

# Newlands Closure Project – Cerito Creek Permanent Diversion System

Application Number: **03155**

Commencement Date:

Status: **Locked****25/09/2025**

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## 1. About the project

### 1.1 Project details

#### 1.1.1 Project title \*

Newlands Closure Project – Cerito Creek Permanent Diversion System

#### 1.1.2 Project industry type \*

Mining

#### 1.1.3 Project industry sub-type

Coal

#### 1.1.4 Estimated start date \*

01/12/2026

#### 1.1.4 Estimated end date \*

31/12/2040

## 1.2 Proposed Action details

### **1.2.1 Provide an overview of the proposed action, including all proposed activities. \***

NC Coal Company Pty Ltd (NCC) proposes to undertake the Newlands Closure Project – Cerito Creek permanent diversion system (the Project). Mining at Newlands Coal Mine ceased in February 2023, and the mine is undergoing site-wide rehabilitation and closure activities.

The following Project terminology has been adopted in referring this Project:

- Project Area – The area encompassing the proposed Cerito Creek permanent diversion system that may be directly or indirectly impacted by the Project activities, comprising (1) the Project disturbance footprint, and (2) the Impact area for the water resources trigger.
- Project disturbance footprint – Areas of threatened ecological communities (TECs), threatened species habitat, and migratory species habitat that may be directly or indirectly impacted by the Project activities. This consists of discrete areas for in-channel earthworks inclusive of a 50 m buffer (to allow for ancillary activities such as remediation of existing bank erosion and revegetation of riparian areas) as well as Project access tracks (existing and new) inclusive of a 25 m buffer (resulting in a 50 m wide access corridor).
- Impact area for the water resources trigger – The post-mine alignment of Cerito Creek with the potential to directly or indirectly affect water resources (that relate to a large coal mining development) as a result of the Project activities, including an additional 1 km reach upstream and downstream of the main Cerito Creek channel for the permanent diversion system.

### **Project location**

The Project is located at Newlands Coal Mine in Queensland's Bowen Basin, approximately 30 km north-west of Glenden and 135 km west of Mackay. The existing Cerito Creek diversion system (comprising of a southern and northern diversion drain, Cerito Dam and several water storage ponds) is an approximately 30 km long clean water diversion, channelling upstream ephemeral watercourse flows, and overland stormwater flows around the Newlands Coal Mine. The existing diversions are temporary and are authorised by the Queensland Government through temporary Water Licences issued under the *Water Act 2000* (Qld).

The Newlands Coal Mine site consists of three major mining areas – Main Deposit, Eastern Creek and Suttor Creek. The proposed Cerito Creek permanent diversion system and ancillary activities is located within the Main Deposit area on Lands Lease within Mining Lease (ML) 4748, 4771, 4774, 10176 and 10316.

The Project location and existing mining leases for Newlands Coal Mine are shown in Att 1 Figure 1 Project location. The proposed action is shown in Att 1 Figure 2 Proposed action. The Project Area is 631.67 ha and the Project disturbance footprint is 325.06 ha. These calculations are derived from spatial data using a projected coordinate system (GDA2020Zone55).

An assessment of the Project and the potentially occurring Matters of National Environmental Significance (MNES) is provided in Att 2 Part 1 to Part 5 of 5 MNES Assessment Report, Executive Summary, Sections 1-9 and Appendices, pg 1-310.

### **Project design**

The major components of the Project are:

- Modification and rehabilitation of the existing temporary diversions.
- A proposed channel connecting the Ramp 1 Pond with the Cerito Creek system.
- A proposed channel connecting Lake Austin to the Cerito Creek system, which will collect runoff from the final landforms.
- Removal of Cerito Dam within upstream reaches of Cerito Creek, and an engineered drop structure within the existing southern diversion.

The Project is not a standard mine diversion for temporarily diverting a section of a watercourse. Cerito Creek was originally diverted in 1988 (with subsequent repairs and modifications occurring between 1988 and 2016). The Project involves refinement and adjustment of existing diversions, as well as creation of new channels to manage runoff from the final landform and link to the natural channel system.

Geomorphological and geotechnical assessments have indicated that the existing two diversions are, on the whole, performing better than might be anticipated for older constructed channels. However, there is evidence of erosion within the existing constructed channels and sediment throughput has been disrupted by Cerito Dam, subsidence from historical mining activities, and the low bed slope of the existing southern diversion. Vegetation that was cleared for the existing two diversions was slow to re-establish during the first 15–20 years, with mature riparian vegetation only becoming more widespread and established within the last decade or so (based on site photographs and aerial imagery).

Therefore, the Project aims to:

- Improve throughput of flow and sediment to match the local seasonal and ephemeral watercourses.
- Provide a permanent diversion that is safe, stable and environmentally sustainable.
- Retain existing water storages, where possible, for stock watering by the post-mining landholder.

### **Project activities**

The Project will involve linking of channels, removal of engineered structures, creation of low-flow channels, remediation of erosion, and rehabilitation of an area of past subsidence, amongst other activities, where necessary to reinstate natural flow and sediment transport in Cerito Creek and its tributaries. Project activities will be undertaken in previously mined and disturbed areas, rehabilitated areas, and to a lesser extent, undisturbed areas (resulting from linking into and integrating with natural ephemeral flow paths).

The Project design prioritises the re-establishment of natural ephemeral watercourse characteristics and the retention of mature, stabilising vegetation. It seeks to avoid and minimise disturbance in areas that comprise or contain habitat for conservation significant species. The Project will not impact the biodiversity offset areas for the Newlands Coal Extension Project (EPBC No. 2011/5968) and Wollombi Open Cut Coal Mine – Suttor Creek ML4761 Extension (EPBC No. 2005/2015) located within the Newlands Nature Refuge area. Disturbance in the Newlands Nature Refuge (outside of the two biodiversity offset areas) is authorised under the Newlands Open Cut (Glencore): PLN Biodiversity Management Plan, however additional disturbance by the Project will be minimised.

To achieve the above, the following Project activities are proposed:

- Vegetation clearing for:
  - Diversion earthworks (consisting largely of in-channel works and disturbance of riparian vegetation and will therefore have more of a direct and indirect impact to aquatic species, habitats and functions); and
  - Construction and maintenance access (establishment of new Project access tracks to gain entry at key locations where in-channel earthworks are proposed to occur and for widening of existing Project access tracks).
- In-channel earthworks, including blasting of areas of strong competent basalt and sandstone layers within the diversion system although a design objective is to minimise blasting through avoidance of strong, competent rock, typically Rewan Group sandstone layers and Tertiary basalt flows. Areas envisaged to require blasting are as follows:
  - At the drop structure due to challenging access and some medium to high strength sandstone and rock layers within the target excavation depth.
  - Along Lake Austin channel due to strong basalt layers in the upstream reaches of the proposed new channel and deep gravely fill expected to be encountered adjacent to Pub Hill cutting.
- Permanent access track construction for post-construction monitoring and to accommodate post-mine landholder access, including replacing existing culvert crossings with bed level causeways.

- Temporary and permanent erosion and sedimentation controls both during and post-construction.
- Temporary and permanent spoil stockpiles during and post-construction (which will be located in previously mined and/or disturbed areas).
- Temporary and permanent fences to prevent livestock from accessing rehabilitated areas until such time that adequate ground cover and riparian vegetation has established around areas that require additional protection from grazing pressures.
- Temporary laydown areas (which will be located in previously mined and/or disturbed areas).
- Revegetation of riparian areas and rehabilitation of temporary construction areas.

The Matters of National Environmental Significance (MNES) Assessment Report (Att 2 Part 1 of 5 MNES Assessment Report, Section 2.3, pg 10-15) includes further details on Project activities.

### **Excluded activities**

The following activities are excluded from the Project:

- Rehabilitation and closure activities currently authorised as part of the existing Newlands Coal Mine (including under the State Environmental Authority (EA) Permit number EPML00817713) and approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Cth) for the Newlands Coal Extension Project (EPBC No. 2011/5968) and Wollombi Open Cut Coal Mine - Suttor Creek ML4761 Extension (EPBC No. 2005/2015) are excluded from the Project.
- Ongoing use of existing access roads, and monitoring and maintenance of existing infrastructure (including repairs to existing culvert and bed level crossings), related to the current land uses, operations and closure activities are excluded from the Project.
- On-ground assessments are excluded from the Project, such as topographical surveys, ecological surveys, geotechnical assessments and works pertaining to the management or salvage of Aboriginal cultural heritage items.

### **Project timing**

Construction is anticipated to take approximately three years with the Project to commence in December 2026 and be completed in December 2029. An operation and maintenance program of approximately 10 years from 2030 to 2040 is proposed. Therefore, the total duration of the proposed action is 14 years from December 2026 to December 2040.

## **1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?**

No

## **1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? \***

An assessment of the relevant approvals for the project has been completed. The legislation relevant to the Project and how it is applicable is discussed below.

Commonwealth legislation:

***Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)***

Any action that is likely to have a significant impact on MNES is required to be referred for determination under the EPBC Act (Cth). The proposed action is to be assessed against the relevant guidelines, including:

- Significant Impact Guidelines 1.1: Matters of National Environmental Significance
- Significant Impact Guidelines 1.3: Coal seam gas and large coal mining developments – impacts on water resources.

Section 6 of the MNES Assessment Report (Att 2 Part 3 of 5 and Part 4 of 5 MNES Assessment Report, Section 6, pg 101-213) assesses the significance of impact of the Project on MNES that are known to occur, likely to occur or have the potential to occur within the Project disturbance footprint.

Development at Newlands Coal Mine began in 1981, with the mine opening in December 1981 and operating up until February 2023. As part of the Newlands Closure Project, NCC is progressively rehabilitating the existing mine complex to comply with the closure requirements of the EA EPML00817713, and in accordance with the Progressive Rehabilitation and Closure Plan (PRCP) currently under assessment by the Queensland Department of the Environment, Tourism, Science and Innovation (DETSI).

The EPBC Act (Cth) (under Division 6, Part 4) recognises the prior authorisation of the existing Newlands Coal Mine including previous mining operations and the current closure activities, other than where expansion projects have been the subject of additional referrals and subsequent approvals by the Minister, namely for the Newlands Coal Extension Project (EPBC No. 2011/5968) and the Wollombi Open Cut Coal Mine - Suttor Creek ML4761 Extension (EPBC No. 2005/2015).

Residual significant impacts, which may be remaining after avoidance and minimisation measures are assessed for a proposed action, may be offset in accordance with the *EPBC Act Environmental Offsets Policy (October 2012)* (Cth).

***Native Title Act 1993***

The recognition of rights and interests in land by Aboriginal and Torres Strait Islander peoples is administered through the *Native Title Act 1993* (Cth) for activities or works with the potential to affect native title by extinguishing native title rights or creating interests which are inconsistent with the existence of native title.

There are two native title determinations in favour of the Birriah People (QCD2016/001) and the Jangga People (QCD2012/009) for the region.

No changes to the mining tenements or additional restrictions with respect to site access for native title holders are currently proposed as part of the Project.

Queensland legislation:

***Environmental Protection Act 1994 (EP Act)***

The EP Act (Qld) provides for the granting of EAs for resource activities – mining activities. In giving approval under the EP Act (Qld), the Queensland DETSI must address the regulatory requirements set out in the *Environmental Protection Regulation 2008* (Qld) and impose conditions to reduce or avoid potential environmental impacts.

NCC holds an existing EA EPML00817713 for mining activities at Newlands Coal Mine, covering the Project MLs 4748, 4771, 4774, 10176 and 10316. Mining at Newlands Coal Mine ceased in February 2023, and the mine is undergoing site-wide rehabilitation and closure activities. As part of the Newlands Closure Project,

NCC is progressively rehabilitating the existing mine complex to comply with the closure requirements in EA EPML00817713, and in accordance with the PRCP currently under assessment by the Queensland DETSI.

In addition to the closure requirements in EA PML00817713, NCC must also meet other obligations under the EP Act (Qld), and the regulations made under the EP Act (Qld), including the general environmental duty under section 319 of the EP Act (Qld). Appropriate construction management measures and monitoring will be implemented for the Project to meet these obligations.

#### ***Environmental Offsets Act 2014***

When deciding an EA application that proposes to impact Matters of State Environmental Significance, the Queensland DETSI must also consider whether to impose a condition requiring the delivery of an environmental offset under the *Environmental Offsets Act 2014* (Qld), as provided for under section 207(1) (c) of the EP Act (Qld). Environmental offset requirements for the site-wide rehabilitation and closure activities as part of the Newlands Closure Project has formed part of the assessment for the existing EA EPML00817713 (last issued on 11 June 2025).

#### ***Water Act 2000***

A Water Licence under the *Water Act 2000* (Qld) is required to divert the flow of water or to impound water. Temporary Water Licences currently authorise the existing Cerito Creek diversion system and engineered structures (i.e. Cerito Dam and the drop structure). The Department of Local Government, Water and Volunteers (DLGWV) has advised that a new Water Licence will be required to authorise the Cerito Creek permanent diversion system and relinquish the existing temporary Water Licences.

A Riverine Protection Permit is required when undertaking work that requires the excavation, placement of fill or destruction of vegetation within a watercourse, lake or spring. The holder of an EA (for a resource activity) under the EP Act (Qld) can use the Riverine protection permit exemption requirements WSS/2013/726 (Version 2.03 2/06/2023); however, construction works and activities associated with the Project are unlikely to be able to achieve the minimum requirements with respect to clearing limits and material limits outlined in the Riverine protection permit exemption requirements WSS/2013/726. Therefore, a Riverine Protection Permit will likely be required for the Project, including the causeways.

