habitat (sandstone erosion pavement). The Project also includes areas of cleared vegetation and open water (current and historic mining infrastructure). The rehabilitation will be less diverse for reasons set out below and will include the following key vegetation / habitat types with less species diversity;

- Tall forest
- Beech forest (a) – including mountain-silver beech forest and beech/podocarp/kāmahi/Southern rātā dominated)
- Beech forest (b) – mountain beech - silver beech forest
- Mānuka Shrubland (a) – mānuka-mountain beech-podocarp
- Mānuka Shrubland (b) – mānuka / Gahnia-wire rush shrubland
- Flax Shrubland (a)- mānuka mountain flax / wire rush shrubland
- Pākihi – mānuka and tussock/rush dominated
- Boulderfields/rockfields (high proportion of rock) / coal floor

Rockfield, boulderfield and forested blockfield includes exposed coal floor and other created habitats with a high proportion of rock to provide habitat for species typical of sandstone erosion pavement.

The following aspects of rehabilitation have been gleaned from the EcoLogical Solutions (2026) reports and from discussions with

[38] EcoLogical Solutions (2025). Rehabilitation Management Plan

[39] EcoLogical Solutions (2025). Rehabilitation Management Plan, Section 4.0 – 4.6.

ecologists involved with the Project and are relevant to understanding the approach to revegetation rehabilitation on the plateaux.

'The establishment of vegetation and growth rates are generally slow on the plateaux due to a combination of climatic conditions (high altitude, high rainfall, exposed sites), and shallow, poorly drained, infertile and acidic soils. With the exception of the immediate VDT rehabilitation (vegetation <1.5m in height), the species mix for rehabilitation will not replicate existing vegetation types but will comprise species that are representative of a typical vegetation type community, are successful colonising species and that will achieve maximum growth rates in the conditions prevalent on the plateau.

The tall forest will be two types, either southern rāta-mountain beech-podocarp forest or mixed beech-podocarp-broadleaved forest as dominant species with a small proportion of podocarp and / or beech because they are poor dispersers and slow growers. Eventual height may be up to approximately 12m, but it will take decades to achieve this height and for podocarps to emerge as the dominant canopy species. The beech forest will be a mixture of mountain and silver beech as canopy dominants, currently mostly high altitude, and will be relatively stunted reaching 3-5m height at high altitudes but likely taller at lower elevations.

The most common species widely used in rehabilitation at the Stockton Mine is mānuka and this will continue to be utilised as a key pioneer species for shrubland and pākihi vegetation. Other species that are unlikely to colonise rehabilitation sites due to poor or irregular seed dispersal (such as beech sp.) or limited ability to establish on bare ground will be planted in areas that represent appropriate vegetation types. The expectation is that plant species with wind-dispersed seed or that produce abundant seed will infiltrate rehabilitated areas as natural processes occur and overtime natural vegetation patterns will emerge as a self-sustaining vegetation cover.'

Initially the vegetation mosaic will appear patchy depending on the staging and method of rehabilitation, i.e., VDT, direct planting or rockfield. Slow growth rates mean that the vegetation types will take time to establish and differentiate, i.e., forest will take a long time to achieve some stature above shrubland areas. Similarly ground cover / canopy closure will also take time depending on the vegetation type.

In general VDT will establish almost immediately within 10 years. Shrublands will take 20 – 30 years to achieve canopy closure based on

known growth rates at Stockton[40]. Forest will take many decades up to more than a century to achieve comparable pre-mining habitat.

The data from previous rehabilitation plots at Stockton confirms that canopy cover for shrubland vegetation types will reach 30 – 45% after 18 years and will increase more rapidly after that with canopy cover at 50 – 60% at approximately 20 years and canopy closure at 30 years. The other vegetation types indicate a slower timeframe to achieve canopy cover.

The ecologists[41] advise that updated ecological rehabilitation methods will improve on these outcomes subject to limitations by site constraints however it should be possible to achieve greater than 50% canopy cover for all vegetation types after 25 years.

It is acknowledged that 'Threatened' and 'At Risk' and regionally important plants are widespread throughout the Project Area. Some of these plants, whilst considered 'Threatened' or 'At Risk' nationally, are locally common and widespread. Goals and objectives to retain these species are included along with specific habitat designs for targeted species.

Habitat creation for fauna is discussed in relation to vegetation types including wetlands, tarns, rockfields, and streams. Habitat creation depends on mobility of species in addition to species requirements and preferences. The vegetation types will provide habitats for a unique lizard assemblage, threatened and At-Risk bird species including rōroa, fernbirds and New Zealand pipit. According to EcoLogical Solutions (2025) recommendations, vegetation clearance will be avoided during peak bird breeding seasons and during inactive seasons for lizards to avoid adverse effects.

Sections 6.0 and 7.0[42] set out guiding principles for habitat design to ensure that existing species found on the plateaux will persist. The most effective rehabilitation method in the short term for snail and lizard habitat is stated as being VDT. Rōroa will also benefit from VDT but specific habitat such as burrows will be included to encourage occupation.

Once all mining activity has ceased, all disused haul roads and access roads will be progressively removed and revegetated or narrowed to a standard appropriate for maintenance and / or any other intended postmining land use. Roading that provides access to active and

[40] Ecological Solutions. Table 12 Overall Magnitude of Effect of the BPCP on Vegetation and Habitats

[41] March 2026. Table and Comms with Gary Bramley

[42] EcoLogical Solutions (2025). Rehabilitation Management Plan, Section 7.0.

PWTPs will be narrowed and maintained to a suitable standard to provide maintenance access to these sites.

At final closure, the infrastructure areas associated with mining operations will be decommissioned, the buildings and foundations removed from site, and sites will be rehabilitated. This will either involve reshaping and re-vegetating or establishing areas of sandstone pavement. At closure, a light vehicle access to the Mt Rochfort repeater will be re-instated on the final landform.

5.7 Mitigation

The EcoLogical Solutions (2025) report sets out a number of mitigation recommendations to avoid, minimise and or remediate adverse effects on ecological values[43]. These are summarised in Table 11. Effects Management Actions proposed to Avoid, Minimise and Remedy Adverse Effects on Ecological Values within and adjoining the Buller Plateaux Continuation Project, of the EcoLogical Solutions (2025) Terrestrial Ecology, Ecological Impact Assessment.

The BPCP Rehabilitation Management Plan (Ecological Solutions, 2025) sets out objectives, risks, management controls, responsibilities, monitoring, reporting etc for the rehabilitation of disturbed areas as part of the BPCP and applies the effects management hierarchy to address the adverse effects of mine activities.

A defining aspect of the Project is the duration of the activity and the longevity of resulting landscape change. The timeframes applied to the Project are defined within the Rehabilitation Management Plan as:

- Short term – post mine closure and up to 10 years after rehabilitation commences[44]
- Medium term – 10 – 50 years
- Long term – over 50 years

These timeframes are adopted by this LA, noting that timeframes are of significance to landscape effects in determining when rehabilitation begins to influence visibility and landscape character.

[43] EcoLogical Solutions (December 2025). Terrestrial Ecological Impact Assessment Report

[44] NB. Rehabilitation timeframes will vary according to the staging of extraction and rehabilitation so at mine closure some areas (ESE – Stage 2) may have been rehabilitated for up to 17 years or more.

6. DESCRIPTION OF THE RECEIVING ENVIRONMENT

Introduction

The receiving environment is the spatial area of the landscape most relevant in both its extent and context (along with the policy provisions and existing environment approach) for determining the landscape and visual effects of the Project. For this reason, the receiving environment is described at both a **Broad-Scale** and **Project-Scale** to reflect the different scales at which people currently experience the landscape and will experience this Project.

The Broad-Scale receiving environment best describes the scale at which the **majority of people** will experience the Project from the coastal corridor along SH67.

The Project-Scale receiving environment describes the scale at which the Project will be best understood and experienced by people residing on the Denniston Plateau or at Millerton or visitors seeking a more intimate encounter on or in proximity to the plateaux. Refer GA, page 04.

A description and understanding of a landscape's existing character and attributes (landform, landcover and land use) that contribute to landscape values (physical, perceptual and associative) provides the basis for assessing the effects on landscape values that may arise as a result of a particular proposal. Identifying landscape values is fundamental to its management and the relative significance of these values will depend on the context.

Some of the relevant landscape values, particularly those experienced at a Broad-Scale are recognised at national and local levels through objectives and policies and designations such as National Parks, Conservation Areas, Significant Natural Areas or local landscape classifications such as ONL / ONFs. Some landscapes are strongly linked to cultural or historical heritage, for instance like mining, while others may be valued for their perceived lack of human influences. In addition, value may be placed on a landscape due to its rarity or novelty within a particular area. Landscapes can have high values, despite not being readily accessible or experienced by people.

6.1 Broad-Scale Description of the Receiving Environment

The receiving environment lies within the Buller District and at the Broad-Scale extends along the West Coast of the South Island from Westport north up to the small settlement at Hector including the

Ngakawau Gorge. The receiving environment is enclosed to the east by the mountainous backdrop formed by the Glasgow Range, south to and including the Mt William Range, and the Buller River. Refer GA, Page 04.

Physical Attributes

The receiving environment including the Buller Plateaux lies mostly within the Ngakawau Ecological District (ED) adjacent the Foulwind ED (which comprises a strip along the coast) and the Buller ED to the south up to and including the Buller River.

The Ngakawau ED extends over the coastal hills and low mountains up to 1400 masl over approximately 48,710 ha. The geology includes large areas of Eocene quartz sandstone, grit and conglomerate with coal seams (Brunner coal measures).

Within the Ngakawau ED, the climate is mild near the coast, bleak and wet inland on the plateaux with a high rainfall ranging between 2800-6000 mm per annum. As a consequence, the soil on rolling and hilly land including soils on the sandstones of the Brunner coal measures is very strongly leached to podzolised, with very low fertility and acidic (pH 4 – 4.97) with poor drainage from siliceous sandstone, quartzite, conglomerate and granite. On steeper country, stony steelpan soils occur from greywacke, sandstone, granite and conglomerate with low natural fertility[45].

The broader receiving environment lies within the Foulwind ED, which includes Westport and the surrounding coastal area where the topography is low-lying, rolling and flat with marine gravels and sand deposits on the coastal plan and along larger rivers. The climate is mild and humid with rainfall between 2000 – 3200 mm per annum, considerably less than the Ngakawau ED. The original vegetation was largely podocarp-hardwood forest although only cut over areas remain[46].

The Buller ED includes the ranges (part of the Paparoa Range and Mt William Range) surrounding the Buller River and is mostly very steep country with ridges plunging sharply from altitudes of 1450 -1000 masl down to narrow valley floors. The Buller ED climate is cold, with a high rainfall between 4000 – 8000 mm per annum. Most of this ED

[45] Ecological Regions and Districts of New Zealand, Ed 2 1981, Sheet 3, Ngakawau 48.01.

[46] Ecological Regions and Districts of New Zealand, Ed 2 1981, Sheet 3, Foulwind, 48.02.

retains the original vegetation of mountain beech-pink pine-southern rata forest, although the composition varies with altitude[47].

The coastal environment has a significant influence on the character of the receiving environment. The coastline comprises a distinct combination of sandy / rocky beaches, and estuarine lagoons backed by a thin strip of rural land before rising steeply to the coastal ranges as the inland extent of the coastal environment.

Further inland (outside the coastal environment) lie the Buller Plateaux (Denniston and Stockton) backed to the east by rows of mountain ranges, consisting of the Radiant Range north of Mokihinui River, the Glasgow Range south of the Mokihinui River, the Mt William Range south of the plateaux and the Paparoa Range south of Westport and the Buller River. These ranges trend north-south bisected by major river systems flowing through deeply incised gorges including the Buller River, the Waimangaroa River and the Ngakawau River, each with a complex network of tributaries.

The Buller Plateaux and immediate surroundings are nested within the receiving environment but best described in detail at a Project-Scale below.

The receiving environment has a wide range of geodiversity that is apparent due to the complex landforms, natural landcover and historic land use. The New Zealand Geo Preservation Inventory has identified the following internationally, nationally and regionally significant sites of relevance.

- Charming Creek coal mine and tramway
- Ngakawau Gorge

Indigenous forest is a predominant land cover in the receiving environment mostly over the mountain ranges and deeply incised gorges that are Crown Conservation Land administered by DOC or LINZ. Refer GA, Page 06, which shows the extent of Conservation Land in the receiving environment.

Within the Ngakawau ED the original vegetation is predominantly podocarp/beech forest, rimu/silver beech (mountain) beech forest with concentrations of rimu and kahikatea on riparian terraces and pure silver beech forest forming a low treeline at 1300 m on the Glasgow Range. Gully vegetation in limestone areas includes *Pseudopanax linearis, Myrsine divaricate*, kamahi, mountain toatoa and occasional

[47] Ecological Regions and Districts of New Zealand, Ed 2 1981, Sheet 3, Buller, 48.03.

mountain beech. Some locally rare endemic flora are present in the district. Vegetation specific to the coal plateaux is detailed below.

The steep slopes within the Buller ED retain the original indigenous forest while the flatter coastal land within the Foulwind ED is mostly pastoral farmland, and areas of forestry with indigenous vegetation confined to the steeper slopes on the hill backdrop to the coastline.

The receiving environment has generally been modified by farming including exotic forests, mining, and burning. Pest species such as browsers – deer, hares / rabbits, goats, mustelids, rats, mice and possums are generally present.

The first human habitation on the West Coast was by Māori, who mainly occupied locations close to the coast including Kawatiri / Westport at the lagoon and Buller River mouth where fish and shellfish were available. Pounamu was discovered on the West Coast and traded from the 1300s by Waitaha. Subsequently the West Coast was occupied by Ngati Wairangi in the 16 or 17th centuries. By the early 19th century / 1800s Ngati Waewae, a hapu of Ngai Tahu claimed ownership of much of the West Coast. They came to be known as Poutini Ngai Tahu[48].

Poutini is the name of the taniwha that, according to legend, swims up and down the West Coast, protecting both the people and the mauri (life force) of pounamu (greenstone) that is characteristic of the region.

The receiving environment has a variety of mineral resources with substantial reserves of coal found on the Buller Plateaux. Originally gold, coal and timber were the main resources on the West Coast and drove the West Coast European settlements. These industries still exist although have expanded to include agriculture (mainly dairy), and tourism. Agriculture is largely confined to small, discontinuous coastal strips, river valleys and alluvial terraces.

Westport / Kawatiri is the oldest European settlement on the West Coast established in 1861 on the right bank and at the mouth of the Buller River. It is a major town and population centre of the district and has gradually increased in importance as a tourist and holiday attraction.

The small rural settlements of Granity, Ngakawau, and Hector are located on SH 67 approximately 28 – 30 km north of Westport. Waimangaroa lies inland on the south-west bank of the Waimangaroa

[48]https://teara.govt.nz/en/west-coast-region/page-4#:~:text=The%20West%20Coast%20was%20occupied,known%20as%20Poutini%20Ng%C4%81i%20Tahu.

River at the western foot of the Denniston Plateau. These settlements were all once mining and / or sawmill towns but today are less dependent on coal mining ventures, offering various lifestyle options. Granity has a population of around 168 people, Ngakawau and Hector have a combined population of approximately 200 people, and Waimangaroa has a population of around 230 people.

Hector and Ngakawau are located on either side of the Ngakawau River mouth. The Charming Creek Railway which lies north of Ngakawau transported coal from the Charming Creek Mine and Mangatini Falls, Albion Mine and Ngakawau Mine to Ngakawau. Ngakawau on the southern side of the mouth of the Ngakawau River serves as the terminus of the Ngakawau Branch railway and today continues to receive coal via the aerial ropeway from the operating Stockton Mine. Coal haulage and freight are the sole traffic on the railway line between Ngakawau and Lyttelton Port.

Many of the tracks and attractions in the vicinity are related to the NZ Heritage List and NZ Geo Preservation Inventory providing access to historic mines, artefacts and coal haulage etc., including the Charming Creek Tramway and associated industrial sites which are of national and regional significance and represent sawmilling and coal mining industries in NZ history.

Other tracks include the Britannia Track to the Old Britannia Gold Mine, which traverses the coastal hills west of Stockton Plateau, Buckland Peaks Track to the Buckland Peaks Hut at 1184 masl on the Paparoa Range and more distantly the Mt Glasgow Route up to 1469 masl.

The West Coast is a popular scenic highway and other attractions in the locality include Cape Foulwind, Tauranga Bay with its large fur seal colony, and surfing beaches at and immediately south of Westport.

The Old Ghost Road, which runs between Lyell and Seddonville to the north of Westport, the Paparoa Track at Punakaiki and Kawatiri Coastal offers cycling and walking trails in the area.
Rafting and jetboating in the Buller Gorge are popular.

Westport is a convenient base for trips to the Kahurangi National Park, Karamea and the Oparara Basin Arches via SH 67 as the only road access to the area running north from Westport.

6.1.1 Values of the Broad-Scale Receiving Environment

The landscape values of the receiving environment (physical, perceptual and associative) form the baseline, along with the policy

provisions, for an assessment of landscape and visual effects. The landscape values of the receiving environment (including the Buller Plateaux) stem from its past and present landscape attributes. The landscape values that are relevant to an assessment of the Project are listed below and provide the distinctive setting and context to the Buller Plateaux landscape.

Physical Values

The physical attributes contributing to the landscape values at a Broad-Scale are acknowledged by the combination of the conservation land status to protect natural, historic and cultural resources and further the ONL overlays[49] on the surrounding hills and ranges within the broader receiving environment. Refer GA, Pages 5-9. Specific attributes and values are captured by the following ONL Schedules[50]. The ONL Schedules are based on the scale of the relevant ONL and form a relatively "high level" summary of the more natural landscape values of the area. Given the scale of the landscape assessment underpinning the ONL schedules and the high-level nature of the schedules themselves, a finer grain proposal-specific assessment of landscape values will typically be required.

[49] Te Tai o Poutini Plan. Zone Map

[50] TTPP. Part 4 Appendices. Schedule 5: Outstanding Natural landscapes

Table 3. ONL 41 and 49

Unique Identifier	Site Identifier	Site Type and Values
ONL41	Te Paparoa/Paparoa Range east & Mt William Range	Steep mountain range moderately dissected by descending foothills and lowland terraces with exposed rocky peaks and outcrops along the ridgetops. • Interplay of mature indigenous forest and vegetative sequence from lowland forest through to alpine communities reinforcing topography and pronounced relief. • Exposed peaks and ridgetops revealing underlying geology are highly expressive of the landscapes formative processes. • Assemblage of ridgelines, peaks and mountaintops of similar orientation, elevation and vegetation cover and appearance. • Continuous beech forest giving way to alpine tundra at higher elevations. • Mt Rochfort, Buckland peaks, and the lower Buller Gorge are landmarks within this landscape. • Important cultural landscape for Poutini Ngāi Tahu including SASM 47 Māwheranui Native Reserve and SASM 48 Brunner wāhi taonga.
ONL49	Orikākā River Valley	A deeply incised river valley flanked by broad terraces and plateau which are hemmed in by the Mt William Range and Lyell Range. Homogenous cover of mature lowland forest. Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and expansive depositional landforms reinforce these qualities. Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding. The river contains a range of aggregate sizes and weathered boulders that are constantly sifted and graded by the varying flows. Distinctive assemblage of ridges and valleys of similar orientation, elevation and vegetation cover and appearance that contrasts with the higher Mt William and Lyell Ranges.

Table 4. ONL 50 and 51

ONL50	Denniston – Waimangaroa	A well-defined valley system enclosed by steep to very steep ridges that descend from the Denniston Plateau along the coast. Contiguous mixed podocarp / beech forest giving way to shrublands and grasslands on exposed faces. Clearly expressed river valley and coastal ranges reinforce by the succession of lowland through to alpine vegetation cover and exposed upper elevations. The landscape strongly defined by its dramatically uplifted landforms and coastal orientation / outlook. The vegetation patterns, exposed bluffs and outcrops reinforce the landscapes topography and exposure. Mt Frederick, the Waimangaroa River and the dramatic bluffs that form the headwall of the Valley.
ONL51	Ngākawau River Valley	A steep to very steep sided valley and deeply etched chasm like gorge system with a narrow river channel which passes through a series of

		very broad rolling foothills set between the Glasgow Range to the east and Radcliff Ridge to the west. Extensive coverage of mixed podocarp / beech forest. A strong sense of naturalness is primarily derived from the dramatic and incised profile of the gorge and the coverage of mature native vegetation. Dramatically eroded landforms clearly express the rivers power and varying flow. Broken vegetation and expansive depositional landforms reinforce these qualities. Evidence of erosion revealing underlying geology, rockfall, stream downcutting and flooding. The Ngākawau Gorge and the Radcliffe Ridge are key landmarks with this landscape.

A very high degree of naturalness is afforded by the distinctive geology including the rock outcrops, including major karst areas and dramatic limestone features / bluffs, and the extent of indigenous vegetation in places forming a contiguous mountain to sea cover in places. The species include nikau palm, karaka and northern rata, rangiora and titoki and these along with dense tangles of kiekei and supplejack vines gives the coastal forests a lush sub-tropical character. The underlying geology, landforms, coastline, estuary and riverine systems all support very high physical values.

Significant Natural Areas (SNAs) in the form of Regionally Significant Wetlands are scheduled and identified in the West Coast Regional Land and Water Plan.

Perceptual Values

The receiving environment, particularly the dramatic coastal environment, deeply incised river valleys and steep mountains with a contiguous forest cover to the sea contribute to outstanding scenic values, with very high memorability, legibility, and a high natural character. Refer GA, Page 9, TTPP planning maps. There is a strong sense of enclosure, within this dynamic environment, close to nature, drama with a series of memorable scenes convey a distinctive sense of place.

Associative Values

[redacted]

[redacted].

The cultural values and principles inherent to the Ngāti Waewae world view are set out in the Cultural Impact Assessment in further detail and recognise the inseparable connections between maunga, whenua, waterways and people and apply to the Broad-Scale and Project-Scale dimensions of the Project. Numerous sites of cultural and spiritual significance are located across Te Tai Poutini and the landscapes, waterways and ecosystems of this region are woven into the whakapapa and identity of Ngāti Waewae. Of note there are no wāhi tapu sites within the Project footprint known to Ngāti Waewae.

Broadly speaking the West Coast is renowned for its mining history given its variety of mineral resources arising from geological origins, including its substantial reserves of coal and gold. The coal mining industry has historically been of great social and economic importance to the District.

Strong interconnections and relationships between human and nature that are of cultural, social and spiritual significance as well as a distinctive sense of identity and well-being are derived from people's relationship with the environment and this is particularly evident along the West Coast acknowledged by the vast areas of conservation land.

Tourism and recreational values are high and strongly linked with a local and national identity. Historic mining experiences and recreational opportunities abound with walking, cycling, rafting, boating, horse riding, hunting, fishing and caving due to the varied natural attributes of the locality.

6.2 Project-Scale Description of the Receiving Environment

The Project-Scale description focuses on the attributes of the landscape relevant to the proposed Project sub-areas and identifies landscape values at this scale. In the immediate vicinity of the plateaux are the existing and former settlements that reference historic mining ventures undertaken and that form part of the receiving environment at the Project-Scale including the coal loadout infrastructure located at Ngakawau since 1877. Refer GA, Page 04.

The historic town of Millerton lies 1.6km inland from Granity at an elevation of 300masl and below the north-western edge of the Stockton Plateau. Although it is classified as a ghost town it retains a small resident population. Access to the town is via the Stockton Road. The Millerton Mine began production in 1896 and ended in the late 1960s. The Millerton Mine includes the Old Dip Coal Mine with two remaining burning vents, and the Mine Creek Coal Mine. The remnants of the Millerton Incline, rope roads / pack tracks, trucks, bath house, mine portals and other artefacts are still visible, testament to the coal mining on the Stockton Plateau in 1891. This infrastructure lies within a 500ha reserve established in 2003 at Millerton and added to in 2005 by DOC and Solid Energy, becoming the Millerton-Stockton Reserve Area with the objective of preserving and enhancing the historic and natural heritage while providing access for visitors[51]. Refer GA, Page 24. There are several short walks in and around Millerton to historic mine sites and associated activities with scenic views.

[51] Clough & Associates (2025) Buller Plateaux Continuation Project. Archaeological and Historic Heritage Assessment.

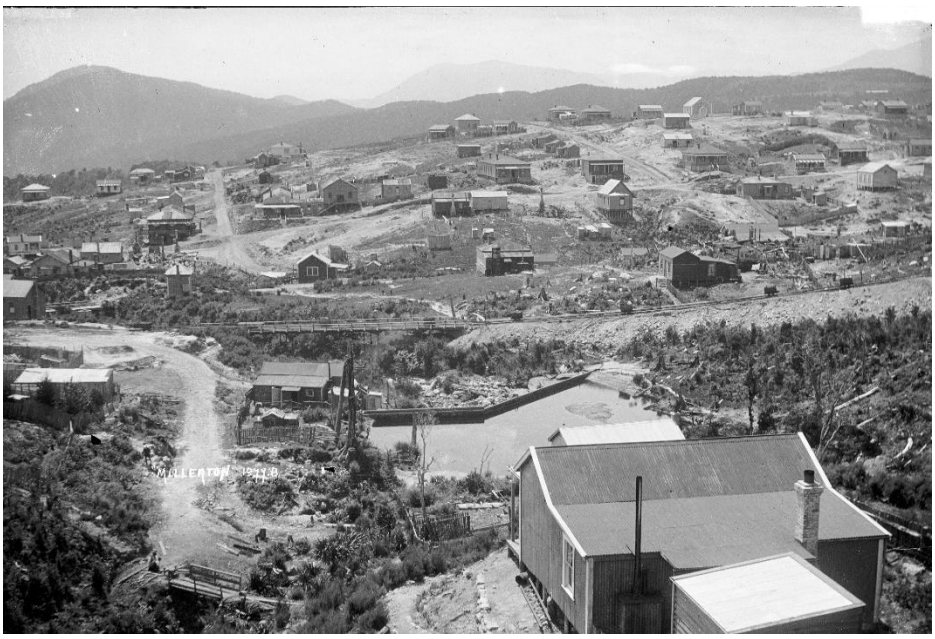

Figure 3. Millerton 1877

Stockton is a former settlement in the Paparua Ranges established in 1908 for the Stockton Mine workers. Today Stockton is little more than a carpark at 340 masl where the entrance gate and office to the operating Stockton Mine are located. The Stockton Plateau is closed to the public and only accessible by permission via Burma Road.

The Buller Plateaux and immediate surroundings form the bulk of the Project-Scale receiving environment. Parts of this are publicly accessible and the various Project sub-areas will be visible in proximity from Millerton, Denniston, Cedar Creek Road, Mt Rochfort etc.

The Buller Plateaux Landscape Study[52] prepared by RMM contains a comprehensive description of both the Denniston and Stockton Plateaux as at December 2021 and an evaluation of the landscape values pertaining to each plateau. The following description and values are drawn from the study and have been updated using information provided by technical experts engaged by Bathurst to undertake further detailed site surveys of the Project Areas and their immediate context.

Stockton Plateau

The Stockton Plateau is defined in landscape terms as an extensive area of flat upland with an inner coherence and unity and therefore

[52] Rough Milne Mitchell Landscape Architects Ltd (2021) Buller Plateaux Baseline Landscape Study

deviates from other definitions of the Stockton Plateau[53]. According to the RMM Baseline Study the boundaries of the Stockton Plateau are described as:

'The northern boundary is irregular and less well defined than the western and eastern margins. It deviates around the steep headwaters of Granity Stream, Miller Stream above the Millerton settlement and Sandy Stream and continues to follow distinct topography change across the lower slopes of Mt Stockton.

The western boundary is clearly defined by a north trending ridge including Mt Augustus and Mt Frederick and coincides with the margin of the Brunner coal measures.

The eastern boundary is defined by the Mt William Fault along the toe of the William Range, which more or less coincides with the broad valley of the Waimangaroa River where it flows south and the Cypress Stream where it flows north.

The southern boundary follows the crest of the Waimangaroa River gorge and its tributary Cedar Creek to the McWilliam Fault line.

Substantively the Stockton Plateau outlines an area that shares particular landscape attributes such as the underlying coal measures geology, low relative relief of the topography, landcover, and land use and bounded by steep slopes of river gorges and enclosed by the surrounding mountainous'. Refer GA, Page 10.

For the purposes of this report the Stockton Plateau includes the Stockton Extension Project subarea located on the northern edge at the boundary of the plateau.

The Stockton Plateau is an elevated landform (varying between approximately 610 – 860masl with a high point at Mt Frederick) that has been tilted and dissected by earthquake faulting. The average rainfall on the Stockton Plateau exceeds 6m per year. The plateau is deeply incised by streams and contains the headwaters and tributaries of the Waimangaroa River flowing south and Cypress Stream flowing northwards. The Stockton Plateau includes Mt Frederick at 1125masl and the Waimangaroa River Valley. It covers an area approximately 12km long and 4.1km wide.

The Stockton Plateau can be accessed from two directions. Sandwiched between mountain ranges, the northern boundary of the plateau is primarily accessed from SH67 via the Millerton Road to Stockton and thereafter by Burma Road. The southern boundary of

[53] Rough Milne Mitchell Landscape Architects Ltd (2021) Buller Plateaux Baseline Landscape Study, Page 60

the Stockton Plateau can be indirectly accessed via the Denniston Plateau from Cedar Creek Road, which traverses the head of the Waimangaroa River gorge to the southern boundary of the plateau. Cedar Creek Road is a rough 4WD track that follows the creek and also accesses the transmission pylons, which cross the Mt William Range to the east.

In landscape terms, the Stockton Plateau can be divided into three main landscape character units (LCU 1 – 3) defined by the combination of differences in landcover, land use (extent of modification) and topography with two sub character units within LCU 1 (1A and 1B) (GA, Page 10).

Of these LCU 1 comprises the northern part of the plateau and contains the Stockton Mine area separated from the balance of the plateau by Webb Stream. The S extension is proposed on the northern periphery of LCU 1 and at the boundary of LCU 1A and LCU 1B. In addition, pest free enclosures will be located on Mt Augustus as part of LCU 1A and Whirlwind Rise as part of LCU 1B.

LCU 2 comprises the southern part of the Stockton Plateau, south of Mt Frederick. MFS is proposed within LCU 2.

LCU 3 comprises the Waimangaroa River Valley. The UWHR is proposed along LCU 3.

Each of these LCUs is described separately to correspond with the Project Areas contained within and the values identified for each.

6.2.1 Stockton Plateau - LCU 1 (A and B) Description

The proposed Stockton Extension will affect isolated patches of intact vegetation at the periphery of the northern edge of LCU 1 and at the boundary of LCU 1A and LCU 1B within Whirlwind Rise. Refer GA, Page 28.

Of note is the context afforded by the implemented CML and mining permits that apply to the majority of LCU 1. The exception is the southern part of the central section (LCU 1B), which is DOC stewardship land.

The Stockton Plateau contains an active mine site and the existing mining operations are carried out under Stockton CML 37-150 and ACML 37-150-2 and 37-150-3 for the Ngakawau Rail Loadout, the aerial ropeway, bath house and part of the haul road. These licences continue to authorise mining and rehabilitation activities until they expire on 31 March 2027. As of May 2023, the Stockton Mine had a

total disturbed footprint of 1191 ha, including 754 ha of active mining areas and infrastructure (road, sediment control structures, stockpiles, processing facilities etc) as well as a rehabilitated area of 437 ha. Refer GA, Pages 27 and 28.

The Stockton Plateau is not publicly accessible, and all employee / contractor access is controlled at the mine gate entrance at the former settlement of Stockton.

Physical Attributes

Broadly speaking LCU 1 comprises the northern half of the Stockton Plateau with the irregular northern boundary identified by the steep headwaters of Granity Stream, Miller Stream and Sandy Stream to the toe of Mt Stockton. The western boundary is clearly defined by a north trending ridge including Mt Augustus south to Mt Frederick. The eastern boundary is defined by the Mt William Fault along the toe of the Mt William Range, which more or less coincides with the Cypress Stream where it flows north. The southern boundary is identified by the east-west fault line and pronounced vertical offset along Webb Stream and also includes Mt Frederick. Three main fault lines (Millerton Fault, Jorgenson Fault, Mangatini Fault) have been identified traversing LCU 1 in an east-west direction, generally indicated by abrupt escarpments. Refer GA, Page 29.

LCU 1 covers an area of approximately 3011.85 ha / 30.11 km^2 being 7 km long in a north south direction and 5.5 km narrowing to three km wide at the southern end. LCU 1 generally slopes northeast from 900 masl along the western boundary to approximately 600 masl, except at the northeastern corner on the lower slopes of Mt Stockton and isolated high points within the central area. LCU 1 is divided into two broad landscape character sub areas (1A and 1B) largely based on land use modification. Refer GA, Page 27.

LCU 1A contains the current opencast workings on the Stockton Plateau including reservoirs, structures, overburden areas, stockpiles and haul roads. The landform has been highly modified at a massive landscape scale including Mt Frederick, with benched hillsides and deep excavated pits. The mining infrastructure comprising buildings and storage and processing is located centrally within LCU 1A.

Currently the Stockton CML 37-150 is divided into several discrete mining blocks with a number of operational areas mined at any one time to enable blending of the various coal products. Refer GA, Sheet 30. Each stage is mined separately before being rehabilitated, minimising the amount of ground disturbed and exposed at any given time resulting in a distinct patchwork of exposed earth and rehabilitated land with vegetation at various stages of establishment. Refer GA, Pages 37 - 40, Site Photographs 1-7.

The Cypress Mine is located at the southeast end of LCU 1A and extends along the Cypress Stream to St Patricks Dam with further infrastructure including a power scheme, reservoirs, roading, structures and the historic Mt William Mine area, located north at the base of the Mt Stockton and Mt William range. The current opencast workings are concentrated at the North Pit of the Cypress Mine, with the South Pit unimplemented at present. The Cypress mining is authorised by Mining Permit (MP) 41515 and all resource consents are current.

LCU 1B encompasses two relatively undisturbed areas of coal measures extending throughout the southeastern portion of the LCU 1 area. LCU 1B is described as gently sloping areas of exposed pavement and tussock grassland dissected by deeply incised streams containing low stature native forest shrub species. Waterways of note include T31, Fly Creek, Plover Stream, Whirlwind Stream and Herbert Stream.

There are three major water catchments within the area covered by the Stockton CML – the Millerton catchment (Miller Stream), Mangatini catchment (Mangatini Stream and various tributaries) and St Patrick Catchment (St Patrick Stream and various tributaries). These streams generally all flow northward into the Ngakawau River, except part of Miller Stream which flows westward to Granity Stream. Of note on the plateau are the distinctive drainage patterns that occur as deeply incised cuts into the sandstone erosion pavement, in particular at the head of Cypress Stream where the stream course deviates at an obvious right angle.

Water management and treatment are critical aspects of the mining operation at Stockton because the type of rock being mined at Stockton has the potential to expose sulphates to oxygen and water, resulting in AMD.

Much of the current AMD at Stockton is a result of historical mining activities. An essential part of water management at Stockton is to capture and treat sediment and AMD from both historic and current mining activities before releasing it back to natural catchments. These actions are required to achieve long term water quality outcomes agreed with the Crown and therefore water treatment infrastructure will remain in place and monitoring will continue to occur post mining and closure of the Stockton Mine.

The soil over the plateau is of poor quality and typically low fertility, as well as being shallow over the basement rock. This means that where it remains intact, vegetation is typically low stature in exposed areas.

Most of the natural vegetation cover over LCU 1 has been removed as part of the open cast mining operations with only the northern periphery, isolated pockets and LCU 1B remaining intact.

In parallel with current mining operations on the Stockton Plateau, extensive areas have been rehabilitated using various techniques including VDT and replacement of rock pavement areas. Refer GA, Page 42, Site Photos 14 – 19. Other areas, particularly sloping berms have been vegetated with grass species as a temporary measure until mining is complete and final rehabilitation is undertaken.

Rehabilitation at the Stockton Mine has been undertaken in accordance with the Stockton Rehabilitation Design Guidelines and Conditions. Each year more than 30 ha of rehabilitation is completed, which includes the planting of several hundred thousand native plants annually. The rehabilitation uses naturally occurring plants which are the most tolerant of Stockton's low soil fertility, high rainfall and cold sub-alpine situation. Seed and cuttings are collected from the Stockton ecological area, propagated and grown-on before planting occurs in spring and autumn.

The rehabilitated areas are in various stages of establishment depending on the year planting occurred, noting that these areas form part of the receiving environment. Refer GA, Pages 38 and 42. The rehabilitated areas have been excluded from the fast-track application because they are completed to the required standard and are no longer subject to active mining.

The objective of the rehabilitation programme is to leave the site safe and geotechnically stable post-mining, incorporate landforms that are sympathetic to surrounding landscapes, and to encourage an indigenous, self-sustaining and diverse vegetation cover and ecosystem. As above, refer GA, Page 42, Site Photos 14 – 19 illustrating the status of some of the rehabilitated areas at Stockton, as at December 2024.

A full description of the vegetation types, species composition and distribution is set out in the EcoLogical Solutions Stockton Baseline Survey.

Within the undisturbed intact areas, the southern rātā-mountain beech-podocarp forest is the most common forest type and occurs in the gullies and sheltered sites with a mean height of c. 7.5 m. This vegetation type is dense with a high species richness represented at all layers.

Mānuka-mountain beech-podocarp shrubland is the most widely distributed at around 3.9 m in height with a diverse understory forming

an ecotone between taller forest on more well-drained slopes and in gullies.

The mānuka-tussock-wire rush shrubland is also a widespread vegetation type in the proposed disturbance area, dominated by a mānuka canopy up to c. 0.83 m in height.

The stunted shrubland and low pākihi communities are present on flatter, more poorly drained sites with low pākihi dominated by prostrate mānuka and wire rush. Bare rock is obviously present as sandstone erosion pavement with some prostrate/low growing vegetation species. Cleared areas and waters relating to historical mine infrastructure is also present.