#### ***Aboriginal Cultural Heritage Act 2003***

The *Aboriginal Cultural Heritage Act 2003* (Qld) directs Cultural Heritage Risk Assessments to identify high-risk areas for significant cultural items or places. Consultation with Aboriginal parties and a Cultural Heritage Management Agreement are key parts of the process.

A number of cultural heritage sites within a 10 km radius of the Project have been recorded from previous clearance surveys undertaken in 1978, 2002, 2003, 2005, 2010, 2014, 2018, 2019 and 2021.

The two Traditional Owners for the area are the Birriah People and Jangga People. NCC has executed separate Cultural Heritage Management Plans (CHMPs) with the Birriah People (in 2010) and Jangga People (in 2004), which provides guidelines and processes that must be strictly followed when engaging with the Traditional Owners.

NCC has commenced engagement activities with the Birriah People and Jangga People to confirm survey requirements and start to schedule cultural heritage surveys and salvage of Aboriginal Cultural Heritage, where necessary, within the Project Area prior to commencement of construction.

#### ***Biosecurity Act 2014***

A General Biosecurity Obligation applies to all persons. Compliance with the *Biosecurity Act 2014* (Qld) will be required during the construction phase to prevent the spread of existing pest species and the introduction of new prohibited or restricted pest species. Measures will include active weed management during and after construction.

#### ***Nature Conservation Act 1992 (NC Act)***

The NC Act (Qld) is concerned with the protection of protected plants and animals, including animal breeding places, and protected areas. If an action is proposed that will tamper with animal breeding places, it must comply with the *Nature Conservation (Animals) Regulation 2020* and potentially requires a Species Management Program to be approved by DETSI. A high-risk Species Management Program will be implemented for the Project prior to removal of any denning trees for greater glider.

The *Nature Conservation (Koala) Conservation Plan 2017* includes independent clearing requirements for overall districts within Queensland and for types of koala habitat, in order to protect koalas from being injured or killed during clearing. Provisions include sequential clearing methods and the use of a qualified fauna spotter. Suitably qualified and experienced fauna spotter-catchers will be engaged to undertake pre-clearance surveys prior to clearing and to supervise the clearing process.

Clearing of vegetation within 100 m of a known occurrence of a threatened plant listed under the NC Act (Qld) requires a Protected Plant Clearing Permit to be obtained from DETSI. This will be required for the Project prior to clearing within 100 m of the king blue-grass individuals.

**1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. \***

## **Engagement with Traditional Owners**

NCC operates under the Glencore Coal Assets Australia (GCAA) Cultural Heritage Standard (Att 3 GCAA 15.0 Cultural Heritage STD) to identify, manage and consult with cultural heritage stakeholders for activities with the potential to impact on Aboriginal Cultural Heritage.

These standards guide the practices and processes followed by NCC as part of operations for the site-wide rehabilitation and closure activities at Newlands Coal Mine.

NCC has commenced engagement activities with the Birriah People and Jangga People to confirm survey requirements and start to schedule cultural heritage surveys and salvage of Aboriginal Cultural Heritage, where necessary, within the Project Area prior to commencement of construction.

## **Public consultation**

Stakeholder engagement and consultation activities for the broader site-wide rehabilitation and closure activities are being undertaken in line with the GCAA 10.0 Social Performance Standard (Att 4 GCAA 10.0 Social Performance STD).

Key stakeholders relevant to the proposed works include:

- Direct landholders and adjoining neighbours
- Federal, state and local government officials and representative agencies
- Traditional Owners (Birriah and Jangga People)
- Local business operators and representatives
- Local communities/community groups.

Ongoing consultation with these groups and future landholders will be undertaken to assist in balancing expectations and viewpoints for closure and providing a realistic and achievable closure outcome.

Throughout the life of mine, a range of consultation methods have been utilised to great success, and will also be utilised through the social engagement process for the Newlands Closure Project:

- One-on-one meetings
- Stakeholder Engagement Group quarterly meetings
- Workshops
- Site tours
- Local authority information sessions.

Unscheduled, less formal engagement may also occur at any time via interaction with neighbours or when approached informally by relevant stakeholders.

## 1.3.1 Identity: Referring party

### **Privacy Notice:**

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### **1.3.1.1 Is Referring party an organisation or business? \***

Yes

## Referring party organisation details

**ABN/ACN** 71079862936

**Organisation name** NC COAL COMPANY PTY LIMITED

**Organisation address** 4743 QLD

## Referring party details

**Name** Craig Bushell

**Job title** Environment and Community Manager

**Phone** 0438637645

**Email** craig.bushell@glencore.com.au

**Address** Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

## 1.3.2 Identity: Person proposing to take the action

### 1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? \*

Yes

## Person proposing to take the action organisation details

**ABN/ACN** 71079862936

**Organisation name** NC COAL COMPANY PTY LIMITED

**Organisation address** 4743 QLD

## Person proposing to take the action details

**Name** Craig Bushell

**Job title** Environment and Community Manager

**Phone** 0438637645

**Email** craig.bushell@glencore.com.au

**Address** Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

**1.3.2.14 Are you proposing the action as part of a Joint Venture? \***

No

**1.3.2.15 Are you proposing the action as part of a Trust? \***

No

**1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. \***

NCC has a record of responsible environmental management. There are nil proceedings involving NCC under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

Newlands Coal Mine operates in compliance with numerous State and Commonwealth approvals, including:

- State Environmental Authority Permit number EPML00817713
- Newlands Coal Extension Project (EPBC No. 2011/5968)
- Wollombi Open Cut Coal Mine - Suttor Creek ML4761 Extension (EPBC No. 2005/2015).

**1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework**

The GCAA Environment Standard (Att 5 GCAA 11.0 Environment STD) provides guidance on the management of environmental aspects and impacts. The requirements apply to all GCAA and NCC personnel, including managers, employees and contractors, at all levels.

**1.3.3 Identity: Proposed designated proponent****1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? \***

Yes

## Proposed designated proponent organisation details

**ABN/ACN** 71079862936

**Organisation name** NC COAL COMPANY PTY LIMITED

**Organisation address** 4743 QLD

## Proposed designated proponent details

**Name** Craig Bushell

**Job title** Environment and Community Manager

**Phone** 0438637645

**Email** craig.bushell@glencore.com.au

**Address** Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

## 1.3.4 Identity: Summary of allocation

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### ✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

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ABN/ACN	71079862936
Organisation name	NC COAL COMPANY PTY LIMITED
Organisation address	4743 QLD
Representative's name	Craig Bushell
Representative's job title	Environment and Community Manager
Phone	0438637645
Email	craig.bushell@glencore.com.au
Address	Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

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### ✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

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Same as Referring party information.

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### ✔ Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

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Same as Person proposing to take the action information.

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## 1.4 Payment details: Payment exemption and fee waiver

**1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? \***

No

**1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? \***

No

**1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?**

No

**1.4.7 Has the department issued you with a credit note? \***

No

**1.4.9 Would you like to add a purchase order number to your invoice? \***

No

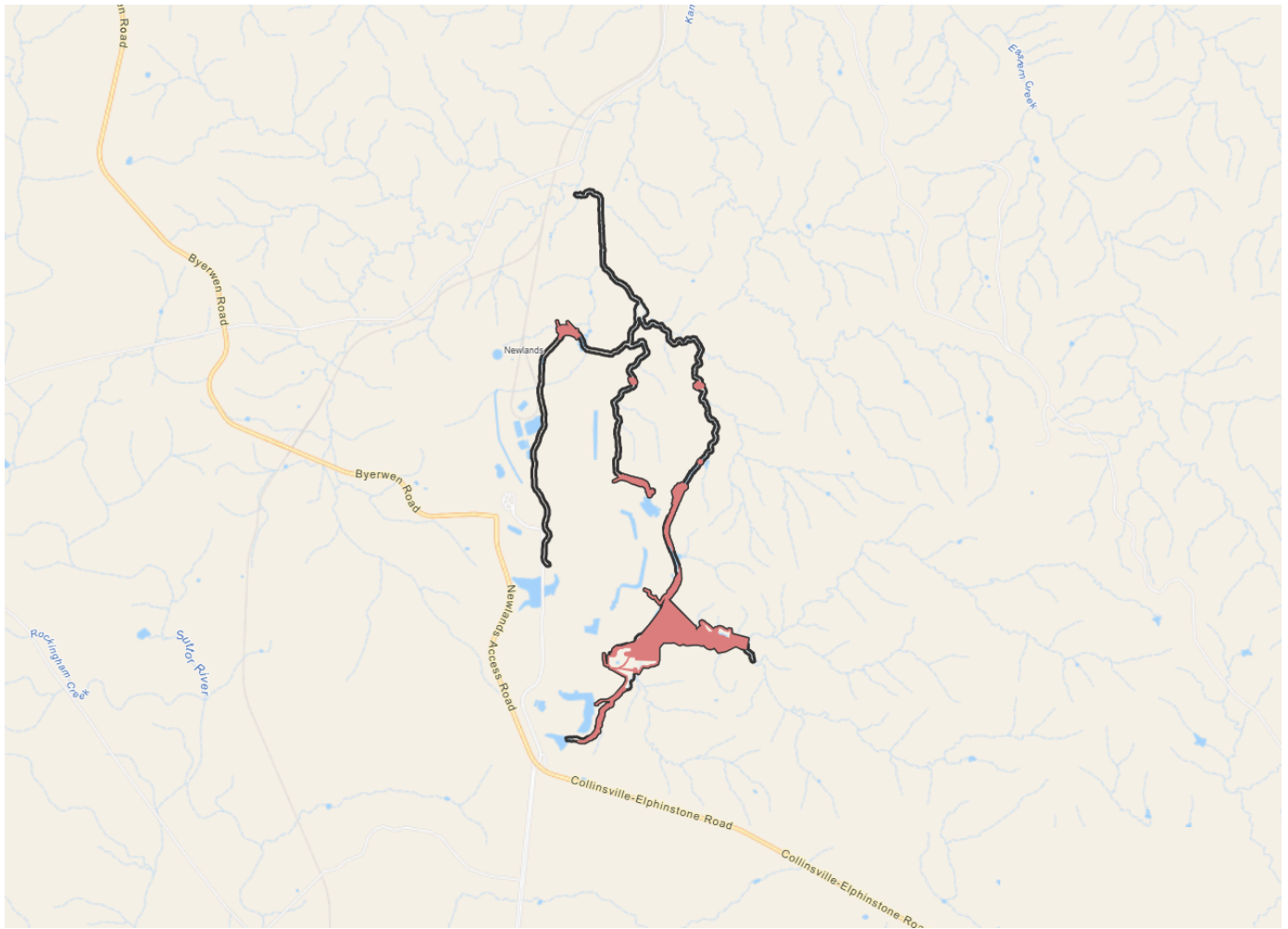
## 1.4 Payment details: Payment allocation

**1.4.11 Who would you like to allocate as the entity responsible for payment? \***

Person proposing to take the action

## 2. Location

## 2.1 Project footprint



**Project Area: 633.76 Ha Disturbance Footprint: 326.13 Ha**

## 2.2 Footprint details

### 2.2.1 What is the address of the proposed action? \*

Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

### 2.2.2 Where is the primary jurisdiction of the proposed action? \*

Queensland

### 2.2.3 Is there a secondary jurisdiction for this proposed action? \*

Yes

### 2.2.4 Where is the secondary jurisdiction of the proposed action? \*

Queensland

### 2.2.5 What is the tenure of the action area relevant to the project area? \*

The following land parcels and tenure are relevant to the Project Area:

- Lot 3 on SP315411 (lands lease)
- Lot 14 on SP315412 (lands lease)
- Lot 1 on DK235 (lands lease) (railway loop for Collinsville Newlands Branch Railway)
- Easements:
  - Lot A on DK117 (easement)
  - Lot B on DK117 (easement)
  - Lot C on DK119 (easement).

The following mining leases are relevant to the Project Area:

- ML 4748 – Newlands
- ML 4771 – Newlands South
- ML 4774 – Newlands East
- ML 10176 – Eastern Creek Haul Road
- ML 10316 – Northern Underground 1.

Other tenures relevant to the Project Area include Newlands Nature Refuge (PA338).

## 3. Existing environment

## 3.1 Physical description

### 3.1.1 Describe the current condition of the project area's environment.

The Project is located at Newlands Coal Mine in Queensland's Bowen Basin, approximately 30 km north-west of Glenden and 135 km west of Mackay, central Queensland.

The Project is within the Brigalow Belt Bioregion, within the Northern Bowen Basin sub-region.

The land within the Project Area is zoned as rural under the Whitsunday Regional Council Planning Scheme. Adjoining land is also zoned as rural under the planning scheme.

Parts of the Project Area are heavily disturbed due to mining activities occurring in the area for the last 40 years. Newlands Coal Mine has been transitioning to closure and rehabilitation since 2023 with over 5,000 ha of land already being rehabilitated, representing about over half of all land disturbed (total approximately 9,000 ha). To date, over 210 ha of rehabilitation has been certified by the Queensland Government.

Sections of the original watercourse have been historically and significantly modified for the original diversion works, including an impoundment (Cerito Dam) and engineered sections of channels and some concrete structures that create vertical drops. The local watercourses show existing disturbances to aquatic and riparian habitats as a result, with erosion or scouring, limited vegetation cover, a lack of aquatic habitat features, and reduced water quality present in many areas.