Natural inland wetlands are identified as low pākihi, manuka-tussock-wire rush shrubland, manuka-mountain beech-podocarp shrubland, mānuka/Gahnia-wire rush shrubland and manuka-mountain flax / wire rush shrubland due to the hydrological and soil characteristics typical of wetlands[54]. The high rainfall contributes to maintaining these wetland features.

The baseline survey[55] noted that based on the vegetation types and habitats present, Threatened and At-Risk species could be present.

The landcover in LCU 1B is mostly intact coinciding with the area referred to as Whirlwind Rise proposed to be mined in a small localised area. This will be captured with a total of 694.5ha set aside as a pest free enclosure. LCU 1B comprises extensive areas of coal measures tussock, *Chionochloa juncea,* associated with rock pavement and low pākihi, southern rātā-mountain beech-podocarp forest, isolated pockets of silver beech-mountain beech forest, manuka-mountain beech – podocarp shrubland and mānuka-dracophyllum shrubland. Shallow tarns and wetland pools are limited to gently sloping basins within the extensive sandstone landform between the upper parts of Plover and Whirlwind Streams[56]. At the southern extent of LCU 1B ribbons of high elevation beech forest is confined to incised streams. Discrete areas of red tussock fernland associated with fertile wet sites either side of Whirlwind Rise lie close to the boundary of LCU 1A where the Cypress Mine South Pit is located.

[54] EcoLogical Solutions, January 2025. Terrestrial Ecological Impact Assessment Report, Prepared for Bathurst Resources Limited

[55] EcoLogical Solutions (2025). Baseline Ecological Surveys for the Stockton Project sub-area.

[56] Wildland Consultants, March 2010. Mapping of Vegetation and Habitats on the Stockton and Denniston Plateaux, Northern Westland. Contract Report No. 2334

Notable fauna species utilising the terrestrial habitats across the plateau include rōroa / great spotted kiwi, western weka, the South Island fernbird and the New Zealand pipit. Lizards (forest gecko, west coast green gecko and Newmans speckled skink are also found across the plateau. The undisturbed areas of the Stockton Plateau are within the known range of the carnivorous snail, *Powelliphanta patrickensis*.

Pest mammals are present but vary in abundance both seasonally and annually, as well as during mast years.

The topographical maps and collapsed rock outcrops indicate that historically, underground mining has occurred over a large area across the Stockton Plateau since 1896. Refer Figure 4 below and GA, Page 29.

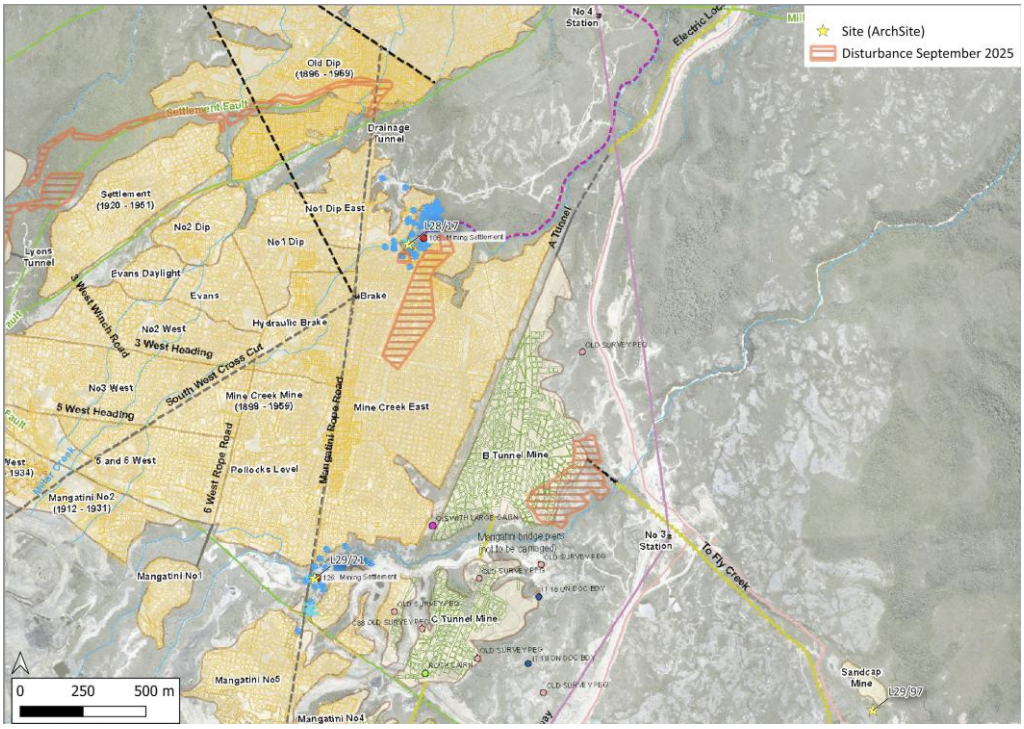

Figure 4. Clough & Associates (Figure 17) The extent of the proposed S-North disturbance (orange hatch) across the Electric Loco Line- 'B' Tunnel and Mine (L28/20), Mine Creek settlement (L29/17), and historic underground mining areas (yellow).

The underground mines along the northern periphery of the plateau include Rockies, 3rd West, Old Dip Mine (No.1 and No.2) and Millerton comprising Mine Creek Mine, Mine Creek East, 'B' Tunnel Mine, 'C' Tunnel and 'D' Tunnel Mine with the Mangatini mines south of the Mangatini Stream and the Mangatini Fault line.

The central area was historically mined and the underground mines are identified as New Webb, Old Webb underground, Webb Opencast, McCabes, and the Fly Creek mines.

Sandcap Mine, F Dip and New Mine lie along the east periphery of the Stockton Plateau with Mt William North on the elevated slopes to the east.

The Stockton Electric Tramway (Loco Line) dates from 1906 - 08 and hauled coal from the Millerton mines to the Stockton Incline roughly following the Burma Road alignment. The Electric Loco Line traversed above ground, with tunnels ‘A and ‘B’ below ground extending further south via Mumm’s Bridge across the Mangatini Stream to the Fly Creek Mine. Parts of the Electric Loco Line have been damaged by work on the haul roads within the plateau. The Electric Loco Line was replaced by an aerial cableway to transport coal. Currently c. 80% of the line remains in situ with four major cuts across it.

The Mine Creek Settlement (L28/17) lies in a narrow valley on either side of Mine Creek Stream on the northern periphery of the Stockton Plateau. The Mine Creek Infrastructure began in 1899 comprising the air compressor shed, boiler shed and ventilation flue and subsequently developed into a small township that was abandoned in the 1930’s. The remains of mining infrastructure, mine entrances, domestic buildings, benched pack track have been recorded but there has been considerable modification to the Mine Creek Settlement by recent mining activities including mining roads, water pipeline and the damming of Mine Creek to create a large reservoir. Thick gorse and dense vegetation have overgrown the settlement site.

[redacted]

6.2.1.1 Stockton Plateau - LCU 1 Landscape Values

These landscape values are relevant to the proposed Stockton Extension sub-area located on the northern periphery of LCU 1, and at the LCU 1 - LCU 2 Whirlwind Rise boundary.

Physical Values

Overall LCU 1 is dominated by the mining activity, highly modified and best described as industrial in character.

Notwithstanding this, the unique geology and geomorphology of LCU interspersed with very high-quality tertiary coal measures contributes to very high biophysical values across LCU 1. The Stockton Structural Detachment is a natural landform recognised as a Geo Preservation Site located on the LCU 1A and LCU 1B boundary on the Fly Creek Mine Road cutting between Mt William Mine to Stockton. It is noted as important because of its regional scientific, aesthetic or educational value and vulnerable to significant damage by human-related activities.

Notable features in LCU 1 are the Webb Fault escarpment between Plover and Whirlwind Stream and Whirlwind Rise.

Landform within LCU 1A has been very highly modified by mining, roading, excavation and reservoirs. The main drainage systems and waterways have been compromised by mining excavation altering natural drainage patterns and affecting water quality and quantity. Some sections of the steep incised gully streams appear intact such as Ford Creek and its tributaries and T35 Stream in LCU 1A. Cypress Stream has been essentially removed and in the case of St Patrick Stream modified by damming and the addition of power generation infrastructure.

The undisturbed land on the northern periphery of LCU1 contains natural inland wetlands characterised by saturated soil, surface water, stunted plants, sandstone basement rock and highly leached gley soils. The wetlands are comprised of low pākihi, mānuka-tussock-wire rush shrubland, mānuka-mountain beech-podocarp shrubland, mānuka/Gahnia-wire rush shrubland and mānuka-mountain flax/wire rush shrubland vegetation types.[57]

[redacted][58].

Remnant vegetation is largely confined to incised gully streams across both sub character units. The sandstone erosion pavement and associated *Chionochloa juncea* vegetation is the most abundant

[57] EcoLogical Solutions (2025). Baseline Ecological Surveys for the Stockton Project sub-area.

[58] Known as Stockton Ribbon as per Schedule 1 and 2: Significant Wetlands of the West Coast Region

ecosystem within LCU 1B east of Burma Road and recognised as historically rare habitat and significant species. Southern rātā-mountain beech-podocarp forest, and isolated pockets of silver beech-mountain beech forest are associated with Whirlwind Rise as a feature of this landscape character unit.

Perceptual Values

The sheer scale of the Stockton Plateau means that the extent of the landscape modification by mining is really only understood and appreciated from a high point at or around Mt Augustus overlooking the Stockton mine. From this aspect an open character prevails over a complex landform that is dominated by active mine pits, engineered and rehabilitated landforms. Despite the current extensive mining activity and modification, legibility both natural and arising from mining is high and in places emphasised by mining activity exposing rock sequences.

The highest values relating to legibility, memorability, visual cohesion, complexity and natural character are largely confined to the central area of LCU 1B, where a sense of the overall intact pre-mine landform is gained. The distinctive drainage patterns that occur as deeply incised cuts into the sandstone erosion pavement are a particular feature and contribute to natural character and legibility. One feature of note is located at the head of Cypress Stream where the stream course deviates in a distinctive right angle that is obvious from aerial views.

There is a high contrast between the active mine and rehabilitated areas and pockets of natural character that are associated with gullies and rock pavement. The different areas of modified, rehabilitated vegetation and natural vegetation are obvious and comprehendible by both expert and lay persons, although, overtime it is likely that the rehabilitated areas, particularly those achieved by VDT methods, will eventually be indistinguishable from the unmodified areas.

Overall LCU 1 is a very distinctive and memorable landscape associated with the contrast between the natural landscape context and where the bulk of mining activity occurs, contributed in part by the human activity and endeavour at a particularly grand scale. Consequently LCU 1 affords a unique and memorable sense of place.

The sense of place is emphasised by the transient qualities experienced on the plateau which are wide ranging and changeable over the day, season or year due to the light conditions and dramatic, wild and unpredictable weather. This is a particular feature of the plateau enhanced by its coastal proximity, orientation and elevated exposed topography. During inclement weather conditions, the

plateau can be experienced as a hostile environment, uncomfortable, wild and remote while during sunny calm weather the plateau may be appreciated for its distinctive coal mining character and unique plateau landforms, vegetation and fauna. In good weather the plateau can be experienced as less remote despite being an elevated, enclosed catchment separated from the inhabited coastal plains by the surrounding steep mountains and security measures preventing general public access. Generally, LCU 1 lacks an overall coherence due to the extensive mining activity both historic and contemporary, including the benching of steep slopes, pits, engineered batters and damming of natural streams and disruption to landform that conveys a very discordant pattern and an overall low aesthetic value particularly apparent while active extraction continues to occur.

Associative Values

Mining is a key component of the cultural identity of the locality and strongly connected to the historic and cultural heritage of the Buller Plateaux and West Coast in general. Although not accessible by the public or acknowledged onsite, the associative values are high relating to historical, technological and contextual attributes linked with the following scheduled historic places.

Mine Creek Settlement (L28/17), Jorgen's Drive (L28/16) and the Stockton Electric Tramway (Loco Line) (L29/20) (refer Figure 5 above and GA, Page 26) have been evaluated according to the relevant statutory criteria and have been scheduled for protection under the BDP (Schedule 14.1 Historic Places) but not the TTPP.

Parts of the Mine Creek Settlement containing the air compressor shed, boiler shed and ventilation flue are recorded as constructed pre-1900 and protected under HNZPTA, however the balance of the Mine Creek Settlement, is post 1900. It has been previously assessed as having moderate to high significance for its archaeological potential, historical associations and broad context (Watson 2007). Part of the settlement has been destroyed by mining activity in the area and further naturally deteriorated overtime.

Jorgen's Drive dates from c.1925 and is not an archaeological site (pre-1900) according to the HNZPTA definition as it post-dates 1900. Overall, this site is considered to have limited to moderate significance[59].

According to the Historic Heritage and Archaeological Report, while the whole of the Electric Loco Line is rare, it is the first section (from the top of the Stockton Incline to the A Tunnel portal) that is

[59] Clough and Associates (2025). Historic Heritage and Archaeological Report. Part 4. Stockton

considered ‘nationally significant’ as this section was the first electric railway line built in NZ. This section will remain intact under the proposed S extension Project sub-area. The Stockton Electric Loco Line was constructed after 1900 and therefore not recognised under the HNZPTA. Overall, the historical heritage, technological and contextual attributes relate to high landscape values derived from a long intergenerational mining history, which has shaped a community identity, pride, attachment or local narratives of resilience.

6.2.2 Stockton Plateau - LCU 2 Description

The proposed MFS mine will lie within LCU 2. The bulk of the LCU 2 land is DOC stewardship land within the Waimangaroa – Granity Conservation Area. The balance of LCU 2 is Crown Land administered by LINZ. Currently BT Mining Limited hold an Exploration Permit over the DOC stewardship land and a Mining Permit over the Crown Land.

Physical Attributes

LCU 2 comprises the southern half of the Stockton Plateau bounded by Webb Stream in the north, the coastal ridgeline south of Mt Frederick to the west and the steep scarp of the Waimangaroa River Gorge to the south and the Waimangaroa River valley / headwaters to the east. LCU 2 covers an area of approximately 1,198.09ha / 12 km^2 being approximately 5 km long in a north-south direction and 3 km in an east-west direction.

LCU 2 generally slopes south from a high point south of and below Mt Frederick at 1053masl from the northwest corner to 600masl at the confluence of the Waimangaroa River and Cedar Creek over a distance of approximately five km. Refer GA, Page 44. This landscape character unit is relatively inaccessible due to the steeply incised network of deep gorges.

The LCU is characterised by extensive areas of exposed sandstone rock pavement with obvious drainage patterns. LCU 2 is deeply carved by a number of streams including Billo and Deep Stream to the south, L75 Stream to the north, which flow east or southeast. The Mt Frederick Fault, which runs north-south through LCU 2 has resulted in a distinctive scarp feature labelled Rata Ridge. Two other inferred fault lines have been identified traversing LCU 2 in an east-west direction coinciding with the abrupt escarpments of Deep Stream and Webb Stream. As a result, deeply incised streams and steep rock bluffs are a feature of the unit.

The vegetation[60] within LCU 2 includes forest, shrubland, low vegetation and cleared vegetation associated with previous mining activity. In general, the vegetation is indigenous, mostly intact and demonstrates natural ecological patterns and gradients.

LCU 2 also includes naturally uncommon ecosystems (sandstone erosion pavement, seepages and flushes, boulderfields of acidic rocks, pākihi wetlands and small tarns). Of note is Billo tarn located at the head of Billo Stream. Natural inland wetlands which meet the relevant tests in the National Policy Statement for Freshwater Management (2020) are present within LCU 2.

Low pākihi vegetation is the most common abundant vegetation type within LCU 2 and associated with bare rock / sandstone pavement.

High elevation beech is confined to the upper river gullies immediately south of Mt Frederick. Silver beech-mountain beech forest is identified at the Billo and Deep Stream headwaters. The southern rātā-mountain beech-podocarp forest is present along steeply incised gullies and the Rata Ridge scarp face along with mānuka-mountain beech-podocarp shrubland.

Mānuka-tussock-wire rush shrubland is present along with tussock-mountain flax shrubland in a previously disturbed area. Twelve 'At Risk' plants are known or expected to occur in LCU 2. Weed species including gorse and heath rush are present particularly near previously disturbed areas.

Sixteen species of indigenous birds were recorded and present in relatively low numbers. A small amount of habitat suitable for *Powelliphanta patrickensis* is present in LCU 2. Habitats preferred by lizards are present in LCU 2 but have not been explicitly surveyed.

The majority of LCU 2 encompasses a large and relatively undisturbed area (1198.09 ha) of coal measures despite the historic underground mining for coal and related disturbed areas and presence of artefacts.

The historic underground mining was mainly confined to the southern boundary from the head of the Waimangaroa River Gorge along the scarp edge up to the high point at 866 masl and the headwaters of Billo Stream. The various named mines are shown on GA, Page 43 and include the Koranui Mine and Incline above 800 masl, and the two-level workings of the Taipo Mine post 1900 below 800 masl. The

[60] EcoLogical Solutions (2025). Baseline Ecological Surveys for the MFS Project sub-area

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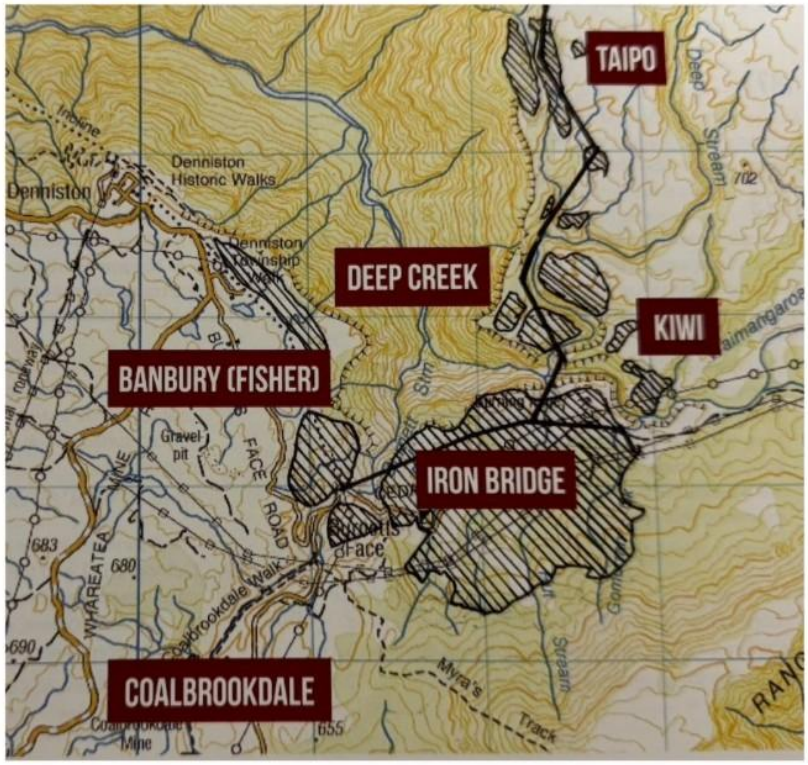


Figure 6. The location and extent of the Iron Bridge, Deep Creek, Kiwi and Taipo underground coal mine workings (Source: Burce-Smith 2022:19)

Many of the heritage features associated with the Koranui and Taipo mines have been documented by various archaeological surveys. The most recent of these was undertaken in 2024 by Clough and Associates for BT Mining Ltd, which provided a georeferenced plan of the historic underground honeycomb of working of the Koranui Mine.

6.2.2.1 Stockton Plateau LCU 2 – Landscape Values

These landscape values are relevant to the proposed MFS Project sub-area. While the BPLS concluded that part of the Stockton Plateau identified as LCU 2 and where the MFS Project sub-area is proposed, would meet the threshold as an ONF, following further information provided as part of the Project it is concluded that the extent of human modification is too high to meet the naturalness threshold. Notwithstanding this, the overall landscape values associated with LCU 2 are **very high**.

Physical Values

The unique geology and geomorphology of LCU 2 interspersed with very high-quality Tertiary coal measures contributes to very high biophysical values. A notable feature is the Mt Frederick Fault

escarpment referred to as Rata Ridge. This fault scarp is associated with southern rātā-mountain beech forest.

The LCU 2 landform appears unmodified with natural drainage and vegetation patterns mostly intact, despite the historic mining. Tarns are located within open areas of superficial depressions indicating shallow soils and poor drainage surrounded by low pakihi vegetation. The streams are deeply incised into the sandstone erosion pavement and highly natural in character, characterised by steep, well vegetated gullies and rock bluffs.

LCU 2 has extensive areas of exposed sandstone erosion pavement, which is recognised as a naturally uncommon ecosystem[62].

Perceptual Values

LCU 2 is well contained by the Waimangaroa Gorge and Mt Frederick and visually separated from the extensive mining activity on Denniston Plateau and within the adjoining LCU 1 at Stockton by the landform topography. LCU 2 is a pronounced planar landform defined by the surrounding mountain and gorge landforms with a high degree of legibility and natural character.

LCU 2 is a very distinctive, and memorable landscape associated with the plateau landform and Mt Frederick as a wayfinding highpoint. Extensive areas of sandstone pavement appear to slope evenly south, as a strongly coherent surface despite obvious patterns of drainage and vegetation. The taller forest vegetation is typically associated with gullies with low stature vegetation located on and around the rock pavement.

A unique sense of place conveyed by the intact and unique character of the landform and vegetation is also emphasised by the transient values conveyed by exposure to the highly changeable and dramatic weather systems although given its difficult access is perhaps experienced to a lesser degree than the more accessible parts of the plateau. LCU 2 displays an overall high aesthetic value, albeit as an ‘austere’ aesthetic due to the predominance of sandstone erosion pavement, low stature vegetation and exposure to all weather conditions.

LCU 2 is also remote in the sense of an elevated, enclosed catchment separated from the inhabited coastal plains by the surrounding steep mountains and not readily accessible by the general public due to the Waimangaroa River and deeply incised streams and relatively impenetrable vegetation. LCU 2 is however visible at a distance of

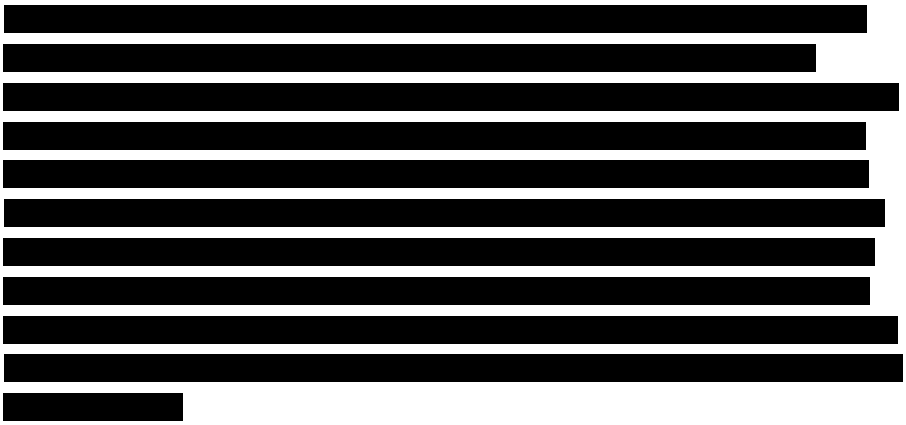
[62] EcoLogical Solutions (2025). Baseline Ecological Surveys for the MFS Project sub-area

1km from the northern edge of Denniston Plateau, from the pylon tracks across the William Range and at a distance of over 3km from Myra's Track up to the Mt William summit at 1062masl.

Associative Values

Mining is a key component of the cultural identity of the locality and strongly connected to the historic heritage and ongoing community associations with the Buller Plateaux and West Coast in general.

The associative values within LCU 2 relate mainly to the historic underground mining that has occurred and are generally considered to be high from a landscape perspective where accessible, or of interest, as a scheduled Historic Place or listed under the HNZPTA.



The Taipo Mine workings date to the 1920-40s and not recognised as an archaeological site and the mine is not scheduled as a Historic Place under the BDP. The Taipo mine workings are well recorded and understood according to the Historic Heritage Report and of limited historic significance as one of similar mines in the locality.

At the lower extent of the LCU 2 and adjoining the Waimangaroa River are the Deep Creek and Kiwi mines. These mines postdate 1900 and are not scheduled as Historic Places under the BDP.

Based on the archaeological and historic heritage report and ongoing community associations overall the associative landscape values relating particularly to the historic mining relating to the Koranui Mine and Incline are **moderate - high**.

6.2.3 Stockton Plateau - LCU 3 Upper Waimangaroa River Valley Description

LCU 3 is Crown Land managed by LINZ and currently BT Mining Limited hold a Mining Permit over the entire LCU. Part of the

[63] Clough and Associates (2025) Archaeological and Historic Heritage Assessment. Part 3 Mount Frederick

proposed UWHR will lie within LCU 3. ONL 49 Orikākā River Valley extends over the west facing slopes of the Mt William Range enclosing the Upper Waimangaro River Valley

Physical Attributes

The upper Waimangaroa Valley includes the existing Cedar Creek Road access to transmission lines and access to the Mackley River route. It is identified as LCU 3 on the Stockton Plateau and comprises the north-south trending shallow dished Waimangaroa River valley located along the eastern edge of the plateau, bounded by the William Range to the east, Webb Stream to the north (south of the Cypress Mine), LCU 2 to the west and Burnett Stream and Burnett Face to the south at the head of the Waimangaroa Gorge.

LCU 3 is publicly inaccessible from the northern end, constrained by the steep topography, the incised stream beds, and mining activity although the Cypress Mine footprint indicates that excavation will extend to within approximately 500 m of the LCU 1A / LCU 3 boundary. The southern end of LCU 3 is however readily accessible from the Denniston Plateau via Burnetts Face Road and Cedar Creek Road and acts as the connecting / bridging landform between Denniston Plateau and LCU 1.

As a valley, LCU 3 covers 494.71 ha / 4.94 km^2 being approximately 7 km long in a north-south direction and 1.0 km in an east-west direction, sloping gently south from a high point at 600 masl from the north to 500 masl.

The headwaters of the Waimangaroa River arise at the confluence of Webb and Ernest streams and flow south, fed by various tributaries including L75 Stream, Wilson Creek, Cedar Creek, Deep Stream, Gomorrah Creek and Hut Stream before heading west and discharging into the Waimangaroa River Gorge. The valley aligns with the Mt William Fault.

The valley is characterised by its relatively dense forest cover in contrast to the extensive exposed rock pavement and low stature vegetation within the adjoining LCU 2.

Vegetation cover within the UWHR comprises mostly forest and shrubland. The most common forest is southern rātā-mountain beech-podocarp forest common along the riparian margins and sheltered areas. A smaller percentage of mixed beech-podocarp-broadleaved forest is present to the north as dense old growth forest. Areas of mānuka-mountain beech-podocarp shrubland, mānuka-tussock-wire rush shrubland and low pākihi are apparent. Small, localised areas of red tussock with the occasional mountain flax and Dracophyllum sp were sparsely distributed throughout the UWHR area. Bare rock

[redacted][64].[redacted]

[redacted]

S[redacted][67]

Human modification is apparent within LCU 3 and is mainly concentrated within the southern half. The extent of modification comprises the Cedar Creek Road access from Denniston Plateau via Burnetts Face, which extends approximately 4 km north partly as a metal road deteriorating to a rough 4WD track along its length as an infrastructure corridor comprising pylons and power transmission lines. This corridor heads northwards along the river valley with various side access routes to transmission / power lines before heading east and traversing William Range north of the Cedar Creek Saddle. Refer GA, Page 65, Site Photographs 1 - 6

The existing Cedar Creek Road crosses an area of extensive underground mine workings associated with the Iron Bridge Mine. Refer GA, Page 56. The historic and extensive underground workings of the Iron Bridge Mine (1882) is located at the head of the Waimangaroa River and extends south to Burnett Stream encompassing Burning Mine and Burnetts Face accessed from Cedar Creek Road along with various artefacts and debris associated with historic mining. Of note is Burning Mine, which is identified by the plumes of smoke from underground fires. These surface remains and underground workings may date to pre-1990 and are an archaeological site according to Heritage New Zealand[68] List.

While Cedar Creek Road affords access to infrastructure it also provides important access to recreational tracks for mountain biking,

[64] EcoLogical Solutions (2025). Baseline Ecological Surveys for the UWHR Project sub-area

[65] Ibid

[66] EcoLogical Solutions (2025). Baseline Ecological Surveys for the UWHR Project sub-area

[67] Ibid

[68] Heritage New Zealand Pouhere Taonga Act (2014) (HNZPTA)

motorbike and 4WD, particularly the Mackley Track between the Denniston Plateau and Lyell.

Views over the river valley are limited to the northern edge of the Denniston Plateau at the end of Burnetts Face Road, from Myra's Track up to Mt William and the tracks to the ridgeline between Cedar Creek Saddle and Wilson Saddle that access the Mackley River and route circuit to Lyell, where expansive views up and across the valley may be gained.

6.2.3.1 Stockton Plateau - LCU 3 – Upper Waimangaroa River Valley Landscape Values

These values are relevant to the proposed UWHR.

Physical Values

The LCU 3 is characterised by a shallow, dished, landform with a largely intact forest cover with a range of habitats and high biodiversity. The TTPP ONL Schedule[69] outlines the physical attributes that underpin ONL 49 values relating to the eastern slopes of the valley. The Waimangaroa River is a predominant feature and a natural water course that expresses high legibility and natural character. The LCU 3 is mostly unmodified with natural drainage patterns integral to the landform. The various tributary streams are characterised by steep, well vegetated gullies and rock bluffs in places.

Land use is related to power transmission corridors and roading with three historic underground mines identified in discrete locations towards the southern end of this LCU.

Perceptual Values

LCU 3 is well contained and physically separated from LCU 1 and 2 and the Denniston Plateau by the topography, the steep scarp face of the Waimangaroa Gorge and the surrounding William Range, conveying a sense of enclosure and shelter from the dramatic weather conditions that plague the elevated plateaux. The existing road and presence of transmission pylons etc indicates a human presence and offers potential connections to the wider landscape. Intermittent views to the surrounding features of Mt William and the Waimangaroa Gorge including the extent of plateau comprising LCU2 conveying a sense of place and landscape scale.

[69] Section 8.1.1 Values of the Broad Scale Environment. Table 2

Despite human modifications LCU3 has a high degree of natural character relating to the cobbled riverbed and the contiguous forest cover along the Waimangaroa and that extend up the slopes of Mt William. Although not overly distinctive or memorable LCU3 has an obviously different character as a dished river valley in contrast to the adjoining rock pavement plateau landform and stunted vegetation.

Overall, LCU 3 is strongly coherent mainly due to the contiguous area of forest that extend downwards from the William Range and across the river valley with forest cover affording so less exposed to the changeable weather conditions and dramatic transient values that are associated with more exposed areas of the plateaux.

LCU 3 is visible at a distance of 1 km from the northern edge of Denniston Plateau, from the pylon tracks across the William Range and at over 3 km from Myra's Track up to the Mt William summit at 1062 masl. LCU 3 displays an overall moderate to high aesthetic value due to the visual and physical coherency of the forest cover and valley landform, which is best appreciated at a distance.

Associative Values

Mining and infrastructure corridor is a key component of the character and cultural identity of the locality and LCU 3 contains the historic underground Ironbridge Mines strongly associated to the heritage of the Buller Plateaux and West Coast in general. Recreational values are high and relate to the access to the Mackley River route for mountain biking circuits linking to wider trails, motorbike and four-wheel driving opportunities.

Te Ao Maori considers rivers and waterways as taonga (treasures) and the lifeblood of the land (Papatūānuku). Traditionally rivers were used as Ara tawhito for pounamu and seasonal mahinga kai, connected to the Orikākā / Mackley River. The river's upper catchment acts as a migration pathway and spawning ground for taonga species. The preservation of the river's mauri (life force) ensures these traditional food resources are sustained. These concepts align with the ecological values associated with the Project.

6.2.4 Denniston Plateau Description

The proposed ESE will lie within the Denniston Plateau. Most of the Denniston Plateau is identified as stewardship land[70] within the public conservation estate and administered by DOC.

Physical Attributes

The Denniston Plateau is a roughly circular area about 4.5 km across and covers 17.5 km2/1,750 ha. Refer GA, Page 67. It lies some 26.7 km east of Westport and is accessed via 9 km of winding sealed road from the settlement at Waimangaroa. The plateau is formed of relatively young sedimentary rocks, which rest on much older igneous and metamorphic rocks referred to as the Te Waipounamu Erosion Surface.

The central part of the plateau is elevated between 600 and 700 masl and is clearly defined by a steep coastal scarp to the west, steep scarp faces of the Waimangaroa River gorge to the north, and Cascade Creek to the southeast. The plateau is a distinctive landform with sections to the south and north that have been tilted, up to about 840 masl towards Mt Rochfort, and down to about 450 masl to the northwest.

The overall plateau topography has a gently undulating surface with knolls rising to 50 m high, separated by deeply incised stream valleys. The most noticeable of these is the gorge formed by the Whareatea River, which separates the upwarped western section from the central section of the plateau. The Whareatea River gorge trends northwest-southeast and is 2.5 km long, up to 350 m wide and incised to a depth of 60 m, with valley walls densely vegetated by southern rata-mountain beech forest.

The northern side of the plateau falls away very abruptly into the 500 m deep Waimangaroa Gorge, a well-defined valley system that flows west from the upper catchment of the Mt William Range for over 9 km towards the coast.

To the south, beyond the Denniston Plateau, the topography rises in steps a further 200 m to the summit of Mt Rochfort, at 1,040 masl. The south-eastern side of the Denniston Plateau drops away steeply into the densely forested slopes enclosing Cascade Creek valley. And further east the Denniston Plateau merges into the lower slopes of Mt

[70] Stewardship land has the lowest legal status of protection of land managed by DOC and only stewardship land may be swapped or sold, but the management of stewardship land allows for particular commercial uses to occur.

William that rises to 1,062 masl, approximately 400 m above the plateau.

The western edge of the Denniston Plateau is bounded by the steep, forested, coastal escarpment that faces the Tasman Sea and is bisected by various watercourses including the Whareatea River, W W, Rapid and Sandstone streams.

The mean annual temperature on the Denniston Plateau is approximately 8.0°C and frequent snowfalls occur in winter and spring. Cloud and fog are often present, and humidity is high[71]. Precipitation over the plateau is very high and often in the form of fog and snow in addition to rain. Up to an average annual precipitation level of 7,420 mm with a variation between 4,950 and 10,170 mm, with extreme events potentially occurring throughout the year. Consequently, there are a network of streams flowing across the plateau as tributaries of the Whareatea River, Cascade Creek south of the plateau, Waimangaroa River north of the plateau and west to the coast.

Soils on the sandstones of the Denniston Plateau are infertile and acidic (pH 4-4.97) with poor drainage. The soils developed from Brunner coal measures, comprise predominantly hard, thick-bedded quartzose and sandstone with subordinate carbonaceous mudstone, granite and local coal seams with low fertility. In many places, coal seams are obvious at the ground surface, particularly along road cuts. Consequently, the growth rates of native plants on coal measures soils is very slow with a predominant pattern of stunted vegetation.

The Denniston Plateau is within the Ngakawau ED, which notes that mining and burning have considerably modified the plateau vegetation.

The Denniston Plateau vegetation has been surveyed to varying degrees over the years.

The most recent surveys[72] (2025), identifies and describes the different vegetation types mapped across c. 11,438 ha including the operational mine area. The existing vegetation is shown on GA, Page 72 and identifies two forest vegetation types, five shrubland types,

[71] Nichol, R and Overmars, F. Vegetation and Flora Baseline Survey, L & M Coal Limited Escarpment Mine Project, Denniston Plateau, October 2008

[72] EcoLogical Solutions Terrestrial Ecological Impact Assessment Report (2025)

EcoLogical Solutions (2025). Baseline Ecological Surveys for the ESE Project sub-area

three low vegetation types as well as bare rock, cleared vegetation and water. The vegetation types are:

- mixed beech-podocarp broad leaved forest
- southern rātā-mountain beech-podocarp forest
- mānuka-mountain beech-podocarp shrubland
- mānuka/Gahnia -wire rush shrubland
- weedy shrubland
- mānuka-tussock-wire rush shrubland
- mānuka-mountain flax/wire rush shrubland
- low pākihi and low pākihi with exotic component
- tussock-mountain flax shrubland
- exotic grassland

The most widespread vegetation type on the Denniston Plateau is low pākihi. The south-western edge of the plateau is dominated by mixed beech-podocarp broad leaved forest.

Southern rātā and mountain beech are the main components of relatively low stature gully forest occurring above 500 masl and generally the dominant vegetation type occurring mainly in gullies and sheltered sites, particularly in the Whareatea River Gorge. Shrubland, with a varying density of manuka up to 1.5m high is also widespread on the margins of forest patches throughout the plateau. The remaining vegetation/habitat types are less common.

The northern part of the plateau coinciding with the heritage area of Denniston is dominated by a large area of cleared vegetation and weedy shrubland. There are also other obvious areas across the Denniston Plateau that have been disturbed by mining works, by cracking and subsidence associated with the former underground coal mining (refer GA, Page 69), modified by historic fires, by roads, tracks, exotic weed species and other earth disturbance. Refer GA, Page 81, Photographs 12 and 13. Today slumped landforms indicate the presence of underground mining and collapsed tunnels.

Of the naturally uncommon ecosystems[73] sandstone erosion pavement, seepages and flushes, boulderfields of acidic rocks and pākihi wetlands and small tarns are present in localised areas across the Denniston Plateau.

The presence of streams, waterbodies, and wetlands (represented by a range of wetland vegetation types) are distributed in a mosaic-like pattern across the Plateau. According to EcoLogical Solutions (2025) most of the Denniston Plateau exhibits hydrological and soil characteristics typical of wetlands, including soil saturation, surface

[73] Naturally uncommon ecosystems are defined as those which have a natural total extent of less than 0.5% pf NZ's total area or those that meet the International Union for conservation of Nature (IUCN) threat assessment criteria.

water, stunted plants, a shallow aquitard (i.e., sandstone basement rock) and highly leached gley soils. The high rainfall contributes to maintaining these wetland features. The shrubland and low pākihi vegetation types were all considered natural inland wetlands (EcoLogical Solutions Limited 2024a) but the mixed beech-podocarp-broadleaf forest and southern rātā-mountain beech-podocarp forest were not.