The Project Area is contained within the Burdekin River (Lower) and Bowen River sub-basin (WQ1205), within the Rosella Creek environmental value zone, mapped by the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* (Qld). The Project Area is mapped as a 'slightly disturbed' system in the upper Cerito Creek extents that occur within the Newlands Nature Refuge, and 'moderately disturbed' directly downstream of this (with moderately disturbed values also mapped across the majority of the Rosella Creek environmental values zone).

Existing access tracks are present across the Project Area, with culverts or bed level creek crossings present. Other historical land uses include clearing and cattle grazing with introduced pasture grasses dominant in many areas and other invasive weeds occurring throughout the Project Area.

Remnant and regrowth vegetation also occurs throughout the eastern portion of the Project Area, where broad-scale clearing has not occurred within at least 15 years and predominantly woodland communities are present or have re-established. The terrain to the east of Newlands Coal Mine and around Cerito Creek is gently undulating, typical of the region.

The geology of the area includes a Triassic age Rewan Group, an arenite-mudrock dominant rock. It is summarised by lithic to lithic pebbly sandstone, green to reddish brown mudstone and minor volcanilithic conglomerate base. The Project Area contains a mosaic of soils including dermosols, sodosols, vertosols, chromosols and rudosols.

The Project Area is surrounded by the following land uses, infrastructure and services:

- Exploration permits for the following purposes:
  - Coal seam gas
  - Petroleum
  - Coal
  - Geothermal
- Mining leases:
  - Newlands Open Cut Coal Mine (12 MLs)
  - Byerwen Coal Mine (ML 70434 – Byerwen 3)
- Byerwen Road (State-controlled road)
- Newlands System Railway (Newlands Loop section)
- Newlands Nature Refuge (PA338)
- Category B, C and R regulated vegetation under the *Vegetation Management Act 1999* (Qld)
- Habitat for endangered / vulnerable species.

The Project Area will be accessed via Byerwen Road. Internal access roads constructed for mining operations are to be used within the Project Area. The physical environment is further described in Section 4.1 of the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.1, pg 44).

### **3.1.2 Describe any existing or proposed uses for the project area.**

Mining at Newlands Coal Mine ceased in February 2023, and the mine is undergoing site-wide rehabilitation and closure activities. As part of the Newlands Closure Project, NCC is progressively rehabilitating the existing mine complex to comply with the closure requirements of the EA EPML00817713, and in accordance with the PRCP currently under assessment by the Queensland DETSI.

Historical and existing uses include above and underground coal mining and associated activities, as well as cattle grazing in surrounding areas.

The following post-mining land uses are proposed across the Newlands Coal Mine:

- Grazing
- Native ecosystem
- Managed resource protection
- Riparian corridor and water management.

### **3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.**

The Newlands Nature Refuge has an area of 4,363 ha and is located in the eastern extent of the Project Area on Lot 14 on SP315412 (Att 1 Figure 2 Proposed action). This area was created under a 2007 Newlands Nature Refuge Conservation Agreement and is managed via biodiversity management plans and a Voluntary Declaration Category A area in 2024. The Newlands Nature Refuge has been noted to contain dry rainforest scrubs, riparian ecosystems, and wetlands of high ecological value. This area includes offset areas for Newlands Coal Extension Project (EPBC No. 2011/5968) and Wollombi Open Cut Coal Mine - Suttor Creek ML4761 Extension (EPBC No. 2005/2015). No impacts to these offset areas will result from the proposed action.

The Newlands Nature Refuge is managed to conserve significant natural and cultural values, including:

- Areas containing, or providing habitat for flora and fauna listed as threatened under State legislation and the EPBC Act (Cth)
- Habitats or vegetation types that are threatened, such as 'endangered' and 'of concern' regional ecosystems (REs), including Brigalow and Semi-Evergreen Vine Thicket communities
- Regenerating areas of brigalow woodland that have previously been cleared.

There is a state significant terrestrial biodiversity corridor mapped over the northern portion of the Project Area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4.1, Figure 4.5, pg 69).

### **3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.**

The Newlands Coal Mine is located within the southern (upstream) catchment area of the Burdekin River Basin. The natural topography of the Project Area is gently undulating, and generally slopes from south to north, with rare hills and ephemeral streams, occasionally containing semi-permanent waterholes.

The elevations within the Project Area range between approximately 220 m and 320 m Australian height datum (AHD) (derived from Qld Globe contours).

Gently undulating hills and ridges, and level to gently undulating plains and lowlands dominate the lower catchment, particularly along the Bowen River section.

The steep escarpment of the Redcliffe Tablelands is located outside the eastern extent of the mining leases associated with the Newlands Coal Mine, approximately 12 km east of the Project Area.

## 3.2 Flora and fauna

**3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.**

Desktop assessments and field surveys have been undertaken to assess the existing ecological values of the Project Area. The PMST report is provided in Att 2 Part 5 of 5 MNES Assessment Report, Appendix C. A likelihood of occurrence assessment for Threatened Ecological Communities, threatened flora and fauna species and migratory species is provided in Att 2 Part 5 of 5 MNES Assessment Report, Appendix E.

### Flora

The desktop search extent generally encompassed a 10 km buffer surrounding the Project Area, and included searches of databases and mapping layers up to 20 km from the Project Area.

Terrestrial flora surveys involved vegetation assessments across the Project Area and adjacent areas (the survey area). Aquatic surveys included assessment transects to identify aquatic plants. The field survey methodology is described in Section 3.3.2 of the MNES Assessment Report (Att 2 Part 1 of 5 MNES Assessment Report, Section 3.3.2, pg 28-31).

### **Regional ecosystems (REs)**

The assessment identified areas of Category B (remnant) and Category C (high value regrowth), as well as large areas of Category X (non-remnant) vegetation within the study area, including 11 REs within the survey area that are described under the *Vegetation Management Act 1999* (Qld) (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.1, pg 44-48).

The field surveys confirmed the presence of six REs within the Project disturbance footprint, including eucalypt woodland on alluvial plains or fringing drainage lines, brigalow woodland or open forest, and eucalypt woodland on fine-grained sedimentary rocks (Att 2 Part 2 of 5 MNES Assessment Report, Section 5.3.1, Table 5.1, pg 92-93).

### **Threatened Ecological Communities (TECs)**

The assessment identified four TECs as potentially occurring within the study area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.2, pg 49):

- Poplar Box Grassy Woodland on Alluvial Plains
- Brigalow (*Acacia harpophylla* dominant and co-dominant)
- Natural grasslands of the Queensland Central Highlands and Northern Fitzroy Basin
- Semi-Evergreen Vine Thickets of the Brigalow Belt (North and South) and Nandewar Bioregions

The field surveys confirmed the presence of two vegetation communities associated with the Brigalow TEC (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.1.4, pg 103-106) and Semi-Evergreen Vine Thicket TEC (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.2.4, pg 113-116) within the Project Area.

### **Threatened flora species**

The desktop assessment identified nine threatened flora species as potentially occurring within the Project Area, including some that were previously recorded within 10 km of the Project area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.3, pg 49-51).

Field surveys identified a population of king blue-grass (*Dichanthium queenslandicum*; Endangered) in the southern extent of the Project Area (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.2.1.3, pg 122-125). No other threatened flora species or suitable habitat were recorded during the surveys and the remaining species identified during desktop assessments are considered unlikely to occur.

### Fauna

The fauna field surveys included habitat assessments and targeted surveys throughout the survey area. The field survey methodology is described in Section 3.3.3 of the MNES Assessment Report (Att 2 Part 1 of 5 MNES Assessment Report, Section 3.3.3, pg 32-33). Fauna species identified during field surveys are listed in Att 2 Part 5 of 5 MNES Assessment Report, Appendix D.

## Fauna habitat

The field surveys confirmed the presence of the following major habitat types within the Project disturbance footprint (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.4, pg 52-61):

- Eucalypt woodlands along main creeks (7.25 ha)
- Eucalypt dry woodlands (13.97 ha)
- Acacia woodland to open forest (14.26 ha)
- Pasture grassland (202.33 ha).

Additional habitat types of Melaleuca woodlands on alluvial plains and Semi-Evergreen Vine Thicket were identified during field surveys (however are not present within the Project disturbance footprint).

## Threatened fauna species

The desktop assessment identified 21 threatened fauna species as potentially occurring within the Project Area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.5, pg 62-64).

The field surveys for the Project recorded two threatened fauna species within the Project Area, the greater glider (southern and central) (*Petauroides volans*; Endangered) and squatter pigeon (southern) (*Geophaps scripta scripta*; Vulnerable) (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.5, Table 4.4, pg 62 and Figure 4.4, pg 66). In addition, suitable habitat was recorded for the koala (*Phascolarctos cinereus*; Endangered) (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.2.4, pg 142-145), ornamental snake (*Denisonia maculata*; Vulnerable) (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.3.4, pg 153-157), and white-throated needletail (*Hirundapus caudacutus*; Vulnerable) (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.5.4, pg 175-178). Koala was considered to have potential to occur, while ornamental snake and white-throated needletail were considered to be likely to occur.

## Migratory species

The desktop assessment identified nine migratory bird species as potentially occurring within the Project Area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.6, pg 64-66).

No migratory species were observed during the field surveys. However, suitable habitat was recorded for the Caspian tern (*Hydroprogne caspia*) (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.1.4, pg 183-186), fork-tailed swift (*Apus pacificus*) (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.2.4, pg 188-191), oriental cuckoo (*Cuculus optatus*) (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.3.4, pg 193-196), and white-throated needletail (refer 'Threatened fauna species' above), and these species were considered likely to occur.

## Aquatic habitat

Aquatic ecology field assessments were conducted from 26 February to 2 March 2025 at 17 survey sites within the Project Area, including nine along Cerito Creek spaced at intervals up to 2 km apart. An additional eight survey sites were analysed within the Project Area, nearby to Cerito Creek that have connectivity to the aquatic ecology of Cerito Creek. Across the survey extent the availability of aquatic habitat varied, ranging from completely dry channels to intermittent and relatively permanent deep (>0.5 m) pools.

As there was little to no flow observed at most sites, no aquatic fauna passage was available between sites and connectivity was limited. There are multiple man-made barriers to aquatic fauna movement in the form of existing culvert crossings that would restrict flow and movement in a limited rainfall event. Nonetheless, flow is ephemeral in this region, and pools would become connected during high flow events. Fish and other aquatic fauna would be expected to move along the watercourse extent during such flow events and utilise the existing pools as dry season refuges, which is evident by the presence of fish at sites further upstream.

Overall, aquatic habitat was minimal at each site providing limited resources for aquatic fauna. Surveys assessed the potential for Irwin's turtle (*Elseya irwini*) and eight *Euastacus species* of freshwater crayfish, which are listed as threatened fauna under the EPBC Act (Cth). However, habitat for these species is not considered to be present in the Project Area and they have not been recorded previously in the region (therefore considered unlikely to occur). Further detail on aquatic habitat is provided in Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4.3, pg 71-72.

**3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.**

### Vegetation characteristics

Field surveys identified six major habitat types within the survey area (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.2.4, pg 52-61).

#### **Eucalyptus woodlands along main creeks**

Contains regrowth and remnant woodlands of Queensland blue gum (*Eucalyptus tereticornis*) along creek edges and/or floodplains. Moderate to high levels of erosion were observed in some sections. Several invasive species were observed within this habitat type, including parthenium (*Parthenium hysterophorus*) and rubber vine (*Cryptostegia grandiflora*). Ground layer generally dominated by introduced Guinea grass (*Megathyrsus maximus*).

Associated with remnant RE 11.3.4 (*Eucalyptus tereticornis* (blue gum) woodland with *Blakella* spp. and *Eucalyptus* spp. on alluvial plains), remnant RE 11.3.4a (*Blakella tessellaris* (Moreton Bay ash) woodland on alluvial sandridges to elevated levees), and remnant and regrowth RE 11.3.25 (blue gum woodland fringing drainage lines on sandy soils).

#### **Eucalypt dry woodland**

Contains regrowth and remnant woodlands generally dominated by narrow-leaved ironbark (*E. crebra*) or mountain coolibah (*E. orgadophila*), with red bloodwood (*Corymbia erythrophloia*) and/or Dallachy's gum (*Blakella dallachiana*) as a sub-canopy or associated species. The groundcover was generally dense and included a mix of native and exotic pasture grasses but was often dominated by introduced Indian bluegrass (*Bothriochloa pertusa*).

Associated with remnant RE 11.8.5 (*Eucalyptus orgadophila* (Mountain coolibah) open woodland on Cainozoic igneous rocks) and remnant and regrowth RE 11.9.9 (*Eucalyptus crebra* (narrow-leaved ironbark) woodland on fine-grained sedimentary rocks).

#### **Acacia woodland to open forest**

Brigalow (*Acacia harpophylla*) woodland with yellowwood (*Terminalia oblongata*), wilga (*Geijera parviflora*) and false sandalwood (*Eremophila mitchellii*) occasionally present as a low tree layer or tall shrub layer, and currant bush (*Carissa ovata*). Groundcover ranged from being dense, often dominated by introduced buffel grass (*Cenchrus ciliaris*), to very open in patches.

Associated with regrowth RE 11.9.1 (*Acacia harpophylla* (brigalow) woodland to open forest on fine-grained sedimentary rocks) and remnant and regrowth RE 11.9.5 (brigalow open forest on fine-grained sedimentary rocks).

#### **Melaleuca woodlands on alluvial plains**

Exhibits a low, dense canopy of black-tea-tree (*Melaleuca bracteata*), with a dense groundcover of joyweed (*Alternanthera denticulata*). Restricted to one patch outside of the Project Area.

Associated with remnant RE 11.3.3a (black tea-tree woodland on alluvial plains).

#### **Semi-Evergreen Vine Thicket**

Restricted to two areas, at the edge of Cerito Creek in the northern Project Area, featuring a dense canopy and sub-canopy with patches of dense low shrubs and open groundcover (with a variety of species consistent with RE 11.3.11 (Semi-Evergreen Vine Thicket on alluvial plains)); and on a hillside near (but outside) the central Project Area with dense continuous shrub cover (with a variety of canopy and shrub species consistent with RE 11.12.7 (narrow-leaved ironbark woodland with patches of Semi-Evergreen Vine Thicket on boulder-strewn hillsides)).

#### **Pasture grassland**

Non-remnant vegetation, either cleared pasture or containing returning vegetation bordering patches of remnant vegetation. Trees are typically absent or sparse, with only isolated *Acacia spp.* or *Eucalyptus spp.* saplings throughout the cleared areas. Limited habitat value present.

#### Geology and soil characteristics

Newlands Coal Mine is located within the northern Bowen Basin which comprises a sequence of Permian and Triassic age sandstone, siltstone, mudstone, conglomeratic and carbonaceous deposits.

The geology of the Project Area is dominated by the Triassic age Rewan Group, an arenite-mudrock dominant rock. It is characterised as lithic to lithic pebbly sandstone, green to reddish brown mudstone and a minor volcanilithic conglomerate base.

The Project Area contains a mosaic of soils including Dermosols, Sodosols, Vertosols, Chromosols and Rudosols. Vertosols are the most common soil in Queensland and are known for their high soil fertility and high-water holding capacity. Chromosols and Sodosols are texture contrast soils, with Sodosol containing a high sodium concentration in the subsoil. Rudosols are known for low fertility and low water holding capacity. More details on geology and soils are provided in Section 4.1 and 4.5.1 of the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.1, pg 44 and Section 4.5.1 pg 82).

## 3.3 Heritage

### 3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

No places listed on the Australian Heritage Database, Queensland Heritage Register or Whitsunday Regional Council's Local Heritage Register are present within or adjacent to the Project Area, or the surrounding region.

### 3.3.2 Describe any Indigenous heritage values that apply to the project area.

A search of the Aboriginal and Torres Strait Islander Cultural Heritage Database was conducted for the two properties on which the works are proposed to be undertaken: namely Lot 3 on SP315411 and Lot 14 on SP315412. The following heritage sites were identified in the search results within or directly adjacent to the Project Area:

- Two Indigenous heritage sites intersect with the Project Area (directly east of the Lake Austin channel downstream and directly north of the existing haul road and proposed causeway)
- One Indigenous heritage site within 100 m of the Project disturbance footprint (directly north of the Levee 7 pond).

A number of cultural heritage sites have been recorded within a 10 km radius of the Project Area from previous clearance surveys undertaken in 1978, 2002, 2003, 2005, 2010, 2014, 2018, 2019 and 2021.

NCC has executed separate CHMPs with the Birriah People (in 2010) and Jangga People (in 2004) for the Project Area. In line with the CHMPs, NCC has commenced engagement activities with the Birriah People and Jangga People to confirm survey requirements and start to schedule cultural heritage surveys and salvage of Aboriginal Cultural Heritage, where necessary, within the Project Area prior to commencement of construction.

NCC also operates under the GCAA Cultural Heritage Standard (Att 3 GCAA 15.0 Cultural Heritage STD).

## 3.4 Hydrology

**3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. \***

## Surface water

The Project Area is located within the Burdekin catchment of the Bowen River sub-basin, which drains north into the Burdekin River and discharges into the sea near Ayr on the Queensland coast. The Project Area is approximately 130 km from the Queensland coastline.

Cerito Creek and its tributaries flow through the Project Area as stream orders 1-4, being historically diverted and impounded in some areas by the Newlands Coal Mine. From the Project Area, Cerito Creek flows into Kangaroo Creek northwards, as stream order 5. Kangaroo Creek then flows into Rosella Creek (at the confluence of Kangaroo Creek and Eastern Creek), then to the Bowen River and into the Burdekin River (downstream of the Burdekin Dam).

Watercourses in this upper catchment area are ephemeral and flow only after sustained or intense rainfall (typically during the wetter summer months), with low to no flow for the remainder of the year. Cerito Creek does not hold permanent water, although seasonal waterholes (as well as artificial waterbodies) exist. The current flow regime has been modified by past mining and associated land uses to include impoundments (Cerito Dam and other artificial dams made through levee structures), a large area of subsidence from historical underground mining panels that has formed artificial wetland values, and diversions and changes to the channel profile in other sections of Cerito Creek and its tributaries.

The Project Area does not have significant wetland values, and the closest high ecological significance wetland is located approximately 8.5 km east of the Project Area. There are riverine wetlands mapped over some natural channel sections of Cerito Creek, with hydrologically modified or artificial lacustrine wetlands mapped over mining pits and water storages. Riverine wetlands are mapped over some REs in the region, such as for RE 11.3.25, where a wetland type RE makes up part of the mapped polygon.

The hydrology of the Project Area is discussed in further detail within the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4, pg 68-82).

## Groundwater

There are several groundwater bores along Cerito Creek and its tributaries registered by the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development. Strata logs in these locations included sand or sandstone over siltstone, and clay over sandstone.

The Groundwater Database - Queensland holds limited groundwater quality information for the registered bores within the study area, however some values are summarised below:

- Data (two records) for the Tertiary (undefined) strata indicates near neutral pH (pH of 7.9) and slightly brackish groundwater (electrical conductivity (EC) of 2,755 and 2,930  $\mu\text{S}/\text{cm}$ ).
- Six records for groundwater within the Permian coal measures indicates near neutral pH (7.6 to 8.2) and slightly brackish to saline quality (EC range from 1,870 to 11,600  $\mu\text{S}/\text{cm}$ ).

The Project Area is not within the Great Artesian Basin catchment. No springs are mapped in the region.

The Groundwater Dependent Ecosystems (GDEs) Atlas (Bureau of Meteorology) has mapped:

- Aquatic GDEs along the channels of Cerito Creek and its tributaries and associated impounded areas (aquatic ecosystems that rely on the surface expression of groundwater, including rivers, wetlands and springs).
- Low or high confidence potential terrestrial GDEs in some riparian zones along the watercourses, particularly in the northern extent of the Project Area (terrestrial ecosystems that rely on the subsurface presence of groundwater).
- No subterranean GDEs (subterranean ecosystems, including caves and aquifer ecosystems).

Terrestrial surveys undertaken for the Project have identified Eucalypt woodlands habitat along main creeks (riparian vegetation) including blue gum woodland, river oak, Moreton Bay ash, black tea tree, Leichhardt bean and sandpaper fig with exotic grasses dominating the ground layer. Riparian communities were

verified downstream of Cerito Dam, and downstream and upstream of Cerito Creek northern diversion area. These communities may constitute terrestrial GDEs (however the reliance of riparian vegetation on groundwater and sensitivity and resilience to groundwater level changes has not been verified).

The existing, ephemeral, creek diversion system is underlain by the low-permeability Triassic Rewan Group that functions as a regional aquitard (as it restricts the flow of groundwater). The Rewan Group is locally overlain by Quaternary alluvium, which supports the localised presence of groundwater, or Tertiary basalt which is a local groundwater source (indicated to be predominantly used for stock watering). The alluvium and basalts occur along relatively short sections of the diversion. Groundwater presence in the alluvium is anticipated to be perched on the underlying Rewan Group aquitard. Similarly, groundwater in Tertiary basalt is anticipated to form localised aquifers and be perched on the underlying Rewan Group.

Groundwater flow within the unconfined aquifers, including alluvium, is understood to follow the fall in topography, with a general northerly flow (with localised variability). The inferred overall groundwater flow direction is towards the north and northeast, with localised flow towards the former backfilled open cut voids and former northern and southern underground mining panels. Aquifer recharge from direct rainfall is anticipated to be minor, as evaporation rates are significantly higher than rainfall rates. Recharge occurs from the following mechanisms:

- Direct rainfall and runoff infiltration
- Seepage from water stored within watercourses and ponds
- Seepage from overlying units, e.g., seepage from alluvial perched aquifers into Tertiary basalt and Permian coal seams.

When the watercourses are flowing (following rainfall), infiltration of surface water through the creek bed into alluvium and basalt recharges the groundwater system. Infiltration into the Rewan Group sedimentary sequences is only anticipated in highly fractured or highly weathered areas. The desktop assessment has identified that the shallow aquifers do not appear to provide baseflow for the Cerito Creek system, and watercourse and diversion channels do not intercept groundwater. Therefore, the surface and groundwater systems appear to be hydraulically disconnected.

However, alluvial groundwater is anticipated to be present temporarily within creek bed sediments (where present) and the underlying strata (where fractured or weathered) following periods of flow. On this basis, the riparian eucalypt woodland vegetation may opportunistically access shallow groundwater.

The ephemeral nature of surface water, the absence of baseflow from shallow groundwater, and the hydraulic disconnection of shallow groundwater in the alluvium and Tertiary basalt from the underlying Triassic and Permian strata is anticipated to continue under predicted post-mining groundwater levels. The predicted post-mining groundwater table is indicated to be in the order of 10 to 20 m lower than ground surface along the southern half of the proposed diversion system (to around Ramp 6 North) and in the order of 5 to 10 m lower than ground surface at the northern end of the proposed diversion system.

The hydrogeology of the Project Area is discussed in further detail within the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.5, pg 82-90).

## 4. Impacts and mitigation

## 4.1 Impact details

**Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.**

<b>EPBC Act section</b>	<b>Controlling provision</b>	<b>Impacted</b>	<b>Reviewed</b>
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	Yes	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

## 4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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**4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.**

\*

The closest World Heritage Place to the Project is the Great Barrier Reef World Heritage Area, which is located approximately 175 km north of the Project Area and more than 215 km downstream (along the Bowen River and then the Burdekin River) from the Project Area.

The Project aims to:

- Improve throughput of flow and sediment to match the local seasonal and ephemeral watercourses
- Provide a permanent diversion that is safe, stable and environmentally sustainable
- Retain existing water storages, where possible, for stock watering by the post-mining landholder.

Temporary construction activities, such as clearing and earthworks that are required to be undertaken to modify and rehabilitate the existing creek diversion channels, have the potential to alter surface water flows due to modification of the current channel and formation of new channels, degrade water quality due to increased sediment, thereby increasing turbidity, and modify local freshwater aquatic habitats due to changes to channel dimensions, habitat features and conditions. Construction impacts are likely to be temporary and localised, with the rehabilitation of riparian corridors proposed where works have occurred, and the watercourse expected to return to natural conditions once completed, with no long-term or downstream impacts from the Project anticipated. Following completion of the Cerito Creek permanent diversion system, hydrological flows are anticipated to resume as ephemeral watercourses with seasonal high flow events. The Project is likely to have a long-term positive impact on aquatic habitats by restoring flow and creating long-term stability, with consideration of the currently modified condition of the local watercourses.

Areas with existing evidence of erosion, or considered to have a higher risk of erosion following completion of the Cerito Creek permanent diversion system, will include erosion protection in the design, such as through rip-rap, incorporation of geomorphological features such as bars, benches and pool/riffle sequences, and revegetation of riparian areas.

The hydrology of the Project Area is discussed in further detail within the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4, pg 68-82) and the potential impacts to surface and groundwater resources are discussed in Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.2, pg 203-208.

The location of the Project Area at the top of the catchment and the ephemeral nature of the local watercourses, along with the distance from the World Heritage Area, means that the Project is **unlikely** to have a direct or indirect impact, both in the short term and long term, to the Great Barrier Reef and its values.

## 4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

#### 4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

#### 4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

The closest National Heritage Place to the Project is the Great Barrier Reef, which is located approximately 175 km north of the Project Area and more than 215 km downstream (along the Bowen River and then the Burdekin River) from the Project Area.

The Project aims to:

- Improve throughput of flow and sediment to match the local seasonal and ephemeral watercourses
- Provide a permanent diversion that is safe, stable and environmentally sustainable
- Retain existing water storages, where possible, for stock watering by the post-mining landholder.

Temporary construction activities, such as clearing and earthworks that are required to be undertaken to modify and rehabilitate the existing creek diversion channels, have the potential to alter surface water flows due to modification of the current channel and formation of new channels, degrade water quality due to increased sediment, thereby increasing turbidity, and modify local freshwater aquatic habitats due to changes to channel dimensions, habitat features and conditions. Construction impacts are likely to be temporary and localised, with the rehabilitation of riparian corridors proposed where works have occurred, and the watercourse expected to return to natural conditions once completed, with no long-term or downstream impacts from the Project anticipated. Following completion of the Cerito Creek permanent diversion system, hydrological flows are anticipated to resume as ephemeral watercourses with seasonal high flow events. The Project is likely to have a long-term positive impact on aquatic habitats by restoring flow and creating long-term stability, with consideration of the currently modified condition of the local watercourses.

Areas with existing evidence of erosion, or considered to have a higher risk of erosion following completion of the Cerito Creek permanent diversion system, will include erosion protection in the design, such as through rip-rap, incorporation of geomorphological features such as bars, benches and pool/riffle sequences, and revegetation of riparian areas.

The hydrology of the Project Area is discussed in further detail within the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4, pg 68-82) and the potential impacts to surface and groundwater resources are discussed in Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.2, pg 203-208.