Lake Brazil or Brazils Dam is the largest artificial reservoir (covering 2 ha) on the south-eastern edge of the Denniston Plateau. Refer GA, Page 80, Photos 8 and 9. It was used for water storage for underground hydro mining projects and is now used as part of the Escarpment Mine currently under care and maintenance. Other artificial reservoirs occur in a broad cluster in the vicinity of Denniston settlement, on the northern part of the plateau.

It is evident that water quality in some areas has been altered by acid mine drainage from old mine workings. This is demonstrated by bright green algal growth, which indicates acidic toxicity and a reduced water quality downslope of, and in, the vicinity of the Sullivan West Mine.

[redacted]

[redacted]

[redacted]

[redacted][75].

[74] Escarpment Extended Baseline Surveys. 3.5 Avifauna and 4.0 Conclusion

EcoLogical Solutions (2025). Baseline Ecological Surveys for the ESE Project sub-area

[75] EcoLogical Solutions (2025). Baseline Ecological Surveys for the ESE Project sub-area

The Escarpment Mine (refer GA, Pages 76-78, Site Photographs 4 – 9) is a consented open cast mine (currently on care and maintenance) located on the southern edge of the Denniston Plateau on DOC managed land, which is part of the Mt Rochfort Conservation Area, accessed via the Whareatea Mine Road. Most of the infrastructure associated with the Escarpment Mine has been removed except for the reservoir and road access.

The Cascade Mine is located outside but on the south-eastern periphery of the Denniston Plateau and is being rehabilitated with access via the plateau.

Historically, coal mining began on the plateau in 1878 at the Fisher or Banbury Mine followed by the Iron Bridge and Coalbrookdale mines. Later mines included the Whareatea Mine (part of the Coalbrookdale workings) and the nearby Sullivan Mine. The mines were typically underground and small in scale. Refer GA, Page 82.

Initially, coal was transported by a complex system of rope roads, which brought coal across the plateau to the top of the Denniston Incline. Later, coal was transported by an aerial ropeway system.

A comprehensive description of the history of mining on the Denniston Plateau is contained in the Clough and Associates Archaeological and Historic Heritage Report[76].

Three main townships were originally established on the plateau - at Denniston, Burnetts Face and Coalbrookdale. The setting and history of Denniston is located on the northern edge of the Denniston Plateau at an elevation of 600 masl, some 15 km northeast of Westport. The settlements at Burnetts Face and Coalbrookdale were further south of Denniston on the edge of the plateau but were deserted by 1954. Some artefacts remain and interpretation panels illustrate the previous settlement and mining activity along the Coalbrookdale Walk including the brick Coalbrookdale Mine Fan House. Refer GA, Page 83. Photos of the interpretation panels showing the historic Burnetts Face and as it is today.

Denniston was established c. 1880. Many of the buildings were abandoned and removed in 1960. Today Denniston is now very small with remaining buildings privately owned and occupied by about 10 residents. The remaining artefacts and buildings form the Denniston Historic Area.

[76] BCPCP Archaeological and Historic Heritage Assessment. Prepared for Bathurst Resources Ltd by Clough & Associates Ltd, 2025.

The Denniston Historic Area is listed as a Category 1 Historic Place on the NZ Heritage List and is considered to have outstanding historical and cultural significance or value including technological values. The extent of the listing concentrated on the 19th century mines and mining infrastructure as features of high significance. These include the Denniston Incline, the Brakehead, the Banbury Arch, mine mouth and rail link, Burnetts Face, Coalbrookdale, the rope road, the bath houses and the settlement of Denniston as well as The Camp.

The Denniston Incline and the key historical areas of the plateau are now managed by DOC (refer to GA, page 82) as one of the most important historic places on the West Coast. At Brakehead, replicas have been built of some of the former trackwork and three original Q wagons placed on the site. Visitor experiences on offer include a historical walk around Denniston, and the museum where photos, static displays and other information provide the history of mining on the plateau.

The heritage walks with interpretation panels are popular and easily accessible tourist destinations.

Other evidence of mining including disused underground mines, gravel pits, aerial ropeway and towers, etc., remain evident over the plateau. In addition to the roading network, power pylons and other infrastructure is evident across the Denniston Plateau.

Immediately outside the plateau is the telecommunications mast on the summit of Mt Rochfort. A power line extends north south across the plateau between the telecommunications mast on Mt Rochfort to Denniston and down to Waimangaroa. Other power lines run along the eastern edge of the plateau before heading northeast towards the Stockton Plateau along Cedar Creek Road and the Waimangaroa River. Two transmission lines run east–west across the plateau from a substation, located at Waimangaroa, across the Cedar Creek Saddle and the Mount William Range 1 km and 1.5 km north of Cedar Creek Saddle respectively.

Beyond the Denniston settlement, metal roads crisscross the plateau. Of these, the Whareatea Road is accessible for 2WD vehicles to the Burnetts Face car park while the remaining roads, including the Mt Rochfort Road, are accessible by 4WD vehicles only.
A network of recreational tracks (mountain biking and walking) are located on the Denniston Plateau and / or via roads and to Myra's Track up to Mt William at 1062 masl informed by signage and maps. Refer GA, Page 83.

6.2.4.1 Denniston Plateau Values

These values are relevant to the landscape assessment of effects arising from the ESE sub-area.

Physical Values

The Denniston Plateau has very high physical values related to its geology and geomorphology and as a faulted plateau of metamorphic and sedimentary rocks interspersed by very high-quality Tertiary coal measures. The geology has resulted in a number of actively managed historic sites and mining artefacts in the receiving environment including:

- Millerton Bath House
- Britannia Track & Gold Mines
- Denniston Incline
- Conns Creek Yards
- Denniston Brakehead
- Denniston Bridle Track
- Denniston Township
- Banbury Mine, Arch and Rope Road
- Burnett's Face & Coalbrookdale
- Coalbrookdale Roperoad, Fan House & Mines

Many of these are scheduled historic places and recognised for their physical and technological significance and as having archaeological values under the HNZPTA / Heritage NZ. The Denniston Historic Area is recognised by the Heritage New Zealand as a place of national significance with a Category 1[77] listing and also identified under the TTPP at HH5 with archaeological, historical, social and technological values derived from coal mining on the Denniston Plateau. This area is easily accessible from the sealed Denniston Road on the northern side of the plateau overlooking the Waimangaroa River gorge and the Denniston Incline.

The Denniston Plateau is strongly contained by the impressive Waimangaroa River Gorge that is part of ONL50 and separates the two plateaux. The Whareatea River is also a feature of note cutting into the plateau plain south of the midpoint. To the south the Denniston Plateau is contained by ONL41 where Mt Rochfort is a key orientating feature and highpoint located southwest of the ESE sub-area at 1040 masl. The Mt William highpoint at 1062 masl and forested range forms a distinctive backdrop to the southeast of

[77] NZ Heritage List, Category 1 historic places are of **special or outstanding** historical or cultural significance or value. Category 2 historic places are of historical or cultural significance or value.

Denniston Plateau as part of ONL49. The open character of the Denniston Plateau is contributed by its gently undulating topography, abundance of rock platform surfaces, stunted vegetation and deeply incised river systems due to physical influences including high rainfall, rock composition, low fertility, elevation, geomorphology and coastal location.

The New Zealand Geo Preservation Inventory lists the Denniston Plateau, and the Burnett Stream porphyry as being of regional scientific, aesthetic or educational value. The Denniston Plateau is identified as a barren rocky, weakly dissected, plateau and described as an attractive feature formed due to the existence of a near horizontal resistant rock layer. As one of only three similar landforms in the South Island (Thousand Acres, Stockton and Denniston plateaux), the Denniston plateau is a rare and unique elevated peneplain landform with a distinctive pavement topography.

The Inventory lists the Burnett Stream porphyry as of regional scientific, aesthetic or educational value being easily accessible and having fresh exposures of porphyry with abundant xenoliths, being vulnerable to significant damage by human-related activities.

The West Coast Regional Land and Water Plan (2014) identifies the whole of the Denniston Plateau as a Schedule 2 Wetland and as such either as, or likely to be, ecologically significant[78]. According to EcoLogical Solutions (2025), the shrubland and low pākihi vegetation types were all considered natural inland wetlands.

[redacted]

[redacted]

[78] WCRLWP 6.1, Schedule 1 and 2 Maps NGAP 051, page 157, PLWRP 6.1, page 24

[79] BCPCP. Escarpment Extended Project Sub-Area Baseline Surveys. Prepared for Bathurst Resources Limited. July 2025

[80] Ibid

Perceptual Values

The Denniston Plateau has high perceptual values based on a perception of naturalness, including legibility, the appreciation of cultural heritage and human endeavour, transient qualities associated with exposure to extreme weather conditions, the recreational opportunities and the experience of panoramic views and vistas from the plateau, all of which combine to evoke a strong sense of place (Refer GA, Pages 82 – 83 and Viewpoint 13).

High aesthetic values are based on an 'austere' aesthetic as a relevant model for the aesthetic appreciation of the Denniston Plateau[81] rather than the stereotypical sublime, picturesque and/or beautiful aesthetic, albeit one with high visual coherence. The dramatic landform including the incised nature of streams and rivers, land cover and land use over the plateau combine to convey a unique character, particularly in relation to the exposed sandstone pavement and low-stature vegetation sequences, which while appearing natural is obviously modified in places as a result of past mining practices. The modification post mining is particularly noticeable where rock bluffs have slumped or collapsed and over disturbed and unrehabilitated land where weed species rather than indigenous vegetation occurs. Other areas include substantial water bodies, which although artificial, appear natural and contribute to a high scenic quality.

Intuitively, and with the benefit of some scientific knowledge, the Denniston Plateau is highly expressive of its formation (i.e. it has high legibility) and provides a stimulating and uniquely interesting landscape that is obviously different to the surrounding environment. It has the potential to evoke feelings of awe and a sense of wonder. In addition, the scenic panoramic outlook from the plateau to the coastline and mountain surroundings emphasises the legibility of the landforms and conveys a diminutive sense of individual scale.

The Denniston Plateau displays an exposed open character, with aspects of wildness, and a temporal sense of isolation and solitude in some places, and at certain times of the day or year, emphasised by the sense of abandonment and desolation. In some places on the plateau, the landscape appears natural while in other places on the plateau there is obvious reference and testament to human endeavour relating to mining activity and endurance in surviving in an environment of harsh extremes. Various interpretation panels around the Denniston Plateau point to previous levels of habitation that today

[81] According to Dr M Steven - An austere aesthetic is defined as having the following characteristics – sparse, expansive, gaunt, unadorned, severe in contrast to the sublime, picturesque and beautiful models of aesthetic appreciation.

are difficult to comprehend when viewing the naturally rehabilitated landscape, i.e., Burnetts Face, Wooden Bridge where the landscape has naturally recovered post 1954 mining and habitation.

The plateau is a very memorable and unique landscape that affords people a sense of place, and a means of orienting themselves within the natural world.

The transient values are recognised as a distinctive part of the plateau, which is exposed to extremes of weather and offer a widely variable experience. Other landscape architects (Mr Craig[82] and Mr Brown[83]) have described the plateau when shrouded in mist as feeling 'bleak, desolate, mournful, threatening and forbidding' while on fine days it will feel 'serene, peaceful and sublimely expansive' and as 'a unique, harsh and, in some respects, a morbidly fascinating place'. On-site investigations confirmed these descriptions.

Associative Values

The values derived from associative factors are widely recognised and documented. Of these the historic and heritage associations with the Denniston, Whareatea, Sullivan, Coalbrookdale, and Cascade mines since 1880 are very highly valued. The ESE disturbance area will contain the 20 century workings of the Whareatea Mine (K29/72) and the Sullivan Mine (K29/98), which includes above ground remains and extensive underground workings and part of the Monocable Aerial Cableway (K29/59). The remains of the cableway include most of the foundations, three standing towers and associated infrastructure. The aerial cableway linked the Whareatea and Sullivan Mines and was a key component of this landscape. These are not archaeological sites because they post-date 1900 however, the Monocable Aerial Cableway is of **high** heritage value, the significance of the Whareatea Mine site is assessed as of **moderate to high** heritage value while the Sullivan Mine has lower heritage values with fewer surviving surface remains.

The values of these mines collectively appear to be in their integral part of and importance to the wider historic context and historic landscape of the Denniston Plateau as an extensive and relatively complete coal mining landscape that is not found elsewhere in NZ.

[82] Mr A Craig, EIC for the Proposed Escarpment Mine, paragraph 46

[83] Mr S Brown, EIC for the Proposed Escarpment Mine, paragraph 58

The CMS maps (refer GA, Page 6) refers to the actively managed historic sites in the receiving environment including:

- Millerton Bath House
- Britannia Track & Gold Mines
- Denniston Incline
- Conns Creek Yards
- Denniston Brakehead
- Denniston Bridle Track
- Denniston Township
- Banbury Mine, Arch and Rope Road
- Burnett's Face & Coalbrookdale
- Coalbrookdale Roperoad, Fan House & Mines

As physical relics, the actively managed historic sites listed above contribute to the Denniston Plateau as a popular tourist destination[84] aided by images, interpretation panels and the preservation of mining relics along annotated walkways, including reference to the well-known historical novel 'The Denniston Rose', by Jenny Pattrick. This novel captures the harsh realities of life in the bleak 1880s coal mining settlement of Denniston and promotes interest and understanding of the cultural history of the plateau.

The CMS[85] identifies and describes the landscape values derived from the historic coalfields, community and industrial heritage of the Buller Kawatiri plateaux as having a popular recreational focus, where the emphasis is on day walks. Mount Rochfort provides an easily accessible place with expansive views to experience the coal measure ecosystems and landscapes of the coal plateaux.

An outstanding opportunity for historic heritage appreciation is available at Denniston. The historic bridle track provides walking access to the Brakehead and Denniston township. People can also drive up to the Brakehead car park. Several walking opportunities are available within the township and across the plateau and most recently through to Burnetts Face and Coalbrookdale areas. Interpretation panels on the plateau inform people about historic heritage values as well as natural heritage.

The CMS emphasises the **very high** recreational values afforded by the Denniston Plateau. Easy access via the sealed road to Denniston village leads to the Quarry car park and the signposted and named

[84] West Coast Te Tai o Poutini Conservation Management Strategy 2010.

[85] West Coast Te Tai o Poutini Conservation Management Strategy 2010. The purpose of the West Coast Tai o Poutini Conservation Management Strategy (CMS) is to manage the natural, historical and cultural heritage values and recreational opportunities within the Conservancy over a 10 year period.

network of mountain bike tracks across the plateau. A 4WD loop track on the Denniston plateau provides a challenging journey across a spectacular sub-alpine environment, offering dramatic views of mountain and coastal landscapes.

The Recreation and Tourism Assessment[86] refers to visitor survey results which ranked features of interest in order as mining and social history, views, the experience of the natural environment including plant and animals, walking tracks, MTB and family connections on the Denniston Plateau. There was a mix of positive and negative responses from survey respondents relating to mining awareness and effects on visiting.

According to the Recreation and Tourism Assessment, other popular activities include trail running and photography. And of note is Outwest Tours who hold a concession with DOC and a contract with Bathurst to provide tours of Stockton Mine indicating a level of interest in existing mining and new mining techniques. Visitors value the connection to the area's history, the physical challenge of the terrain, and the stark, barren landscape, though weather conditions like fog and cold often dictate the experience. Tourism / recreational values are very **high** and strongly linked with a local and national identity.

From a landscape perspective, the historic and recent mining activity convey the sense of a working landscape with strong relationships to the historic heritage of the plateau and continue the mining tradition and culture that is an important part of economic wellbeing of the West Coast community. This demonstrates the intergenerational mining identity associated with the Buller Plateaux that extends from the historic mining at Denniston, Burnetts Face, Coalbrookdale, including the Whareatea and Sullivan underground mines, to the recent mining at the Escarpment Mine, Cascade Mine and the proposed ESE.

The Social Impact Assessment[87] (SIA) found that Bathurst operations are generally seen as being socially and economically positive in the Westport local, and primary and secondary regional areas and have good levels of community support. Notwithstanding this, some opposition to coal mining has also been identified in these areas. The SIA also identifies that opposition to mining exists including opposition from specific organisations representing parts of the population that actively object to coal mining. Both regional and more dispersed opposition to coal mining are generally based on opposition to the

[86] Rob Greenaway & Associates (November 2025) Recreation and Tourism Assessment. Draft Version 5

[87] Aigis Group-Mark Sargent Enterprises (January 2026) Social Impact Assessment

mining of fossil fuels for use as energy sources, and the physical effects of mining on the environment.

Overall, the Denniston Plateau has **very high** associative values relating to mining history and heritage that are widely recognised in the community particularly with regard to the pioneering culture and technology that remain evident today and relating to tourism and recreational opportunities afforded over the plateau.

7.0 ASSESSMENT OF EFFECTS ON LANDSCAPE VALUES

Introduction

"A landscape effect is an outcome for a landscape value. Change itself is not an effect: landscapes change constantly both naturally and intentionally. It is the implications of change on landscape values that is relevant." [88]

The landscape values are set out in full above at section 8 following the descriptions of the Broad-Scale and Project-Scale receiving environments, noting that values differ slightly depending on the context, scale and distance. Of note is that the Buller Plateaux have not been identified as an ONL, although the south part of the Stockton Plateau (LCU2) was identified as an ONF as part of the Buller Plateaux Landscape Study prior to recent information received on the actual degree of modification present by historic mining. The Buller Plateaux are however surrounded and / or adjacent to ONL 41, 49, 50 and 51 under the TTPP, refer GA, Page 08, largely coinciding with the vast Conservation Areas in the vicinity, refer GA, Page 06.

The potential landscape effects arising from the Project include:

- Changes to physical attributes by removing or adversely affecting geological features, complex natural topography, streams, rock pavement surfaces, vegetation biodiversity, habitats and fauna of value, wetlands / tarns and historic mining artefacts / structures. The extraction activity and processes including dust, noise, lighting, traffic, AMD, and rehabilitation also create effects on landscape values.

- Changes to physical attributes (listed above), introduction of buildings and structures, and mining activity such as lighting, dust, noise, traffic, access etc. that will affect perceptual / sensory values, including natural character, amenity, scenic outlook, visual coherence, memorability and legibility.

- The changes to physical attributes potentially cause effects on the associative values relating to cultural and historical associations, conservation ideology, tourism, intergenerational mining connections and recreational opportunities including access.

[88] 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Page 135.

To reiterate, aspects of the Project within each sub-area that will give rise to potential effects on landscape values during LOM for 11 – 16 years and post mining activity include:

- Coal mine excavation and extraction (Stockton Extension, MFS, ESE pits)
- Access and haul roads
- River crossings including culverts and bridges
- Stockpiles – overburden, topsoil and ROM coal
- Engineered landforms (ELF)
- Infrastructure areas including buildings / offices, staff facilities, workshops and storage sheds
- Presence of lighting, fixed to structures or mobile lighting including free standing poles at 8 – 12m height or mobile lighting towers at 12m in height
- Water treatment plant and management, settling and treatment ponds
- Final landforms – engineered slopes, stepped slopes, highwalls and lakes
- Rehabilitation including decommissioning infrastructure, staging of rehabilitation and methods
- Mine related traffic including lights and noise
- Dust
- Restricted public access
- Removal / exposure of existing historic mining and artefacts

Some of these features will be more relevant during the LOM (such as lighting and traffic) and of less, or of no relevance once mining has ceased.

The EcoLogical Solutions (2025) report sets out a number of recommendations to avoid, minimise and or remediate effects on ecology and the following assessment assumes these are accepted as part of the Project rehabilitation.

As mentioned above, the visual assessment is undertaken as a separate section upfront of the landscape assessment for practicality but will inform the assessment of effects on landscape values below. This is in accordance with TTaTM, which states "*a visual effect is an effect on landscape values experienced visually. Visual effects are a subset of landscape effects. A visual assessment is one method to help understand landscape effects*." [89]

89 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'. Tuia Pita Ora New Zealand Institute of Landscape Architects, July 2022. Page 135.

Physical, associative and perceptual dimensions are each experienced visually (and through other senses) and values stem from the cognitive processing of an individual. However, effects on landscape values do not have to be visible to be an effect.

In part, landscape values experienced visually are captured by the term 'amenity'[90] and include a scenic outlook (views to physical features of interest, skylines, coastlines etc), but also inform many other values such as legibility, natural character and visual coherence of the landscape, cultural and spiritual values and identity etc.

Introduction to Visual Assessment on Landscape Values

The visual effects of the Project will depend on how and where it is experienced; for example, from at a scenic outlook, while moving along a road, or from a remote mountaintop. These factors are taken into account through the following visual assessment from publicly accessible representative viewpoint locations along roads, transport, and recreational routes at a Broad-scale and Project-Scale. Visual effects will vary depending on proximity to the Project (i.e. whether from a Broad-Scale or Project-Scale), the angle of view, and intervening landscape features and the people that will be affected by the Project. Typically, the people that will be affected by the Project include residents, motorists, workers, those partaking in recreation and tourists.

The significance of the visual effect will be influenced by the visibility (highly dependent on weather conditions), distance, duration of the view, the relative elevation, scale, nature and duration of the proposal, its overall visual prominence, the context in which it is seen, and the size of the viewing audience. Also, of relevance to note is that people's responses to mining vary – to some mining will threaten the surrounding environment while to others it is an engineering feat and of interest, or a place of work.

When assessing the effects of the Project, the visual effects on the receiving environment and the extent to which the landscape values attributed to this setting are retained or, if adversely affected, effects can be satisfactorily avoided, remedied or mitigated are of key relevance.

The extent of the receiving environment was determined by the visibility from public locations within the vicinity of the proposed development, and where it is most likely to be visible with some

[90] Amenity values are defined in the Act as:…*those natural or physical qualities and characteristics of an area that contributes to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*.

degree of effects. Noting that, in the main, aspects of the Project are limited in the degree of visibility from public locations largely because of the localised topography.

The viewpoints chosen were places where the public frequent and may pause and / or naturally look toward the sub-areas of the Project within the receiving environment. This means the viewpoints are located in parking areas, at road intersections and scenic outlooks. Although the proposed development may be visible beyond these viewpoints, any such effects will be inconsequential due to distance and context of the view.

The potential visual effects are experienced within the receiving environment at two difference scales - a Broad-Scale and at the Project-Scale and from selected representative viewpoints within these receiving environments. Refer GA, Page 4. Despite the extent of the receiving environment, visual effects will be confined to a small visual catchment, contained by the coastal setting and mountainous landforms, and / or the plateau landforms themselves.

Section 8 contains a description and identifies the values associated with the Broad-Scale and Project-Scale receiving environments. At the Broad-Scale, effects arising from the Project are assessed from the following viewpoints:

- Along the scenic highway / SH67 at varying distances
- Westport / Cape Foulwind
- Bucklands Peak

At the Project-Scale, effects arising from the Project are assessed from the following publicly accessible viewpoints, noting that during mine operations public access to some of these locations may be restricted:

- Mt Rochfort
- Denniston - Whareatea Road
- Burnetts Face Road
- Mt William Summit / Myra's Track
- Millerton

No viewpoints were located in at the Denniston Brakehead historic heritage area due to lack of visibility to ESE and MFS. Table 1 Summary of Visual Effects is provided in Appendix A.

7.1 Broad-Scale Visual Assessment

Viewpoint 1. Karamea Bluff Lookout Point, SH 67 looking south towards the site at a distance of 22 km. Refer GA, Page 14.

Viewpoint 1 is located at the Karamea Bluff Lookout Point on SH 67, facing south-west, 22 km from the closest proposed consent boundary. The SH continues north to the small, coastal settlements at Little Wanganui, Karamea and Ōpārara to the end point at the start of the Heaphy Track. The lookout is not sign posted, and it appears as an informal pullover bay albeit one of the few places possible to stop on a narrow winding road that traverses the Radiant Range and coastal hills. This road has an estimated traffic volume of 230 vehicles per day[91].

Only road users travelling south along this road will gain a brief view for approximately 150m where roadside vegetation permits of the densely forested hills including the Mōkihinui Forest and Radcliffe Ridge in the midground, the Mōkihinui River mouth, a thin sliver of the Tasman Sea and beyond to the Stockton Plateau in the distant background.

The existing mining activities are visible over an expansive area of the north-facing flanks of Mt. Augustus. However, the existing mine infrastructure and fixed lighting is not visible. The lack of vegetation and exposed earthworks draws attention amidst the forested hill outlook, although the often-present cloud haze slightly reduces visibility of the Stockton Mine activity. Despite very distant views of the Stockton Mine, road users gain a very high degree of amenity that is derived from the expansive elevated views over the hillsides cloaked in native forest.

The visibility of Stockton Mine from this viewpoint is limited based on the distance and cloud haze/weather, with an average of 74 days of sunshine a year for the Buller District[92]. The proposed Stockton Extension to the Stockton Mine will be on the lower periphery of the current mine footprint and an incremental addition that is likely to be indistinguishable to road users. Lighting will consist of 8-12m high mobile lights with downward facing LED fittings to reduce light spill, vehicle headlights, and safety lights and at this distance will be no more visible than the very faint skyglow that already exists above Stockton. Therefore, the proposed disturbance will have a **no - very low** degree of adverse effect on the existing landscape values experienced by road users at and surrounding the Karamea Bluff Lookout Point during LOM.

[91] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

[92] https://thecapefoulwindproject.co.nz/live-here/environment/#:~:text=Despite%20what%20you%20might%20hear,coldest%20at%2012.6%20degrees%20Celsius

Post rehabilitation of the proposed disturbance combined with the existing disturbance rehabilitation once established the vegetation will allow the site to blend into the surrounding hills. Although the rehabilitation vegetation cover will be lower and appear visually different to the forest in the midground of the view for some time, the viewer distance of 22 km will allow the rehabilitated site to be readily absorbed into the surrounding environment.

Overall, the additional proposed disturbance to the existing Stockton Mine will have **no** degree of adverse effects on the current visual amenity experience at and surrounding the Karamea Bluff Lookout Point at COM.

Viewpoint 2. **Mōhikinui, Batty Street at the Mōhikinui River mouth looking south towards the site at a distance of 14.2 km. Refer GA, Page 14 and VS, Pages 3 – 12.**

Viewpoint 2 is located at the Mōhikinui Campground, local playground and sports fields. Viewers will be a mix of locals, and tourists. A high amenity is derived from the small bach settlement with views to bush clad hills, distant mountains and proximity to the beach and Mohikinui River mouth.

The Stockton Plateau is visible as part of the distant backdrop of coastal hills with the existing extent of mining viewed as an area of cleared land at the plateau summit with vegetation retained over the lower north-facing slopes. The Denniston Plateau is not visible from this viewpoint due to the general coastal haze and being screened by intervening structures and vegetation.

From this viewpoint, the proposed Stockton Extension will consist of the Hope Lyons / Rockies and Millerton extraction and will appear as an extension to the lower periphery of the existing Stockton Mine areas. Note that, the VS shows a larger area of exposed terrain including dumps, ELF and mitigation relating to previous stages of the Stockton Mine, rather than the Stockton Extension. The Stockton Extension areas will be partly concealed behind the lower topography of the north facing slopes. Lighting will consist of 8-12m high mobile lights angled downward, vehicle headlights, and safety lights and at this distance will be no more visible than the very faint skyglow from lighting that currently exists at Stockton.

Although the proposed disturbance and associated mining activities will be visible from this viewpoint, at a distance of over 14.2 km the incremental extension below the existing mining activity will have a **very low** adverse effect on existing landscape values including cumulative effects from this viewpoint. Post rehabilitation there will be

no adverse effects on the existing visual amenity of the Mōhikinui Campground.

Viewpoint 3. Hector, SH 67 at the Ngakawau River mouth looking south towards the site at a distance of 4.16 km. Refer GA, Page 15 and VS, Pages 13 - 21.

Viewpoint 3 is located at the self-contained free camping car park in Hector, adjacent to SH67 immediately north of the Ngakawau River mouth and the Ngakawau settlement on the opposite side of the river. This viewpoint looks south towards the Stockton Mine at a distance of 4.160 km. The SH67 is a scenic highway with an average of 933 vehicle movements per day[93] comprising tourists and local residents, including mine employees.

Road users travelling south along this stretch of SH67 experience the expansive views to the Tasman Sea from a narrow strip of land enclosed by the steep bush-clad coastal hills and interspersed by small coastal settlements characterised as bach-like at intervals along the West Coast. Although divided by the Ngakawau River mouth and gorge, Hector and Ngakawau are two separate settlements with Ngakawau distinguished by the red roofed Ngakwau Coal Processing Facility at the base of the steep coastal hills below Stockton.

The coastal hillsides immediately behind Ngakawau are modified by patches of bush clearance coinciding with pylons and aerial rope corridors with a small area of pasture. The existing Stockton Mine is visible as patchy mosaic of exposed earthworks and vegetated areas on the upper slopes and skyline with small sections of the access road snaking up midway up the hill slopes. Amenity is derived from the small-scale settlement flanking the natural river mouth and exposure to the coastline affording a moderate – high level of amenity.

From this viewpoint closer to the hillslopes, the proposed Stockton Extension to the Stockton Mine will appear in separated areas and partly concealed behind the topography of the lower slopes. Associated mining activities such as vehicles will continue to be identified with use of existing internal Stockton Mine roads and headlights of vehicles working during the night. Existing lighting of the Stockton Mine infrastructure is not visible but some mobile lighting (plant, vehicles, mobile lighting towers) will be seen on the upper slopes above the Ngakawau Coal Processing Facility and general lighting within the settlement. The Lighting Assessment[94] states that

[93] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

[94] LDP (2025). BPCP Assessment of Environmental Effects – Lighting

the light spill will be similar to dim natural ambient light (i.e. moonlight and starlight).

Although the proposed disturbance and associated mining activities will be visible from this viewpoint, at a distance of over 4 km the incremental extension below the existing mining activity will have a **very low** adverse effect including cumulative effects on landscape values from this viewpoint. The most obvious visual effects will occur during the early stages (02 – 05) of excavation where earthworks are exposed over the Rockies and Hope Lyons historic workings. Mid to post mining a stepped face will appear as shadowed area similar to unmined terrain in the midground hill slopes with a small ELF below. The balance Stockton Extension mine areas will not be visible. Post mining activity and rehabilitation there will be **very low to no** adverse effects on the visual amenity of road users travelling south.

Viewpoint 4. **SH67 and O'Connor Road intersection looking southeast towards Mt Frederick and Denniston at a distance of 5.7 km. Refer GA, Page 15 and VS, Pages 22-36.**

Viewpoint 4 is located at the intersection of SH67 and O'Connor Road, adjacent to the railway line looking southeast towards Mt. Frederick and Denniston at a distance of 5.7 km. This road provides access to a small number of rural properties and their dwellings, as well as access to the Britannia Track, which follows an old pack track to arrive at the abandoned Britannia Gold Mine[95] and is currently closed. The Viewpoint 4 setting represents views from this stretch of SH67 and includes the presence of the main south railway line, farm dwellings and farm sheds and pastoral flats with the coastal hill backdrop covered in dense predominantly native vegetation. The Stockton Plateau is not visible from this viewpoint although high points of Mt Frederick and Mt Augustus are discernible as part of the skyline. Mt Rochfort is visible as a high point on an undulating skyline and the north facing slopes of the Denniston Plateau are visible in the distance. The outlook conveys a rural scene that combined with the backdrop of the coastal hillslopes and their native vegetation cover, appears high in natural character and visual amenity.

MFS: The proposed MFS Mine will be mostly contained behind the Mt Frederick ridgeline. However, the north-western proposed pit will extend to the top of the ridge south at 865masl and well below the Mt. Frederick (1105masl) summit. The visual effects are illustrated by the VS from Viewpoint 4 over the various mine stages. The removal of vegetation cover and extraction activity will occur during stages 5 and 6. The engineered landform will be rehabilitated on the ridge during

[95] https://westcoast.co.nz/visit/operators/westport-walks/

stage - 9 (refer to GA, page 48) will reduce the height of the ridgeline over a very short section (200m). The reduction of the ridge and moving lights on the ridgeline may be noticeable during the extraction period but in reality, will be a thin sliver over a short broadly flat section of ridgeline, mostly screened by the forest vegetation in the foreground. From Viewpoint 4 the excavation will constitute a small component of the overall ridgeline, at a distance of 5.5 km and despite intruding into ONL50 will be unnoticeable while travelling along the SH.

The rehabilitation of the proposed MFS Mine will include reshaping as an engineered landform that may be temporarily visible from this viewpoint, as well as being revegetated to replace the native vegetation to blend with existing forest edge vegetation.

Those viewers familiar with the area and skyline may be aware of the removal of the ridge during the extraction period, but the reshaping of the ridgeline and subsequent establishment of vegetation will restore a natural character to the skyline so post mining and rehabilitation viewers will be unaware that mining has taken place and altered the skyline landform. The excavation, ELF, reinstatement of forest and lack of visual effects are considered to result in **very low** to **no** adverse effects on natural character and visual amenity at a Broad-Scale.

Therefore, post rehabilitation, adverse visual effects arising from MFS mining will reduce to **no** effect.

ESE: The proposed ESE will be visible as narrow intermittent strips along part of the skyline from Stage 2 and over most subsequent stages with small patches of disturbance identifiable on the slopes below during stages 10 – 12. The extraction is mostly screened by the foreground topography. Most of the extraction activity will be concentrated over the rough textured slopes comprising rock pavement low stature vegetation and patches of dense forest vegetation in gullies. The highly textured nature of the landcover and complex topography means that the areas of disturbance will not be visually apparent.

At a distance of 7.5km details of the excavation will not be apparent but it is likely that lighting both fixed and mobile will be visible and head lights in particular from moving vehicles may draw attention during the dark night hours.

The general slope of the topography means that the staging and sequential rehabilitation over the entire extent of the ESE will not be visible at any one time and if visible at a distance. In general views of the proposed mining will be fleeting, being experienced while viewers

are travelling at 80 – 100km / hour and lighting effects only apparent during night hours. Overall, adverse effects on visual amenity will be **low** during ESE LOM reducing to **no** post rehabilitation with an increase in patches of forest cover.

Both MFS and ESE will potentially be visible from Viewpoint 4 so cumulative effects will occur. However, based on the visual effects assessment above overall cumulative effects will be **very low** to **no**.

Viewpoint 5. Pottingers Road, Waimangaroa Cemetery, looking northeast towards Mt Frederick and MFS at a distance of 7-8 km

Viewpoint 6 Pottingers Road, Waimangaroa Cemetery, looking northeast Denniston at a distance of 6.5 km. Refer GA, Page 16.

Viewpoints 5 and 6 are located at the end of a no exit metal road some 1.95 km west of SH67 that provides access to a small number of rural dwellings, farm sheds, and to the beach. It also provides access to the small Waimangaroa Cemetery. The estimated traffic volume is 10 vehicles per day[96].

Viewpoint 5 is facing northeast towards the coastal hills backing the Stockton Plateau although the plateau itself is not visible. Mt Frederick is a high point on the skyline at a distance of approximately 8 km. Viewpoint 6 looks southeast towards Denniston and Mt Rochfort, at a distance of approximately 6.5 km. These viewpoints were chosen as the Project will be less visible from the intersection with SH67 and at the Waimangaroa settlement due to the closer view perspective.

Although modified farmland with a low level of habitation, the cemetery is a point of interest and the beach access and open rural character provides a high degree of amenity.

The parts of the Project that will be potentially visible are MFS and ESE. The visual effects will be similar to that described above for Viewpoint 4 although at a great distance, which will further mitigate effects. The only difference is that both MFS and ESE will be visible in the same view therefore cumulative effects must be a consideration.

The proposed MFS pit extending to and beyond the coastal hills ridgeline will be partly visible from this viewpoint. The modified skyline and removal of vegetation cover will be indistinguishable to users of

[96] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

Pottingers Road looking east to MFS, even those who are familiar with the setting and who will likely be aware of changes to the skyline. Any lighting from mine activity will be seen as an ambient over stages 5 – 6 with rehabilitation occurring during stage 9.

Although the Denniston Plateau and proposed ESE disturbance area tilt towards the viewer the Visual Simulation from Viewpoint 4 shows that the bulk of the mining activity will be obscured by the topography, however the extraction activity, rehabilitation and the mobile lighting over the hours of darkness will be intermittently visible across a narrow band close to the skyline during the ESE LOM.

For both MFS and ESE the scale of change is small in this Broad-Scale context and further mitigated by the 6km distance separating MFS and ESE. The reduced ridgeline arising from MFS is not likely to be noticed by visitors unfamiliar with the setting. Overall, it is considered that the scale and view distance will ensure adverse effects on landscape values including cumulative effects will be **very low to no** for MFS and **very low** for ESE during LOM. Effects on landscape values will reduce to **no** visual effects for MFS and ESE post rehabilitation and establishment of vegetation.

Viewpoint 7. **SH67 and Beach Road intersection, looking east to Denniston at a distance of 8 km and northeast towards Mt Frederick and MFS at a distance of 10.5-12 km**

Viewpoint 8. **Beach Road looking east towards Denniston at a distance of 8.7 km and northeast towards Mt Frederick and MFS at a distance of 11-12 km. Refer GA, Page 17.**

Viewpoint 7 is located on Beach Road, near the intersection of Beach Road and SH67, looking southeast to the coastal hills. Mt Rochfort is an identifiable peak in the distance. Viewpoint 8 is located at the western end of Beach Road, adjacent to the beach, at a distance of over 8 km to Denniston and 11 km to MFS.

The first half of Beach Road off SH67 is sealed and thereafter unsealed as a metal no exit road that provides access to a small number of rural dwellings and the beach including an informal boat ramp. Estimated vehicle movements per day from the intersection with SH67 are 115[97], although this number is reduced to 15 vehicle movements per day[98] at the beach access section of the road. This suggests residents and other locals are the primary users of this road, and that this road is not commonly used.