The location of the Project Area at the top of the catchment and the ephemeral nature of the local watercourses, along with the distance from the Great Barrier Reef, means that the Project is **unlikely** to have a direct or indirect impact to this National Heritage Place and its values.

### 4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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#### 4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

#### 4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

The closest Ramsar Wetland to the Project is Bowling Green Bay, which is located approximately 190 km northwest of the Project Area. This Ramsar Wetland is in the Haughton and Ross catchments, which is a different catchment than the Project Area in the Burdekin Basin, therefore is not hydrologically connected along surface water channels. The location of the Project Area at the top of the catchment and the ephemeral nature of the local watercourses, along with the distance from the coastal regions of the Ramsar Wetland, means that the Project is **unlikely** to have a direct or indirect impact to Bowling Green Bay and its values.

### 4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

### Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	<i>Denhamia megacarpa</i>	Large-fruited Denhamia
Yes	Yes	<i>Denisonia maculata</i>	Ornamental Snake
No	Yes	<i>Dichanthium queenslandicum</i>	King Blue-grass
No	No	<i>Dichanthium setosum</i>	bluegrass
No	No	<i>Egernia rugosa</i>	Yakka Skink
No	No	<i>Eseya irwini</i>	Irwin's Turtle, White-headed Snapping Turtle
No	No	<i>Erythroriorchis radiatus</i>	Red Goshawk
No	No	<i>Eucalyptus raveretiana</i>	Black Ironbox
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	Yes	<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)
Yes	Yes	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Macroderma gigas</i>	Ghost Bat
No	No	<i>Neochmia ruficauda ruficauda</i>	Star Finch (eastern), Star Finch (southern)
No	No	<i>Petauroides minor</i>	Greater Glider (northern), Greater Glider (north-eastern Queensland)
Yes	Yes	<i>Petauroides volans</i>	Greater Glider (southern and central)
Yes	Yes	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the	Koala (combined populations of Queensland, New South Wales and the

Direct impact	Indirect impact	Species	Common name
		ACT)	Australian Capital Territory)
No	No	Poephila cincta cincta	Southern Black-throated Finch
No	No	Polianthion minutiflorum	
No	No	Ptilotus uncinellus	
No	No	Rostratula australis	Australian Painted Snipe
No	No	Tyto novaehollandiae kimberli	Masked Owl (northern)

### Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	Yes	Brigalow (Acacia harpophylla dominant and co-dominant)
No	No	Natural Grasslands of the Queensland Central Highlands and northern Fitzroy Basin
No	No	Poplar Box Grassy Woodland on Alluvial Plains
No	Yes	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions

**4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

Yes

**4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. \***

The Project will involve linking of surface water channels, removal of engineered structures, creation of low-flow channels, remediation of erosion, and rehabilitation of an area of past subsidence, amongst other activities, where necessary to reinstate natural flow and sediment transport in Cerito Creek and its tributaries. Project activities will be undertaken in previously mined and disturbed areas, cleared pasture grassland, rehabilitated areas, and to a lesser extent, undisturbed areas (due to linking into and integrating with natural ephemeral flow paths).

The rationale behind the design progression is the improvement of the ecological functioning of the previously impacted area by preserving mature, stabilising vegetation and rehabilitating disturbed areas with location-appropriate vegetation species, and incorporating natural and existing geomorphological features (low-flow channels, benches, sediment bars and pool / riffle sequences) that will restore and promote aquatic habitat.

The total Project disturbance footprint area is derived by applying a 50 m buffer to the direct impact activities and a 25 m width of impact along Project access tracks (existing and new) to provide a maximum direct disturbance footprint as a worst-case scenario. Habitat mapping presented in Att 2 Part 5 of 5 MNES Assessment Report, Appendix F.

#### Threatened Ecological Communities

##### **Brigalow (*Acacia harpophylla* dominant and co-dominant) TEC – Endangered**

The Project has potential to result in the loss of 13.42 ha of habitat critical to the survival of the Brigalow TEC, comprising remnant and regrowth patches of brigalow forest (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.1.4-6.1.1.7, pg 103-107).

Potential indirect impacts on the Brigalow TEC within the Project disturbance footprint include:

- Temporary habitat degradation due to increased dust, erosion and sedimentation during earthworks
- Introduction and spread of invasive species (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.1.7, pg 107).

##### **Semi-Evergreen Vine Thickets of the Brigalow Belt (North and South) and Nandewar Bioregions (Semi-Evergreen Vine Thicket) TEC – Endangered**

The Project is not anticipated to directly clear or result in the loss of any patches of the Semi-Evergreen Vine Thicket TEC.

Potential indirect impacts on the Semi-Evergreen Vine Thicket TEC within the Project disturbance footprint are considered to be a minor risk; however, may include:

- Loss of habitat due to changes to the flow regime from upstream creek diversion works
- Habitat degradation due to increased dust, erosion and sedimentation
- Introduction and spread of invasive flora and fauna species (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.2.7, pg 117).

#### Threatened flora species

##### **King blue-grass (*Dichanthium queenslandicum*) – Endangered**

No direct loss of individuals of king blue-grass will result from the Project; however it is anticipated to result in disturbance of approximately 0.7 ha of vegetation within a 50 m buffer of known blue-grass records (with the nearest record (representing 11 individuals of the species) located within the Project disturbance footprint and approximately 36 m from the proposed channel works) (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.2.1.3, pg 122-125).

Potential indirect impacts on the king blue-grass include:

- Habitat degradation due to increased dust, erosion and sedimentation

- Introduction and spread of invasive flora and fauna species (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.2.1.6, pg 126).

### Threatened fauna species

#### **Greater glider (southern and central) (*Petauroides volans*) – Endangered**

The Project has the potential to result in the loss of 16.90 ha of suitable denning (7.25 ha) and foraging (9.65 ha) habitat for the greater glider that represents habitat critical for the survival of the species. This species has been recorded during field surveys for the Project within suitable denning and foraging habitat (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.1.4, pg 131-134).

Other potential direct and indirect impacts on the greater glider or its habitat occurring within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements or inadequate tree clearing protocols
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation
- Introduction and spread of invasive flora and fauna species (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.1.7, pg 135-136).

#### **Koala (*Phascolarctos cinereus*) – Endangered**

The Project has the potential to result in the loss of 37.37 ha of suitable foraging (20.17 ha), sheltering (17.20 ha) habitat for the koala that represents habitat critical for the survival of the species.

The Project may also result in the loss of 69.24 ha of dispersal habitat for the koala, which is not considered to be habitat critical to the survival of the species. Mapped dispersal habitat contains occasional mature locally important or ancillary habitat trees, however in a lower density than shelter habitat and is considered to be of lower value than shelter or foraging habitat. This habitat provides minimal protection against predators, and is considered unlikely to be used as refugial habitat, meet essential life cycle requirements due to the minimal presence of food or ancillary trees, and unlikely to be necessary for maintaining genetic diversity or use as corridors or for reintroduction or re-colonisation, considering the abundant and continuous foraging and shelter habitat for the species in the surrounding areas.

No evidence of koalas has been recorded during surveys; however the species was considered to have potential to occur based on suitable habitat being present, a large proportion of which is dispersal habitat that contains only occasional foraging or shelter trees (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.2.4, pg 142-145).

Other potential direct and indirect impacts on the koala or its habitat within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements or inadequate tree clearing protocols
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation
- Introduction and spread of invasive flora and fauna species
- Habitat fragmentation or barrier effects (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.2.7, pg 146-148).

#### **Ornamental snake (*Denisonia maculata*) – Vulnerable**

The Project has the potential to result in the loss of 2.47 ha of suitable habitat, and 7.87 ha of marginal habitat for the ornamental snake. This habitat is not considered to represent important habitat or habitat critical for the survival of the species, or contain an important population of the species. No evidence of

ornamental snake has been recorded during surveys; however the species was considered as likely to occur based on previous records in proximity to the Project Area and the presence of two areas of suitable habitat (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.3.4, pg 153-157).

Other potential direct and indirect impacts on the ornamental snake within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation
- Introduction and spread of pest fauna species
- Habitat fragmentation and barrier effects (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.3.7, pg 158-159).

#### **Squatter pigeon (southern) (*Geophaps scripta scripta*) – Vulnerable**

The Project has the potential to result in the loss of 10.64 ha of suitable habitat for the squatter pigeon (including 10.61 ha of breeding habitat and 0.034 ha of foraging habitat), which represents habitat critical for the survival of the species. The Project may also result in impacts to 29.46 ha of dispersal habitat. The species has been recorded during field surveys for the Project, however no important populations are present in the Project Area (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.4.4, pg 164-168).

Other potential direct and indirect impacts on the squatter pigeon within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements and clearing activities
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation
- Introduction and spread of invasive flora and fauna species
- Habitat fragmentation (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.4.7, pg 169-170).

#### **White-throated needletail (*Hirundapus caudacutus*) – Vulnerable**

The Project has the potential to result in the loss of 35.24 ha of flyover habitat for the white-throated needletail, in which the species may forage over terrestrial vegetated forests and woodlands. This habitat is not considered to represent habitat critical for the survival of the species or contain an important population of the species. No roosting habitat is present. This species has not been recorded during field surveys for the Project; however it has been considered as likely to occur due to presence of aerial foraging habitat and previous records of the species 7.5 km from the Project Area (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.5.4, pg 175-178).

Other potential direct and indirect impacts on the white-throated needletail within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.5.7, pg 179-180).

#### **4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?**

\*

Yes

#### **4.1.4.5 Describe why you consider this to be a Significant Impact. \***

A significant impact assessment was undertaken against the *Significant Impact Guidelines 1.1: Matters of national environmental significance* for MNES assessed as known to occur, likely to occur or with potential to occur within the Project disturbance footprint.

The results are summarised below, which conclude that significant impacts due to the Project are likely for:

- Brigalow TEC
- Greater glider (southern and central)
- Koala.

The Project is considered **unlikely** to significantly impact the remaining MNES assessed. These results are summarised below.

#### Threatened ecological communities (TECs)

##### **Brigalow TEC**

The Project is considered **likely** to have a significant impact on the Brigalow TEC due to the potential removal of up to 13.42 ha of Brigalow TEC; which would account for a reduction in extent, potential fragmentation and/or adverse impacts to habitat critical to the survival of the ecological community (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.1.9, pg 108-112).

##### **Semi-Evergreen Vine Thicket TEC**

The Project is considered **unlikely** to have a significant impact on the Semi-Evergreen Vine Thicket TEC patch, as no direct clearing of the TEC is proposed to occur and there is not likely to be indirect impacts due to the discrete areas of impact, the existing fragmented and isolated nature of the TEC patches in the landscape, and the minor modifications of hydrological regime within the seasonal and ephemeral tributaries of the Cerito Creek catchment upstream of the TEC patch (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.1.2.9, pg 118-121).

#### Endangered flora and fauna species

##### **King blue-grass**

The Project is considered **unlikely** to have a significant impact on king blue-grass, as no removal of individuals is proposed, with the nearest construction activities to recorded individuals being 36 m distance. A nominal 50 m buffer has been mapped around the locations of king blue-grass, of which 0.7 ha intersects the Project disturbance footprint; however, works in this area will be restricted to the western (far) side of the Ramp 1 Channel. There is not likely to be direct or indirect impacts to recorded individuals due to the discrete area of channel works at this location and the ability to avoid the eastern side of the channel where the species population occurs (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.2.1.8, pg 127-129).

##### **Greater glider (southern and central)**

The Project is considered **likely** to have a significant impact on the greater glider due to the potential loss of 16.90 ha of suitable habitat (comprising 7.25 ha of denning habitat and 9.65 ha of foraging habitat) that is considered habitat critical to the survival of the species. Despite this area of mapped habitat impact, mature trees will be avoided by Project construction activities where possible, particularly if they contain existing hollows. Indirect impacts, such as adjacent habitat degradation and fragmentation, are considered unlikely to occur as a result of the Project due to the discrete areas of impact and the surrounding areas of suitable habitat for individuals to move into and through (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.1.9, pg 138-140).

##### **Koala**

The Project is considered **likely** to have a significant impact on the koala due to the potential loss of 37.37 ha of suitable habitat (comprising 20.17 ha of foraging habitat and 17.20 ha of sheltering habitat) that is considered habitat critical to the survival of the species. The Project may also result in the loss of 69.24

ha of dispersal habitat for the koala, which is not considered to be habitat critical to the survival of the species, which contains only occasional foraging or shelter trees. The Project will not result in barriers to movements through these areas. Mature trees will be avoided by Project construction activities where possible. Indirect impacts, such as adjacent habitat degradation and fragmentation, are considered unlikely to occur as a result of the Project due to the discrete areas of impact and the surrounding areas of suitable habitat for individuals to move into and through (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.2.9, pg 149-152).

#### Vulnerable fauna species

##### **Ornamental snake**

The Project is considered **unlikely** to have a significant impact on the ornamental snake, as no removal of important habitat is proposed, and no important populations have been identified within the survey area. The 2.47 ha of suitable habitat mapped within the Project disturbance footprint is not considered to be habitat critical to the survival of the species. Direct and indirect impacts to the species are likely to be minimal, due to the limited extent of works and discrete areas of channel construction at the location of this mapped suitable habitat. Potential marginal habitat has been mapped at Cerito Dam due to containing foraging and shelter resources (based on frogs being present during field surveys and an abundance of woody debris). The Project may result in the loss of 7.87 ha of this marginal habitat for the species, however this is not considered to be important habitat or contain an important population and additional indirect impacts in this area are considered unlikely to occur (Att 2 Part 3 of 5 MNES Assessment Report, Section 6.3.3.9, pg 160-163).

##### **Squatter pigeon (southern)**

The Project is considered **unlikely** to have a significant impact on the squatter pigeon, as no important populations have been identified within the Project disturbance footprint and, although the disturbance footprint contains approximately 40.10 ha of habitat (comprising 10.61 ha of breeding habitat and 0.034 ha of foraging habitat that is considered habitat critical to the survival of the species, as well as 29.46 ha of dispersal habitat that is not considered habitat critical to the survival of the species), the species is locally common and widespread in occurrence with suitable habitat extending into surrounding habitats and throughout the broader landscape. Direct and indirect impacts to the species are likely to be minimal, due to the limited extent of works within discrete and small areas of impact, with connected and higher quality habitats occurring in the broader landscape (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.4.9, pg 171-174).

##### **White-throated needletail**

The Project is considered **unlikely** to have a significant impact on the white-throated needletail, as no removal of important habitat is proposed, and no important populations have been identified within the Project disturbance footprint or adjacent areas assessed. The Project has the potential to result in the loss of 35.24 ha of flyover habitat for the white-throated needletail that the species could use for aerial foraging, however suitable flyover habitat for the species extends into surrounding habitats within the Project Area and beyond into the broader landscape. No roosting habitat is present within the Project disturbance footprint or surrounds and the potential habitat is not considered to represent habitat critical to the survival of the species (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.5.9, pg 181-182).

#### **4.1.4.7 Do you think your proposed action is a controlled action? \***

Yes

#### **4.1.4.8 Please elaborate why you think your proposed action is a controlled action. \***

The Project is considered **likely** to have a significant impact on three MNES, all listed as Endangered under the EPBC Act (Cth), being the:

- Brigalow TEC
- Greater glider (southern and central)
- Koala.

**4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

The Project will involve a creek diversion to reinstate natural flow and sediment transport in Cerito Creek and its tributaries, which have been heavily modified. The Project aims to restore hydrological connectivity and flows through the local ephemeral and seasonal tributaries through linking surface water channels, removing engineered structures, creation of low-flow channels and other habitat features, remediation of erosion, and rehabilitation of an area of past subsidence, amongst other activities.

The Project aims to provide a permanent creek diversion that is safe, stable and environmentally sustainable in accordance with the Newlands Coal Mine PRCP.

Substantial design refinements have been undertaken between the design progression stages to reduce the overall disturbance footprint and avoid areas of TEC and critical habitat for threatened species. Riparian corridors that are disturbed by the Project will be rehabilitated to provide stable landforms and vegetative cover that aligns with the surrounding habitats and corridor connectivity.

The total Project disturbance footprint area has been derived by adding a 50 m buffer to the direct impact activities and a 25 m width of impact along Project access tracks (existing and new) to provide a maximum direct disturbance footprint. Where the 50 m buffers and Project access track buffers include mapped areas of threatened species habitat or TECs, the construction activities and any ancillary activities will be located to avoid direct impacts to mature trees, habitat features and/or identified areas of habitat wherever possible.

The areas of impact generally consist of small, discrete areas of creek diversion works in predominantly cleared and disturbed areas. Some of the mapped habitat within the Project disturbance footprint will be avoided during the detailed design process, particularly where it intersects the outer edges of the riparian corridors.

To further avoid, reduce or mitigate impacts to threatened species and ecological communities, the following measures will be implemented:

- Land clearing will be restricted to the smallest area required for construction of the Project and all ancillary activities, and will be contained within the Project disturbance footprint and positioned in previously disturbed areas where possible.
- Locating laydown, access, spoil and borrow areas in previously disturbed areas wherever possible.
- Construction will be staged to minimise the active works area required at any time.
- All vehicle movements will be restricted to designated tracks located within the Project Area (or otherwise established access roads).
- Clearing will be restricted to daylight hours to reduce impacts on nocturnal species.
- Clearing of mature habitat trees in threatened species habitat will be avoided wherever possible.
- The extent of vegetation clearing (and no-go areas) will be clearly identified on construction plans and in the field, using high visibility fencing or flagging in the vicinity of high conservation significance areas. Clearing extent will be communicated to construction supervisors and personnel. If fencing or flagging is in poor condition, it will be replaced as soon as practicable to reduce the potential of accidental clearing.
- Sequential clearing practices are to be implemented, especially within koala and greater glider habitat, to allow fauna to escape to areas outside the clearing footprint. Resident fauna will be encouraged to leave via indirect measures (i.e. using spotlights or tree-tapping to encourage individuals to leave of their own accord) and any remaining potential den sites actively checked for greater glider individuals prior to clearing. Sequential clearing will be undertaken towards areas of refugial habitat and retained trees to allow movement of resident fauna to refuge areas. Through this process, the risk to individuals and breeding places will be effectively mitigated. Adverse incident response procedures will be developed to detail actions to be taken in the event of wildlife injury or mortality during clearing.
- Suitably qualified and experienced fauna spotter-catchers will be engaged to undertake pre-clearance surveys prior to clearing and to supervise the clearing process. This will involve searching

and clearing hollow trees and logs prior to clearing and relocating resident fauna to the nearest suitable, safe habitat outside the clearing footprint.

- Any hollows that occur within the Project footprint and do not contain fauna are to be removed at the early stages of clearing to avoid fauna relocating to other hollows in the clearing footprint. Habitat enhancement features (e.g. salvaged hollows) will be established outside the clearing area within suitable habitat.
- Fauna management measures will be implemented during clearing and construction activities to limit injury and mortality to threatened species, and other native fauna, including management of risks associated with open excavations, trenching, waterbodies and responses and reporting for roadkill and adverse incident protocols.
- A high-risk Species Management Program will be implemented for the Project in accordance with the requirements of Section 335 of the *Nature Conservation (Animals) Regulation 2020* (Qld) prior to removal of any denning trees for greater glider.
- A Protected Plant Clearing Permit for clearing within 100 m of a threatened plant listed under the NC Act (Qld) will be approved prior to clearing within 100 m of the king blue-grass individuals. Impact avoidance and management measures will need to be approved by the Queensland DETSI.
- Weed and pest management measures will be developed and implemented prior to construction activities commencing, which include protocols to prevent the introduction of weed and pest species into the area and minimise the spread of declared weeds and pests.
- Appropriate design of soil stockpiles and rubbish and waste materials disposal will be undertaken.
- Fuel and chemical storage protocols and spill responses will be implemented.
- All construction vehicles will comply with maintenance schedules and operational restrictions designed to limit noise impacts during construction.
- Speed limits and other traffic control mechanisms will be implemented to minimise dust generation.
- Routine dust suppression and monitoring will be undertaken during dry conditions throughout construction to minimise dust dispersal.
- Areas subject to clearing will be stabilised as soon as practicable.
- Erosion and sediment control measures will be installed where in-stream disturbance must be undertaken during flow conditions. Erosion and sediment control measures employed during construction will be consistent with the practices described in the IECA, Best Practice Erosion and Sediment Control Guideline and/or Queensland Division of the Australian Institute of Engineers' Erosion and Sediment Control: Engineering Guidelines for Queensland Construction Sites.
- Weather conditions during construction will be monitored, and extreme weather stand-down and temporary control protocols established, to minimise adverse outcomes resulting from extreme weather events.
- Temporary laydown areas, stockpiles, site offices and other ancillary areas will be rehabilitated as soon as practicable after these facilities are no longer required.
- Riparian areas and other disturbance areas post-construction will be rehabilitated and revegetated, to provide a stable landform and promote re-establishment of vegetation communities. For areas with high erosion risk or conservation significant habitat value, revegetation areas may be temporarily fenced to exclude grazing or trampling by livestock (or other animals) during the initial establishment and/or maintenance period. Monitoring of rehabilitated and revegetated areas will be undertaken to identify the need for additional maintenance activities or adaptive management techniques.

Regular inspections and monitoring will be undertaken of active construction works and areas rehabilitated post-construction, with corrective actions implemented where controls are not considered to be adequate for the protection of TEC areas and/or threatened species habitat.

**4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

There is the potential that significant impacts to Brigalow TEC, greater glider (southern and central) and koala may require a land-based offset to be secured and managed.

It is envisaged that part of the Newlands Nature Refuge, that is not currently part of existing offset areas for the Newlands Coal Extension Project (EPBC No. 2011/5968) and Wollombi Open Cut Coal Mine - Suttor Creek ML4761 Extension (EPBC No. 2005/2015), would be used to offset any significant impacts from this Project. There is similar habitat in the Newlands Nature Refuge to the Project Area, therefore this has the potential to provide offset areas for species and ecological communities (subject to further survey).

The Project disturbance footprint and the proposed offset area will be surveyed in accordance with DCCEE requirements and scored in terms of habitat quality in the *Modified Habitat Quality Assessment template* and the *Offsets Assessment Guide*.

Where a land-based offset is required, an Offset Proposal and Offset Management Plan will be developed for demonstrating compliance with the principles and requirements of the *EPBC Act Environmental Offsets Policy (October 2012)* (Cth).

### 4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	<i>Actitis hypoleucos</i>	Common Sandpiper
Yes	Yes	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
Yes	Yes	<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	Yes	<i>Hirundapus caudacutus</i>	White-throated Needletail
Yes	Yes	<i>Hydroprogne caspia</i>	Caspian Tern
No	No	<i>Motacilla flava</i>	Yellow Wagtail
No	No	<i>Pandion haliaetus</i>	Osprey

**4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

Yes

**4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. \***

Four migratory species are considered likely to occur within the Project disturbance footprint:

- Caspian tern (*Hydroprogne caspia*)
- Fork-tailed swift (*Apus pacificus*)
- Oriental cuckoo (*Cuculus optatus*)
- White-throated needletail (*Hirundapus caudacutus*) – also listed vulnerable and assessed as a threatened species.

These species have not been recorded during field surveys for the Project. Habitat for these species has been mapped based on species profile and conservation advice, in relation to habitat types identified during field surveys. Habitat mapping presented in Att 2 Part 5 of 5 MNES Assessment Report, Appendix F.

The Project has the potential to result in the loss of the following mapped habitat areas for migratory species:

- 75.33 ha of artificial waterbodies and 15 m buffer of surrounding vegetated habitat for the Caspian tern (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.1.4, pg 183-186).
- 35.24 ha of flyover aerial foraging habitat for the fork-tailed swift (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.2.4, pg 188-191).
- 35.24 ha of general terrestrial habitat for the oriental cuckoo (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.3.4, pg 193-196).
- 35.24 ha of flyover aerial foraging habitat for the white-throated needletail (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.3.5.4, pg 175-178).

No breeding habitat for these species is present within the Project Area, and no roosting habitat for Caspian tern, fork-tailed swift or white-throated needletail is present.

Changes to the connectivity and water quality within the local catchment, both during construction and as a result of the design, could affect the hydrological regime connecting riparian corridors and artificial waterbodies that may comprise foraging habitat for the Caspian tern.

Other potential direct and indirect impacts on these migratory species within the Project disturbance footprint include:

- Injury and mortality due to increased vehicle and machinery movements and clearing activities
- Disturbance to wildlife through increased light, noise and vibration during construction
- Habitat degradation due to increased dust, erosion and sedimentation (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.4.5, pg 197-198).

#### **4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?**

\*

No

#### **4.1.5.6 Describe why you do not consider this to be a Significant Impact. \***

A significant impact assessment was undertaken in accordance with the criteria for listed migratory species in the Significant Impact Guidelines 1.1, which found the Project is **unlikely** to result in a significant impact to the listed migratory birds (Att 2 MNES Part 4 of 5 Assessment Report, Section 6.4.7, pg 199-200).

The Project disturbance footprint is considered to contain important habitat, as defined by the *Draft referral guideline for 14 migratory birds listed under the EPBC Act*, for oriental cuckoo in general terrestrial habitats, and for fork-tailed swift and white-throated needletail as terrestrial habitats that support the species' exclusively aerial foraging activities. Important habitat for the Caspian tern is not considered to be present in the Project disturbance footprint or surrounding landscape.

None of the subject species have been recorded during Project field surveys, and these migratory species are all non-breeding visitors to Australia.

Potential habitat areas for migratory birds are unlikely to contain an ecologically significant proportion of any of these listed migratory species.

The creek diversion works aim to restore hydrological connectivity across the Project disturbance footprint and between upstream and downstream areas and waterbodies. The areas of impact consist of small, discrete areas of creek diversion works. Proposed works will aim to avoid and minimise impacts to suitable habitat for terrestrial species by limiting the disturbance footprint in these areas.

#### **4.1.5.7 Do you think your proposed action is a controlled action? \***

No

#### **4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action.**

\*

The Project is **unlikely** to have a significant impact on listed migratory species and is not considered to be a controlled action in relation to this controlling provision.

These species have not been recorded during field surveys and no ecologically significant proportion of a population is considered likely to be present in the Project Area. No breeding habitat for any of the species, or roosting habitat, apart from the oriental cuckoo, is present. Two species (fork-tailed swift and white-throated needletail) would be exclusively aerial foraging species in the local landscape.

The areas of impact consist of small, discrete areas of creek diversion works, and proposed works will aim to avoid and minimise impacts to suitable habitat for terrestrial species by limiting the disturbance footprint in these areas and rehabilitating areas of riparian corridor that are cleared or disturbed.