[97] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

[98] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

The visual amenity from both Viewpoints 7 and 8 are very similar, with Viewpoint 8 being only 1 km further west capturing a wider view of the receiving environment.

Viewpoint 8 in particular captures the modification to the Denniston Plateau including the communication tower at the summit of Mt Rochford, roading and transmission lines within the patchy mosaic of vegetation on the coastal hillslopes in the background.

The deeply incised river gorges of the Whareatea and Waimangaroa rivers are an orientating feature in the background hills. The setting is obviously rural farmland with an open character but the proximity, ready access and views to the beach, presence of native patches of vegetation with the coastal hill backdrop convey a high level of natural character and visual amenity.

The parts of the Project that will be potentially visible are MFS and ESE. The proposed MFS pit extending to and beyond the ridgeline enclosing the Waimangaroa River gorge will be visible from this viewpoint at a distance of more than 11 km. The proposed ESE will also be visible in part as a narrow strip on the skyline above Conglomerate Stream.

The modified skyline and removal of vegetation cover will not be particularly distinguishable during MFS stages 5 - 6, with rehabilitation occurring during stage 9. The landform modifications close to the skyline and removal of vegetation cover will be visible intermittently within a narrow band during ESE stages 2 – 13. , Views will be distant and MFS and ESE will be separated by over 8-12 km along the coastal hill slopes. While some night glow above active mine areas on both MFS and ESE is likely to be visible during the night-time dark hours over varying stages it will be similar to dim natural ambient light such as moonlight[99]. The scale of these changes, especially in the busy context of the SH intersection, will form a very small component within the wider scale of the outlook and therefore may be missed, depending on viewer focus.

Overall, the scale and view distance will ensure adverse effects on landscape values will be **very low** during ESE mine stages, and **very low** to **no** over stages 5 – 6 and 9 on MFS. Mining activity on both mine areas will be mitigated by the often-present coastal haze and weather and will reduce to **no** adverse effects on landscape values post rehabilitation and establishment of vegetation in the medium term over 10 - 50 years after mine closure as vegetation establishes.

[99] LDP Limited (2025) Proposed Infrastructure Assessment of Environmental Effects - Lighting

Overall, cumulative effects will be **very low** to due to the scale and view distances to ESE and MFS.

Viewpoint 9. **Caledonian Road, looking east towards Denniston at a distance of 12 km and towards MFS at a distance of 15.4 km. Refer GA, Page 18.**

Viewpoint 9 is located on Caledonian Road adjacent to the railway line, just after the intersection with SH67, facing east towards the site at a distance of 12 km to the nearest proposed consent boundary. This road provides access to a number of rural dwellings, lifestyle properties and farms, with an estimated 135 vehicle movements per day[100].

The fore-midground displays a rural working character with patches of native vegetation, exotic rural amenity/ shelter trees breaking the skyline in places, scattered dwellings and farm buildings that extend along the periphery of the base of the coastal hills. The backdrop coastal hillslopes vary between native bush and land cleared for grazing. The communications tower on the summit of Mt. Rochford is discernible in the centre of this viewpoint panorama as an orientating element however this will only appear in the peripheral vison of users traveling east on Caledonian Road. Overall, the existing level of rural amenity is moderate.

The ridgeline of Mt. Rochford obscures the view of the proposed mine works on the Denniston Plateau from this viewpoint so there will be **no** adverse effects on landscape values arising from the ESE.

Although the MFS mining will potentially be visible along the ridgeline of the coastal hill slopes it won't be discernible and any light spill would be negligible at a distance of over 15 km away, which means that there will be **no** effects on landscape values from this viewpoint and orientation of view. Once rehabilitation has taken place there will be **no** adverse effects.

Viewpoint 10. **Coates Street, Tip Head of the Buller River looking southeast towards Denniston at a distance of 17.5 km and MFS at a distance of 19.8 km. Refer GA, Page 18.**

Viewpoint 10 is located at the westernmost end of Coates Street, at the Tip Head of the Buller River, looking southeast towards the MFS and ESE Project Areas at a distance of over 17.0 km. This 900m section of Coates Street is a popular lookout point and commonly used by locals and tourists taking part in recreation such as fishing

[100] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

and surfing, indicated by the estimated 400 vehicle movements per day[101].

The view panorama extends from the mouth of the Buller River to the coastal hillslopes and the Paparoa Range, which conveys a high natural character despite the channelised river mouth due to the unmodified coastline (sandy beach, native vegetation) and coastal processes, vegetative screening of urban Westport and coastal hill backdrop. Overall, the view affords high physical, perceptual and associative values.

From this viewpoint both MFS and ESE mine workings will potentially be visible but not particularly noticeable due to distance and the prevalent coastal haze. However as above, the extent of MFS will be confined to a short section of the coastal hill ridgeline over stages 5 - 6 and ESE will appear as small triangle at the head of the Whareatea River gorge with a land backdrop. Any visible light glow will be negligible. Both areas will be glimpsed at a distance of over 17.5 km away which means that there will be **no** effects on landscape values experienced visually from this viewpoint and orientation of view. Post rehabilitation there will be **no** adverse visual effects from either MFS or ESE Project Areas.

Viewpoint 11. 74 Cape Foulwind Road / SH67A, looking northeast towards Denniston at a distance of 17.5 km and MFS at a distance of 20.07 km. Refer GA, Page 19.

Viewpoint 11 is located on Cape Foulwind Road / SH67A, looking northeast towards the proposal. This 1.4 km stretch of road has a 100 km/hour speed limit and is the main access route to the Westport Airport, Carters Beach settlement and campground, the Westport Golf Club and the popular tourist destination of Cape Foulwind, with an estimated 1876 of vehicle movements per day[102]. Road users travelling south on Cape Foulwind Road experience a pleasant rural amenity characterised by open pastoral landscape interspersed with native and exotic vegetation with a backdrop of the coastal hills skyline and Buller Gorge looking south approaching the intersection with SH 67 and routes to Westport- Karamea and Greymouth-Murchison.

The Buckland Peaks, Mt. William Range, Mt Rochfort and the Denniston Plateau coastal slopes are cloaked in native vegetation and contribute to a high aesthetic value. The pastoral setting although a

[101] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

[102] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

highly modified landscape, still provides a reasonably picturesque outlook, affording road users a high degree of amenity.

As above, although both MFS and ESE mine workings and night time lighting will potentially be visible, it will be at such a distance that it will not be discernible for those travelling along Cape Foulwind Road / SH76A. Therefore, there will be **no** visual effects arising from the proposed Project Areas, including after rehabilitation.

Viewpoint 12. Bucklands Peaks, looking northeast towards Denniston at a distance of 16.0 km and MFS at 23.0 km. Refer GA, Page 19.

Viewpoint 12 is located at the northern end of the Paparoa Range, at the Buckland Peaks summit at 1325 masl, looking northeast towards Denniston Plateau at over 16.0 km to the nearest proposed ESE boundary. The Buckland Peaks are accessible via a two hour walk from the DOC-administered Buckland Peaks Hut, which is a five hour walk from SH6.

The Buckland Peaks is an advanced tramping track and as a marked route only suitable for expert trampers through mixed podocarp forest, that climbs to *Dracophyllum* and subalpine scrub. Granite boulders and formations, as well as a large diversity of alpine flora are part of the experience. The weather can be very changeable at all times. Where weather / cloud cover permits, the Buckland Peaks track affords exceptional views over the Paparoa Range and sweeping coastline. The native vegetation, rock formations and elevated outlook above the coastal plains to Mt. Rochford, Mt. William and beyond to the Stockton Plateau convey a high legibility and are very high in natural character contributing to an overall very high degree of amenity.

The proposed ESE mine will be concealed behind the ridge of Mt. Rochford, so there will be **no** visual effects on amenity arising from the proposed ESE.

A distant view of Stockton Plateau is visible including the entire MFS Project Area. While there will be potential for visual effects including lighting, at a distance of over 23 km it is unlikely these effects will be noticeable given the distance, coastal haze, changeable weather conditions and a limited viewing audience. Therefore, during extraction, post mine closure and rehabilitation there will be **no** adverse effects on landscape values.

7.2 Project-Scale Visual Assessment

The following Project-Scale viewpoints are located adjacent to the Project Areas. Some of these viewpoints will be in locations that will be publicly accessible during the life of the Project and others in locations that will not be readily accessible to the public during the life of the Project. However, the range of viewpoints offer a better understanding of the potential effects on landscape values.

Viewpoint 13. Mt Rochfort, looking northeast MFS at a distance of 8.8 km, towards Denniston at a distance of 6.4 km and Conglomerate Stream at a distance of 2.4 km. Refer GA, Page 20. Refer VS, Pages 37 - 51.

Viewpoint 13 is located at the summit of Mt. Rochford (1040 masl) looking northeast towards the proposed ESE boundary and to the Stockton Plateau, the high peaks of Mt Frederick and Mt Augustus of the coastal hills to the west and Mt William, Mt Stockton and the enclosing Mt William mountain ranges to the east.

The telecommunications tower located at the summit of Mt Rochfort services Westport and Western Buller and is accessible by road from Denniston. The return trip from Denniston to the summit is approximately 17 km with a total ascent of 500 m and popular with mountain bikers. Over the course of the ESE mining operations (if granted consent), public access across the Denniston Plateau to the summit of Mt Rochfort will be restricted and managed. Therefore, visual effects should be weighted accordingly.

Views from Mt Rochfort extend from Westport northwards and offer highly scenic outlooks across the distinctive plateaux, surrounding mountains modified pastoral coastal plains and sweep of the coastline. The Stockton Plateau is distantly visible beyond the Waimangaroa River gorge with LCU2 obvious as a southwest tilting plateau, the dished Waimangaroa River valley trending northwest between the Stockton Plateau and dense bush clad slopes of the Mt William Range to the east. The Stockton Mine is located further north and concealed by the north tilting plateau topography. The only part of the Stockton mine workings visible from this viewpoint are the barely distinguishable rehabilitated slopes up to the summit of Mt Frederick.

In the view foreground from Mt Rochfort, the Denniston Plateau is easily understood as a plateau landform characterised by stunted, low growing native vegetation interspersed with expanses of exposed sandstone and deeply incised creeks, including the Whareatea River gorge and Conglomerate Creek. A network of tracks crosses the plateau along with other signs of historic mining (powerlines, aerial

rope poles, mine relics), including areas of exposed earth, a quarry and reservoirs / lakes.

The landscape values are variable with a high degree of scenic values, high natural character and legibility, somewhat reduced by the modified areas of the Denniston Plateau. Details of infrastructure and dwellings at Denniston village are not easily visible and the Escarpment Mine (under care and maintenance) is not visible from this viewpoint. The landscape displays an austere aesthetic that is appreciated for its unique, highly specialised landform and landcover. From an elevated vantage point, the dramatic scale of the landforms and expansive views contribute to a very high degree of visual amenity across the Plateau.

The proposed ESE mine workings and infrastructure will be prominently visible from Viewpoint 13, extending over the midground of the Denniston Plateau that is visible from the summit of Mt. Rochfort at a distance of 2.4km to the closest Project disturbance area. A small clearing amidst the road network and transmission towers, midway between the Denniston Brakehead area and the proposed pits will contain the gatehouse infrastructure. This will consist of portacom buildings, security gates, fixed lighting, associated facilities and a steel frame 5 bay shed for emergency response vehicles. These structures will be between 4 – 6m in height clad in recessive color steel in a colour to visually blend with the immediate surroundings.

The buildings within the ESE Central Infrastructure Area and Coal Load Out area will be visible but will be obscured in later stages as ELFs are formed and reach their final height.

The buildings will remain for the LOM and will be decommissioned post mine closure depending on rehabilitation requirements. Over the LOM, the comparatively small scale of these structures will be absorbed by the vast scale of the plateau and built context of the Denniston village, occupied dwellings and various modifications present.

Extraction will start at the southeast edge of the disturbance area and move northwest towards the Whareatea River gorge before splitting, with extraction stages occurring simultaneously to the north over Conglomerate Stream and to the south over Trent Steam, V40 Stream and S Creek. There will be fixed lighting on the internal infrastructure and mobile lighting at active pit faces and mine vehicles although it is unlikely that viewers will be at Mt Rochfort during the night and be affected by views of fixed and moving lights on the plateau.

Extraction activities will remove the complex topography, tall forest, shrub manuka, pākihi and rockfield vegetation types, incised streams including Conglomerate Stream visible from this view.

The ESE mine workings will occur in stages with disturbance and extraction at stage 2 appearing in three separate areas on either side of the Whareatea River gorge. Over subsequent stages the mine disturbance areas will extend contiguously across the midground of the view throughout stages 2 – 15. The central ELF will be constructed to form the central hill almost immediately and rehabilitated sequentially between stages 2 – 8. The stepped high walls form the Whareatea River gorge edge pit walls in Stage 6, Conglomerate Stream over stages 10 – 12 and the Cascade Creek ridgeline over stages 11 – 13 with a marginal intrusion into ONL41 followed by sequential rehabilitation. The extraction over stages 5 – 13 will be mostly screened by the topography especially around Conglomerate Creek. Mine closure will occur at Stage 18 at which time mine activity will cease, infrastructure will be decommissioned and all rehabilitation will be complete.

The final landform will comprise stable hill slopes with the central ELF as a prominent hill feature with a forested landcover and the northern ELF also forested with a large tarn across the hilltop. At closure the Stage 1 rehabilitation will have been in place for up to 17 years with the bulk of the central ELF forested completely by Stage 8, being in place for 10 years. Tarns will be created on the flatter hill tops or in localised depressions. Rockfields will appear as bare rock and water infrastructure will form lakes at the southern edge of the Whareatea Gorge and within the borrow pit.

The proposed MFS mine will be evident at a distance of 8.8km along the Waimangaroa River gorge ridgeline on the Stockton Plateau between the Cedar Creek / Waimangaroa Haul Road and the upper pit. Stages 1 - 5 will include the initial disturbance areas and cut walls of the haul road from the Waimangaroa River valley that extends up to a midpoint at the western edge of the plateau. Built form consisting of portacom modules up to 4m in height, fuel tanks and associated water treatment facilities up to 12.8m height will be constructed on the infrastructure pad at the midpoint (740masl). At distances of over 8km these structures will be barely distinguishable from Viewpoint 13. Thereafter stages 5 – 6 extend up to the high point and subsequent stages 7 – 13 move northeast across the upper area of the plateau crossing Billo Stream below Billo Tarn towards the upper tributary of Deep Stream.

The mid stages 4 - 6 on the edge of the Waimangaroa River gorge will be most evident from Mt Rochfort albeit at a distance. The stepped highwalls will also be discernible at this distance often in shadowed

contrast to the surrounding landforms. The rehabilitation sequence follows the disturbance schedule moving north up to Stage 9 and thereafter moving east across Billo Stream. Details will be difficult to discern, as a consequence effects on landscape values experienced visually will be lessened by the distance, topography and view orientation.

The rehabilitation for both the ESE and MFS disturbance areas includes ELFs with a variety of slopes to accommodate different vegetation types resulting in a vegetation mosaic representing forest, shrubland, pākihi and rock pavement. Highwalls, and open water will be included, streams recreated and other areas will be rehabilitated to reflect a rockfield landscape. Overtime as the landform 'softens' through natural erosion processes and vegetation establishes then visual effects will reduce.

The ESE mine will have **very high** adverse effects and MFS will have **high** adverse effects on visual amenity during the LOM from Mt Rochfort especially over the mid stages where maximum disturbance occurs, stepped highwalls are created and the disturbance areas intrude into the river gorge edges. Although opportunity to access Mt Rochfort will be limited during LOM observers will have a rare opportunity to observe modern mining activity first-hand and up close. When public access to Mt Rochfort is fully reinstated at mine closure, the change in landform and vegetation cover post rehabilitation in the short term will be very noticeable, especially for those familiar with the site particularly in relation to the reduced complexity of the landform, stepped highwalls and extent of bare earth in relation to vegetation cover as vegetation establishes.

Post closure and once rehabilitation is established and as natural processes of weathering continue to occur in the medium term the visual effects will diminish to **low-moderate.** Effects will continue to diminish further over time to **low** at 25 years and **very low** at 50 years post closure with the extent of forest cover increasing. This visual experience builds on Denniston's rich mining history - something that both locals and visitors to the area are likely to recognise.

Viewpoint 13 Cumulative effects

From Viewpoint 13, cumulative adverse effects arising from the combined views of both ESE and MFS in the distance during LOM will be **high** due to the extent and scale of mine operations and newly establishing vegetation visible although as demonstrated by views of Stockton Mine rehabilitation on Mt Frederick cumulative effects will reduce to **low** – **moderate** post mine closure in the short to medium term.

Viewpoint 14. Intersection of Whareatea Mine Road and Burnetts Face Road, looking north towards MFS on the Stockton Plateau at a distance of 2.4 km. Refer GA, Page 20. Refer VS, Pages 52 - 66.

Viewpoint 15a. **Whareatea Mine Road, at edge of seal / carpark looking northeast towards MFS at a distance of approximately 3.0km. Refer GA, Page 21.**

These scenes are experienced from a sealed road and easily accessible by visitors to the Denniston Brakehead heritage area, traversing Burnetts Face Road to access Myras Track, the Coalbrookdale Walk and those undertaking various other recreational activities. Viewpoint 14 also represents potential views from the Denniston Village where some permanent residents reside.

The view towards the Stockton Plateau looks directly north from an elevated location on the Denniston Plateau across the Waimangaroa River gorge to Mt Frederick, where the south tilt of the plateau is appreciated above the densely forested steep gully slopes. Overlapping mountain ranges are distantly visible. The southernmost extent of the existing Stockton Mine activity is visible below Mt Frederick as a lighter exposed earth colour with some engineered slopes visible however, the scene is dominated by the natural characteristics of the vegetation and landform and general scale of the landscape.

The landscape values including the degree of amenity are very high conveyed by the natural character and legibility of the landforms, with a high degree of visual coherence.

While the entire spread of the MFS mine workings will be obscured (due to the relative elevation, foreshortening and view aspect) the proposed MFS mine extraction will be visible intermittently along the Waimangaroa River gorge ridgeline at Stage 2 where the ridgeline obscures the full extent of the initial disturbance area. However, no buildings will be visible within MFS due to the intervening topography. At stages 4 - 6 –the full extent of the disturbance area is visible along the edge of the Waimangaroa River gorge ridgeline with removal of the edge landform and forest trees at a distance of 2.4 km. This is the most visible and obvious part of the disturbance on MFS from these viewpoints.

While part of the subsequent disturbance stages may be visible, they are mostly obscured by the topography and rising construction of the ELF as the disturbance areas move east. The disturbance areas in stages 1 - 6 will be rehabilitated sequentially with stages 4 - 6 rehabilitated between stages 7 - 9. This means that visual effects will

reduce after Stage 9. Most of the West Pit extraction and rehabilitation is screened by the topography from this viewpoint.

Adverse visual effects on landscape values (legibility, natural character through removal of forest and a sense of enclosure contributed by the Waimangaroa River gorge etc) will be **high** during the LOM, taking into account the shorter time frame of effects, which are limited to stages 4 – 6, and rehabilitation up to Stage 9 and the mobile lighting visible in a previously dark environment. The glare from the mobile lighting at the working pit faces and associated with moving vehicles will be experienced particularly over stages 4 - 6 and effects will **high.** The fixed lighting on the MFS infrastructure at the southern end of the haul road is likely to appear as light spill, similar to dim natural ambient light.

The rehabilitation will result in a greater amount of forest vegetation replacing the patchy areas of rock pavement and pakihi and from Viewpoints 14 and 15a will places appear as an extension to the Waimangaroa River gorge forest.

In the short term, post mine closure and rehabilitation adverse effects will reduce to **low** and **very low** (residual landform and vegetation rehabilitation with removal of lighting effects) and medium to long term will reduce from **very low** to **no**. This conclusion is reached because the full extent of the landform changes and details will not be readily appreciated from this viewpoint.

Viewpoint 15b. **Whareatea Mine Road, looking southwest towards ESE at a distance of approximately 1.2km. Refer GA, Page 21. Refer VS, Pages 67-75.**

Viewpoint 16. **Whareatea Mine Road, looking southeast towards ESE at a distance of approximately 750m – 2.3km. Refer GA, Page 22.**

The Whareatea Mine Road continues as a metal road beyond Viewpoints 14 and 15a providing access to the existing Escarpment Mine and thereafter to Mt Rochfort. The road has an estimated 20 vehicle movements per day[103].

Viewpoints 15b and 16 are located at varying distances beyond the Denniston village and historic area on the Whareatea Mine Road where the sealed road becomes gravel approximately 750m from the ESE mine gate and where an informal carpark is located.

[103] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

These viewpoints are separated from Burnetts Face, the Coalbrookdale cultural and recreational experiences and access to Myras Track. Viewpoints 15b and 16 face southwest towards the proposed ESE Mine, close to the informal car park (Quarry carpark), north of the proposed ESE Mine gate infrastructure. The carpark is mostly used by mountain bikers (MTB), with a map showing the various trails accessible across the Denniston Plateau, refer Figure 8 below. The car park will remain accessible but access to the mountain bike tracks will likely be restricted during the active mining stages.

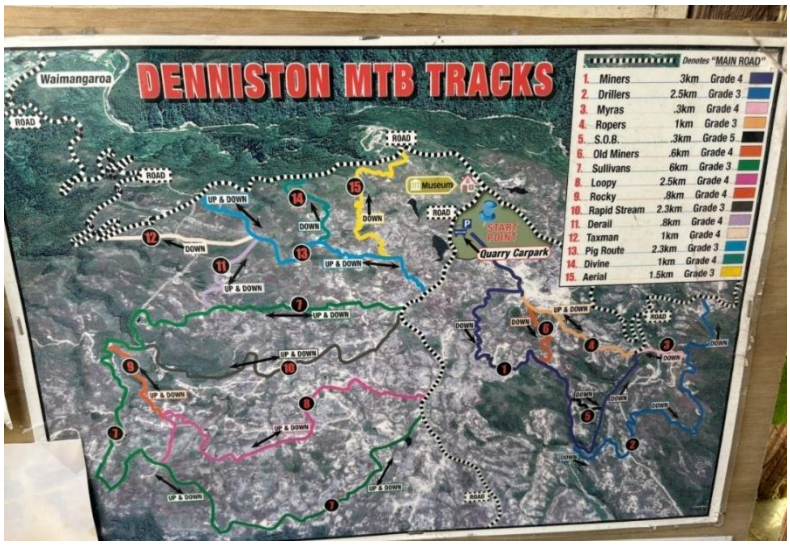


Figure 8 Mountain Bike Tracks Map – Denniston Plateau

From Viewpoints15 b and 16 the panorama includes the ridgeline forming the southern edge of the Denniston Plateau (high points at 866, 854 and 786masl), extending southwest to the high point of Mt Rochfort across a foreground of undulating terrain comprising low level diverse native vegetation on the spurs, taller vegetation in the dips and gullys of the Whareatea River headwaters, the occasional rock outcrop, areas of sandstone pavement, and several water reservoirs / ponds. Various elements are present that indicate habitation and / or mining including the quarry, power poles and pylons, roading network, and in the distance the cut exposed faces of the northern extent of the existing Escarpment Mine, and transmission tower at Mt Rochfort. Overall amenity is moderate-high.

The closest mine workings will be at a distance of between 750 m – 2.3 km from Viewpoints 15b and 16. Components of the proposed ESE Mine that will be prominently visible are illustrated by the VS and include the Central and Sullivan ELFs and the proposed VDT stockpile area. The building infrastructure at the mine security gate will be visible particularly from Viewpoint 16 and consist of 4m high portacom modules, security gate, lighting and a 5-bay shed for emergency response vehicles. The buildings will be visually

unobtrusive due to vast scale of the plateau landform, recessive earth coloured cladding to blend into the plateau colours and in the context of built structures over the plateau notably the transmission pylons in proximity.

Road widening is proposed to the gravel section of Whareatea Mine Road, to accommodate mining activities although the bulk of truck movements will utilise the UWHR which is not visible from these viewpoints. The main mine activity visible will occur over the southern part of the ESE disturbance area, south of the Whareatea River gorge apart from the Sullivan ELF which will appear as a hill in the foreground of the view. The headwalls of the pits will be visible over stages 6, 11 and 12. The Sullivan and Central ELFs will increase in height and prominence during rehabilitation from stage1 – 8 through to Stage 18 when the background high points will be obscured from these viewpoints, essentially creating a new skyline. .

Lighting will be fixed to the ESE Mine gate, building infrastructure and the coal loadout area. Mobile lighting is proposed at active pit faces and will be associated with moving vehicles, which will be increasingly obscured in the later stages as the ELFs are constructed.

Two areas of pest free enclosures are proposed north and east of ESE and referred to as North Denniston enclosing 47.3ha and Coalbrookdale enclosing 154.3ha including part of the Coalbrookdale Walk. The fencing will be at least 2.0m in height, with timber posts at 2m centres, stainless steel mesh and a stainless-steel top cap. The fencing will be visible from Viewpoint 15b and 16 and various MTB tracks in the vicinity as it follows alongside the Whareatea Mine Road and the natural contours of the plateau.

Given the level of existing infrastructure over the plateau such as power lines, pylons roading etc, the recessive nature of the fencing and a general viewer understanding of its function, visual effects on landscape values arising from the pest exclusion areas are likely to be **very low**.

Public visibility of the ESE workings will be limited to the Whareatea Mine Road up to / north of the mine gate and from the network of mountain bike tracks that lie outside the mine proposal area and remain accessible. The Recreation and Tourism Assessment[104] states that 90% of visitors to the Denniston Brakehead and museum do not venture far beyond the main access points although these visitor numbers may increase with interest in the mining activity if close views are available. The close proximity to the proposal from these viewpoints will afford a range of adverse effects depending on the

[104] Rob Greenaway & Associates (2025) Recreation and Tourism Assessment. 4.Consultation Findings

staging although this is also likely to vary depending on viewers' attitudes to and interest in mining. Over the initial stages from development to stage 2, adverse effects on visual amenity experienced by users of the Whareatea Mine Road will be **low,** increasing to **high** over stages 3 to 18.

ESE will be rehabilitated to replicate the existing native ecosystems as far as practicable while taking into account the final engineered landform. The dominant vegetation types will be tall forest and beech forest interspersed with smaller areas of dominated shrubland, limited flax dominated shrubland and areas of pākihi. Rock highwalls will remain exposed until the vegetated platforms establish and water infrastructure will remain in situ for treatment purposes post mining. The borrow pit will be retained as a lake partly surrounded by a highwall and the balance as shrubland. Although streams will be recreated and will discharge to the same water catchments, they will not be visible from these viewpoints.

At closure, for those familiar with the Denniston Plateau pre-ESE mining, from Viewpoints 15b and 16 adverse effects will be **high** with the changes to the landform and vegetation prominently visible, especially during vegetation establishment and in relation to the removal / absence of rock pavement and outcrops and skyline changes. Mt Rochfort will remain an orientating feature in the view. Once the revegetation is established and variation in species heights, diversity and response to microclimates occurs the outcome will appear increasingly natural in character. The VS indicate that between closure and 25 years adverse effects will reduce from **low** to **very low** eventually achieving a natural character at 50 years post closure.

Viewpoint 15 Cumulative Effects

From Viewpoint 15 cumulative effects will occur in succession i.e., a viewer will need to turn their head to see one or the other. Although the topography obscures an expansive view to ESE nevertheless visual effects will be **high** over some stages during LOM and at mine closure, while MFS over stages 4 – 9 will be **high** and post mine closure **low to very low.** Overall cumulative effects will be between **moderate-high** to **high** depending on staging during LOM due to the scale of effects and at mine closure will be reduced to **moderate** by the rehabilitation, the 4.2km distance separation where the landscape appears modified and inhabited and where Mt Rochfort remains as a prominent feature of the Denniston Plateau.

Viewpoint 17a Whareatea Trig Track looking northeast towards MFS at a distance of approximately 2.8 km.

Refer GA, Page 23. Refer VS, Pages 76 - 90

Viewpoint 17b. Whareatea Trig Track, and looking southwest towards ESE at a distance of approximately 1.21 km.

Refer GA, Page 23. Refer VS, Pages 91 - 105

Viewpoints 17a and 17b are located approximately 1.8 km beyond the Denniston village and historic area at a localised high point where a trigpoint was historically located. The trigpoint is part of the recreational track experiences offered on Denniston Plateau. As mentioned above, the Recreation and Tourism Assessment[105] states that 90% of visitors to the Denniston Brakehead and museum do not venture far beyond the main access points although these visitor numbers may increase with interest in the mining activity if close views are available.

From the trigpoint the view is expansive in all directions and includes the Mt William summit to the northeast, extending southwest to the high point of Mt Rochfort across a foreground of undulating terrain comprising low level diverse native vegetation on the spurs, taller vegetation in the dips and gully's, the occasional rock outcrop, areas of sandstone pavement, and several water reservoirs / ponds. Various elements are present that indicate habitation and / or mining including the quarry, power poles and pylons, roading network, and in the distance the cut exposed faces of the northern extent of the existing Escarpment Mine, and transmission tower at Mt Rochfort. Part of the 360 degree panorama includes glimpses to the Denniston settlement to the north. Overall amenity is moderate-high.

Viewpoint 17a - MFS

The view panorama towards the Stockton Plateau looks directly north from the elevated Trig Tack location on the Denniston Plateau from the Denniston village across the Waimangaroa River gorge to Mt Frederick, where the south tilt of the plateau is appreciated above the densely forested steep gully slopes. Overlapping mountain ranges are distantly visible beyond the dished Waimangaroa River valley. The southernmost extent of the existing Stockton Mine activity is visible below Mt Frederick as a lighter exposed earth colour with some engineered slopes visible however, the scene is dominated by the natural characteristics of the vegetation and landform and general scale of the landscape.

The degree of amenity is very high conveyed by the natural character, legibility of the landforms, and scenic outlook with a high degree of visual coherence.

[105] Rob Greenaway & Associates (2025) Recreation and Tourism Assessment. 4.Consultation Findings

While the entire spread of the MFS mine workings will be obscured (due to the relative elevation, foreshortening and view aspect) the proposed MFS mine will be visible including the coal load out area adjoining the Waimangaroa River and parts of the haul road as it snakes up the plateau to the proposed dumps and pits where extraction will be visible from Stage -1 to Stage 2 although the Waimangaroa River gorge ridgeline obscures the full extent of the initial disturbance areas. The built infrastructure on MFS will potentially visible but due to the recessive cladding colours at a distance of over 2.8km, and in comparison to the scale of the receiving environment visual effects will be negligible.

At Stage 6 the full extent of the disturbance area will be visible along the edge of the Waimangaroa River valley ridgeline with removal of the edge landform and forest trees at a distance of 2.8 km. However, from this viewpoint perspective the intrusion into the ridgeline is not apparent, despite being the most visible and obvious part of the disturbance on MFS from this viewpoint except for partial glimpses of the highwalls on the eastern extent of MFS over stages 12 – 13 and post mine closure.

While parts of the subsequent disturbance stages may be visible, they are mostly obscured by the topography and construction of the following ELFs as the disturbance areas move east. The disturbance areas in stages 1 - 6 will be rehabilitated sequentially with Stage 6 rehabilitated at Stage 9. This means that visual effects will increasingly reduce up to and after Stage 9.

While there will be lighting effects particularly glare from the mobile lighting at the working pit faces and associated with moving vehicles over stages 4 - 6 it is unlikely viewers will experience these from the Trig Track after daylight hours although Denniston residents will be aware of moving lights over the night hours**.**

Overall, adverse visual effects on landscape values (natural character and Waimangaroa River gorge ridgeline, removal of forest etc) will be **very high** during the LOM particularly up to 4 – 6, reducing with rehabilitation up to Stage 9. In the short term, post mine closure and rehabilitation adverse effects will reduce to **low** (residual landform and vegetation rehabilitation with removal of lighting effects and haul truck activity) and medium term will reduce to **very low to no**. This conclusion is reached because the landform changes and details will not be readily appreciated from this viewpoint.

Viewpoint 17b - ESE

The closest ESE mine workings will be at a distance of between 1.2 – 2.3 km from Viewpoint 17b. Components of the proposed ESE Mine

that will be prominently visible include the Central and Sullivan ELFs, the proposed VDT stockpile area, and the building infrastructure including the mine security gate on the skyline to the west. The larger buildings contained within the central infrastructure area and coal load out area will be distantly visible and difficult to distinguish in this context. Road widening is proposed to the gravel section of Whareatea Mine Road, to accommodate mining activities (visible to west).

The bulk of the mine activity visible will occur over the southern part of the ESE disturbance area, south of the Whareatea River gorge. The topography generally rises across the plateau but mine workings will be partly screened by the Sullivan ELF in the midground of the view. Due to the rising topography, the headwalls / stepped highwalls of the pits will be visible from stage 2 through to the final stage in various locations but most prevalent and obvious in stage 6. The highwalls will reduce in prominence as the Sullivan ELF and Central ELF rise in height providing screening to internal mine activity during rehabilitation over stages 1 - 8.

Lighting will be fixed to the ESE Mine gate, building infrastructure and the coal loadout area. Mobile lighting is proposed at active pit faces and will be associated with moving vehicles, which will be increasingly obscured in the later stages as the ELFs are constructed and rise in height.

The close proximity to and elevated overview of ESE from Viewpoint 17b will afford **very high** adverse effects on visual amenity experienced from the Trig Track during LOM, although likely less frequented than viewpoints 14 – 16 and generally during daylight hours.

By Stage 2 the Escarpment Mine pits will disappear from view as the Central Elf is constructed and stepped highwalls will form as excavation occurs at the edge of the Whareatea River gorge. Over stages 6 through to 14 the extraction activity moves west over Conglomerate Stream. Stepped highwalls remain around the northwest extension.

As described above, ESE will be rehabilitated to replicate the existing native ecosystems as far as practicable while taking into account the final engineered landform. The dominant vegetation types will be tall forest and beech forest interspersed with smaller areas of dominated shrubland, limited flax dominated shrubland and areas of pākihi. Rock highwalls will remain exposed in the short and medium term although planting will occur on the platform steps and overtime will reduce the stepped appearance. The water infrastructure will remain for treatment purposes post mining.

The borrow pit will be retained as a lake partly surrounded by a highwall and the balance as shrubland. Although not visible from Viewpoint 17b, the borrow pit lake will be an engineered feature surrounded in part by stepped highwalls, it will also provide some naturalness and the presence of water will contribute positively to the overall visual experience within the plateau as demonstrated by other various existing water reservoirs on the plateau. The streams will be recreated and will discharge to the same water catchments, but they will not be visible from these viewpoints.

Post mine closure some buildings will be decommissioned but it is likely that the mine gate infrastructure will remain in place until rehabilitation activity has progressed. Mining activity will however cease and extensive areas of rehabilitation will be evident over ELFs.

At mine closure effects will be **moderate – high** due to the massive scale of the workings and presence of stepped highwalls visible in the midground view.

In the short term, for those familiar with the Denniston Plateau pre-ESE mining, from Viewpoint 17b the changes to the landform and vegetation will be obvious, especially during establishment and in relation to the removal / absence of rock pavement and outcrops. At mine closure (stage 18) the stage 1 and 2 rehabilitation vegetation will have been established for approximately 14 years and close to 50 - 60% cover, with the balance Central ELF rehabilitation occurring between stages 6 – 9 with vegetation establishing over 0 – 12 years.

Once the revegetation is established and variation in species heights, diversity and response to microclimates occurs the outcome will appear increasingly natural in character. The forest vegetation will increase replacing the existing patchy rock pavement areas, and in the long term will merge with the forested Mt William backdrop. As illustrated by the VS, post closure plus 25 years adverse effects will reduce to **low** reducing further by 50 years post closure to **no** effect.

Two areas of pest free enclosures are proposed north and east of ESE and referred to as North Denniston enclosing 47.3ha and Coalbrookdale enclosing 154.3ha including part of the Coalbrookdale Walk. The fencing will be at least 2.0m in height, with timber posts at 2m centres, stainless steel mesh and a stainless-steel top cap. Although pest free enclosures will be visible in the wider panorama only the Coalbrookdale pest free enclosure will be partly visible from Viewpoint 17b.

Given the level of existing infrastructure over the plateau such as power lines, pylons roading etc, the recessive nature of the fencing

and understanding of its function, visual effects on landscape values arising from the pest exclusion areas are likely to be **very low**.

Viewpoint 17 *Cumulative Effects*

Viewers (mostly mountain bikers / trail bikers and walkers in daytime) will obtain views to both ESE and MFS in succession i.e., viewers will not see both MFS and ESE in the same view direction but will need to turn their heads to see one or the other from a localised highpoint.

Successive cumulative effects will be **very high**, experienced as a result of the visibility of ESE and MFS from the Trig Track highpoint (Viewpoint 17) during LOM, albeit to varying degrees as extraction activity unfolds. At the peak of extraction activity between stages 2 - 6 the mine areas will appear to be spread across the distant - midground of a continuous panorama and more distantly at ESE as extraction activity moves west over Conglomerate Stream.

Between stages 2 - 6 extraction effects including the widespread, massive scale of earthworks, landform alteration, removal of vegetation, high levels of activity from machinery will appear most obvious in both mine areas irrespective of the physical separation between the mines (approximately 3.7km between ESE to MFS).

The dramatic landform changes arising from ESE will be evident resulting in a forested ELF and stepped highwalls. Changes arising from MFS will be less evident due to the view perspective. Despite the vast scale of the receiving environment and context of a modified Denniston Plateau cumulative effects on landscape values will relate to enduring changes to the physical landscape, reduced natural character, legibility, a scenic outlook, aesthetic coherence, the erosion of transient values (quiet, tranquillity, close to nature), with adverse effects on recreation and conservation.

As rehabilitation occurs and establishes during LOM visible effects will reduce to a degree although stepped highwalls will be prominently visible and activity levels will still remain high. At COM cumulative effects will reduce to **moderate** when the physical dynamic activity ceases, infrastructure is removed, and rehabilitation is completed due to the proximity, massive scale of the workings and stepped highwalls visible but will increasingly reduce further as rehabilitation continues to establish and engineered landforms soften.

Viewpoint 18a. Myra's Track, summit of Mt William, looking northeast towards ESE at a distance of approximately 3.7.

Refer GA, Page 24. Refer VS, Pages 106 – 120.

Viewpoint 18b. Myra's Track, summit of Mt William, looking north towards MFS at a distance of approximately 2.1 km.

Refer GA, Page 24. Refer VS, Pages 121 – 135.

Viewpoints 18a and 18b are located at the summit of Mt. William (1062 masl), where Myra's Track emerges from the native forest below. Viewpoint 18a faces northwest towards the upper southern half of the Denniston Plateau and part of the proposed ESE Mine at a distance of approximately 3.7 km. Viewpoint 18b is facing towards the south tilting section of the Stockton Plateau and the proposed MFS Mine at a distance of 2.1 km.

Myra's Track starts at Burnetts Face Road opposite the Coalbrookdale Walk and winds across the plateau and Cedar Creek Road, up the lower slopes through dense forest vegetation until emerging into the alpine zone to traverse the ridgeline to the Mt William summit. There is an option to continue the circuit along the Mt William Range and Cedar Creek Saddle back down to Cedar Creek Road. This track is identified on the Topo 50 maps and is relatively popular according to Strava heatmaps[106].

In fine weather, the summit of Mt. William and ridgeline afford extensive views across both the Denniston and Stockton plateaux, the steep ridgeline of the Waimangaroa River gorge at the plateaux edges and down to the coastline. The full extent of the view panorama encompasses Kahurangi National Park, the Lyell Range, the Nelson Lakes National Park, the Buller River, Brunner and Victoria Ranges. To the south the view panorama includes Buckland Peaks, the Paparoa Range and Mt Rochfort.

The view illustrates the relationship between the massive scale landforms expressive of their processes of formation. In the foreground the Mt William range, summit and ridgeline are characterised by gently sloping sandstone pavement, rock outcrops and bluffs interspersed with low growing native alpine species with taller forest species in the gullies and extending below the timber line over the lower slopes to the plateaux. From this viewpoint, the Denniston and Stockton plateaux are distinctive plateau illustrating the uplift and geological origins separated by the steep forested slopes eroded by the Waimangaroa River gorge.

The Denniston Plateau is dissected by a network of access tracks including Burnetts Face Road and Cedar Creek Road, and transmission lines. The access road to the orientating feature of Mt Rochfort is visible snaking its way up the plateau to the highpoint and

[106] Rob Greenaway & Associates (2025) Recreation and Tourism Assessment. 3.1.2

communications tower visible at the peak. The occasional water body, the quarry, and the Denniston village are also visible towards the northeast edge of the plateau. The existing Escarpment Mine is not visible from this viewpoint being hidden by the flanks of Mt William. Visual amenity is moderate-high to high mainly derived from the overall scale of the Denniston Plateau landform and associative attributes (recreation, tourism and mining) albeit reduced by evidence of modification.

The viewpoint extends to include the southern end of the Stockton Plateau and the upper Waimangaroa River valley, which appear relatively unmodified except the transmission line pylons and Cedar Creek Road. Evidence of historic mining is not distinguishable although the Cypress Mine is and will be increasingly visible in the distance. The full extent of Stockton Mine is not visible except for the area immediately below the summit of Mt Frederick.

The Stockton Plateau affords an extensive tilted surface interspersed with sandstone pavement and low growing native species deeply dissected by a network of water courses. The elevated views across the Plateaux and beyond to the ocean in the background affords users of Myra's Track and Mt William circuit a very high visual amenity also contributed by the dominant presence of natural features with a high natural character and legibility. Overall, the sheer scale of the landscape and distinctive landforms afford a highly memorable experience from Viewpoint 18.

Viewpoint 18a - ESE

The visual simulation at Viewpoint 18a shows that the ESE will be visible on either side of the deeply incised Whareatea River. The mine gate and buildings, the borrow pit area, the Sullivan ELF, and the central infrastructure area will be visible north of the Whareatea Gorge. The buildings both at the gate house and within the central infrastructure area will be visually unobtrusive due to vast scale of the plateau landform, recessive earth coloured cladding to blend into the plateau colours and in the context of built structures over the plateau.

The main pit working including the Central ELF (rehabilitated as a forested hill) will be south of the Whareatea Gorge. There will be fixed lighting on the buildings in the central and mine gate infrastructure areas and mobile lighting at active pit faces and associated with moving vehicles within the ESE disturbance areas and along the UWHR.

The UWHR will extend from the ESE loadout area partly coinciding with the existing Cypress Mine haul road before intersecting with the

existing Cedar Creek Road east of Burnetts Face. The UWHR will include widening the existing roads but will avoid the Coalbrookdale Walk and will cut across the lower section of Myra's Track and avoid Burnetts Face car park. The UWHR will be intermittently visible as a widened version of the existing Cedar Creek Road.

There will be two areas enclosed by pest free enclosures on Denniston. Of these the Coalbrookdale Enclosure will form an extensive 154.3ha pest free area encompassing the undulating topography, rock pavement and vegetated gullies immediately east of ESE mostly following existing tracks or road infrastructure and the North Denniston Enclosure will form a 47.3ha pest free area north of ESE. The pest free enclosure fencing will be indiscernible except where the enclosure fencing abuts the Whareatea Mine Road and / or tracks on the plateau. The pest free enclosure fencing will cross the Coalbrookdale Walk (and bike track) at the midpoint of the walk, where access will be provided. Overall, visual effects afforded by the pest free enclosures will be **no - very low** based on the visibility of existing power poles, the low reflectance value, visual permeability of the fence structure and the viewing distances.

The UWHR is less likely to generate adverse visual effects given that it is partly an existing road, albeit extended and widened and public access will be managed to maintain access to Myras Track and the Mackley Track. During the LOM the haul road activity will also be noticeable and noisy to those in its proximity including from a short section the Coalbrookdale Walk and Myras Track and from the summit viewpoint.

Post mine closure, mine traffic between ESE, MFS and Stockton along the UWHR will cease. The UWHR will be rehabilitated by narrowing the road corridor and reinstating vegetation along the roadsides. The road will remain for rehabilitation maintenance purposes only.

The ESE Mine workings will be staged and appear as a patchwork of different surfaces as extraction and rehabilitation occur sequentially and in stages over at least ½ - 1/3 of the plateau. From approximately a 2-300m section of Myras Track ESE activity will be briefly seen in the distance before views from the track are obscured by the densely forested slopes below Mt William.

During stages 1 to 2 the disturbance area will extend over both sides of the Whareatea River gorge with stepped highwalls visible as excavation occurs over the Central ELF pit area. The Sullivan ELF area is also disturbed for stockpiles. The widened Whareatea Mine Road and mine gate buildings will be visible in the distance collocated

with existing power pylons close to the land-sea interface. The UWHR will be visible and overlooked in the valley foreground.

Up to and including Stage 6, the stepped pit highwalls will encroach into the Whareatea River gorge, and also up to the ridgeline and ONL 41 boundary to Cascade Creek. Viewpoint 18a doesn't capture the full extent of the southernmost stages 8 – 13 that extend along the ridgeline boundary. However, the VSs show the later stages of ESE that extend across Conglomerate Stream at the northwest boundary of ESE disturbance area as a series of highwalls. The VSs show the Central ELF rehabilitation at Stage 6 although in reality this begins (out of view) at Stage 1. Throughout subsequent stages the Central ELF is progressively constructed with rehabilitation planting occurring east – west. At mine closure the Sullivan ELF and Central ELF will be prominent landforms with forest vegetation in various stages of establishment. Stepped highwalls will be visible at the edge of the Whareatea River and along the periphery of stages 10 – 12 to the south and western extents of ESE sub-area.

ESE will be rehabilitated to replicate the existing native ecosystems as far as practicable and taking into account the final engineered landform. Tall forest and beech forest will form the main vegetation types over the Central and Sullivan ELFs with tarn / wetland areas on the flat hill tops and localised depressions / streams interspersed with manuka dominated shrubland and pākihi. Streams will be reinstated / recreated and will discharge into the same water catchment areas. Rockfield rehabilitation will occur on the pit floors. Highwalls will remain exposed in the medium term as the vegetation on the highwall treads / platforms establishes and achieves some height to soften the cut step / riser faces. The water infrastructure will remain for treatment purposes post mining. The borrow pit will be retained as a lake partly surrounded by a highwall and the balance as shrubland but will not be visible from Viewpoint 18.

Overall, given the scale of the Project over the Denniston Plateau ESE will generate **very high** adverse effects on visual amenity over the LOM experienced from the upper sections of Myra's Track and Mt William, although this may vary depending on viewers' attitudes to and interest in mining. Effects from lighting will be improbable because the track is unlikely to be used by viewer's during the hours of darkness.

At mine closure, the built infrastructure, lighting etc will be removed, and the complexity and subtleties of the topography will be replaced with engineered slopes / evenly graded slopes and / or stepped highwalls. As the revegetation establishes and variation in species heights, diversity and response to microclimates occurs, the outcome will appear increasingly natural in character with subtle responses to

natural processes of erosion, slope aspect etc presenting. In the short term, 10 years post mine closure and rehabilitation, for those familiar with the plateau pre-ESE mining, the change in landform and vegetation will be obvious, especially relating to the removal / absence of rock pavement and outcrops. Overall, in the medium to long-term post rehabilitation as shown by the VS, the visual effects will reduce to **low – very low**.

Viewpoint 18b – MFS

From Viewpoint 18b, the UWHR will be intermittently visible winding north up the Waimangaroa River valley to the existing Cypress Mine approximately 8km away.

On the Stockton Plateau, the MFS lower coal load out / transfer pad will be partly visible and screened by the Mt William foreground slopes with the haul road extending up to the bridge across Deep Creek. Thereafter the disturbance areas will extend up the flanks of Mt Frederick north of Deep Stream. The main mine pits will be between 660 masl up to 900 masl and will lie either side of Billo Stream. The extraction of the West Pits will start at the southern end of MFS over stages -1 – 6 and will move north, crossing over Billo Stream to the east during stages 6 – 13.

A small area of infrastructure will be located midway at c. 740 masl immediately south of West Pit area and also at the base coal loadout area to include portacoms containing offices, toilets and WTP etc. These buildings will be lit with fixed lighting. In general, the buildings will be visually unobtrusive due to vast scale of the plateau landform, small size structure, and recessive earth coloured cladding to blend into the plateau colours.

Mobile lighting will occur at working pit faces and will be associated with moving vehicles along the haul road and the UWHR during the nighttime hours of darkness.

The water treatment areas will be located along the western edge of the disturbance area and alongside the coal load out area at the base of the slope adjacent the Waimangaroa River.

The MFS disturbance areas will not be visible from Myras Track as it ascends to the summit of Mt William, due to forest vegetation and topography. However, the low stature alpine vegetation and the elevated view from the summit allows the full extent of MFS to be visible. The MFS Mine workings will be staged and appear as a patchwork of different surfaces as extraction and rehabilitation occur sequentially and in stages over the southern part of the Stockton Plateau. The construction of the UWHR and haul road activity will

also be evident although screened in part by the lower slopes of Mt William and the topography of the valley. The UWHR will also be physically separated by the elevation of the summit at 1062masl, over 400 m above the UWHR. Effects from lighting will be improbable because the track is unlikely to be used by viewer's during the hours of darkness.

Up to Stage 2 disturbance will occur over the lower half of the southern pits and the haul road will be visible tracking up to the Stage 6 disturbance area. Between stages 4 - 6 excavation will occur along the Waimangaroa River gorge ridgeline although from this view angle the intrusion doesn't appear to be a significant encroachment into the valley slopes but confined to the plateau itself. However, from this viewpoint angle the extraction works appear on the horizon at stages 5 - 6 but rehabilitated by Stage 9. Rehabilitation of the earlier stages on the western flank of MFS will simultaneously be underway, with the bulk of the West Pits (excluding WTP) rehabilitated by Stage 9, as extraction stages 6 – 13 shift to the northeast of Billo Stream. The latter stages of MFS extraction (stages 9 – 13) over the East Pits will face towards the Mt William summit view and be highly visible over this time period resulting in stepped highwalls and extensive areas of rockfield rehabilitation and water infrastructure at the southern periphery. Refer GA, pages 48 and 50, VS, pages 121 - 135.

At mine closure / Stage 15 the rehabilitation of both landform and revegetation of the MFS disturbance area will be complete. Some of the vegetation rehabilitation will have occurred from stage 2 with vegetation growth over 13 years or so achieving 20 – 30% coverage over the bulk of the West Pits. The forest vegetation type rehabilitation of the West Pits will merge overtime with the Waimangaroa River gorge forest. Stepped highwalls will be visible around the East Pit periphery of stages 10 – 12 for some time post mine closure.

The UWHR is less likely to generate adverse visual effects given that it is partly an existing road, albeit extended and widened and public access will be managed to maintain access to Myras Track and the Mackley Track. During the LOM vehicle movements will likely be noticeable and noisy to those in its proximity including from the summit viewpoint.

Post mine closure, mine traffic between MFS and Stockton along the UWHR will cease. The UWHR will be rehabilitated by narrowing the road corridor and reinstating vegetation along the roadsides. The road will remain for rehabilitation maintenance purposes only.

Over the LOM, given the scale of the Project over the plateau MFS will generate **very high** adverse effects on visual amenity experienced

from the upper sections of Myra's Track and Mt William. The view of MFS will change from the complex topography and open character of rock pavement and stunted vegetation to pits, engineered slopes including stepped high walls and coal floor. The adverse effects on visual amenity will however be experienced as separate to / spatially removed from Mt William, i.e. unlikely to overwhelm the viewer to the extent that it detracts from the overall experience of Mt William and Myra's Track and the sweeping panorama that forms the wider view.

At mine closure and in the short term[107] adverse visual effects on landscape values will still be **very high.** For those viewers familiar with this area of the Stockton Plateau pre-MFS mining, the change in the subtle complexities of landform and vegetation will be evident, especially relating to the removal / absence of rock pavement and outcrops. The reduced visual cohesion, and adverse effects on legibility and natural character will be obvious. It is however noted that the MFS disturbance area avoids the highly natural features including Billo tarn, Billo Stream and Deep Creek with mining restricted to the plateau areas either side of these deeply incised gorges.

Once the revegetation is established and variation in species heights and response to microclimates occurs the outcome will increasingly appear natural in character.

Overall, in the medium[108] to long-term[109] post rehabilitation, the visual effects arising from MFS at Viewpoint 18b will reduce to **low – very low**.

Viewpoint 18 Cumulative Effects

The Mt William summit is part of the Cedar Creek Saddle Loop track or Myras Track. The values are primarily afforded by the summit setting with impressive rock formations amidst alpine / tussock grassland from where trampers and trail runners can experience 360-degree views over the distant West Coast, Westport, Tasman Sea and surrounding mountain ranges including Buckland Peaks and the Paparoa Range to the south and William Range to the north. In the view midground both the Denniston and southern half of the Stockton plateaux landforms are best appreciated. Mt Rochfort provides an identifiable feature at the top of the Denniston Plateau with a network of roads and pylons and the Denniston settlement conveying a modified landscape. Mt Frederick on Stockton Plateau is less

[107] Short term defined as 10 years post mine closure and rehabilitation

[108] Medium term defined as 10 – 50 years post mine closure and rehabilitation

[109] Long term defined as 50 years plus post mine closure and rehabilitation

prominent but nevertheless the high point of the highly natural south tilting plateau tableland adjoining the steeply incised Waimangaroa River gorge with rocky bluffs at the head of the gorge.

Successive cumulative effects will be **very high**, experienced as a result of the visibility of ESE and MFS and Cypress Mine areas from the Mt William summit (Viewpoint 18) during LOM, albeit to varying degrees as extraction activity unfolds. At the peak of extraction activity, the mine areas will appear to be spread across the midground of a continuous panorama conveying a change in character.

Between stages 2 - 8 extraction effects including the wide spread massive scale of earthworks, landform alteration, removal of vegetation, high levels of activity from machinery and haul trucks along the UWHR will appear most obvious in all three mine areas irrespective of the physical separation between the mines (approximately 3.7km between ESE to MFS and 4.1km between MFS to Cypress). Despite the vast scale of the receiving environment and context of a modified Denniston Plateau cumulative effects on landscape values will relate to enduring changes to the physical landscape, reduced natural character, legibility, a scenic outlook, aesthetic coherence, the erosion of transient values (quiet, tranquillity, close to nature), with adverse effects on recreation and conservation. Of note is that the degree of cumulative effects experienced from Mt William will relate to the numbers of viewers, the sensitivity and attitude of the viewing audience towards the landscape and mining. Opinions on coal mining are polarised ranging from some people accepting coal mining as an economic necessity and for energy security, while others are anti-coal mining for environmental and health reasons. These opinions will directly relate to the degree of cumulative effects on landscape values.

As rehabilitation occurs and establishes during LOM visible effects will reduce to a degree although stepped highwalls will be prominently visible and activity levels will still remain high. At COM cumulative effects will reduce to **low** when the physical dynamic activity ceases, infrastructure is removed, and rehabilitation is completed and increasingly reduce further as rehabilitation continues to establish.

Viewpoint 19. 408 Calliope Street (intersection with Franklin St), Millerton, looking south towards Stockton at a distance of 950 m. Refer GA, Page 25.

Viewpoint 19 is located on Calliope Street in the small settlement of Millerton at the intersection with Franklin Street and represents a brief unobstructed view south towards Stockton Mine at a distance of 950 m to the nearest proposed Stockton Extension.

Millerton is located midway on the north facing slopes below the Stockton Plateau. The topography is undulating, and dwellings nestled within the slopes surrounded by dense vegetation, so views tend to be restricted. Millerton is an historic mining town and is home to a small resident population. With an estimated 251 vehicle movements per day[110] Millerton provides access to the historic Millerton Bathhouse, various short walks in around the township to historic sites and scenic views. Access to these areas will not be affected by the proposed Stockton Extension.

The small-scale historic settlement has a high visual amenity with the backdrop of Mt. Stockton overlooking the settlement.

The S extension will be visible in part on the skyline, but the extent of visual effects during LOM will be **very low** removing discrete, small areas of vegetated slopes reducing to **no** in the short term post mine closure and rehabilitation.

7.3 Summary of Visual Effects on Landscape Values

Appendix A, Table 1 summarises the visual effects on landscape values from representative viewpoints.

The effects assessment sets out adverse visual effects during the LOM at key stages (stages 2/3 and 6/8), at mine closure, and post mine closure and rehabilitation in the medium and long term being up to 50 years. Effects will continue to decrease past mine closure as vegetation continues to establish and natural processes of colonisation dominate, and weathering softens and blurs engineered slopes and stepped high walls.

The Broad-Scale assessment illustrates the changing aspects and effects of the Project from over 55km of the SH and local roads noting that the majority of viewers will experience the landscape while moving at speeds of up to 100km/hr along the coastal highway. The Project-Scale assessment illustrates the effects of the Project from viewpoints in proximity and from where public access will be maintained, managed or restricted.

Of note is that effects on landscape values are likely to be experienced differently by viewers depending on their attitudes to mining, conservation and connection to the Project Area landscapes.

The starting point is the landscape values identified at both the Broad-Scale and Project-Scale.

[110] https://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=95fad5204ad243c39d84c37701f614b0

The Broad-Scale Values are summarised as:

Physical: ONL and coastal context, large scale landforms including river gorges with orientating features / peaks, rocky bluffs and outcrops as distinctive landmarks, contiguous indigenous forest cover, conservation land setting.

Perceptual: High naturalness, legibility, visually coherent, dramatic scenes, appreciation of dynamic processes at play, distinctive and memorable scenes, beautiful, sense of place and proximity to nature / natural elements.

Associative: SASM, inseparable connections between maunga (mountains) whenua (land), waterways and people, a culture of mining, West Coast identity and culture, conservation, recreational and tourism values.

The Project-Scale Values are summarised as:

Physical: Distinctive, unique and recognisable plateaux landforms, valley landforms, coal measures geology and stunted landcover including rock pavement, deeply incised streams, contiguous native forest cover, wetland vegetation types, bird, snail and lizard habitats.

Perceptual: High natural character, high legibility, an austere aesthetic, high visual coherence, open character, remote, memorable, sense of place, wild, remote, transient qualities relating to highly changeable weather conditions.

Associative: High values relating to tourism, recreation, mining heritage, cultural values relating to ridgelines and skylines, mountains, taonga species, mauri of water, sense of identity, and conservation ethics.

The differences in visual effects on landscape values are derived from the viewpoint distance, view orientation, elevation / overview, scale of landscape, context of landscape, cultural perspectives and experience that a viewer is engaged in at the time of viewing. Of note and excluded from consideration as part of the visual assessment is the inclement weather and low light conditions that are a characteristic of the locality and occur regularly to severely reduce visual effects

From the Broad-Scale viewpoints during LOM visual effects on landscape values range between **no to low**, reducing to **no** visual effects post mine closure.

From the Project-Scale viewpoints during LOM visual effects on landscape values range between **moderate-high** to **very high**.

Over the short-term visual effects range between moderate-high to **very high**.

Over the medium term, visual effects range between **low – moderate** to **low**.

In the long term the visual effects will range from **low** to **very low** and **no**. In other words, visual effects will be negligible or visible only to those with knowledge and familiarity with a post mining landscape.

7.4 Landscape Effects Assessment

The following effects on landscape values and character are assessed in relation to the separate Project sub-areas during the LOM and immediately post mining up to 10 years (short term), at medium term 10 – 50 years, and long term at 50 plus years post mining, taking into account landform rehabilitation and the establishment of vegetation rehabilitation, the proposed vegetation types and time frames set out above and according to the EcoLogical (2025) Solutions recommendations. The effects on landscape values experienced visually are partly informed by the visual assessment above at both the Broad-Scale and Project-Scale viewpoints and illustrated by the VSs from key viewpoints.

The primary landscape effects arising across all project sub-areas will arise from the irreversible and major physical modifications to landform including the removal of rock pavement, boulder fields and rock outcrops, changes to hydrology including removal of incised creeks, streams and encroachment into major river gorges, removal of native vegetation, habitats, reduced biodiversity and fauna, loss of heritage features, loss of recreational opportunities, the visual impact and noise of large scale industrial activity and lighting in an otherwise dark setting.

The resulting landscape effects will be removal of natural patterns of the complex and subtle topography, hydrology, water quality, and vegetation including biodiversity, habitats and fauna. The landform will change to ELFs with even slopes, regularly stepped highwalls including changes to skylines and ridgelines. Altered hydrology will relate to altered landforms. The replacement of diverse and subtle vegetation with broad vegetation types comprising a high component of pioneer species, initial patches of bare soil until canopy closure, removal of the plateau rock pavement surface, presence of pits, and water treatment ponds. Many of these effects will be temporary / reversible overtime aided by natural processes of weathering and erosion driven by the high rainfall, low fertility, elevation and coastal context.

Effects on landscape values will include perceptual dimensions including reduced natural character, reduced legibility, reduced visual cohesion, memorability, uniqueness, and associative dimensions relating to cultural, heritage, recreation, conservation and identity. Adverse effects on the austere aesthetic and a sense of remoteness are likely to be temporary during LOM and regenerate in the medium to long term post mine closure. The transient qualities of the plateaux derived from the dramatic and rapid changes in weather on the elevated and exposed plateaux will remain.

Cultural concerns have been identified in the Cultural Impact Assessment, which acknowledges that Bathurst have addressed many of the issues and Ngati Waewae considers that, provided the proposed mitigation and compensation package is implemented as intended and recommendations accepted, the project can be supported.

The Project staging underlies the assessment of effects on landscape values. In essence the temporal dimension of the Project includes initial disturbance, sequential extraction, rehabilitation sequence, final landforms and long-term ecological recovery. Timeframes for vegetation establishment and canopy closure are set out in the Project Description for rehabilitation. These are key drivers in understanding how the landscape values will be affected over the LOM and post mine closure. Of relevance to the Project is the baseline context, that recognises the plateaux as highly modified landscapes shaped by a long history of extractive use.

The least sensitive receptors will be those who experience the Project at a Broad-scale travelling along SH67 and other local roads or from coastal settlements. This group will include mine employees and associated contractors.

The most sensitive receptors will be those who experience the Project at a Project-scale such as Denniston and Millerton residents, conservationists,111111111 recreational users and tourists to the Denniston Brakehead heritage area.

7.4.1 Landscape Effects Assessment - Stockton Extension

The Stockton Extension sub-area is an approximately 31 ha[111] extension to the already consented Stockton Mine on the Stockton Plateau and will lie within the existing Mining Licence boundary and land owned by BT Mining Limited. The proposed extension will be within the existing Stockton mining blocks: Rockies North, Hope Lyons, Millerton West and Millerton East.

The Stockton Extension will occur over five stages with the A-Drive Borrow Pit extraction during Stage 1 and the Rockies – Hope Lyons pit extraction over stages 2 – 5, Millerton over stages 2 – 3 and the Millerton East pit at Stage 4. Refer GA, Page 32 showing the disturbance schedule and rehabilitation sequence and Page 34 showing the final landform and revegetation types post mining.

The rehabilitation sequence identifies Millerton will be rehabilitated at Stage 6, Rockies – Hope Lyons, the A-Drive Borrow Pit and the

[111] BPCP. Summary Project Description. January 2026. Table 5-1.

Millerton East pit will be rehabilitated during Stage 8. At end of Year 11 the Stockton mining will be completed and these areas will have had vegetation establishing over 3 – 5 years. It is noted that the Stockton infrastructure will remain in place and active up to Year 16 (a further five years) to process coal extraction from ESE and MFS.

Effects on Stockton Extension Project Sub-Area Physical Values

The coal processing will utilise the existing facilities and main haul roads in place at the Stockton Mine. The key changes arising from the Stockton Extension will be the alteration to the landform in four discrete areas. These three discrete areas are located on the northern periphery of the existing Stockton Mine workings mostly overlying historic underground mine workings and are referred to, from west – east, as Rockies-Hope Lyons, Millerton and Millerton East pit. The southern most area is referred to as the A-drive Borrow Pit.

Further change will also occur as part of the pest free enclosures at Mt Augustus and Whirlwind Rise, which includes enclosure of proposed A-drive Borrow Pit area, part of rehabilitated Stockton Mine and the balance of an area referred to as Whirlwind Rise.

The Stockton Extension sub-area will encroach into a generally natural, intact 31 ha of vegetation and well-connected habitat at the northern edge of the Stockton Plateau towards Millerton and will expose historic mine workings.

Although there are **very low to no** visual effects experienced from the representative viewpoints, the Stockton Extension mining will change a complex physical landform, vegetation cover and creeks, that relate to perceptual values, notably visual coherence, natural character and legibility and remove parts of historic mine works with heritage value.

The water courses affected will include Twins Stream (above the existing access road to Rockies-Hope Lyons area used for water treatment), an unnamed stream flowing north towards Millerton, and the other unnamed water courses (within the Millerton Catchment) including tributaries to Ford Creek during the LOM.

The proposed Stockton Extension mine areas on the northern periphery will avoid deeply incised cliffs to streams, particularly Miller Stream and the stream confluence and forest patches between the eastern pits.

The proposed A-drive Borrow Pit will avoid impacts on high value habitats and associated species. Other management actions are proposed to avoid, minimise and remedy adverse effects on

ecological values[112] with further mitigation proposed[113] to address effects on historic heritage and archaeological values. See below discussion of effects on associative values.

The final landform of the northern three areas will generally slope north towards Millerton and will comprise a combination of highwalls on the down slope periphery, engineered slopes graded to existing contours and rock pavement areas, typically pit floors.

The watercourses / streams will either form AMD / water treatment areas and / or be recreated post mining, not necessarily in their pre-mining location but feeding into the same water catchments. Any water treatment areas will appear as open water and continue for the long-term post mining, including that resulting from underground historic mining. The streams will be reinstated through landform contouring, and where possible and / or pragmatic introducing a sinuous alignment, accommodating where appropriate, a flood plain, rock substrate, sandy and / or cobble base habitats.

The A-Drive Borrow Pit will be rehabilitated as rock pavement and post rehabilitation will be enclosed as part of the Whirlwind pest free enclosure.

Vegetation types removed during the Stockton Extension mining predominantly consist of southern rāta-mountain beech-podocarp forest, mānuka-mountain beech-podocarp shrubland and mānuka-tussock-wire rush shrubland with the remainder being low pākihi with lesser areas of different types of manuka dominated shrubland, bare rock and cleared vegetation. Around half the Stockton Extension Project sub-area comprises wetland vegetation types.

The proposed rehabilitation vegetation types will include tall forest, beech forest, manuka and flax dominated shrubland, pākihi and rockfield, in addition to rehabilitated highwalls and water treatment areas concentrated at the Rockies – Hope Lyons pits.

[redacted]

[112] Ecological Solutions (November 2025) Ecological Impact Assessment. Table 11

[113] Clough and Associates (October 2025) Archaeological and Historic Heritage Assessment. Part 4 – Stockton.

[114] Medium term is defined as mine closure and rehabilitation at between 10 – 50 years. Long term is defined as mine closure and rehabilitation at 50 plus years.

[redacted].

[redacted].

Providing the EcoLogical Solutions (2025) recommendations (refer above) are adopted or accepted as conditions, then it is considered that landscape effects on biodiversity and habitats (flora and fauna) will be minimised.

The indicative final landform features at Stockton Extension suggest that although the landform will change, some landform complexity will be maintained by rockfield rehabilitation, native ecosystems and the proposed revegetation will include a range of vegetation types. Although the composition of vegetation types will change, the key vegetation types will be represented, and overtime will further diversify with natural colonisation occurring between 6 months and five years.

The Whirlwind Rise pest free enclosure will include the Q-Drive Borrow Pit mined as part of the Stockton Extension sub-area and indicates key mitigation measures undertaken to protect, preserve and enhance areas with high landscape values, such as legibility, natural character, an austere aesthetic, visual cohesion etc. In comparison the balance of the Stockton Mine area will represent a different character illustrating the processes of an extractive industry, albeit one that is transitioning towards rehabilitated post mining landscape.

Further, given the consented scale of Stockton Mine as open pit mining (1328 ha) and that the proposed Stockton Extension Project sub-area extension to the open pit mining is approximately 31 ha at the northern edge of the Stockton Plateau, the scale and consequential effect on physical landscape values arising from the incremental extension to open cast mining post mine closure is considered to be **very low**.

Effects on Stockton Extension Project Sub-Area Perceptual Values

The visual effects assessment determined that although there will be views of the Stockton Extension mining from three viewpoints north of Stockton at a Broad-Scale, visual effects will be mitigated by the distances between 4.16 – 22km and consequently there will be **very low** to **no** adverse effects on visual amenity. At a Project-Scale the extent of visual effects will be limited to glimpses from Millerton with **very low** effects on visual amenity during the LOM, reducing to **no** at mine closure and rehabilitation in the medium term. Due to the

inaccessibility of the Stockton Plateau the experience of the S sub-area is not considered in any detail.

Although effects from mobile lighting will be likely to occur during LOM, they will remain unchanged from the lighting that currently occurs as part of the Stockton Mine extraction activity.

The disturbance areas will be mined over five stages and the staged removal of vegetation and extraction means that naturalness and natural character of the slopes will reduce over the LOM while being sequentially replaced. The staging and sequential nature of rehabilitation will mean that the entire extent of the disturbance area will not occur at any one time and will appear as a discrete mosaic of rehabilitated areas in various stages of establishment, notwithstanding the existing industrial context of mining and rehabilitation of the Stockton Mine as a whole.

The proposed rehabilitation will reinstate six vegetation types plus rockfield, rehabilitated highwall and water infrastructure. As mentioned above the vegetation types will not exactly replicate the naturally occurring diverse mix of species, but which according to the Ecological Solutions reports will develop overtime.

During LOM the modified landform will be evident, particularly the stepped highwalls and vegetation cover patchy and incomplete. At mine closure and post rehabilitation up to 10 years, effects on landscape values will be **low** to **very low**. The stepped landform will be less evident and vegetation cover will have progressed in terms of establishment with DVT established within 10 years.

Post mine closure, in the short to medium term (post rehabilitation planting) canopy cover is likely to be achieved for shrubland areas, and the underlying landform will increasingly appear less engineered assisted by the high rainfall and natural processes of weathering and erosion. Natural processes will also enable colonisation of a more diverse range of species and will continue as a self-sustaining ecosystem. In the short to medium term the effects arising from the Stockton Extension Project sub-area will be **very low** with a return to a high natural character (perceived), with visual cohesion restored, albeit resulting in a different legibility (relating to post opencast mining in the context of the Stockton Mine workings and rehabilitation). The scenic outlook from Millerton in particular, will remain with minimal disruption.

While the transient values pertaining to the dramatically changing weather conditions will be on-going, they will not necessarily be experienced unless public access to Stockton is available post mine closure. Even so the Stockton Extension Project sub-area will only be

accessible for maintenance and not generally accessible to the public. In the long term there will be **no** effects on perceptual values.

Effects on S Project Sub-Area Associative Values

The associative attributes relate mainly to the historic underground mining that has occurred in the vicinity of the proposed Stockton Extension disturbance area and generally considered to be high from a landscape perspective, or of interest, as a scheduled Historic Place or listed under the HNZPTA. The Stockton Extension disturbance area will not be publicly accessible during LOM nor at close of mine and post rehabilitation except for maintenance purposes. There are no recreation values relating to the Stockton Extension Project sub-area.

According to the Archaeological and Historic Heritage and Report[115] the proposed Stockton Extension Project sub-area mining will adversely affect the following heritage sites:

- [redacted]e.
- [redacted]

It is understood that the balance of the Millerton Mine workings will remain intact and there may be potential opportunity for public access from the 500ha Millerton-Stockton Historic Area reserve post mine closure, to access much of the infrastructure of the Millerton Mine including Old Dip and Mine Creek portals, parts of the rope roads, the bathhouse and pack track.

[115] Clough and Associates (October 2025) Archaeological and Historic Heritage Assessment. Part 4 – Stockton

Mines dating to the 20 century are well recorded and understood according to the Archaeological and Historic Heritage Report (Clough and Associates, 2025) and of limited historic significance. Notwithstanding this the visible presence of historical workings and / or surface artefacts are generally of interest to the public and relate to a sense of place and history.

There are no known effects on archaeological or historic heritage sites or features from the proposed Stockton pest free enclosures including the surrounding fencing due to the physical separation of the fencing from these features.

Various recommendations and mitigation measures are proposed[116] and include monitoring, recording, retrieval of items of interest, protection of remaining features and recovery of historical information. Providing these recommendations and mitigation measures are undertaken, overall adverse effects on historic heritage values in relation to the proposed Stockton Extension Project sub-area are likely to be minor – moderate[117] in landscape terms equating to **low** effects on associative values.

7.4.2 Landscape Effects Assessment – MFS

MFS is proposed on the south tilting flanks of Mt Frederick along the edge of the Waimangaroa River gorge. MFS will lie outside the Buller Coalfield Zone and partly within the Mining License Permit boundary over an area of approximately 170ha (217ha including the ecological setback) on land owned by BT Mining Ltd and Conservation land administered by DOC / LINZ. This part of the plateau and the MFS disturbance area adjoin the ONL50 boundary, which tracks along the ridgeline of the Waimangaroa River gorge and coastal hills to the north.

The effects on physical, perceptual and associative values will be determined in part by the mine staging of extraction and rehabilitation. Refer GA, Pages 48 and 50. The visual effects are illustrated by the VS from Project-Scale representative viewpoints 13, 14, 15a, 17a and 18b.

Initially disturbance and extraction will occur over the southern half of the West Pits and the haul road will require cuts into bedrock tracking up to the Stage 6 disturbance area.

From Stage 4, up to and during Stage 8 excavation will occur along the Waimangaroa River gorge ridgeline and to the northwest of Billo Stream. The active pits will be identified by the stepped excavation

[116] Clough and Associates (October 2025) Archaeological and Historic Heritage Assessment. Part 4 – Stockton

[117] Ibid

including the water treatment plant at the western edge of the plateau. Rehabilitation of the earlier stages on the western flank of MFS will simultaneously be underway as extraction moves to the East Pits in stages 6 - 13 with the bulk of the West Pits (excluding WTP) rehabilitated by Stage 9.

At Stage 15 / mine closure the rehabilitation both landform and revegetation of the MFS disturbance area will be complete.

Effects on MFS Project Sub-Area Physical Values

The MFS mining will encroach into a highly natural, intact plateau landform and well-connected habitat. The key changes will be the alteration to the landform, removal of landcover, hydrology, habitats and historic underground mining.

The lower coal transfer pad and water treatment area will lie at approximately 500masl alongside the Waimangaroa River connecting to the UWHR. The MFS haul road will consist of noticeable sections of cut along its 3.3km from the Waimangaroa River / UWHR intersection up to the East – West Pits.

The proposed disturbance will extend from approximately 500masl along the periphery of the plateau to the Waimangaroa River gorge and coastal hill ridges and will remove a high point at 865masl and the elevated plateau areas between 600-700masl for the East and West Pit disturbance areas.

The encroachment into the Waimangaroa River gorge ridge will occur from Stage 4 up to Stage 6. The disturbance appears to intrude into the ONL50 boundary, which is shown at a scale on the DP maps that necessitates some interpretation but is assumed to follow the ridgeline of the Waimangaroa River valley and coastal hills to capture the relevant landscape values. The intrusion will remove mixed podocarp beech forest forming the margin of shrublands and grasslands on the exposed plateau face. The rehabilitation will replace tall forest with beech dominated forest merging into manuka dominated shrublands.