#### **4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

Substantial design refinements have been undertaken between the design stages for the Project to reduce the overall disturbance footprint and avoid areas of terrestrial habitat for migratory bird species.

The design aims to restore hydrological connectivity and flows through the local ephemeral and seasonal tributaries. Riparian corridors that are disturbed by the Project will be rehabilitated to provide stable landforms and vegetative cover that aligns with the surrounding habitats and corridor connectivity.

To further avoid, reduce or mitigate impacts to migratory species, the following measures will be implemented:

- Land clearing will be restricted to the smallest area required for construction of the Project and all ancillary activities, and will be contained within the Project disturbance footprint and will be located within existing cleared or disturbed areas wherever possible.
- Clearing of mature trees will be avoided wherever possible.
- The extent of vegetation clearing (and no-go areas) will be clearly identified on construction plans and, in the field, using high visibility fencing or flagging in the vicinity of high conservation significance areas. Clearing extent will be communicated to construction supervisors. If fencing or flagging is in poor condition, it should be replaced as soon as practicable to reduce the potential of accidental clearing.
- Sequential clearing practices are to be implemented to allow fauna to escape to areas outside the clearing footprint, encouraging fauna to leave via indirect measures.
- Suitably qualified and experienced fauna spotter-catchers will be engaged to undertake pre-clearance surveys prior to clearing and to supervise the clearing process.
- Fauna management measures will be implemented during clearing and construction activities to limit injury and mortality to migratory birds, including management of risks associated with vehicles (e.g. via speed limits) and responses and reporting for roadkill and adverse incident protocols
- All construction vehicles will comply with maintenance schedules and operational restrictions designed to limit noise impacts during construction.
- All vehicle movements will be restricted to designated tracks located within the Project Area (or otherwise established access roads).
- Routine dust suppression and monitoring will be undertaken during dry conditions and throughout construction to minimise dust dispersal.
- Erosion and sediment control measures will be installed where in-stream disturbance must be undertaken during flow conditions.
- Rehabilitation of temporary laydown areas, stockpiles, site offices and areas will be undertaken as soon as practicable after these facilities are no longer required
- Areas subject to clearing or other construction activities, will be rehabilitated as soon as practicable post-construction to provide a stable landform and promote natural regeneration of vegetation communities.
- Weather conditions during construction will be monitored, and extreme weather stand-down and temporary control protocols established, to minimise adverse outcomes resulting from extreme weather events.

Regular inspections and monitoring will be undertaken of active construction works and rehabilitated areas, with corrective actions implemented where controls are not considered to be adequate for the protection of terrestrial and waterbody habitat for migratory birds.

**4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

The Project is **unlikely** to have a residual significant impact on any of the listed migratory species; therefore no offsets are proposed.

## 4.1.6 Nuclear

### 4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \*

No

### 4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

The Project does not involve nuclear actions.

## 4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

### 4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \*

No

### 4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

There are no Commonwealth Marine Areas in proximity to the Project Area. The closest Commonwealth Marine Area is located approximately 140 km north-east of the Project Area.

## 4.1.8 Great Barrier Reef

#### 4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \*

No

#### 4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

\*

The Project will not take place within the Great Barrier Reef Marine Park, which is located approximately 175 km north of the Project Area and more than 215 km downstream (along the Bowen River and then the Burdekin River) from the Project Area.

The Project aims to:

- Improve throughput of flow and sediment to match the local seasonal and ephemeral watercourses
- Provide a permanent diversion that is safe, stable and environmentally sustainable
- Retain existing water storages, where possible, for stock watering by the post-mining landholder.

Temporary construction activities, such as clearing and earthworks that are required to be undertaken to modify and rehabilitate the existing creek diversion channels, have the potential to alter surface water flows due to modification of the current channel and formation of new channels, degrade water quality due to increased sediment, thereby increasing turbidity, and modify local freshwater aquatic habitats due to changes to channel dimensions, habitat features and conditions. Construction impacts are likely to be temporary and localised, with the rehabilitation of riparian corridors proposed where works have occurred, and the watercourse expected to return to natural conditions once completed, with no long-term or downstream impacts from the Project anticipated. Following completion of the Cerito Creek permanent diversion system, hydrological flows are anticipated to resume as ephemeral watercourses with seasonal high flow events. The Project is likely to have a long-term positive impact on aquatic habitats by restoring flow and creating long-term stability, with consideration of the currently modified condition of the local watercourses.

Areas with existing evidence of erosion, or considered to have a higher risk of erosion following completion of the Cerito Creek permanent diversion system, will be subject to design protections, such as through rip-rap, incorporation of geomorphological features such as bars, benches and pool/riffle sequences, and revegetation of riparian areas.

The hydrology of the Project Area is discussed in further detail within the MNES Assessment Report (Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4, pg 68-82), including the potential for impacts to surface and groundwater resources (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5, pg 201-213).

The location of the Project Area at the top of the catchment and the ephemeral nature of the local watercourses, along with the distance from the Great Barrier Reef, means that the Project is **unlikely** to have a direct or indirect impact to the Great Barrier Reef Marine Park and its values.

#### 4.1.9 Water resource in relation to large coal mining development or coal seam gas

**4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? \***

Yes

**4.1.9.2 Briefly describe why your action has a direct and/or indirect impact on this protected matter. \***

The Project involves works on the existing Cerito Creek diversion system at Newlands Coal Mine to provide a permanent creek diversion.

The Project aims to:

- Improve throughput of flow and sediment to match the local seasonal and ephemeral watercourses
- Provide a permanent diversion that is safe, stable and environmentally sustainable
- Retain existing water storages, where possible, for stock watering by the post-mining landholder.

The Project will involve linking of channels, removal of engineered structures, creation of low-flow channels, remediation of erosion, and rehabilitation of an area of past subsidence, where necessary to reinstate natural flow and sediment transport in Cerito Creek and its tributaries.

The design objective is the improvement of the ecological functioning of previously diverted and impacted areas by preserving mature, stabilised vegetation and rehabilitating disturbed areas with location-appropriate vegetation species and incorporating natural and existing geomorphological features (low-flow channels, benches, sediment bars and pool/riffle sequences).

In accordance with definitions of the Significant Impact Guidelines 1.3, the proposed action would be considered a 'large coal mining development with the potential to impact a water resource', for the purpose of mine closure and rehabilitation, integral to the formerly operating coal mine.

The Impact area for the water resources trigger is shown in Att 2 Part 1 of 5 MNES Assessment Report, Figure 1.4 pg8.

The construction works for the Project involve the following potential impacts:

- Alteration of surface water flows due to the modification of the current channel and formation of new channels
- Temporary impacts on water quality due to increased erosion and sedimentation from clearing and earthworks increasing turbidity, lowering dissolved oxygen levels and releasing contaminants trapped in sediment (e.g. nutrients, metals)
- Modification of aquatic habitats due to changes to channel dimensions, habitat features and conditions.

Following completion of the Cerito Creek permanent diversion system, hydrological flows are anticipated to resume as ephemeral watercourses with seasonal high flow events.

The Project is not anticipated to result in significant changes to groundwater levels or groundwater quality, either during construction or post-construction.

Most construction impacts are likely to be temporary, with the rehabilitation of riparian corridors proposed where works have occurred, and the watercourse expected to return to natural conditions once completed, with no long-term impacts from the Project anticipated.

### **Surface water flows**

The ephemeral Cerito Creek and downstream Kangaroo Creek systems are characterised by prolonged dry periods with flashy, rainfall-driven flood flows during the wet (summer) season. Flood modelling undertaken shows no significant difference in flood depths/elevations in adjacent natural reaches. Changes to the flood regime are likely to be minor and absorbed locally; with model outputs indicating that changes to peak flow discharges and associated impacts to downstream water users, are negligible in the natural reaches of Cerito Creek or Kangaroo Creek further downstream.

The Project design involves minor refinements to the existing system and diversion channels to buffer the transition from the constructed reaches into the natural reaches. Works will include restoring sinuosity, channel bed grades, bank profiles, removal of vertical drops and obstructions, rehabilitation of riparian corridors and improved bed features such as rip rap for erosion protection.

Ponding in the subsidence area (downstream of Cerito Dam) after rain events/flooding is anticipated to continue to occur following removal of the dam and reconstruction of a main channel area.

While there may be some minor impacts during construction as sections of channels are modified, constructed or diverted; mitigation measures will effectively reduce the risk of impact on surface water flows. Due to the ephemeral nature of the watercourses, where water flow is limited to periods following heavy rainfall, impacts to surface water resources are anticipated to be minor.

### **Surface water quality**

Temporary impacts to surface water quality may arise from increased sediment due to clearing and earthworks (and potential release of contaminants trapped in sediment), which may mobilise and transport sediment downstream. However, these impacts are not anticipated to be significant, as the existing water quality within Cerito Creek is considered moderately to slightly disturbed.

Downstream water quality will not be adversely impacted by the Project; with water quality to be maintained or improved through restoration of natural channel meandering landforms, instream habitat features and riparian corridor vegetation and the use of erosion control, such as rock protection.

Surface water assessments are discussed in Att 2 Part 1 of 5 MNES Assessment Report, Section 3.6.1, pg39-41. Hydrological characteristics are discussed in Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4, pg68-82. Potential impacts to hydrology and water quality are discussed in Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.2.1, pg203-206 and Section 6.5.2.2, pg207.

### **Groundwater levels**

A groundwater assessment was conducted in accordance with the DCCEEW Significant Impact Guidelines 1.3 for large coal mining developments, including evaluation of the risk of potential impacts to groundwater resources (as per the Independent Expert Scientific Committee *Information guidelines for proponents preparing coal seam gas and large coal mining development proposals*, 2024).

The proposed new surface water drainage channels (at Lake Austin Drain, Ramp 1 Drain, and connector channels) are not anticipated to intersect the groundwater table, which is indicated to be at least 8-10m below ground level. Therefore, hydrogeological conditions along these channel lines and associated habitat are not expected to be impacted by the Project in the long-term.

Works proposed at Cerito Dam to remove water ponding and create improved surface water drainage may result in a reduction in localised recharge from surface water to alluvium, and shallow groundwater in weathered Rewan Group (if groundwater is present) downstream and upstream of Cerito Dam. Minor changes to the alignment of the existing diversion system at Cerito Dam, and above the existing subsidence area, are not anticipated to impact the existing shallow sub-surface hydrogeological conditions. Seasonal and/or temporary presence of water may develop over time within bed sediments or shallow bedrock beneath and along the line of the proposed channel at this location.

Riparian Eucalypt habitat near Cerito Dam is anticipated to remain or re-establish after removal of the dam. However, the presence of groundwater in shallow alluvium is expected to become seasonal and increase in depth, and may cause changes to the riparian vegetation composition. Existing hydrogeological conditions that support riparian Eucalypt habitat along other parts of the current diversion and naturalised channels, are not expected to be impacted by the Project.

The desktop assessment has identified that the shallow aquifers do not appear to provide baseflow for the Cerito Creek system, and watercourse and diversion channels do not intercept groundwater; with surface and groundwater systems anticipated to be hydraulically disconnected. This situation is not anticipated to change following construction of the Project. Therefore, the Project is likely to have a negligible impact on the groundwater system, associated GDEs and groundwater users.

### **Groundwater quality**

Based on the groundwater assessment undertaken, the overall risk of the proposed diversion system to shallow groundwater beneath/near the ephemeral surface water channels (groundwater resources of the alluvium, basalt and Permian-age strata beneath and around the proposed diversion system) and to values supported by groundwater resources (including existing riparian eucalypt woodland), is considered to be low. Therefore, potential impacts of the Project on groundwater quality are expected to be negligible.

Groundwater assessments are discussed in Att 2 Part 1 of 5 MNES Assessment Report, Section 3.6.2, pg40-41. Groundwater characteristics are discussed in Att 2 Part 2 of 5 MNES Assessment Report, Section 4.5, pg82-90. Potential impacts to groundwater and groundwater quality are discussed in Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.2.3, pg207 and Section 6.5.2.4, pg208.

### **Third-party users**

Surface water and groundwater utility is discussed in Att 2 Part 2 of 5 MNES Assessment Report, Section 4.4.5, pg82 and Section 4.5.6, pg90. Potential impacts to third-party users have been identified as minor, and once construction is complete would be negligible (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.2.5, pg208).

Water available for downstream uses will not be adversely impacted by the Project; with water quality to be maintained or improved through restoration of natural channel meandering landforms, instream habitat features and riparian corridor vegetation and the use of erosion control, such as rock protection.

The Project avoids impacts to undisturbed sections of Cerito Creek that may have Indigenous cultural heritage value.

Biodiversity values will be rehabilitated and restored along the modified sections of the permanent diversion. Works along the watercourse will be designed to tie-in to adjoining natural channels, restore natural flow regimes and riparian communities, and improve the movement of fish and other aquatic species during seasonal flows by reducing barriers to movement.

REs that are considered potential terrestrial GDEs will be rehabilitated along the designed channel sections. The design will aim to retain as many values for wetlands or aquatic GDEs within impounded sections as possible, while restoring flow conditions along watercourses.

#### **4.1.9.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?**

\*

No

#### **4.1.9.6 Describe why you do not consider this to be a Significant Impact. \***

A significant impact assessment was undertaken in accordance with the Significant Impact Guidelines 1.3, which found the Project is **unlikely** to result in a significant impact to water resources that would be of sufficient scale or intensity as to reduce the current or future utility of the water resource for a third party use.