In terms of effect on the ONL, the coastal hill ridge and well-defined valley system will remain intact. Mt Frederick, the Waimangaroa River and the dramatic bluffs that form the headwall of the valley will remain the dominant landscape features. The VSs demonstrate that there will be **no** visual effects arising from the MFS ridgeline intrusion from Viewpoint 4. The encroachment into the Waimangaroa River gorge will potentially be visible from the SH and local roads from viewpoints 5 – 6 where it may be viewed on the skyline at distances between 7 - 8 km. While the disturbance on the ridgeline will potentially affect the physical containment of the river albeit at the head of a tributary

stream it will be a very marginal intrusion. Consequently, the visual effects from the Broad-Scale viewpoints are assessed as **very low** to **no**.

At a Project Scale, the encroachment into the ONL50 boundary will be visible from the publicly accessible and elevated Denniston Plateau viewpoints over stages 4 - 6 with rehabilitation between stages 8 – 9. Effects relating to vegetation removal and landform alteration will occur for approximately 4 years but will not appear as a skyline breach. Post mine closure, rehabilitation forest along the ridgelines will have established for over 6 – 7 years and will reinstate the vegetation pattern relating to the river valley to reinforce the valley / plateau interface, topography and exposure. Although the forest will take some time to establish, given the removal of forest occurs at a transition zone the changes in vegetation patterns will make sense and support the general legibility and naturally occurring vegetation patterns to reduce effects on the ONL values.

The proposed MFS mining will avoid the natural character associated with the Billo tarn at the head of Billo Stream and leave the deeply incised Billo Stream, and Deep Stream water courses intact except where the culverts and bridge across Deep Stream and the culvert across the Billo Stream headwaters are required between the East and West pits.

Five minor tributaries (headwaters) of Deep Stream and the Waimangaroa River will be affected by the proposed disturbance area providing for water infrastructure and ELFs. The five unnamed permanent / intermittent creeks will be recreated post mining, not necessarily in their pre-mining location, but will be directed back into the same water catchments. The streams and / or creeks will be restored through landform contouring.

The landform, including the water courses, stunted vegetation and extensive areas of rock pavement with an exposed open character are the key physical attributes that relate to perceptual values, notably visual coherence, natural character and legibility.

The final landform will generally mimic the existing pre-mining contours as a series of moderately steep hillslopes (18^0) that slope south towards the Waimangaroa River valley. In this regard the general plateau tilt will be reinstated. The key departure to this will be the southern extent of the East Pits, which will feature a large coal floor surrounded by stepped rock highwalls. The highwalls will be up to 50m in height around the exposed coal floor with lower highwalls around other depressions on the East Pit periphery of the disturbance area that will form two water bodies remaining as AMD treatment areas.

As part of the landform, poorly drained ELFs will be created to promote wetland development, meaning that pākihi will be created on high platforms above forested approaches. Further there will be the creation of tarns on gently sloping backs with semi natural hydrologic regimes and suitable (soft moist) substrates. Vegetation in these areas will be pākihi and will become wetland / tarn complexes with frequent inundation of soils, occasional ephemeral pools and small areas of permanent open water[118].

Overall, the post mining landform will result in an engineered uniformity of slopes and a highly modified landform. The removal of the subtle complexities of landform and vegetation will be evident, especially relating to the removal / absence of rock pavement and outcrops. The reduced visual cohesion, and adverse effects on legibility and natural character will be obvious as a result of the physical changes.

Vegetation and landcover types removed during the MFS mining over ~170ha will include forest, shrubland, low vegetation and cleared vegetation associated with previous underground mining activity. Of these the most common vegetation type is approximately 90ha of low pākihi at almost half of the landcover occurring on gently sloping, poorly drained and exposed areas, followed by approximately 38ha of mānuka-mountain beech-podocarp shrubland (up to 3.9m in height. Forest included approximately 34ha of southern rātā-mountain beech-podocarp forest (up to 7.5m in height) mostly in sheltered gullies and sites with isolated areas of silver beech-mountain beech over ~ 5ha at higher elevations.

Other vegetation types were present in smaller areas and sparsely distributed within the Project area. Bare rock, mostly sandstone erosion pavement comprises about 19 ha of the disturbance area with some low prostrate vegetation cover. Approximately 0.1 ha of cleared vegetation was present resulting from historic mining with gorse and juncus also near disturbed areas.

The proposed revegetation / rehabilitation will reinstate the following vegetation types over approximately 170ha comprising:

- 12 ha tall forest (podocarp / kamahi / southern rātā dominated)
- 50.5 ha beech forest
- 25 ha shrub mānuka (mānuka dominated shrubland)
- 2.5 ha shrub flax (mountain flax dominated shrubland)
- 21 ha pākihi

[118] EcoLogical Solutions BPCP Version 1.0. 4.3 Wetlands / Tarns.

- 22 ha rehabilitated highwall
- 12 ha coal floor
- 22 ha open water – lakes, water infrastructure

The key changes to the landscape will be the removal of the patchy areas of rock pavement and reduction in pakihi vegetation type, which afford a distinctive flat, unvegetated, open character, with high legibility and lend an austere aesthetic to the plateau. These will be replaced by a higher proportion of forest and manuka dominated shrublands.

[redacted].

The vegetation rehabilitation over the West Pits will have occurred from Stage 2 up to Stage 9 so at mine closure vegetation will have grown over 6 - 13 years with shrublands achieving 20 – 30% coverage over the bulk of the West pits. The forest vegetation type will merge overtime with the Waimangaroa River gorge and coastal hill forest. Stepped highwalls will be visible around the East Pit periphery from stages 10 – 12 and will remain as highly modified landforms post mine closure with rehabilitation gradually occurring over the medium to long term as vegetation on the platforms establish and natural processes of erosion blur the cut steps.

AMD treatment areas will remain adjacent the coal loadout area in proximity to the Waimangaroa River, on the mid-slopes on the western edge of the plateau at around 730masl and below the East Pits. These will remain in-situ for the long-term post mining. Roading will remain in place post mining for maintenance access, but road widths will be reduced and revegetated either side.

Other high ecological values that require specialist knowledge have been addressed by / through procedures / management strategies that will be in place to appropriately manage adverse effects on Threatened and At-Risk plant and animal species such as the land snails (*Powelliphanta* sp), lizards, birds and invertebrates[119].

The rehabilitation methods and management plans, including weed and pest control, will help ensure that over time the landcover, although altered, develops a self-sustaining and natural-looking character. Despite reductions in some features, particularly areas of

[119] Ecological Solutions (2025) Rehabiliation Management Plan.

rock pavement, natural processes are expected to support species diversity and canopy closure.

Offset or compensation for adverse effects on physical attributes and landscape values overall are proposed in two areas on the Stockton Plateau totalling 910.7ha. On the Stockton Plateau these include an elevated area of 14.6ha on Mt Augustus and 154.3ha of mostly undisturbed land referred to as Whirlwind Rise. These areas will be protected, remain ecologically intact and will represent the legibility of the pre-mining landscape in perpetuity.

Overall, effects on physical values will be **very high** during LOM, and in the short term at close of mine and post rehabilitation adverse effects will be **very high.** In the medium – long term, effects on physical values will reduce to **low to very low.**

Effects on MFS Project Sub-Area Perceptual Values

Perceptual values are those experienced visually and or processed cognitively and therefore effects on perceptual values rely in part on the visual assessment. Views of MFS are either experienced at a distance from a Broad-Scale or limited to specific viewpoints from the Denniston Plateau, and Mt William at a Project-Scale and maybe intermittent sections of the UWHR because of the topography and difficult access to LCU2 where the MFS disturbance areas are proposed. Access is restricted by the deeply incised creeks and streams and further restricted by the dense vegetation cover.

At a Project-Scale, the perceptual values relate to a high natural character, sense of place, legibility, visual coherence, and a scenic outlook with transient and ephemeral values relating to the weather, remoteness / accessibility and austere aesthetic of the Stockton Plateau. LCU2 is highly memorable with identifiable features of note including Deep Stream, distinctive ridges / fault scarps and deflected streams, the Waimangaroa River and gorge, Mt Frederick summit.

The visual effects assessment determined that the extent of visual effects will be represented by distant viewpoints 4, 5, 7, 8 and 12 within the Broad-Scale receiving environment and close viewpoints 13, 14, 15a, 17a and 18b from Mt Rochfort, Whareatea Mine Road, Trig Track and Mt William within the Project-Scale receiving environment.

Of relevance to the Broad-Scale receiving environment will be the visual effects on the skyline as viewed from SH67 where the MFS mining pits extend into the adjoining the ONL of the coastal hills and the Waimangaroa River gorge. Skylines are of critical importance, particularly as part of or adjoining an ONL. This is illustrated by the contrast between the simple horizontal flat coastal landscape and the

more complex slopes and skyline of the coastal hills. The viewer's eye is naturally drawn to skylines, although the extent to which this happens depends on the nature of the skyline, viewing distance, its memorability and the distribution and type of other elements and foci within the landscape. The character of a skyline may be particularly valued if it conveys a sense of naturalness, wildness, if it forms the backdrop to a settlement, if it comprises a particularly distinctive (memorable) landform, or where distinctive landmarks and/or cultural features appear on it. From the Broad-Scale viewpoints the skyline is unremarkable, often obscured by low cloud or inclement weather and viewed at a distance.

From the Broad-Scale viewpoints 4 - 8, the skyline effects arising from the intrusion into the ridgeline or the coastal hills or Waimangaroa River gorge will be potentially visible along SH67 during stages 4 – 6 with rehabilitation completed by end of Stage 9. Distance is a key mitigating factor with effects viewed from distances of 4.7 – 8km, however the VS from Viewpoint 4 indicates that effects will not be noticeable. The unremarkable skyline contour and topography is also a factor in the degree of effect. The removal of forest and landform alteration will not be particularly apparent because of the plateau's south tilting slope aspect. The topography relative to the viewpoints also mitigates lighting effects over stages 4 - 9. The slope aspect and rehabilitation once vegetated will ensure that the change to the ridgeline will be very difficult to discern. Refer VS, Viewpoint 4.

The overall visual effects assessment at Broad-Scale concluded that adverse visual effects arising from MFS will range from **no** to **very low** during LOM with **no** adverse visual effects at mine closure and post rehabilitation in the short term.

At a Project-Scale, the MFS mine will be distantly visible from Mt Rochfort (Viewpoint 13) beyond the ESE mining and from Whareatea Mine Road and Trig Track (viewpoints 14, 15a - and 17a) and Mt William summit (Viewpoint 18b). The degree of adverse effects on visual amenity will relate to criteria including view perspective / elevation, context, scale and extent of disturbance and built form visible across the plateau depending on extraction and rehabilitation stages, public accessibility, the viewer distance and activity, and weather conditions and consequently visual effects will vary depending on the viewpoint. Lighting effects from both mobile and fixed lights are also relevant during hours of darkness. Cumulative effects occur where views of more than one Project sub-area will be obtained during LOM and post mine closure until rehabilitation takes effect.

Adverse visual effects will be greatest from Mt William summit and ridgeline (represented by Viewpoint 18b) due to the elevation of the

viewpoint and orientation of the view, which overlooks the south tilting plateau area of LCU2. While the area affected by mining will be extensive over 170ha, in reality the mining will appear to be confined to the higher elevations of LCU2, and over a small area relative to the scale of the entire Stockton Plateau. Further, the staging and sequential rehabilitation will ensure that adverse visual effects, will be minimised as far as possible. Although lighting is a potential effect from Project-Scale viewpoints during LOM, in reality it is unlikely that viewers would be on any of the tracks during the hours of darkness or visiting the heritage area. However, depending on their outlook orientation Denniston residents will be aware of lighting from MFS activity.

At a Project-Scale, the visual assessment concluded that adverse visual effects during LOM will range between **very low** to **very high** depending on the criteria outlined above. At mine closure adverse visual effects range between **low** to **very high** and in the medium-term visual effects will reduce to **low-moderate** to **low** and in the long-term eventually **very low to no**.

The pest free enclosure fencing around Whirlwind Rise will not be discernible from the Project-Scale viewpoints.

Over the LOM and post mine closure Mt Frederick and the Waimangaroa River valley will remain as orientating features to this part of the Stockton Plateau. It will also be evident that a large portion of LCU2, including identifiable ridge features, Deep Stream, Billo Stream and Billo tarn will remain intact.

The transient values attributed to the dramatic changes in weather will persist, so at times the plateau will be obscured by mist, low cloud and rain and exposed to strong winds.

The most obvious permanent changes will be the removal of the hummocky nature of the landform with its distinctive pattern of exposed rock pavement areas being replaced with an engineered landform with stepped slopes and highwalls. This will coincide with noticeable changes to the landcover with the removal of the sandstone pavement, and initially the lower diversity and low stature of the rehabilitation vegetation. The sandstone pavement will be partly replaced with pākihi wetlands, coal floor, highwalls and water bodies.

The complexity of the landform and vegetation diversity will reduce to the evenly graded slopes of the ELFs, stepped highwalls and broad even height swathes of vegetation types used for rehabilitation. While an open character will be retained, the legibility and natural character will appear substantially reduced.

Initially, the rehabilitation will appear patchy due to the rehabilitation sequencing and different vegetation types will be noticeable. A lower diversity of plant species will improve overtime as other species colonise the rehabilitation areas occurring over 6 months to 5 years and the low stature vegetation will become differentiated as forest species grow and natural vegetation patterns will re-establish.

The staging and sequential nature of rehabilitation will mean that the entire extent of the disturbance area will not occur at any one time and will appear as a discrete mosaic of rehabilitated areas in various stages of establishment both during LOM and at mine closure.

Over the LOM there will be **very high** adverse effects on perceptual values including natural character and legibility, visual cohesion and scenic outlook. A sense of remoteness will be lost due to the extent of mine activity, including fixed and mobile lighting throughout the nighttime, the overall appearance of a modified landscape and a diminished austere aesthetic due to in part the removal of the rock platform.

At mine closure, in the short term (up to 10 years post planting and less for VDT), the modified landform including stepped highwalls will still be evident and vegetation cover incomplete, although it will retain some memorability for different reasons and at a broad scale a plateau landform will remain. Therefore, effects on landscape values will be **moderate – high.**

In the medium term (10-50 years post planting) canopy cover will gradually be achieved for planted areas, and the underlying landform will appear less engineered assisted by vegetation growth, the high rainfall events and natural erosion processes. Natural processes will also enable colonisation of a more diverse range of species and will continue as a self-sustaining ecosystem.

However, in the long-term the MFS mine will return to a high natural character (perceived) albeit with an altered legibility, visual cohesion will be restored, and a scenic outlook from Mt William in particular will also re-establish. Although it is likely that the stepped highwalls will remain discernible in the future alluding to past mining activity, overall adverse effects on perceptual landscape values will reduce to **low - very low**.

Effects on MFS Project Area Associative Values

The associative attributes and values relate mainly to the historic underground mining that has occurred in the vicinity of the proposed MFS disturbance area relating to the West Pits and are generally considered to be of high value from a landscape perspective where

accessible, or of interest, as a scheduled Historic Place or listed under the HNZPTA.

The MFS disturbance area is not readily publicly accessible but contains the Koranui Mine and Incline above 800masl, and the double tier underground workings of the Taipo Mine post 1900 below 800masl. The Deep Creek and Kiwi Mine lie below 700masl and extend to the confluence of Deep Stream with the Waimangaroa River but will not be affected by the MFS mine workings.

According to the Historic Heritage and Archaeological Report[120] the proposed MFS mining will expose and destroy the historic underground workings associated with the Koranui Mine (L29/14) dating from the 1880s and the multi-layered Taipo Mine post 1900's, but the Koranui Incline will remain intact. The Koranui Mine and Incline has historical, technological and contextual values. The Taipo mine workings all date to the 20 century and are well recorded and understood according to the Historic Heritage Report and of limited historic significance as one of similar mines in the locality.

Various mitigation measures are proposed[121] and include monitoring, recording, retrieval of items of interest, protection of remaining features and recovery of historical information. Providing these mitigation measures are undertaken, effects on associative values will range from **low** to **moderate** given that the removal of the Taipo Mine is post 1900 and similar to other mines in the locality and that the Koranui Mine Incline will remain intact.

Recreational values are mostly associated with the 4WD opportunities afforded over the lower part of LCU2 and will not be accessible during MFS LOM, although likely to be reinstated post mine closure. This indicates that post mine closure effects on associative values relating to recreation will be **very low** to **no**.

7.4.3 Landscape Effects Assessment – ESE

ESE is proposed on the southern 1/3 of the Denniston Plateau on conservation land managed by DOC, although a large part of the ESE Project sub-area is highly modified by previous extraction activity. The southern part of the Denniston Plateau and the ESE disturbance area adjoins the ONL41 boundary to the south.

The ESE Mine workings will extend over 460 – 585ha. Refer GA, pages 71 and 73. The Project-Scale viewpoints 13 – 18 (refer GA, Pages 20-24 and VSs) illustrate ESE extraction and rehabilitation

[120] Clough & Associates (November 2025) Archaeological and Historic Heritage Report. Part 3 – Mount Frederick South

[121] Ibid

stages. ESE will be staged and appear as a patchwork of different surfaces as extraction and rehabilitation occur sequentially and in stages over at least ½ - 1/3 of the plateau.

The mine gate buildings and structures, the central infrastructure area buildings, coal loadout area buildings and haul road activity will be evident from the publicly accessible Whareatea Mine Road, some 1.3km from the Denniston Brakehead heritage area and from viewpoints with restricted access at times during LOM including viewpoints 13 and 18.

During stages -1 to 2 the disturbance area will extend over both sides of the Whareatea River gorge with stepped highwalls visible as excavation occurs over the Central ELF pit area. Stage 1 extraction will occur over the bulk of the underground mining and Escarpment Mine. The Sullivan ELF area north of the Whareatea River gorge is mainly disturbed for stockpiles. The borrow pit will begin as part of Stage 1 with removal of the local high point at 690 masl.

Subsequent stages (stages 8 – 12) will move west towards Conglomerate Stream and simultaneously wrapping southeast towards Trent and V40 streams. Up to and including Stage 6 the stepped pit highwalls will encroach into the Whareatea River gorge and also up to the ridgeline and ONL 41 boundary to the Cascade Creek catchment.

The VSs show the Central ELF rehabilitation at Stage 6 although in reality this begins at Stage 1. Throughout subsequent stages the Central ELF is progressively constructed with rehabilitation planting occurring east – west. At mine closure the Sullivan ELF and Central ELF will be prominent landforms with forest vegetation in various stages of establishment. Stepped highwalls will be visible at the edge of the Whareatea River and along the periphery of stages 10 – 12 to the south and western extents of ESE sub-area at mine closure.

Effects on ESE Project Sub-Area Physical Values

ESE will cover approximately 460ha (585ha including the ecological setback). Over half the proposed disturbance area has been previously disturbed by underground mining including approximately 20ha comprising the existing open pit Escarpment Mine, including water treatment areas and Lake Brazil. The eastern half of ESE south of the Whareatea River gorge and to the north will extend over the underground Whareatea and Sullivan mines. Historic mining infrastructure, and areas of cleared vegetation are also evident.

The western extent of the proposed disturbance area of ESE, apart from roading, appears relatively intact / unmodified in terms of topography and landcover as an undulating but obvious part of the

Denniston Plateau with a dominant north facing tilt, deeply dissected by the north flowing tributaries of the Whareatea River including Conglomerate Stream, Trent Stream, V40 Stream, S Creek and various other unnamed minor tributaries.

Existing vegetation consists of mainly southern rātā-mountain beech-podocarp forest and low pākihi, followed by mānuka-tussock-wire rush shrubland and mānuka-mountain beech-podocarp shrubland. A high component of cleared vegetation and bare rock is also evident alongside weedy shrubland.

These physical attributes of the ESE Project sub-area landscape will change relating to the permanent removal of landform and vegetation as extraction and rehabilitation stages progress.

The final ELFs will remove the subtle complexities of the surface undulations and the network of streams, including Conglomerate and Trent Stream although the headwaters of Conglomerate Stream and most of the Whareatea River gorge will remain intact, except where the water treatment area removes part of the gorge wall between Sullivan and the West Whareatea pit.

The final Central ELF will feature a moderately sloped semi-conical hill, capped with a flat peak, and areas of flatter terrain to the north and east. A series of undulating gentle and moderate slopes will descend northwards in the west separated from the hill by the recreation of Trent Stream. Convex topography will create sheltered gullies.

Conglomerate and Trent Stream will be reinstated and discharge to the Whareatea River gorge. The borrow pit will become a lake surrounded by rehabilitated highwalls and will be one of the several areas of open water that will remain, including Lake Brazil. A cut-off drain will remain around the base of the semi-conical hill and discharge to a water treatment plant above the Whareatea River gorge but post mine closure the water treatment plant will be decommissioned and water will be directed to a passive treatment system using a mussel shell reactor.

The encroachment into ONL41 Cascade Creek catchment will occur on the southern periphery of the disturbance area between Stage 6 up to Stage 13. The ONL41 boundary, is shown at a scale on the DP maps that necessitates some interpretation but is expected to follow the ridgeline of the Cascade River valley catchment to the south to capture the relevant landscape values. However, it is noted that the ONL boundary doesn't follow the ridgeline but arbitrarily intrudes over the edge of the Denniston Plateau into the north trending slopes of the plateau. The localised highpoints at 866 and 854 and 786masl which

indicate the ridgeline to Cascade Creek are well separated from the disturbance areas. Therefore, although ESE appears to encroach into the ONL on the basis of landform, adverse effects on the ONL values pertaining to Cascade Creek will be avoided.

Post rehabilitation the topography will become less complex, and the Central and Sullivan ELFs and stepped highwalls will appear engineered and as prominent landforms in comparison to the balance of the Denniston Plateau. As part of the landform, in addition to the reinstated creeks, at least ten poorly drained ELFs will be created to promote wetland development in part recognising the wetland classification over the entire Denniston Plateau. Some rockfield rehabilitation will be created amongst pākihi and shrubland areas.

Stepped highwalls are proposed along the southwest edge of the disturbance area in places close to the southern edge of the plateau above the Cascade Creek catchment, surrounding the northern extent of the Conglomerate pit and the borrow pit. These will be rehabilitated by planting on the treads between each riser and / or hydroseeded with the intention that overtime vegetation and natural processes of erosion will blur and naturalise the engineered appearance of the stepped highwalls.

Currently the vegetation patterns are highly diverse and represent a wide range of habitats in response to the subtleties of the topography, shelter, nutrient and moisture gradients. The rehabilitation will comprise a mix of vegetation types with key types relating to final ELF slope gradients and soil depth.

The rehabilitation plan (refer GA, page 70) shows manuka dominated shrublands (<5m in height) interspersed with tall forest and pākihi areas. Narrow bands of flax dominated shrubland (<2m in height) are proposed surrounding areas of pākihi.

The vegetation types will be simplified with less species diversity and result in broad swathes of vegetation type planting. The forest vegetation type will be mostly concentrated at the base and the undulating mid slopes of the conical hill and in sheltered gullies.

The area of tall forest will increase particularly over the north facing slopes south of the Whareatea River gorge. Areas of exotic vegetation, cleared ground and bare rock (approximately 43.90 ha) will be rehabilitated with indigenous vegetation species.

Initially the rehabilitation will appear patchy due to the rehabilitation sequencing / time of planting and different vegetation types will be noticeable. The lower diversity will improve overtime as other species

colonise the rehabilitation areas and the low stature vegetation will become differentiated as dominant canopy species emerge.

The vegetation changes will be noticeable at time of planting, mine closure and post rehabilitation in relation to the reduced vegetation diversity, the reduced extent of rock pavement areas / boulderfields, and presence of stepped highwalls. In the short term, the modified hill landforms of the Sullivan and Central ELFs will be prominent and vegetation cover incomplete.

Post mine closure and / or within 10 years canopy cover is likely to be achieved for VDT and within 20 – 30 years canopy covers will be achieved for the shrubland planted areas. In the medium to long term the underlying landform will appear less engineered, assisted by the natural erosion caused by the high rainfall. Natural processes will also enable colonisation of the full range of species and areas of rehabilitation will continue as a self-sustaining ecosystem.

The benefits to the physical values will be evident in the replacement of weed species and cleared areas with indigenous vegetation, AMD treatment of historic mine workings and at a large-scale, retention of the overall plateau landform.

Any potential residual adverse effects on physical attributes and landscape values will be balanced by the pest free enclosures totalling 201.6ha proposed in two areas on the Denniston Plateau outside the ESE disturbance area. These are referred to as Denniston (47.3 ha) and Coalbrookdale (154.3 ha) and both contain high ecological values relating to biodiversity and habitats. These areas will be fenced as pest free enclosures to maintain and enhance ecological values. These areas are and will remain ecologically intact and will represent the legibility of the pre-mining landscape in perpetuity.

Effects on ESE Project Area Perceptual Values

As noted above, perceptual values are those experienced visually and or processed cognitively and therefore effects on perceptual values rely in part on the visual assessment. Views of ESE are either experienced at a distance from a Broad-Scale or from a Project-Scale represented by viewpoints on the Denniston Plateau chosen because they are publicly accessible, and / or popular although access may be restricted at time over LOM. The summit of Mt William affords a panoramic overview of both ESE and MFS to illustrate cumulative effects.

The perceptual values of the Denniston Plateau relate to its easy accessibility by road and / or tracks from which an appreciation of the plateau landform may be obtained or experienced, along with (subject to transient weather conditions), the austere aesthetic, quiet,

expansive scenic outlook, visual coherence, legibility of the plateau landform and a variable degree of naturalness. Inevitably these values will be adversely affected to varying degrees by the ESE mining activity, presence of buildings and large-scale modification to landforms, watercourses and vegetation.

One of the key drivers for visitors is the historic heritage area of the Denniston Brakehead, Coalbrookdale and Burnetts Face historic areas, with preserved mining relics, building foundations and interpretation panels as popular tourism destinations. Further afield, the historic mining activity includes other scattered remnants of mine buildings and relics in various states of decay. Obvious modifications indicate the continued habitation including a small cluster of dwellings at Denniston, and the existing Escarpment Mine, a roading network (sealed and unsealed), various mountain bike trails, a quarry, water reservoirs, a maze of power lines and transmission lines and access to Mt Rochfort transmission towers and infrastructure.

The prime visitor settings on the Denniston Plateau being the Denniston Brakehead, Coalbrookdale Walk and the Burnetts Face car park will be largely unaffected by the ESE Project mostly due to visual screening by the topography, separation distance with access retained during the LOM. Access to other parts of the Denniston Plateau to the southwest beyond the Mine Gate including to Mt Rochfort will be restricted and / or managed over the LOM. Refer discussion below regarding effects on recreation and tourism.

At a Broad-Scale, ESE will potentially be visible from distant viewpoints 4 – 8, 10 and 11 along SH67 and various local roads. Refer GA, Pages 14 – 19 and Visual Simulation from Viewpoint 4. While parts of the ESE will potentially be visible on the skyline, the distances at 5km - 20km are a key mitigating factor, as is the low memorability of the skyline contour. Of relevance is that the ESE appears well separated from the distinctive peak of Mt Rochfort, which is the distinctive orientating feature on Denniston Plateau.

Viewpoint 4 shows, at worst, that part of ESE will appear as a thin sliver over a short section of a skyline silhouette. The slope aspect and rehabilitation will ensure that alterations to the skyline will not be noticeable and once vegetated the change will be very difficult to discern.

The visual assessment determined that from the Broad-Scale viewpoints along the SH and coastline the visual effects of ESE on landscape values will range between **no** to **low** with distance being the key mitigating factor and reducing to **no** adverse visual effects once rehabilitation is complete at mine closure and post rehabilitation.

At a Project-Scale, ESE will be obvious in proximity from the Denniston Plateau viewpoints including Mt Rochfort (Viewpoint 13), Whareatea Mine Road (Viewpoints 14 - 17) and from the Mt William summit and along the ridgeline (represented by Viewpoint 18a) which afford extensive views over the north tilting plateau and ESE disturbance area. Refer GA, Pages 20-24 and VS from viewpoints 13, 15b, 17b and 18a). From these viewpoints the extraction activity and rehabilitated landforms will dominate. While built forms will be visible in discrete locations, despite exceeding district plan standards, they will be dwarfed by the scale of the receiving environment, with visibility further minimised by the recessive colours and cladding, rural built forms in a modified context.

The visual effects assessment appraises the close views of the ESE obtained from the most accessible viewpoint on Whareatea Road, 722m north of the mine security gate. While there may be some visual effects potentially gained from various MTB tracks in the vicinity, in general these traverse the north facing slopes downhill and views of the ESE will be screened by the uphill topography.

Predictably any mountain biker or visitor to Denniston will be aware of the ongoing mine activity during the LOM and for some visitors glimpses of mining activity are likely to be sought out of interest[122]. It is unlikely that the mine workings will be visible from the Coalbrookdale Walk, part of which will be enclosed by the pest free enclosure, with public access maintained. However, the haul road activity will be visible from parts of the Coalbrookdale / Burnetts Face area of the Denniston Plateau where topography allows. An overview of the staged mine workings will be visible from the summit of Mt William and will appear as a mosaic of pits, exposed coal seams, rock/earth and rehabilitated areas in various stages of establishment.

The closest view of the ESE mine works will be gained from the Whareatea Mine Road with public access possible up to the Mine Gate from where mining activity will dominate the scene. While that may be an interest to some, overall, the extent of adverse effects on landscape values including amenity afforded by the Denniston Plateau view panoramas will be **very high** during LOM.

Taking into consideration cumulative visual effects from Mt William the adverse visual effects on landscape values arising from the ESE will be **very high**.

The scale of mining will be extensive over the LOM, although the staging and sequential rehabilitation will ensure that effects on

[122] RG&A (2025) Recreation and Tourism Assessment. Section 4, Consultation Findings

landscape values will be minimised as quickly and effectively as possible.

The 24-hour mining operation will require lighting throughout the site. Fixed lighting will be provided at the Mine Gate, the central infrastructure area, and coal load out area while mobile lighting will be associated with operating vehicles at the active coal face and along the haul roads. The assessment of the proposed lighting[123] established that lighting effects on local residences will mostly be concealed by topography with a dominant view away from the ESE disturbance area. Glare from mobile lighting may be experienced and night-time views may be affected. However, lighting will be at least 1km distant from local residences ensuring that light spill will be similar to dim natural ambient light (i.e. moonlight and starlight). In the context of the small settlement notwithstanding the dark sky values overall, the assessment of the proposed lighting concluded that lighting effects would be **low-moderate**[124].

The staging and sequential nature of rehabilitation will mean that the full extent of extraction over the disturbance area will be piecemeal although initially the quarry and overburden stockpiles on the Sullivan ELF will be the most obvious and the excavation of Sullivan and the placement of the Central ELF will also be visible as a prominent hill noting that vegetation rehabilitation of the Central ELF commences in Stage 1 and progresses up to Stage 8 - 9 at which point at least half the vegetation rehabilitation will be complete.

The visual assessment concluded that effects on landscape values, being visual amenity, legibility of the landform and natural character in particular will inevitably be **very high** from these close views during the LOM, but they will reduce to **moderate-high** at mine closure and post rehabilitation. Although the borrow pit lake will be an engineered feature surrounded in part by stepped highwalls, the presence of water will contribute positively to the overall visual experience within the plateau as demonstrated by other various existing water reservoirs on the plateau.

Over time the disturbed area of the ESE mine will return to a high natural character (perceived), visual cohesion and tranquillity will be restored, legibility will re-establish and a scenic outlook from Mt William will also return.

Of relevance to the certainty of the landscape to recover post mining to a natural self-sustaining state are the examples on the Denniston

[123] Leading Design Professionals (November 2025) Proposed Infrastructure Assessment of Environmental Effects - Lighting

[124] Ibid

Plateau where areas of historic mining and settlements at Burnetts Face Junction (Wooden Bridge 1891 – 1954) and Millerton have rehabilitated naturally with little active intervention, apart from the removal of infrastructure. To all intents and purposes, it is difficult to envisage a thriving mining community where today the outlook is of vegetated slopes. Reference to evidence provided by interpretation panels including historic photos effectively demonstrate the dramatic landscape change and the natural recovery over the past 50 – 70 years.

The two pest free enclosures at North Denniston (47.3ha) and Coalbrookdale (154.3ha) will mostly follow existing road or track alignments and enclose areas of high landscape values relating to ecology, habitats and heritage. They will be visible from the Whareatea Mine Road and Coalbrookdale where 2m high fences enclose the Coalbrookdale Walk. It is considered that the pest free enclosures will afford a benefit to perceptual values relating to conservation ethics and emotional connections to landscapes with a sense of place.

Therefore, while effects on perceptual landscape values during LOM will be **very high**, and in the short-term, post mine closure, effects will be **moderate - high** it can be stated with confidence that in the medium to long-term, adverse effects on perceptual values arising from ESE will be **very low** and eventually reduce to **no** adverse effects.

Effects on ESE Project Area Associative Values

The associative attributes and values relate mainly to the historic heritage and recreational attributes of the Denniston Plateau, with conservation values relating to the coal measures landscape, biodiversity and presence and habitats of carnivorous snails, lizards and birdlife in particular.

Also of relevance is the proximity of the Denniston Plateau to the surrounding ONL. At a detailed scale the Denniston Plateau adjoins ONL41 (Te Paparoa/Paparoa Range east & Mt William Range) on the south-eastern boundary. Refer GA, Page 09. Table 2 above sets out the values of ONL41.

While the ESE disturbance boundary appears to overlay the ONL41 boundary on the TTPP planning map, however, the ESE disturbance area is actually north of the ridgeline. It is the ridgeline, which is taken to be the actual ONL boundary that captures the values relevant to the river valley ONL as a deeply incised river valley with a homogenous cover of mature lowland forest.

The ESE disturbance area will not intrude over the ridgeline into the river valley and the ONL forest vegetation (southern rātā-mixed beech-podocarp-broadleaved forest) will remain intact. In other words, there will be no adverse effects on the adjoining ONL values.

Other associative attributes and values relate to the historic underground mining that has occurred in the vicinity of the proposed ESE disturbance area and which are generally considered to be **high** from a landscape perspective where accessible, or of interest, as a scheduled Historic Place or listed under the HNZPTA. These are listed above and are located 1.1km from the ESE disturbance area, mainly concentrated around the Denniston settlement and historic heritage area including the Denniston Brakehead and Incline, extending to Burnett's Face, and Coalbrookdale. These key tourist areas will remain outside the ESE disturbance area and readily accessible by the public.

According to the Archaeological and Historic Heritage Assessment, there are no mining remains present within the ESE Project sub-area that date to a pre-1900 period so there is no statutory requirement for Bathurst to apply for an Archaeological Authority under the HNZPTA before commencing construction and mining. There is excellent existing baseline survey and recording of surface heritage features within the ESE Project sub-area footprint as a result of past survey and research.

ESE will affect some surface mining features associated with the Monocable Aerial Cableway (K29/59), Whareatea Mine (K29/72) and Sullivan Mine (K29/98), although the ESE has been purposely designed to avoid impacting directly on the vast majority of these remains. ESE will also affect extensive underground mine workings associated with the Whareatea Mine and Sullivan Mine.

Bathurst have committed to avoid any surface mining remains within the wider consent area outside the proposed areas of disturbance.

The Archaeological and Historic Heritage Assessment states that the destruction of a few surface mine remains and extensive underground mining remains will contribute to the cumulative effect of the ongoing loss of features associated with these sites and the Denniston historic landscape. An incremental loss of parts of the historic landscape will lead to an overall negative effect on the historic values on the Plateau. Overall, the effects on historic heritage after recommended mitigation and additional initiatives are likely to be **moderate** in relation to the proposed ESE.

However, it is acknowledged that the proposal represents a continuation of the long-established mining industry on the Buller

Plateaux and is considered acceptable from a heritage perspective subject to the proposed mitigation and additional recommended initiatives.

Given the above conclusions from the historic heritage assessment of effects, it is considered that effects on associative values will vary between **very low to low - moderate** if recommendations are applied.

In relation to recreational and tourism associative landscape values, the development of ESE will occupy some of the recreation settings on the Denniston Plateau.

Access to Mt Rochfort will pass through the active mining area but is likely to be maintained in some form and programmed to occur at specific times for maintenance during the LOM, subject to request and approval by Bathurst.

In relation to the recreational opportunities described by the Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025) while some will remain outside the proposed ESE disturbance area, specifically some MTB, motorbike trails and four-wheel drive (4WD) access will be affected to varying degrees.

The Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025) identifies that while there will be displacement of some walking, mountain biking and trail running within the Mt Rochfort Conservation Area it is possible that many of the informal MTB trails can be re-routed to lie completely outside the ESE disturbance area and further recommends communication and access through liaison between various interest groups, the community, Bathurst and DOC. Overall, the Recreation and Tourism Assessment (Rob Greenaway and Associates, 2025) concluded that with the recommended mitigation in place significant adverse effects on recreation in the study area may be avoided or mitigated.

The development of an additional recreation opportunity offsite is also recommended by the Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025) in recognition of the likely displacement of some walking, mountain biking and trail running from Denniston Plateau.

The installation of the four pest free enclosures are described in the Recreation and Tourism Assessment as having the potential to contribute to the suite of visitor attractions and are a positive addition for recreation and tourism, in addition to promoting conservation values. The fencelines of the North Denniston and Coalbrookdale pest free enclosures are likely to attract interest and use by mountain bikers, trail runners and potentially four-wheel drivers and trail and trial bikes. The pest free enclosure fencelines follow in part routes already

developed for some or all of these activities, which will require management. It is understood that despite the Coalbrookdale pest free enclosure around the Coalbrookdale Walk, the walk will remain accessible during the LOM.

The recreation, tourism and heritage experiences on the Denniston Plateau will continue to afford an understanding of the coal measure ecosystems and landscapes of the coal plateaux, with dramatic views of mountain and coastal landscapes, a memorable sense of wild remoteness, and scenic outlook with high legibility, and visual coherence (depending on the local weather conditions).

For some people experiences on the Denniston Plateau may be enhanced by the ability to view in proximity (approximately 800m from the mine gate) the open cast mining activity that is relevant to the importance of the plateau as coal measure landscape and the importance of the wider historic context and historic landscape of the Denniston Plateau as an extensive and relatively complete coal mining landscape that is unique to the location.

As previously mentioned, the Cultural Impact Assessment is broadly supportive of the Project subject to the uptake of recommendations including communication and monitoring. Of note there are no wāhi tapu sites known to Ngāti Waewae within the Project Area.

Overall, during LOM effects on heritage values will be **very low** to **low moderate** and effects on recreation and tourism will vary but with recommended mitigation in place significant adverse effects on recreation in the study area may be avoided or mitigated. From a landscape perspective it is considered that adverse effects on recreation will be **moderate**. Unrestricted access to the Denniston Brakehead and other areas of interest will ensure that effects on tourism values during LOM will be **no** to **low** despite awareness and proximity of the ESE. With regard to conservation, adverse effects will initially be **high** but offset by the 201.7ha pest free enclosures. Post mine closure overall effects arising from ESE on associative values including cultural values will be **very low** to **no**.

7.4.4 Landscape Effects Assessment – UWHR

The UWHR will traverse Crown owned land predominantly administered by LINZ with the remainder administered by DOC. The UWHR is approximately 19km long within a 50m wide corridor. Only 4km of the UWHR will traverse previously undisturbed ground, comprising 1km adjacent to the ESE infrastructure and 3km connecting to the Cypress mining operation in the north. The balance 15km will require an upgrade to existing roads including part of the Cascade Mine Road and Cedar Creek Road. Approximately 2.3 km of

the UWHR will marginally intrude over the ONL 49 boundary. Of this distance approximately 850m is existing and 1.4km is new road.

Assuming the full 50m setback is utilised and excluding sections of existing road, approximately an additional 36ha will be disturbed.

Effects on UWHR Project Area Physical Values

The physical attributes and values predominantly relate to the Waimangaroa River, hydrological processes, water quality / mauri, contiguous forest cover, habitat, ara tawhito (traditional pathways) and legibility of the river valley especially the upper 8.6km section between Cedar Creek Road and the Cypress Mine. Some modification has occurred where historic mining has occurred at the Iron Bridge Mine underneath Cedar Creek Road.

Most of the UWHR will traverse the existing road network although widening and upgrades to the running surface will be required through this existing modified landscape.

The vegetation removed to increase the Cedar Creek Road and Cascade Mine Road width and extend to connect to the proposed ESE to the south and Cypress Mine to the north will comprise mostly forest and shrubland.

The1km new road section at the southern end of the UWHR will connect to the ESE coal load out area and will traverse a landscape modified by the Burnett Face settlement and Coalbrookdale Mine and transmission infrastructure, so effects on physical values will be **very low**.

The northern end of the UWHR will connect to the existing Cypress Mine and will introduce a new 3km long road up to 17m wide through the forested slopes on the true left of the Waimangaroa River. This section will create new forest edges, which will alter the existing forest microclimate increasing light levels and dust cover on roadside vegetation. New edges will also favour disturbance adapted species over native species which will require management of weed species.

Of key relevance is the northern 3km section of the UWHR which will act as a physical barrier and fragment habitats through a previously connected forest landscape between Mt William range and the mid-section of the Stockton Plateau. The road alignment will however avoid steep terrain and will be located along a valley floor, avoid riparian margins and track along contours to minimise visible scars, the potential effects of cut and fill i.e., erosion, pollution etc. The road will be engineered to avoid adverse effects on the stability of slopes,

run-off sedimentation, tributary stream flows, address drainage and potential pollution.

During LOM the adverse effects of the UWHR on physical values will be **moderate** and mainly be confined to the northern 3km section of the UWHR.

At mine closure the UWHR will be narrowed from 17m to 5m in width and rehabilitated at which time effects will reduce to **low – very low**. The rehabilitation planting will consist of shrubland species in the south on the Denniston Plateau and forest species in the section along the Waimangaroa Valley.

Overall, the massive scale of the receiving environment compared with the small scale of the proposed UWHR and the alignment of the road along the valley floor will maintain the physical attributes and values of the Waimangaroa River and valley.

Effects on UWHR Project Area Perceptual Values

The Waimangaroa River valley has a high degree of natural character, legibility, sense of enclosure and visual coherence with a level of remoteness, quiet and untouched appeal, notwithstanding the presence of roading and transmission infrastructure.

The northern end of the UWHR where it traverses the forested valley floor and lower slopes of the upper Waimangaroa River valley to the Cypress Mine will be visible from the summit of Mt William. However, the full extent of the UWHR will not be appreciated visually because it will be concealed by the topography and vegetation screening along the road corridor and immediate surroundings. While in general the purpose of a road is for vehicle access, it is perhaps not expected to be at the level or type that will be experienced during the LOM on what will be perceived as a rural back road.

Heavy truck movements[125] will be noticeable along the UWHR with adverse effects on natural character, a sense of enclosure and level of remoteness created by the increased road width, introducing noise, dust and moving lights at night. While dust is proposed to be mitigated, the balance effects are likely to be visible or experienced over some parts of the UWHR by Denniston residents at a distance and visitors to Burnetts Face, Coalbrookdale Walk, Myras Track, Mt William, and those who access the Mackley route. This will result in a

[125] Project Description Version 3. UWHR. 10.3 Operational Phase describes coal haulage undertaken on a 24/7 basis with 4 – 6 truck and trailer units on a 70 minute return cycle time per load with an average speed of 40 km/hour.

moderate degree of adverse effects on the perceptual values during LOM.

Once the mine has closed, heavy traffic movements have ceased, the road narrowed and vegetation rehabilitation completed, the planting will rapidly establish given the lower altitude, higher fertility and ready colonisation by some native species within a narrow corridor. Narrow unsealed roads are relatively common throughout rural areas, generally with a high degree of acceptance by the public given the access benefits. Therefore, it is considered that effects on the landscape values pertaining to the Waimangaroa River corridor arising from the UWHR at mine closure will be **very low**.

Effects on UWHR Project Area Associative Values

The associative attributes linked to the UWHR relate to the cultural values, historic mining that has occurred in the vicinity of the proposed UWHR and recreational access / opportunities. In part the UWHR will intrude into ONL 49. The potential effects on the ONL are discussed below at section 11.2.

At the southwestern end the UWHR will require a new, approximately 1 km section within a modified landscape context between ESE to the existing Cascade Creek and Cedar Creek roads. This section will be in proximity to recorded heritage features within the Denniston Plateau but will not directly impact on any known archaeological and other historic heritage sites or features although there is potential to affect previously unrecorded subsurface archaeological remains.[126]

Over the eastern section, the UWHR crosses an area of extensive underground mine workings associated with the Iron Bridge Mine, Beggs Outcrop and Cooks Lease Area within an already modified road corridor but will not be at a depth or extent to affect these workings. The UWHR will increase access to historic mine workings and will not adversely affect any known archaeological and other historic heritage sites or features[127].

According to the Archaeological and Historic Heritage Report (Clough and Associates, October 2025), other artefacts or features that are not in situ or unconfirmed may be affected but after recommended mitigation (fencing off mining features, recovery of artefacts and deposit, relocation of artefacts where appropriate and recording any

[126] Clough & Associates (October 2025) Archaeological and Historic Heritage Assessment. Part 2 – Upper Waimangaroa Haul Road.

[127] Clough & Associates Ltd (October 2025) Archaeological and Historic Heritage Assessment. Part 2 – Upper Waimangaroa Haul Road.

discoveries) overall effects on historic heritage are likely to be minor, which from a landscape perspective equates to **very low**.

The Cultural Impact Report identifies key concerns relating to the water quality / mauri of the Waimangaroa River, access, associations with places and features that may hold cultural significance and generally the terrestrial biodiversity including rehabilitation that my impact or benefit mahinga kai, taonga species and the overall natural environment. Ngati Waewae acknowledge that provided that the proposed mitigation and compensation package is implemented the project can be supported. Overall, it is understood that the road construction will ensure that water quality of the Waimangaroa River and tributary streams will be maintained and adverse effects on habitats of taonga species will be mitigated.

Cedar Creek Road and access opportunities is the focus of recreational use within the proposed UWHR corridor. According to the Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025), the recreational users include cyclists, trail runners, and 4WD vehicle drivers with visitors also walking the Coalbrookdale Track and visiting the Burnetts Face area. The predominant activity is by MTBs traversing the Mackley Track with some pedestrian activity on the circuit from Myra's Track to Mt William. Cedar Creek Road is also part of a 4WD route that traverses the eastern flank of Mount Frederick as an expert route after fording the Waimangaroa River and continuing for approximately 2 km before terminating on the plateau.

Apart from the need for road safety where mine vehicle traffic occurs, public access for walkers and MTB will be facilitated between Myra's Track and the Mackley Track intersection by the inclusion of a 1 m wide track along the UWHR

There will be potential risks to walkers on Myra's Track crossing the UWHR to Mount William, periodic and temporary closures to the Coalbrookdale Walk during blasting activity and people utilising tracks over the Plateau. While there may be effects on access to these recreational facilities via the UWHR, it is understood that these effects will occur periodically and temporarily. The Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025), recommends that information on access be updated and communicated online and the provision of a marked crossing for access to Mt William. If these recommendations are applied the Recreation and Tourism Assessment (Rob Greenaway & Associates, 2025) considered effects on recreation and tourism will be **minor**. This, in landscape terms, is considered to equate to a **very low** effect on associative values.

At mine closure and post rehabilitation, the narrowed UWHR will remain open for ongoing maintenance access and subject to

agreements with landowners, may afford an opportunity for enhanced public access and tourism ventures.

Overall, the adverse effects on associative values arising from the UWHR will be **very low** during the LOM and post mine closure the UWHR is likely to benefit public access for recreational opportunities resulting in **no** adverse effects on associative values.

7.4.5 Project Sub-Areas Landscape Effects Summary

The Project is managed to minimise effects on landscape values. Table 2 is attached in Appendix A setting out the Summary of Effects on Landscape Values.

The proposed mining and associated infrastructure developments across the Project sub-areas at Stockton Extension, MFS, ESE and UWHR will result in a range of physical, perceptual and associative landscape effects informed in part by the visual effects assessment.

7.4.5.1 Stockton Extension Landscape Effects Summary

Physical values: There will be a loss of ~52 ha of shrubland, forest, wetland and sandstone pavement and disturbance to existing creeks. While the Project will locally modify landform, vegetation cover, and watercourses—including removal of a discrete area of intact habitat and exposure of historic workings—these changes are limited in scale relative to the existing consented mining footprint. Rehabilitation, ecological mitigation, including some landform variation and representative vegetation types will ensure that natural character, biodiversity, will develop over time. Effects on physical landscape values will be **high** over LOM and reduce to **very low** post mine closure and rehabilitation in the short term.

Perceptual values: There will be **very low to no** visual effects at a broad scale due to the mitigating effects of distance and screening by topography. Millerton residents and visitors may experience localised effects during mining, but these will be **low** reducing to **no** effect overtime as vegetation re-establishes. Effects on natural character and visual coherence will be reduced locally during active mining, but staged rehabilitation will progressively restore these qualities. During LOM these effects are expected to be **low to very low** and recover within the short (10 years) reducing to **no** in the medium to long term (10 – 50 years).

Associative values: There will be some loss of historic underground mine remains and tramway features with **low** – **moderate** effects, but adverse effects will be **low** if mitigated by recording, artefact recovery, and the protection of key heritage elements.

Overall: Across all aspects of landscape values, the Stockton Extension Project sub-area will result in **very low** (physical and perceptual) **to low–moderate** (associative) landscape effects, with most adverse effects being localised, temporary, and substantially mitigated through rehabilitation and management measures. Refer Appendix A, Table 2.

7.4.5.2 Mt Frederick South (MFS) Landscape Effects Summary

Refer Appendix A, Table 2. The Buller Plateaux Baseline Landscape Study (RMM, 2021) concluded that LCU 2 on the Stockton Plateau could be an ONF based on information to hand at the time. Through the assessment process associated with the BPCP a detailed understanding of the extent of historic mining and modification within LCU 2 has been gained with the resulting conclusion that an ONF classification is not warranted.

Notwithstanding the high physical, perceptual and associative landscape values in relation to LCU 2 coinciding with the MFS disturbance area, it is acknowledged that effects on landscape values will vary, the physical attributes will change but be rehabilitated and overtime will naturalise as natural patterns and processes re-establish. As this occurs adverse effects on perceptual values will also reduce overtime as gradually natural character will develop. The associative values will be lost in places or recorded and / or artefacts recovered for heritage / museum displays.

Physical values: Effects will be **very high** during LOM due to the substantial modification of a relatively intact plateau landform (despite historic underground mining), including partial encroachment into the ONL where the removal of part of the ridgeline to the Waimangaroa River occurs and the ridgeline of the coastal hill slopes facing SH67, hydrological changes, loss of sandstone pavements, and a loss of ~170ha of vegetation, much of which is wetland/pākihi.

The rehabilitation will establish a mosaic of forest, shrubland, and pakihi, reinstate wetlands, and including rock highwall and areas of water for AMD treatment. The revegetation will be simplified in species diversity and initially vegetation stature will remain undifferentiated.

In the short term post mine closure, effects will remain **very high** while rehabilitation is established. Over the medium to long term, rehabilitation, ecological management, and natural processes progressively reduce effects to **low to very low**, although some engineered landform features (e.g. highwalls) will persist.

Perceptual values: Adverse effects on perceptual values will be **very high** during LOM, particularly at a project scale, reflecting major changes to natural character, legibility, visual coherence, scenic quality, and a loss of perceived remoteness. In the **short-term post-closure**, effects reduce to **moderate–high** as rehabilitation progresses but modified landforms remain evident. Over the **medium term**, effects decline to **low–moderate to low**, and in the **long term** further reduce to **low to very low**, with a return to high perceived natural character and restored visual coherence, albeit with altered legibility and some residual evidence of mining.

Associative values: Adverse effects on associative values will be **low to moderate** during LOM. The Project will result in the loss of some historic mining features (notably Koranui and Taipo mine workings), although the Koranui Incline will be retained and many affected features are of limited uniqueness or are well documented. Mitigation measures (recording, recovery, protection) will reduce effects. Recreational values are temporarily affected during LOM but are expected to return post-closure, resulting in **very low to no** long-term effects on associative values.

Overall:

The MFS Project sub-area will result in **very high** (physical and perceptual) effects during LOM, reducing in the medium to long term to **low to very low** as rehabilitation matures, while associative effects will reduce to **low** if mitigated.

7.4.5.2 Escarpment South Extended (ESE) Landscape Effects Summary

Refer Appendix A, Table 2. Notwithstanding the high physical, perceptual and associative landscape values within the ESE disturbance area it is acknowledged that effects on landscape values will vary over LOM. The physical attributes will inevitably change to a **very high** degree. The physical attributes will be recreated, rehabilitated and overtime will naturalise as natural processes occur and as a consequence, natural patterns will re-establish, resulting in a natural self-sustaining landscape.

As this occurs perceptual values will also change from **very high** adverse effects over the LOM and reduce overtime to **moderate-high** at mine closure and post rehabilitation, noting that for some, views of a working opencast mine may be of interest and therefore a benefit rather than adverse effect. As a natural character develops and visual amenity is restored over the medium to long term, perceptual effects will reduce to **very low - no**.

The associative values relating to the historic mining heritage will be lost in places or recorded and / or artefacts recovered for heritage / museum displays. Those associative values relating to recreation will be temporarily affected or avoided and / or may be effectively managed throughout the LOM. Post mining, recreational opportunities may increase through re-routing and or enhancement of existing features.

Physical values: Adverse effects on physical values will be **very high** during the LOM due to large-scale (~ 585ha) landform modification (including ELFs, highwalls, and stream alteration), vegetation clearance, and simplification of landform and ecological patterns across a substantial portion of the plateau. The vegetation cover will be replaced by a simplified rehabilitation mosaic dominated by beech forest and pākihi over engineered slopes with the quarry transformed into a lake.

In the short term post mine closure, effects will remain **moderate to high** while rehabilitation establishes and engineered landforms remain prominent. Over the medium to long term, rehabilitation, natural processes, and ecological offset areas reduce effects to **low to very low**, with restoration of indigenous vegetation cover and overall plateau form, albeit with reduced landform complexity and some residual engineered features.

Perceptual values: Adverse effects will be **very high** during LOM, particularly at close (project-scale) viewpoints where mining activity dominates and natural character, visual coherence, legibility, and scenic values are substantially diminished. At a Broad-Scale, effects will be **low to moderate** due to distance and screening by topography. In the short term post mine closure, effects will reduce to **moderate–high** as rehabilitation progresses but modified landforms remain evident. Over the medium to long term, as vegetation establishes and natural processes such as erosion, colonisation and canopy closure soften the engineered landforms to increase natural character, effects will reduce to **very low**, and ultimately **no** adverse effects, with recovery of a perceived natural character, visual cohesion, and scenic outlook.

Associative values: Adverse effects on associative values will range between **very low to high** during LOM. Effects on historic heritage will be **moderate** with some loss of mid–late 20th century mine sites and cableway elements, although key heritage areas remain unaffected and accessible.

Recreational values will be adversely affected to a **moderate** degree during operations due to the displacement of some tracks, but largely mitigable through rerouting and management, while tourism effects will be **no to low**. There is also potential for enhanced recreational

and tourism opportunities post ESE mining. Effects on conservation values will initially be **high** but offset to a degree by pest-free enclosures and ecological enhancements. Post mine closure, effects on associative values will reduce to **very low to none**.

Overall:

ESE will result in **high to very high effects** on physical and perceptual values during LOM, reducing in the medium to long term to **low to very low** (or none for perceptual values) as rehabilitation matures. Associative effects are generally **low to moderate** during LOM and diminish to **very low or no** adverse effects in the long term, supported by mitigation and offset measures.

7.4.5.4 Upper Waimangaroa Haul Road (UWHR) Landscape Effects Summary

Refer Appendix A, Table 2. Notwithstanding the high physical, perceptual and associative landscape values pertaining to the upper Waimangaroa River valley it is acknowledged that adverse effects arising from the UWHR on landscape values will vary between **moderate** to **low** over LOM. The physical attributes will change to a low degree essentially widening an existing road with two new sections totalling 4km to complete the link from Denniston Plateau to Stockton Plateau.

At mine closure, the UWHR width will be reduced to a single lane metal road and the edges will be rehabilitated resulting in a rural access road similar to that currently existing, and likely with a high level of acceptance by the public associated with access benefits. The associative values relating to the historic mining heritage will be avoided or managed through recording and / or recovering artefacts for heritage / museum displays. Those associative values relating to recreation will be temporarily affected and / or may be effectively managed throughout the LOM. Recreational opportunities may increase through re-routing and or enhancement of existing features.

Initially effects on landscape values will be **low to moderate** but post mine closure and rehabilitation will reduce to **no** adverse effects.

Physical values: The widening and new road construction will affect ~81ha, of mainly forest and shrubland. Effects on physical values will be **moderate** during LOM, primarily associated with the northern new 3 km road section causing vegetation removal, habitat fragmentation, and edge effects within an otherwise intact forested valley. Effects elsewhere will generally be **very low** where upgrades occur within existing road corridors or modified environments.

At mine closure and post-rehabilitation, effects will reduce to **very low**, with road narrowing, revegetation, and the small scale of the

corridor relative to the wider landscape maintaining overall physical integrity.

Perceptual values:

Adverse effects on perceptual values will be **moderate** during LOM, reflecting increased traffic, noise, dust, lighting, and a reduction in perceived naturalness, remoteness, and enclosure along parts of the route. Visual effects are generally limited by topography and vegetation screening. At mine closure, with cessation of heavy traffic and successful rehabilitation, effects will reduce to **very low**, with the corridor reading as a typical rural access route.

Associative values: Adverse effects on associative values will be **very low** during LOM. There will be minimal impacts on historic heritage (with mitigation), and while recreational access may be temporarily affected during LOM, these effects are minor and manageable. Post-closure, the road is likely to enhance recreational access, resulting in **no** adverse (and potentially positive) effects on associative values.

Overall:

The UWHR will result in **moderate** (physical and perceptual) effects during LOM, largely confined to a limited section of the route, reducing to **very low** effects post-rehabilitation, while associative effects will remain **very low** or positive overall.

7.4.5.6 Conclusion on Overall Landscape Effects to Project Sub-Areas

Overall, mining activity for all Project sub-areas will result in **high to very high** adverse landscape effects during LOM on the physical attributes (landform, coal measures, hydrology, vegetation, habitats) of the landscape and particularly that relate to natural character, perceptual values (visual amenity, legibility, scenic outlook) and associative values (ONL, historic heritage, recreation, cultural and conservation). The exception is the UWHR where adverse effects on landscape values will be **moderate** initially but likely to reduce overtime and if maintained for public access post mine closure.

Adverse physical effects will be partly permanent (irreversible) in terms of altered geomorphology, the extent of the pavement rock surfaces and hydrology that contribute to the plateau surface and open character. Although the landform will be significantly altered, initially appearing with an engineered uniformity the general plateau topography will be reinstated, and the landforms will gradually evolve to a more natural state through natural weathering processes. Similarly, the reinstated hydrology systems, although altered, will be reinstated to complement the ELFs and will respond to weathering

processes appearing natural in the short-term. Issues of mauri, taonga species, mahinga kai etc are of concern to Ngāti Waewae and must include cultural monitoring in terms of tangata Whenu values (cultural, spiritual and ecological) alongside scientific values.

The landcover removal will be temporary and reversible through vegetation rehabilitation, which overtime will establish as self-sustaining ecosystems and re-connect to the surrounding unmodified vegetation. Initially there will be a reduced variation in vegetation diversity but natural colonisation will occur within 6 months up to five years. Rehabilitation will achieve 50 – 60% vegetation cover within 20 years and canopy cover within 30 years of planting. These time frames are more rapid for areas of DVT. This means that at mine closure in places some initial rehabilitation could achieve 50 – 60% vegetation cover within 10 years post close of mine.

The substantial physical changes will drive effects on perceptual values although these will evolve over LOM and post mine closure with long term naturalisation resulting in reduced effects on landscape values. Some perceptual aspects, such as legibility - expressing the natural processes of land formation, will be irrevocably lost through mining but will reflect a different legibility derived from mining rehabilitation. Other aspects will change, including memorability and coherence and or will develop in an altered state overtime. Typically, an open character will remain post mine closure, largely due to the growth habits of local indigenous species in response to the environmental gradients and overtime an austere aesthetic and natural character will return. The transient attributes related to extreme weather will persist and continue to affect the experience of the plateaux.

Associative values most sensitive to change are the heritage values related to the historic mining culture that will be permanently lost. Adverse effects will also likely be experienced by those people that strongly associate with the plateaux landscape that affords a sense of identity, a cultural perspective and for those with a strong conservation ethos.

Te Ao Maori is recognised in Ki Uta Ki Tai, a culturally based ‘mountains to sea’ natural resource management framework which Bathurst recognises and is committed to acknowledging.

Recreation and tourism values will be temporary effects (e.g., with reduced access during mining) but in the long term may benefit from increased access opportunities post mine closure. Overall, it is likely that associative values will be maintained and likely increase in the long term where a rehabilitated mining landscape will persist as an aspect of the Buller Plateaux, displaying a successful approach to

environmental management, while adding to the historic heritage of the West Coast and extending the intergenerational mining legacy that will endure for future generations.

Adverse effects on landscape values will continue to reduce post mine closure within the short term (10 years) as natural processes of erosion, colonisation and canopy cover establishes with adverse effects ranging between **very low** to **no** across all Project sub-areas in the medium to long term.

8.0 Assessment Against the Relevant Policy Provisions

The statutory documents relevant to a landscape assessment of the Project are the West Coast RPS, CMS, RLWP, and district plans both the BDP and proposed TTPP. Although these statutory documents are subject to a weighting in decision making under the FTAA compared to the RMA process, they contain objectives and policies that relate to the consideration of landscape effects, each with a varying degree of emphasis pertaining to sustainable management.

The statutory documents collectively establish a consistent and reinforcing framework for managing landscape effects, with several clear thematic threads emerging across the CMS, RLWP, TTPP, and NPS-IB provisions.

A primary theme is the protection of landscape as a multi-dimensional resource, encompassing physical, perceptual, and associative values. Across all documents, landscapes are treated as integrated systems. Physical attributes such as landforms, geomorphology, vegetation patterns, water bodies, and ecological processes are consistently identified as foundational. These elements underpin landscape character and are to be protected not only for their intrinsic value but also for their role in shaping perceptual qualities such as naturalness, coherence, and legibility. The recognition of associative values, including cultural landscapes and historic features (notably Ngāi Tahu associations), further reinforces the holistic understanding of landscape.

A second key theme is the primacy of protection—particularly in high-value landscapes. The statutory direction is strongest in relation to Outstanding Natural Landscapes (ONLs), Outstanding Natural Features (ONFs), and areas of high natural character. The RLWP and TTPP in particular establish a clear hierarchy of response, where avoidance of adverse effects is the dominant directive, rather than reliance on mitigation. This reflects a high policy threshold, consistent

with national-level direction, requiring that development be prevented from undermining identified landscape values in these areas.

Closely related is the theme of maintenance of natural character and landscape qualities. There is a consistent requirement to retain naturalness, scenic quality, and experiential attributes such as wildness, remoteness, and openness. These qualities are framed as sensitive to modification, particularly through earthworks, structures, and vegetation clearance. As such, the statutory framework emphasises careful design, siting, and management of development to minimise visual disruption and maintain landscape coherence. These aspects are not particularly relevant to the Project, which is constrained by the location of the resource to be mined although taken into account for some components associated with mining activity.

Another unifying theme is landscape-scale and systems-based management. The CMS and NPS-IB in particular emphasise the importance of managing landscapes as interconnected systems rather than discrete sites. This includes recognition of mountains-to-sea continuums, ecological connectivity, and the importance of natural processes in shaping landscape over time. The NPS-IB strengthens this by focusing on ecosystem integrity, habitat distribution, and ecological corridors, which indirectly sustain landscape character, continuity, and resilience.

The statutory documents also highlight the importance of landscape patterns, processes, and legibility. There is a consistent expectation that development should not disrupt the underlying patterns that make landscapes understandable and coherent. This includes maintaining geomorphological integrity, vegetation patterns, and hydrological systems, as well as ensuring that human modifications do not obscure or fragment these patterns.

Finally, there is a strong theme of integrated management and alignment with higher-order statutory direction. The RLWP and TTPP clearly align with national directives relating to natural character and outstanding landscapes, reinforcing a cohesive planning framework. Landscape is embedded within broader natural heritage and biodiversity management, rather than treated in isolation, resulting in overlapping and mutually reinforcing policy outcomes.

In summary, the statutory framework collectively establishes that landscape effects must be assessed and managed through a comprehensive lens, with a strong directive for protection, particularly in high-value environments, avoidance, maintenance of natural character, and recognition of landscape as an interconnected system

coupled with a strong emphasis on mitigation, remediation and long-term landscape restoration.

The consideration of relevant landscape matters within the statutory framework are therefore grouped into common themes, set out below as natural character, outstanding natural landscapes, quality of the environment and amenity. The themes are inter-related and similarly effects on landscape values also overlap. These themes are discussed below in relation to the effects of the Project.

Throughout the hierarchy of statutory documents direction is given to ensure incompatible use and development of natural and physical resources are managed to avoid or minimise conflict.

The TTPP is the most recent district plan and combines the Grey, Buller and Westland district plans. Specifically, TTPP has a special purpose zone for the Buller Coalfield recognising the importance of the coal resource to the combined districts. Refer GA, Page 08. TTPP explicitly provides for mineral extraction zones (Buller Coalfield Zone, Mineral Extraction Zone (MINZ)) with tailored policies and rules acknowledging the economic role of extraction, while still requiring consideration of landscape/natural character effects. The Stockton Extension and ESE Project sub-areas lie within the Buller Coalfield Zone but MFS and most of the UWHR lie outside the zone.

8.1 Natural Character

Natural character is specifically mentioned under s6(a) of the RMA to recognise and provide for the preservation of the natural character of the coastal environment, wetlands and lakes and rivers from inappropriate subdivision, use and development.

Natural character is the expression of natural elements, patterns and processes and occurs on a continuum. The level of naturalness is affected by the degree of human modification. Natural character is an overall character derived from natural characteristics and qualities[128].

Vast areas of the West Coast lie within the DOC estate and as conservation land typically has very high levels of natural character. This is recognised both locally and internationallyby large numbers of visitors seeking natural experiences along the West Coast, notwithstanding the interest in historic heritage relating to mining endeavours. The natural character of the region’s wetlands, and lakes and rivers and their margins and their associated amenity values are therefore of key importance.

[128] TtaTM. 9.57

Notwithstanding that parts of Ngakawau lie within the coastal environment, all parts of the Project sub-areas will lie outside the coastal environment, as defined by the district plan maps, being located behind the coastal hills that form the inland extent of the coastal environment. However, the West Coast RLWP identifies Denniston Plateau NGAP051 as a Schedule 2 wetland and wetlands are further described in the EcoLogical Solutions report on the various Project areas.

The descriptions above identify areas of wetlands, and streams that will be unavoidably affected by the Project, which can have significant and long-term adverse effects on both the terrestrial and freshwater ecosystems. As part of the Project, streams and wetlands have been avoided where they are of very high ecological and cultural value, such as the Billo Stream tarn below Mt Frederick and the headwaters of Conglomerate Stream on the Denniston Plateau. The rehabilitation will also provide constructed wetlands over various vegetation types to reinstate wetland areas within all Project sub-areas.

The natural character of the existing creeks on the route of the UWHR and other haul roads, such as Deep Stream at MFS, will be partly compromised with the construction of bridges and/or culverts where the access/haul road crosses water courses whilst maintaining other aspects of natural character relating to habitat connectivity etc. However, unless required for maintenance and / or recreational purposes at the end of the life of the mine such structures will be removed and the integrity of the streams at the crossing points restored. Structures are likely to remain in-situ post mine closure along the 19 km of the UWHR, and also where necessary to reinstate the road access to Mt Rochfort.

Adverse effects on streams and wetlands will inevitably occur as part of the mine activity within the various Project sub-Areas. At Stockton Extension mining activity will intrude into Twins Stream, the upper tributaries of Granity Stream, Mine Creek and Ford Stream.

At MFS mining activity will intrude into the headwater tributaries to Billo Stream and two tributaries to the Waimangaroa River and two minor tributaries to Deep Stream. The most significant deeply incised water courses will be avoided by the use of culverts and the bridging of Deep Stream.

At ESE the mine activity will intrude into the incised walls of the Whareatea River, Conglomerate Stream, Trents Stream, V40 Stream, S Creek including their tributaries that feed into the Whareatea River and generally the wetlands within the ESE disturbance area on Denniston Plateau.

The watercourses will be reinstated according to the EcoLogical Solutions recommendations to replicate the morphology of natural streams and provide suitable ecological habitats. While approximately 17.2km of natural water courses will be lost or modified by the mining activities the rehabilitation will reinstate 20.9km of streams, albeit not in the same locations, although they will feed into the same water catchments. The ecology reports specifically reference the rehabilitation process to reinstate streams[129], wetlands and tarns in all areas of the Project. The parts of the ELFs where slopes are gentle to flat (< 5º) will be targeted for creation of tarns and wetlands. Some of the pits surrounded by highwalls will be created as open water bodies.

Open water bodies will occur as part of the Stockton Extension at the headwaters of Twins Stream, the upper tributaries of Granity Stream and Mine Creek (refer GA, Page 34 Final landform); at MFS where a pond will be located at the headwaters of a Deep Stream tributary to the western edge of the West Pits and to the east above the confluence of Billo and Deep Stream (refer GA, Page 50 Final landform); and at ESE the borrow pit will be rehabilitated as a lake west of the Whareatea Mine Road and a large water body will be located at the edge immediately south of the Whareatea River gorge (refer GA, Page 73 Final landform).

As natural processes continue to occur (particularly in relation to hydrology given the high rainfall and often extreme weather events, vegetation colonisation etc), natural patterns will re-establish and strengthen so overtime a natural character will be restored post mining. In other words, while natural character will not be preserved as such, changes to natural character will be reversible to a high degree. It is understood that the approach undertaken by Bathurst will satisfy Ngāti Waewae concerns conditional on continued engagement, monitoring and mitigation.

Further, adverse residual effects from a landscape perspective will be addressed by the pest free enclosures on Denniston and Stockton plateaux that equate to 910.7 ha of land that will remain physically intact and ensure that landscape values particularly natural character will be preserved and or enhanced, consistent with the policy direction of the relevant statutory documents

8.2 Outstanding Natural Landscapes / Features

Important landscapes are those that are recognised as ONLs/ONFs where Section 6(b) applies. Sustainable management relies on mapped ONLs/ONFs and mapped coastal natural character to trigger

[129] Ecological Solutions (2025) Buller Plateaux. Rehabilitation Management Plan. Sections 6.7 Wetlands, 6.8 Tarns and 6.10 Stream Reinstatement,

different policy/rule outcomes (e.g., stricter controls inside an ONL) with a preference for avoidance in the highest-value areas.

The TTPP provides ONL Schedules as a tool to assist with the identification of the landscape values that are protected within an area. (Refer section 8.1.1 above). The ONL Schedules are based on the scale of the relevant ONL and form a relatively "high level" summary of the more natural landscape values of the area. The TTPP states that given the scale of the landscape assessment underpinning the ONL schedules and the high-level nature of the schedules themselves, a finer grain proposal-specific assessment of landscape values will typically be required.

There are two aspects of Section 6(b) of the RMA requiring consideration - the first being the requirement to recognise and provide for the protection of ONL's and the second being whether an activity, such as mining, constitutes an appropriate development or not. Guidance as to whether the proposed mine is an appropriate activity is given by the RPS 2020. The RPS contains policies that 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. The RPS and the TTPP recognise that the use and development of natural resources may be incompatible with other land uses, in some situations and locations.

The Project sub areas will sit mostly outside these important landscapes, except where the north and western edges of the MFS disturbance area, the southern edge of ESE disturbance area and intermittent parts of the UWHR will encroach into the adjoining ONLs. Refer GA, Page 08. However, the areas of encroachment will be very marginal and more likely a result of the coarse scale and mapped line widths on the topographical map or DP map overlay. In reality, the ONL boundaries will relate to the edge of a landform as a defensible line, but which on the ground may be more or less definitive and from public viewpoints may be difficult to discern.

For these reasons the ONL intrusions will be experienced as an indistinguishable visual effect on the coastal hills' skyline from the SH67 coastal corridor at viewpoints 7-10.

The northern edge of MFS will also partly intrude onto the ridgeline that forms the ONL50 boundary between the Waimangaroa River gorge and the Stockton Plateau where the topography is gently sloping rather than a distinctive ridgeline. Part of the intrusion will constitute the 20m wide ecological setback / buffer.

Of the MFS area, approximately 4.5 ha of land, and its cover of forest vegetation below the ridgeline within the Waimangaroa River gorge, will be removed by the proposed mining (refer VS, Viewpoint 13, Pages 46 – 50, Viewpoint 14, Pages 55 - 59, Viewpoint 17a, Pages 76 – 84, Viewpoint 18b, Pages 121 – 129.).

The VS represent the closer Project-Scale views from where the ridgeline intrusion will be obvious particularly over stages 04 – 06 pre-rehabilitation occurring.

In terms of the protection of the ONL the question is to what degree might the loss of a minor portion of the ridgeline and its forest vegetation compromise the ONL values. ONL50 encompasses the coastal hills and part of the Waimangaroa River gorge with values relating to its contiguous and consistent indigenous forest vegetation cover; and as a dramatic deeply incised river valley system extending to coastal ranges, reinforced by the succession of vegetation patterns. Mt Frederick, the Waimangaroa River and the dramatic bluffs that form the headwall of the valley contribute to the expression of high legibility, and where natural patterns and natural processes are evident.

From the coastal corridor and SH67, the effects on natural character arising from MFS will be confined to a relatively narrow strip along an unmemorable section of the skyline at viewing distances of over 4.7 kms. The process of extraction will, inevitably, adversely affect natural character through the removal of forest, rock outcrops and the presence of earthworks, which may appear along the skyline over certain stages, although the Visual Simulation from Viewpoint 4 does not show any discernible changes. However, the skyline will be rehabilitated (backfilled, recontoured and revegetated) and eventually it will appear, natural, albeit slightly reduced in height.

It is likely that only those people who are very familiar with the existing skyline will perceive it as having been altered from its natural state. Most viewpoints are located at some distance from the ridgeline at over 4.7 km up to 19 km while travelling at speeds of between 80 – 100 km / hour as represented by the Broad Scale viewpoints 4 - 12. Sun angles, distance haze and weather also affect visibility to a substantial degree, meaning that visual effects on landscape values from the coastal corridor will be at worst **very low** and reduce to **no** adverse effect post mine closure and rehabilitation.

At a Project Scale, during LOM Viewpoint 14 Whareatea Mine Road and Burnetts Face will afford the closest view to MFS for the public visiting Denniston Plateau. From this viewpoint it will be obvious that the contiguous forested slopes will no longer extend to the gorge ridgeline but will stop, at the most, some 130m short of the new

ridgeline. It is proposed to rehabilitate the landform and revegetate these slopes. The re-establishment of forest on these exposed upper slopes will appear different above the non-disturbed bush line in the short-term, although environmental gradients will amount to the same visual difference and are not uncommon. On that basis, the ONL has the capacity to absorb change comprising the alteration to the skyline and removal of ridgeline forest as it will not appreciably diminish the remaining components that contribute to the very extensive Denniston-Waimangaroa ONL50 values that will remain largely intact.

The southern edge of ESE appears to encroach marginally into ONL41 during the later extraction stages 11 – 13 and will not be visible from any viewpoint, including the Cascade River catchment which has no formal public access. This is because the ONL boundary lies on the northern side of the ONL ridgeline highpoints (at 866masl and 854masl) rather than aligning with the actual ridgeline that demarcates the Cascade River catchment from the Denniston Plateau. It is considered that based on the descriptions of ONL41 the effects arising from disturbance will not adversely affect the ONL values but will be contained within the Denniston Plateau.

The UWHR will intermittently intrude into ONL49 over the northern 2.3 km stretch of the haul road. About half of this road section will be new while the remaining section is existing and will be widened. The values for ONL49 focus on the river valley to the southeast hemmed in by the Mt William Range and Lyell Range, which suggests that the boundary should follow the ridgeline as an extension of ONL41. The overlay and its description are what defines the extent of the ONL. In this case, the boundary location seems contradictory to the ONL 49 description and values where it traverses the west facing slopes at the base of the Mt William Range. This section of the ONL boundary drops westwards over the ridgeline at Stevenson Stream to run along the true left of the Waimangaroa River for approximately 2km before returning to the east along Ernst Stream along the Mt William Range ridgeline. The boundary doesn't include the Waimangaroa River but captures part of Cedar Creek Road and the transmission pylon road network on the west facing slopes of the range. Notwithstanding the ONL 49 boundary, the key values are associated the homogenous cover of mature lowland forest and overall setting which convey a very high degree of natural character. The presence of the existing roading network within the ONL suggests that the minor intermittent encroachment of the UWHR will not adversely affect the ONL values to more than a low degree.

8.3 Quality of the Environment

The quality of the environment covers a broader range of matters in a more integrated way. In RMA terms, maintenance of the quality of the environment requires that the proposed development does not result in the inappropriate degradation of natural character, outstanding landscape values, amenity values, or cultural relationships, and that it sustains the physical and ecological processes that underpin those attributes. The requirement under section 6 is to **recognise and provide for** matters of national importance, including the protection of natural character and outstanding landscapes, while section 7 requires **particular regard** to be had to amenity values and the quality of the environment.

Accordingly, a proposal will maintain environmental quality where it:

- avoids significant adverse effects on natural character and outstanding landscapes, and
- maintains or enhances the amenity, coherence, and experiential qualities of the landscape, and
- sustains the ecological and cultural systems that contribute to landscape character.

Maintenance of the quality of the environment requires that a proposal does not materially degrade the naturalness, physical integrity, coherence, scenic quality, or experiential attributes of the landscape, nor undermine the ecological systems that sustain those qualities.

The Project will significantly modify the physical integrity and natural character albeit in a landscape that has been modified by a long history of extractive use to varying degrees. Mining will inevitably adversely affect the intactness of landforms, geodiversity, hydrology and indigenous vegetation / biodiversity / connectivity although it will for the most part avoid ONLs / ONFs. Landscape coherence and legibility will diminish with the removal of landscape patterns, and disruption of natural processes reflected by the continuity of landform – vegetation relationships.

Perceptual values pertaining to amenity, visual cohesion, scenic outlook, experience of naturalness, a sense of place, wildness and remoteness, and other qualities will reduce at least over the LOM. Throughout LOM further landscape degradation through additional mining activity will occur and in a cumulative sense by the experience of mining occurring on multiple sites in proximity over the same period of time.

Associative values will reduce in particular where some elements of historic heritage are removed through mining. Effects on recreation and tourism values will also occur at least over LOM and post mining these values will be reinstated, notwithstanding that there may be some benefits relating to improved accessibility to future recreational and tourism pursuits. Offsets will be provided by the substantial areas of the plateaux set aside as pest free enclosures including sustaining cultural systems and values.

The Project will unfold over an extended period of time – initial disturbance, sequential extraction, rehabilitation and long-term ecological recovery meaning that effects on landscape values will evolve significantly over time. So, the temporal dimension is as influential as the spatial scale in determining how the landscape values are affected.

Recognising this the Project includes a comprehensive rehabilitation programme with the most contemporary rehabilitation techniques to facilitate and ensure that physical integrity (landforms, indigenous vegetation and biodiversity, and hydrological systems are reinstated and will become self-sustaining post close of mine and rehabilitation.

The effects on landscape values are managed through detailed mine design and management plans that specifically target the sequence and methods employed for rehabilitation, plant provenance and the prevention of weed spread throughout the LOM, during and post rehabilitation, in addition to providing pest free sanctuary areas protecting biodiversity and natural character.

There are four proposed pest free enclosures that will maintain and protect areas of the plateau with high ecological value and high associative values relating to historic mining. Two of these pest free enclosures are located on the Stockton Plateau and are referred to as:

- Mt Augustus – 14.6 ha;
- Whirlwind Rise – 694.5 ha;

The pest free enclosures located on the Denniston Plateau are referred to as:

- North Denniston – 47.3 ha
- Coalbrookdale – 154.3 ha

The objective of protecting these areas is to maintain and enhance the quality of the environment.

The reinstatement of a pre-mining landscape over the various disturbance areas is unlikely to be achieved, notwithstanding the

historical mining modifications to the landscape over each Project sub-area. Although the landform will inevitably be altered, the proposed rehabilitation is expected to result in a recontoured vegetated landform that overtime will appear natural, connected, self-sustaining and legible as part of a plateau landform. The natural processes will continue to occur and eventually the rehabilitated landform and vegetation patterns will meet or improve on the quality of the environment, especially in places where it has been obviously modified by historic mining.

8.4 Amenity

Section 7(c) of the RMA requires proposals to have particular regard to the maintenance and enhancement of amenity values, where amenity values are defined as those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

Accordingly, the CMS, RPS, RLWP, and the district plans emphasise the maintenance of amenity values and particularly under the RPS, the values that contribute to the West Coast's distinctive character and sense of identity, including places with visual appeal. It is worth noting that the RPS[130] also recognises the competing objectives and considerations between landscapes and mineral extraction.

In implementing the RMA and the RPS, the district plans (BDP and TTPP) clearly anticipate mining activities to occur but recognise that a high percentage of land managed under a conservation mandate has high scenic values and that mining activities have the potential to significantly impact on these values.

The competing considerations and practicality of achieving environmental outcomes is recognised in the BDP by the wording of 'intended environment outcomes' at clauses 4.5.8.1 and 4.5.8.2, which include reference to long term time frames in order to achieve the maintenance and protection of environmental quality, options to avoid, remedy or mitigate significant adverse effects on natural character and the rehabilitation of mined areas to standards, which take into account what is practicable.

The timeframes referred to in this LAR are established from an ecological perspective as short term at 10 years, medium term at 10 – 50 years and long term as more than 50 years[131]. These time frames

[130] West Coast Regional Policy Statement. 2. Significant Resource Management Issues for the West Coast. 5. Use and Development of Resources.

[131] EcoLogical Solutions (2025) Rehabilitation Management Plan. 1.5 Rehabilitation Goals, Objectives and Closure Criteria

relate to rehabilitation, and establishment of self-sustaining ecosystems and adopted for assessing the landscape effects.

Similarly, the TTPP enables existing authorised mineral extraction within the special purpose Buller Coal Zone and also within the Mineral Extraction Zone. Under these zones, there is a dual objective to explicitly provide for mineral extraction but also to minimise and manage adverse effects on landscape– including effects on visibility, scale, lighting, landform change and rehabilitation.

Rehabilitation to best-practise standards after extraction is a core policy. The provisions for mineral extraction are intended to ensure that this strategically important activity continues to be able to be undertaken on the West Coast while also 'managing' the adverse effects of these activities on the amenity, character and quality of the environment.

The rehabilitation of the Project sub-Areas is an important component of the proposal. The Project has been designed and developed to minimise adverse effects on the abiotic and biotic attributes within the disturbance areas and where disturbance is unavoidable, using various revegetation methods and a sequential method of restoration to achieve a practical and high standard of environmental rehabilitation aiming for no net loss in biodiversity values.

The Visual-Simulations (refer Appendix C) illustrate the visual effects on the landscape at both a Broad-Scale and Project-Scale and at key stages of extraction, at close of mine post rehabilitation and in the medium to long term being 10 to 50 years. A summary of visual effects is attached at Appendix A Table 1.

Inevitably, there will be a wide range of adverse effects on landscape values including visual amenity arising from the Project during the course of mining depending on staging, viewpoint proximity and aspect. At a Broad-Scale, adverse effects on landscape values experienced visually (being visual effects) will range between **no –low** during the LOM, reducing to **no** adverse effects post mine closure and rehabilitation. This is mostly due to the mitigating effects of distance, screening by topography and intermittent nature of views from the coastal corridor. There are no cumulative effects given the distance between the Project sub-Areas and intervening topography and the small scale of the mining activity that is visible from the coastal corridor.

At a Project-Scale, with the exception of views of Stockton Extension from Millerton which are assessed as **no** to **low**, adverse effects on landscape values experienced visually (being visual effects) will be **moderate-high** to **very high** mostly due to the overview that will be

gained of the various Project sub-areas from elevated viewpoints in proximity to the mining, noting that public access to these viewpoints will vary from accessible, constrained and / or managed during LOM.

During LOM **moderate-high to very high** visual effects will mostly be experienced from the intersection of Whareatea Mine Road and Burnetts Face Road, Whareatea Mine Road, the Whareatea Trig Track, Mt Rochfort and Mt William represented by viewpoints 13 - 18 if the public are curious enough to venture beyond the Denniston historic area or settlement or by recreational mountain bikers using the tracks that will remain open on the Denniston Plateau. Viewpoints 14 - and 15 in particular are from a sealed road approximately 1.8 km beyond the Denniston historic area, readily accessible and will afford close views to ESE and MFS.

From these Project-Scale viewpoints cumulative effects will occur where both ESE and MFS will be visible from the same viewpoints and from Viewpoint 18 views of ESE, MFS and the consented Cypress Mine will all be visible. However, the cumulative effects will increasingly diminish particularly post mine closure and completed rehabilitation. Cumulative effects are discussed more fully under the Cumulative Effects heading below.

According to the Rehabilitation Management Plan, *the goal of rehabilitation is to leave the site in a safe and geotechnically stable state post-mining, incorporating landforms and vegetation communities that are sympathetic to surrounding landscapes. Rehabilitation aims to establish self-sustaining ecosystems*[132] *that are similar in plant and animal species diversity and functioning to undisturbed (pre-opencast mining) ecosystems and maintain local biodiversity*. Of note is that the objectives of the RMP are to provide details to optimise rehabilitation outcomes. Rehabilitation at Stockton has been an evolving practice for over 30 years, informed by extensive field trials and refining of various techniques, which have included hydroseeding, planting and vegetation direct transfer (VDT). Therefore, vegetation establishment including canopy cover and closure timeframes are well understood in this local environment and inform realistic rehabilitation expectations over the Project sub-areas.

The comprehensive mitigation and rehabilitation will ensure that effects on visual amenity will be mostly experienced during LOM and temporary or reversible in the medium to long term. Adverse effects

[132] A self-sustaining ecosystem is defined as indigenous plant and animal communities that establish, grow, reproduce, and persist indefinitely in response to the ecological gradients present and underpinned by natural ecological succession without human intervention, management or protection. These ecosystems maintain their own biodiversity, nutrient cycles, and resilience against natural disturbances (including weeds) and function as self-regulating, low-maintenance, or wild environments.

on visual amenity will diminish over the LOM as the proposed rehabilitation occurs in successive stages following the stages of extraction. This will ensure that the total extent of disturbed land will be minimised at any one time so adverse visual amenity effects will reduce as quickly as practicable over the LOM and post mine closure and completion of rehabilitation and further reduce in the medium to long term as vegetation establishes.

Notwithstanding this, the landforms, including the skyline ridge, will inevitably be permanently altered and the difference between the rehabilitated areas and surrounding natural vegetation will persist for up to at least 10 - 50 years post mine closure and rehabilitation. Despite this, the long-term outcome of the proposed rehabilitation will result in a self-sustaining ecosystem that will ensure the maintenance, and in some instances the enhancement, of landscape values to satisfy the above-mentioned statutory matters relating to amenity (visual cohesion, legibility, natural character, memorability, scenic outlook etc).

8.5 Cumulative Effects

The general assessment framework policy directs consideration of cumulative effects. Cumulative effects are the effects of a proposal in combination with those of previous developments or where additional developments of the same type are located in proximity. Cumulative effects will arise from the physical changes and collective views of ESE, MFS, Stockton Extension and the consented Cypress Mine. These are assessed in detail under the visual assessment above from viewpoints where cumulative effects will occur and summarised below.

Cumulative landscape effects are considered to be those that affect the physical landscape such as caused by earthworks for the haul road, site works, topsoil stripping, excavating the open cut pit, the progressive development of ELFs and stockpiles and removal of hydrology and vegetation. This will occur across the plateaux during LOM for all Project sub-areas and in combination with Stockton and Cypress Mine so cumulative landscape effects will be **very high** but will decrease proportionately post mine closure as rehabilitation vegetation establishes and natural processes soften and blur ELFs and natural character increases with the self-sustaining ecosystems.

Cumulative visual effects can affect perceptual values including visual amenity and it is generally recognised that this can occur in three ways. These are:

- Combined effects – resulting from two or more Project sub-areas or existing consented mine activities being seen from

one viewpoint in the human field of vision (i.e., spanning 124o horizontally).

- Succession effects – resulting from two or more Projects sub-areas being seen from one viewpoint but not in the same human field of vision, i.e., the viewer has to turn to see one or other Project sub-area.
- Sequential effects – resulting from the observer moving to another viewpoint and then seeing one or another Project sub-area. Sequential effects are most commonly experienced along regularly used routes such as roads and cycle/walkways.

The VS viewpoints were specifically chosen to capture cumulative effects. These occur mostly at a Project-Scale although potential cumulative effects are noted at a Broad-Scale. The Broad-Scale cumulative effects are mostly mitigated by very low visibility due to distance and screening by topography except for Viewpoints 2 and 3 where the VS demonstrate the combined cumulative effect of the Stockton extension where it is seen as an incremental extension to the already existing and consented Stockton mining activity. From these viewpoints the combined cumulative effects will remain **very low**.

At a Project-Scale cumulative effects will occur from viewpoints 13 – 18. The cumulative landscape and visual effects arising from the combined operation of the ESE, MFS and Cypress mine areas are described as varying from **moderate-high to very high** during the life of mine (LOM), depending on the viewing location, extent of simultaneous mining activity, and degree of rehabilitation established over time.

The cumulative effects primarily arise from the widespread visibility of multiple mine areas across the Denniston and Stockton Plateaux landscape, often experienced either simultaneously within a broad panorama or successively as viewers move through the landscape or turn between viewing directions.

The effects are associated with the extensive scale of earthworks, landform alteration, vegetation clearance, stepped highwalls, haul road activity, and visible machinery operating across physically separated but visually related mining areas. Distances between the mines (approximately 3.7 km between ESE and MFS, and 4.1 km between MFS and Cypress) reduce adverse visual effects to some degree, but do not avoid the perception of a broad mining landscape extending across the plateaux.

From several viewpoints, particularly elevated recreational locations such as the Trig Track highpoint and Mt William summit, the mine

areas are perceived as collectively altering the character of the wider landscape. The cumulative effects include:

- enduring modification of landform and physical landscape character;
- reduction in natural character and scenic quality;
- diminished aesthetic coherence and landscape legibility;
- erosion of transient experiential values such as quietness, tranquillity and a sense of remoteness or being close to nature; and
- adverse effects on recreation and conservation values.

Cumulative effects will be greatest during peak extraction stages when multiple mine areas are active concurrently. During these periods, the mine workings appear distributed across a continuous panorama, conveying an expansive extractive intrusion into an intact plateau environment. While the wider Denniston Plateau already exhibits evidence of historic and ongoing mining modification, the scale and extent of simultaneous activity occurring at MFS substantially increases the intensity of visual and landscape effects.

The assessment also identifies sequential cumulative effects where viewers travelling through the landscape experience one mine after another in succession, particularly along Whareatea Mine Road and recreational tracks. Although not always visible in the same viewshaft, the repeated exposure to mining activity will contribute cumulatively to the overall perception of landscape change.

This may result in overwhelming cumulative effects during LOM for viewers that identify strongly with the natural landscape, and for those with a conservation ethos where the activity and contrast between mine disturbance areas and unmodified nature of the broader surrounding landscape will exacerbate visual effects.

Over time, rehabilitation and mine closure are expected to progressively reduce cumulative adverse effects. As active extraction ceases, infrastructure is removed, vegetation establishes, and engineered landforms soften, effects are assessed as reducing from high or very high during LOM to **moderate, low-moderate, or low** following closure and ongoing rehabilitation. Nevertheless, stepped highwalls and modified landforms are anticipated to remain visible for some time post-closure, resulting in some enduring residual landscape change.

9.0 CONCLUSION

The Buller Plateaux Continuation Project (BPCP) is proposed within a highly distinctive and complex landscape that has been shaped by both natural processes and a long history of mining activity. The receiving environment across the Stockton and Denniston Plateaux contains important physical, perceptual and associative landscape values, including dramatic plateau landforms, indigenous vegetation and wetland systems, a strong sense of remoteness and naturalness in parts, extensive historic mining evidence, and recognised recreational and conservation associations. These values are experienced differently at the Broad-Scale and Project-Scale and vary considerably between the individual Project sub-areas.

The BPCP proposes open cast coal mining activities individual Project sub-areas at Stockton Extension, MFS and ESE and associated haul road infrastructure (UWHR), which will generate a range of effects on landscape values, most noticeable as visual effects across the Buller Plateaux throughout the 11 – 16 year life of the Project.

The assessment has identified that effects on landscape values will vary in scale and significance depending on proximity, viewing audience, the Project stage and context. The assessment identifies that the Project will result in both temporary and long-term changes to landscape character and visual amenity values through open cast mining, vegetation removal, engineered landforms, haul roads, water management infrastructure, lighting and associated operational activities.

The greatest effects will occur at a Project-Scale within and immediately adjacent to the active mining areas, where existing landforms, hydrology, landscape patterns and land cover will be modified for extended periods during extraction and rehabilitation phases. Effects will be most apparent during active mining stages prior to the establishment and maturation of rehabilitation vegetation.

At the Broad-Scale, adverse visual effects are generally **no** to **low** due to distance, containment by landform, and weather conditions that influence visibility. This means that at a Broad-Scale, the Buller Plateaux and surrounding coastal and mountain landscapes will continue to retain their overall legibility, dramatic landform expression and landscape identity. The majority of publicly accessible views toward the Project are experienced at considerable distance, within an expansive and dynamic landscape context that already contains visible evidence of historic and contemporary mining activity.

Consequently, while the Project will contribute to cumulative landscape change across the plateaux, it will not fundamentally alter the overall character or appreciation of the wider Buller landscape.

The Stockton Extension and UWHR are assessed as having generally lower landscape effects due to their relationship with existing mining infrastructure, transport corridors and modified landforms.

The assessment concludes that the most notable landscape effects arise within the MFS and ESE Project sub-areas due to the scale of disturbance, duration of mining activity and interaction with elevated ridgelines and areas identified as having higher natural landscape values. Referr Appendix A, Visual Assessment Summary Table. At the Project-Scale, particularly from elevated recreational vantage points such as Mt William, Myra's Track, Whareatea Mine Road and Mt Rochfort, adverse visual effects are assessed as ranging from **very low to very high** during active operations. However, these effects are moderated by the existing mining context, the staged nature of extraction, progressive rehabilitation, and the long-term rehabilitation outcomes proposed.

In relation to physical attributes, the Project will result in the substantial modification of natural landforms, removal of vegetation, and disturbance of hydrological patterns and processes with consequential reductions in perceptual values including natural character, legibility, aesthetic qualities and visual coherence during extraction. These effects will be most apparent where the ridgeline and skyline are modified adjoining ONLs (e.g., MFS and ESE) and where elevated viewpoints overlook the plateaux and afford cumulative effects on landscape values including experiential qualities such as memorability, remoteness, connectivity and continuity of landscapes.

Associative values linked to historic mining landscapes will be partly lost through direct disturbance of archaeological features, although these will be mitigated by recording, recovery, and interpretation measures. Recreational values will be constrained by temporary access restrictions but can be maintained or offset through management of alternative routes and enhanced interpretation opportunities post mine closure. Adverse effects on conservation values will be mitigated throughout the life of the Project if recommendations proposed by EcoLogical Solutions (2025) and Clough & Associates (2025) are undertaken and will continue to be remedied by time. The Cultural Impact Assessment identifies the potential impacts on cultural values and concludes that provided that the proposed mitigation and compensation package is implemented as intended the project can be supported.

Inevitably during the extraction activity, the changes to the physical landscape will be substantial within the Project footprints, corresponding to a range of adverse effects from **low** to **very high** effects on landscape values. However, the effects on landscape values will be managed by the combination of avoidance, mitigation and remediation approaches.

Post-mining, rehabilitation will involve engineered landform reshaping, stream reinstatement, and re-establishment of native ecosystems using VDT, direct planting, and long-term management measures. While the engineered landforms will initially be discernible, the sequential nature of rehabilitation will reduce the establishment of canopy cover timeframes post mine closure. Ongoing natural processes (high precipitation, erosion, colonisation etc) will also progressively assist to restore natural patterns. In the medium to long term, the rehabilitated landforms and vegetation are anticipated to naturalise to a level where landscape coherence, legibility, and perceived natural character are reinstated reducing adverse effects between **no** to **a low** degree as ecosystems become self-sustaining and mature.

On balance, the overall effects on landscape values including natural character during LOM are assessed as **very low to very high** but reducing to **low** to **very low** or **no** adverse effects in the medium to long-term following completion of rehabilitation and ecological restoration, development of self-sustaining ecosystems and the re-establishment of natural character.

From a landscape character and visual effects perspective the pest free enclosures will provide additional balance to any residual adverse effects arising from the extraction activities. These areas will preserve 910.7ha of the plateaux so landscape values remain intact and will act as a yardstick to measure effectiveness of rehabilitation.

Overall, while the Project will result in adverse landscape and visual effects, particularly during active operational phases, these effects are not assessed as resulting in the loss of the wider landscape identity or integrity of the Buller Plateaux.

The Project recognises and responds to the values of the receiving environment through rehabilitation, ecological restoration, and management of landscape change over time. Subject to the implementation of the proposed rehabilitation, mitigation and biodiversity measures, the Project is assessed as being capable of achieving acceptable long-term landscape outcomes within the context of an existing and historically modified mining landscape.

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Appendix A – Summary Tables; Summary Table of Visual Effects and Summary Table of Landscape Effects

Appendix B – Graphic Attachment to Landscape Assessment

Appendix C - Virtual View Visual Simulation Package

Appendix D - Rough Milne Mitchell Landscape Architects-Buller Plateaux Baseline Landscape Study (December 2021)

Appendix E – Policy Provisions Relevant to Landscape Effects

Appendix F – Addendum to Landscape Assessment Report

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APPENDIX A: TABLE 1. SUMMARY OF VISUAL EFFECTS								
Viewpt / VS GA / VS Pages		**Viewpoint Description Distance - closest project boundary**		**Viewpoint Context – Existing Amenity (Landscape Values appreciated visually)**	**Adverse Visual Effects**			
					LOM - Short Term Visual Effects			**Post Mine Closure & Rehabilitation Medium Term (10 - 50yrs)**
BROAD SCALE VIEWPOINTS				**Physical:** ONLs, landform & forest cover, landmarks, coastal, conservation land **Perceptual:** Highly natural, high legibility, dramatic, sense of enclosure, memorable, distinctive, beautiful, close to nature, dynamic, transient attributes **Associative**; SASM, cultural values, mining, culture of WC, conservation, tourism, recreation	**Stage 2 / 3**	**Stage 6 / 8**	**Closure**	**Equates to Vis Sims Post Closure (25yrs & 50yrs)**
1.	14	Karamea Bluff Lookout Point	22km to Stockton	Contiguous native bush over steep inland mountain ranges, expansive views in a coastal setting. Very high amenity.	S: No - Very low	S: No - Very low	S: No	No
2. VS	14 3 - 12	Mōhikinui Campground	14.2km to Stockton	Small settlement, coastal influence, rural coastal hills setting. Stockton mining on hilltop distantly visible. High amenity.	S: Very low	S: Very low	S: No	No
					Cumulative Effects – Very low			
3. VS	15 13 - 21	Hector, self-contained Campground	4.16km to Stockton	Close to SH67, Ngakawau settlement and mine infrastructure, coastal proximity, sealed carpark with a rural backdrop. Stockton mining on hilltop visible. Low-moderate amenity.	S: Very low	S: Very low	S: Very low - No	No
					Cumulative Effects – Very low			
4. VS	15 22 - 36	SH67 and O'Connor Road intersection	5.5km to MFS 7.5km to ESE	SH67and railway within a rural setting, views to coastal hillslopes. Moderate - high visual amenity.	MFS: Very low to No ESE: Low	MFS: Very low to No ESE: Low MFS: No	ESE: No	No
					Cumulative effects Very low - No			
					MFS – skyline breach ONL 50 not discernible ESE – screened by topography with visibility limited to intermittent patches. Some lighting effects			
5.	16	Pottingers Road - north	7-8km to MFS	Coastal, rural setting, local cemetery with cultural association, views to coastal hillslopes - high visual amenity	MFS: No-Very low ESE: Very low	MFS: No-Very low ESE: Very low MFS: No	ESE: No	No
					Cumulative Effects – Very low			
6.	16	Pottingers Road - south	6.5km to ESE	Coastal, rural setting, local cemetery with cultural association, views to coastal hillslopes - high visual amenity	MFS: No-Very low ESE: Very low	MFS: No-Very low ESE: Very low MFS: No	ESE: No	No
					Cumulative Effects – Very low			
7.	17	SH67 and Beach Road Intersection	10.5-12km to MFS 8km to ESE	Rural setting surrounded by coastal hillslopes - high visual amenity	MFS: No ESE: Very low	MFS: No ESE: Very low MFS: No	ESE: No	No
					Cumulative Effects – Very low to No			

8.	17	Beach Road	11-12km to MFS 8.7km to ESE	Coastal, rural setting surrounded by coastal hillslopes - high visual amenity	MFS: No ESE: Very low	MFS: No ESE: Very low	MFS: No ESE: No	No
9.	18	Caledonian Road	15.4km to MFS 12km to Denniston	Moderately modified rural setting surrounded by coastal hillslopes - moderate visual amenity	MFS: No ESE: No	MFS: No ESE: No	MFS: No ESE: No	No
10.	18	Coates Street, Tip Head of the Buller River	19.8km to MFS 17.5km to Denniston	Coastal dominance and setting, expansive views - high visual amenity	MFS: No ESE: No	MFS: No ESE: No	MFS: No ESE: No	No No
11.	19	74 Cape Foulwind Road	20.7km to MFS 17.5km to Denniston	Rural pastoral setting, distant views to hills – moderate - high visual amenity	MFS: No ESE: No	MFS: No ESE: No	MFS: No ESE: No	No
12.	19	Bucklands Peak	20km to Denniston	Pristine alpine setting, memorable, coastal and expansive views to highly legible landforms - very high amenity	MFS: No ESE: No	MFS: No ESE: No	MFS: No ESE: No	No

Viewpt / VS	GA ? VS Pages	Viewpoint Description	Distance - closest project boundary	Viewpoint Context – Existing Amenity (Landscape Values appreciated visually)	Adverse Visual Effects			
					LOM - Short Term Effects 11 – 16 Years		Post Mine Closure & Rehabilitation Medium Term Effects (+10 - 50yrs)	
PROJECT SCALE VIEWPOINTS				**Physical:** ONLs, landform & forest cover, landmarks, coastal, conservation land **Perceptual:** Highly natural, high legibility, dramatic, sense of enclosure, memorable, distinctive, beautiful, close to nature, dynamic, transient attributes **Associative**; SASM, cultural values, mining, culture of WC, conservation, tourism, recreation	**Stage 2 / 3**	**Stage 6 / 8**	**Closure & Rehabilitation (+10Yrs)**	**Equates to Vis Sims Post Closure (+25yrs & 50yrs)**
13	20	Mt. Rochfort, Denniston Plateau	8.8km to MFS 6.4km to Denniston	Expansive plateaux and coastal outlook, high legibility, natural character but modifications evident over Denniston. Stockton Plateau in distance. Dramatic, memorable, dynamic, transient influences with mining culture evident. High amenity.	MFS: High ESE: Very high	MFS: High ESE: Very high	MFS: Moderate ESE: Moderate – high	Low – moderate Low (25yrs) and Very low (50yrs)
VS	37-51				Combined cumulative effects – ESE, MFS and Stockton over LOM high but restricted public access. Built form visible. In short- medium term cumulative effects will be low-moderate.			
14	20	Whareatea Mine Road-Burnetts Face Rd	2.4km to MFS	Elevated view from Denniston to Stockton Plateau. Dramatic landforms apparent, steeply enclosing slopes of the Whareatea River gorge, densely forested, high natural character. High visual amenity.	MFS: Very low	MFS: High	MFS: Low – Very low	Very low - No
VS	52 - 66				Crop 1. Effects high over stages 4 – 6 where intrusion into ridgeline occurs but reduced by stage 8. Forested at closure. No - Low effects at Crop 2.			
15a	21	Whareatea Mine Road at edge of seal / carpark looking northeast	3.0km to MFS	Plateaux outlook. Dramatic landforms apparent, high natural character. Similar to Viewpoint 14. High visual amenity.	MFS: Very low	MFS: High	MFS: Low – Very low	Very low - No
15b	21	Whareatea Mine Road at edge of seal / carpark looking southwest	1.2km to ESE	Plateaux outlook. Mt Rochfort peak key feature, austere aesthetic, legible, high natural character, modified by infrastructure. Moderate – high to High visual amenity.	ESE: Low	ESE: High	ESE: High	Low – Very low - No
VS	67 - 75				Successive cumulative effects ESE, MFS over LOM moderate-high to high. Cumulative effects at COM will be moderate. Altered skyline with prominent ELFs. Mid stages extensive areas of exposed terrain. At closure stepped faces evident, and post closure more forest established and stepped faces blur.			
16	22	Whareatea Mine Road from ESE mine gate looking southwest	750m to ESE	Plateaux outlook, Mt Rochfort peak key feature, rolling topography dominated by pakihi vegetation, rock outcrops. Escarpment Mine visible. Moderate-high to high visual amenity.	ESE: Very High	ESE: Very High	ESE: Moderate	Low – Very low
					Introduction of built form at mine gate. Topography less complex, change from pakihi dominated to forest vegetation.			
17a	23	Whareatea Trig Track looking northeast	2.8km to MFS	Plateaux outlook. Modified foreground with infrastructure, overlapping mountain ranges and Waimangaroa Valley in distance. Mt Frederick feature of Stockton Plateau. Cypress mine screened by topography. Moderate-high natural character. Scattered Denniston dwellings visible. Moderate-high visual amenity.	MFS: Very High	MFS: Very high	MFS: Moderate - Low	Very low - No
VS	76-90				Crop 1. Stage 4 – 6 effects very high. Crop 2. Will see some minor sections of UWHR, some intermittent cuts for MFS haul road.			
17b	23	Whareatea Trig Track looking southwest	1.2km to ESE	Plateaux outlook. Foreground tracks and infrastructure obvious. Escarpment Mine visible. Moderate-high visual amenity.	ESE: Very High	ESE: High	ESE: Moderate-high to High	Low - No
VS	91-105				Dramatic change to terrain, addition of buildings. Cut stepped faces evident. Extensive scale of mining. Mid stages greater composition of mitigation with more forest established over hill landforms in later stages. Successive cumulative effects over LOM very high and at COM cumulative effects will be moderate.			
18a	24	Mt. William Summit	3.7km to ESE	Dramatic, alpine setting with expansive elevated views across the Plateaux. Modified Denniston Plateau apparent. Very high visual amenity.	ESE: Very High	ESE: Very High	ESE: Moderate-high	Low – Very low
VS	106-120				Extensive exposed earthworks, substantial workings, building infrastructure, stepped terrain over early – mid stages. UWHR widened on existing route with constant haul truck activity. Built form at gate in context of existing buildings at Denniston.			
18b	24	Mt. William Summit	2.1km to MFS	Dramatic, alpine setting with expansive elevated views across the Plateaux. Small part of Stockton Mine distinguishable, but Cypress Mine will be visible in background. Overall, Very high visual amenity.	MFS: Very High	MFS: Very high	MFS: Very High	Low – Very low
VS	121-135				Stages 04 – 06 effects highest. Greater extent of forest at closure. Cypress Mine and UWHR visible particularly over stages 02 – 08. Successive cumulative effects at LOM will be very high and at COM will be low.			

19	25	Calliope Street, Millerton	950m to Stockton Extension	Small settlement in a native bush setting. High visual amenity.	S: Very low	S: Very low	S: Very low	No

NOTES:
1. S – Stockton; MFS – Mount Frederick South; ESE – Escarpment Extended Project Sub-Areas
2. Illustrates changing aspects and effects of the Project from over 50 km of SH and local roads noting that majority of viewers will experience changes to the landscape while moving through at speeds up to 100km / hour.
3. Effects on landscape values likely to be experienced differently by locals / viewers depending on their attitudes to mining, conservation and degree of connection to this landscape.
4.Differences in degree of visual effect will depend on distance, view orientation, context, scale of landscape and extent of disturbance visible, viewpoint elevation and overview, experience engaged in by viewer.
5. During LOM the views will include natural landforms, a vegetation mosaic will appear on rehabilitated ELFs, while excavation occurs in stages over the disturbance areas.
6. Effects will continue to decrease past mine closure as vegetation continues to establish and natural processes of erosion and colonisation dominate engineered slopes.
7. Inclement weather and low light conditions severely reduce visual effects.

APPENDIX A: TABLE 2. SUMMARY OF LANDSCAPE EFFECTS 16 June 2026						
Landscape Area / Project Sub-Area Effect Type	Existing Values	Physical Values; ONL coastal context, orientating features / peaks / landmarks, contiguous forest, vegetation patterns relative to environmental factors, habitats, biodiversity Perceptual Values: Highly natural, visually coherent, dynamic, memorable, sense of place, human endeavour, distinctive / unique austere aesthetic, wild, remote Associative Values: Tourism, recreation, heritage, cultural values, sense of identity and conservation ethic	Description of Effects	Adverse Effects Rating		
				During LOM operation	Post COM + Rehab Short Term (up to 10 yrs)	Medium Term (10 – 50 yrs) to Long Term (50 yrs plus)
LCU 1 A and B Stockton - S	Physical	Industrial character context of extractive industry. 1B / Whirlwind Rise - High legibility and intact streams, isolated areas high in natural character with natural wetlands but generally highly modified by widespread open cast mining; snail habitat; lizard habitat;	~31 -52ha landform and vegetation loss (shrubland, forest, wetland, sandstone pavement); stream disturbances	High	Very Low	No
	Perceptual	High legibility, high contrast between modified mine areas and patches of natural character (ie Whirlwind Rise), distinctive and memorable including mining landscape, high transient values relating to changeable and dramatic weather. Strong sense of place at a large scale, low aesthetic values, limited visibility due to lack of public access	Visual effects due to distance and topography Broad-Scale visual effects: Very low to no. Project Scale-Vwpt 19: Very low to no. Adverse effects on natural character, edge of plateau; Lighting effects due to proximity to Millerton settlement	Low to Very Low	Very Low	No
	Associative	Strong cultural identity and connection of mining on Stockton Plateau, values relating to history, technology and context including extensive underground mining; Mine Creek Settlement 1890-1900s; Electric Loco Line, Jorgens Drive	Removal of historic features (Mine Creek; East Mine; 3rd West Extended Mine half of Jorgens Drive,'B' tunnel of Loco Line); mitigated by recording and recovery	Low - Moderate	Low - Moderate	Low
[redacted]	Physical	[redacted]	~170-217ha disturbance to landform, vegetation, loss of sandstone pavement, wetland/pākihi and habitat; highpoint and ridgeline removal	Very High	Very High	Low – Very Low
	Perceptual	[redacted]	Broad-Scale visual effects: Very low Project-Scale visual effects: Very high from Mt William, parts of Denniston Plateau Reduced legibility; large areas of LCU 2 plateau remain intact; noticeable change in vegetation types – less diversity, ELFs, loss of complexity	Very High	Moderate - High	Low – Very Low to No long term
	Associative	[redacted]	Koranui Incline retained; removal of Koranui Mine; Taipo Mine; mitigation measures proposed. Recreation access restricted. Conservation effects offset by pest free enclosures.	Low to Moderate	Low-Moderate and No to Very Low	Low
LCU 3 Upper Waimangaroa Haul Road - UWHR	Physical	Waimangaroa River expresses high legibility and natural character; dished valley landform, contiguous native forest cover	~30-81ha affected; new corridor over 3km of intact forest and 1km of shrubland, otherwise road widening in modified context. Forest edge effects, and habitat fragmentation.	Moderate to Very low	Very low	Very low
	Perceptual	Strongly coherent due to contiguous forest extending down from Mt William range, high legibility; high aesthetic and	Road corridor along valley floor logical location; high public acceptance for access. Impact on remoteness and natural character, continuity of forest	Moderate	Very low	Very low

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				During LOM operation	Post COM + Rehab Short Term (up to 10 yrs)	Medium Term (10 – 50 yrs) to Long Term (50 yrs plus)
		natural character values from coherency of forest and landform; sheltered with taller forest vegetation				
	Associative	[redacted]	Improved access to historic and recreational areas	Very Low	No	No
	Physical	[redacted]	~[redacted]	Very High	High to Moderate	Low to Very low
	Perceptual	High perception of naturalness, legibility, austere aesthetic; transient qualities from extreme weather conveyed by vegetation patterns; panoramic views; memorable sense of place; open character.	Visual effects in close proximity from Whareatea Rd, Mt Rochfort, Mt William; reduced natural character, introduced built forms, legibility, coherence, lighting effects, reduced landform and vegetation complexity, increase in forest vegetation, constructed streams	Very High	Moderate - High	Very Low to No
[redacted]	Associative	Historic coalfield, community and industrial heritage (Denniston Brakehead & Incline); high tourism and recreational focus; conservation ethics; generational attachment. Adjoining ONL	Access to Denniston heritage area maintained. Removal of historic features (Sullivan Mine, cableway); recreation temporarily displaced or managed. Conservation offset by pest free enclosures (201.7ha)	Very low to High Heritage – Very low to moderate Recreation - Moderate Tourism - Low Conservation – High but offset in long term	Very Low to No	No
N.B. Assumes mitigation and recommendations applied at mine closure and thereafter						