### **Changes to hydrology**

The assessment found that a significant impact to hydrological characteristics is unlikely to result from the Project (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.4.1, pg 210-211).

The proposed Cerito Creek permanent diversion system has been designed to restore the natural flow regimes and seasonal nature of hydrological flows of ephemeral watercourses known to occur in the local sub-catchment. The existing temporary diversion channels have been found to have inappropriate channel dimensions with higher erosion rates and a lack of in-stream habitat and riparian vegetation.

There may be minor, localised impacts to flows during construction as the channels are being constructed or diverted. The proposed works involve the reduced function of engineered structures (such as levees and removal of the concrete drop structure) positioned along the diversion channels of Cerito Creek, removal of Cerito Dam, and reduction of the capacity of other water storages that are experiencing overtopping in major rain events. The low flow channel through Cerito Dam is currently open to flows.

No changes to the groundwater recharge rates or levels, or surface water-groundwater interactions, are expected to occur as a result of the Project.

Riparian Eucalypt habitat in the area of Cerito Dam is anticipated to remain or re-establish after removal of the dam, however, the presence of groundwater in the shallow alluvium is expected to become seasonal and, therefore, there is the potential for some changes to the vegetation species to occur. Existing hydrogeological conditions that support riparian Eucalypt habitat along other parts of the existing diversion and naturalised channels, are not expected to be impacted by the Project.

The minor changes to the alignment of the existing diversion system at Cerito Dam, and above the existing subsidence area, are not anticipated to negatively impact on the existing shallow sub-surface hydrogeological conditions. Over time, there is the potential for the development of seasonal and/or temporary presence of water within bed sediments or shallow bedrock beneath and along the line of the proposed channel at this location.

Therefore the Project is unlikely to negatively impact flow patterns and volumes within the local or downstream watercourses, or existing hydrogeological conditions, surface water-groundwater interactions, or existing and foreseeable groundwater users (such as environmental users and extractors of groundwater) along, downstream or upstream of the proposed diversion system. While the Project will change the existing impounded areas and pre-existing engineered channels on site, the result will be a restoration to a natural system that improves the functioning of the water resource for third party use and benefit.

### **Changes to water quality**

The assessment found that a significant impact to water quality is unlikely to result from the Project (Att 2 Part 4 of 5 MNES Assessment Report, Section 6.5.4.2, pg 211-213).

The Project Area is contained within the Burdekin River (Lower) and Bowen River sub-basin (WQ1205), within the Rosella Creek environmental value zone, mapped by the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* (Qld). The Project Area is mapped as a 'slightly disturbed' system in the upper Cerito Creek extents that occur within the Newlands Nature Refuge, and 'moderately disturbed' directly downstream of this (with moderately disturbed values also mapped across the majority of the Rosella Creek environmental values zone). No specific water quality objectives (WQOs) are listed for

slightly disturbed systems due to insufficient information available to establish effectively unmodified WQOs for these waters; therefore the default WQOs for moderately disturbed systems and freshwater lakes/reservoirs have been used when analysing water quality monitoring data.

The existing water quality monitoring data (for a selection of representative sites upstream, within and downstream of the Project disturbance footprint) shows that some parameters of background water quality are not consistently superior to the WQOs for moderately disturbed ecosystems, with the following trends occurring:

- pH is indicated as being variable within and between the monitoring sites, but trending towards alkaline conditions that exceed the default WQO. This is considered consistent with the nature of the soils in the catchment area.
- Turbidity levels are highly variable and often exceeded the default WQO at monitoring sites, however is also highly dependent on flow.
- EC is highly variable (but also highly dependent on flow), and typically exceeded low flow WQO thresholds at the sites within the Project Area (however was frequently lower in upstream and downstream monitoring sites).
- In-situ water quality measurements undertaken in February/March 2025 indicated that dissolved oxygen, pH, turbidity and EC was outside the default WQOs at a number of sites across the Project Area.

The representative upstream sample site at Cerito Creek between 2013 and 2024 demonstrated instances of exceedance of default WQOs, particularly relating to turbidity. This indicates that the current local water quality is not superior to water quality objectives or receiving water trigger levels. More information on water quality monitoring and results is provided in Att 2 Part 2 of 5 MNES Assessment Report Section 4.4.4, pg 72-81.

There may be short-term impacts to water quality during clearing and earthworks due to increased erosion and sedimentation, resulting in changes to aquatic and riparian habitat values. There is also the potential for contaminant spills from machinery working within or in close proximity to watercourses.

However, due to the temporary and staged nature of the proposed works in discrete areas, and the ephemeral and seasonal nature of the local waterbodies, the Project is not anticipated to create risks to health, reduce water available for human or environmental use, cause harmful substances to accumulate in the environment, affect the habitat or lifecycle of a native species reliant on the water source, or cause an invasive species to establish or spread.

#### **4.1.9.7 Do you think your proposed action is a controlled action? \***

No

#### **4.1.9.9 Please elaborate why you do not think your proposed action is a controlled action.**

\*

The Project is not likely to result in a significant impact to water resources, as it is unlikely to result in changes to water quantity, water quality or hydrological and hydrogeological conditions of a significant scale, intensity or worsening of values.

#### **4.1.9.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. \***

The Project design has been developed using the ACARP *Criteria for functioning river landscape units in mining and post mining landscapes* and *Guideline: Works that interfere with water in a watercourse for a resource activity – watercourse diversions authorised under the Water Act 2000*, which are both recognised guidelines for the design of watercourse diversions.

The Project design has aimed to achieve the following:

- Enhancement or incorporation of existing geomorphological features including pool/riffle sequences, rock steps, benches, berms and sediment bars, and riparian corridors or vegetated buffers.
- Preserve and enhance existing inner floodplain and in-channel vegetation, while infilling those reaches or sub-reaches where vegetation density or diversity is lacking.
- Reduce channel longitudinal grades to minimise velocity.
- Increase channel sinuosity to minimise velocity.
- Remediate the existing diversion within current flow paths to minimise further disturbance.
- Adopt vegetation and rip rap as primary means of erosion control, which mimics natural features in the local catchment, with other refinements to reduce or avoid rock protection requirements.
- Adopt a stable final batter profile for bed and banks to reduce the potential for erosion and downstream sedimentation.
- Decommission Cerito Dam, concrete drop structures and levees where possible and beneficial to improve flow regime and aquatic fauna habitat connectivity.
- Replace existing culvert crossings with bed level causeways to provide ongoing access while reinstating throughput of flow and sediment and improving aquatic fauna movement.
- Improve tie-ins to existing adjacent channels to provide a suitable connection to existing meandering watercourse reaches, particularly in terms of flow and habitat features.
- Revegetation of earthworks.

Other proposed avoidance, minimisation and mitigation measures include:

- Avoidance of areas confirmed as habitat for MNES species and ecological communities, wherever practicable.
- Undertaking cultural heritage clearance surveys prior to commencing works along natural channels, particularly in areas not previously subject to significant ground disturbance.
- Management of construction activities to minimise and mitigate potential impacts to water resources; including undertaking works in dry conditions where possible, installing and maintaining temporary erosion and sediment control devices, managing weed and invasive pest species during clearing and earthworks, and ensuring appropriate management of hazardous substances.
- Continuing and adapting water quality monitoring relevant to Project site disturbance locations; and staging of sampling parameters and frequency, in order to provide effective management of water quality during construction.
- Restricting clearing to the smallest area required for construction of the Project and all ancillary activities.
- Locating laydown, access, spoil and borrow areas in previously disturbed areas wherever possible.
- Staging construction to minimise the active works area required at any time.
- Locating and marking no-go areas of environmental sensitivity onsite and in construction plans.
- Establishing a designated access track network and restricting all vehicle and plant movements to designated access tracks located within the Project Area (or otherwise established access roads).
- Employing erosion and sediment control measures during construction that are consistent with the practices described in the IECA Best Practice Erosion and Sediment Control Guideline and/or the Soil Erosion and Sediment Control: Engineering Guidelines for Queensland Construction Sites.
- Rehabilitating temporary construction areas as soon as possible after the completion of construction works.
- Appropriate design of soil stockpiles and rubbish and waste materials disposal.

- Implementing measures to reduce the potential for contaminant and fuel spills, such as maintaining vehicles and machinery to prevent leaks, undertaking daily inspections to identify any potential for contamination, and providing effective and appropriate spill response protocols that are known to all onsite personnel.
- Monitoring weather conditions during construction and establishing extreme weather stand-down and temporary control protocols to minimise adverse outcomes resulting from extreme weather events.
- Rehabilitating and revegetating riparian areas and other disturbance areas post-construction, to provide a stable landform and promote re-establishment of vegetation communities. For areas with high erosion risk or conservation significant habitat value, revegetation areas may be temporarily fenced to exclude grazing or trampling by livestock (or other animals) during the initial establishment and/or maintenance period. Monitoring of rehabilitated and revegetated areas will be undertaken to identify the need for additional maintenance activities or adaptive management techniques.

In general, regular inspections and monitoring will be undertaken of active construction works and rehabilitated areas, with corrective actions implemented where controls are not considered to be adequate.

#### **4.1.9.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. \***

The Project is **unlikely** to have a significant impact on water resources.

#### **4.1.10 Commonwealth Land**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

##### **4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

##### **4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.**

\*

The proposed action does not involve Commonwealth land.

#### **4.1.11 Commonwealth Heritage Places Overseas**

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

**4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? \***

No

**4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.**

\*

The proposed action does not involve Commonwealth Heritage Places Overseas.

**4.1.12 Commonwealth or Commonwealth Agency**

**4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? \***

No

## 4.2 Impact summary

### Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)

### Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

## 4.3 Alternatives

### 4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? \*

No

### 4.3.8 Describe why alternatives for your proposed action were not possible. \*

No possible alternative timeline is proposed due to the requirements to meet State water licence and mine closure conditions. Mining at Newlands Coal Mine ceased in February 2023, and the mine is undergoing site-wide rehabilitation and closure activities. As part of the Newlands Closure Project, NCC is progressively rehabilitating the existing mine complex to comply with the closure requirements of the EA EPML00817713, and in accordance with the PRCP currently under assessment by the Queensland DETSI.

Timing for the Project is provided in Att 2 Part 1 of 5 MNES Assessment Report, Section 2.5, pg 16.

## 5. Lodgement

## 5.1 Attachments

## 1.2.1 Overview of the proposed action

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 1 Figure 1 Project Location.pdf Description of Project Location	11/09/2025	No	High
#2.	Document	Att 1 Figure 2 Proposed Action.pdf Map of proposed action	11/09/2025	No	High
#3.	Document	Att 2 Part 1 of 5 MNES Assessment Report SectionsES-3.pdf Part 1 of 5 of MNES assessment report	24/09/2025	No	High
#4.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	24/09/2025	No	High
#5.	Document	Att 2 Part 3 of 5 MNES Assessment Report Section6.pdf Part 3 of 5 MNES Assessment	24/09/2025	No	High
#6.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	24/09/2025	No	High
#7.	Document	Att 2 Part 5 of 5 MNES Assessment Report Appendices.pdf Part 5 of 5 MNES Assessment	24/09/2025	No	High

## 1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 2 Part 3 of 5 MNES Assessment Report Section6.pdf Part 3 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

## 1.2.7 Public consultation regarding the project area

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 3 GCAA 15.0 Cultural Heritage STD.pdf Description of engagement with traditional owner	31/03/2025	No	High
#2.	Document	Att 4 GCAA 10.0 Social Performance STD.pdf Description of social performance standard	31/03/2025	No	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 5 GCAA 11.0 Environment STD.pdf GCAA Environment Standard	31/03/2022	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 Figure 2 Proposed Action.pdf Map of proposed action	10/09/2025	No	High
#2.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 1 of 5 MNES Assessment Report SectionsES-3.pdf Part 1 of 5 of MNES assessment report	23/09/2025	No	High
#2.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#3.	Document	Att 2 Part 3 of 5 MNES Assessment Report Section6.pdf Part 3 of 5 MNES Assessment	23/09/2025	No	High
#4.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High
#5.	Document	Att 2 Part 5 of 5 MNES Assessment Report Appendices.pdf Part 5 of 5 MNES Assessment	23/09/2025	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

Att 2 Part 2 of 5 MNES Assessment  
Report Sections4-5.pdf  
Part 2 of 5 MNES Assessment

23/09/2025 No

High

## 3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 3 GCAA 15.0 Cultural Heritage STD.pdf Description of engagement with traditional owner	31/03/2022	No	High

## 3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High

## 4.1.1.3 (World Heritage) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

## 4.1.2.3 (National Heritage) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

## 4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 3 of 5 MNES Assessment Report Section6.pdf Part 3 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document				

		Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High
#3.	Document	Att 2 Part 5 of 5 MNES Assessment Report Appendices.pdf Part 5 of 5 MNES Assessment	23/09/2025	No	High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 3 of 5 MNES Assessment Report Section6.pdf Part 3 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 5 of 5 MNES Assessment Report Appendices.pdf Part 5 of 5 MNES Assessment	23/09/2025	No	High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

4.1.8.3 (Great Barrier Reef) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

4.1.9.2 (Water resource in relation to large coal mining development or coal seam gas) Why your action has a direct and/or indirect impact

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 2 Part 1 of 5 MNES Assessment Report SectionsES-3.pdf Part 1 of 5 of MNES assessment report	23/09/2025	No	High
#2.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#3.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

4.1.9.6 (Water resource in relation to large coal mining development or coal seam gas) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 2 Part 2 of 5 MNES Assessment Report Sections4-5.pdf Part 2 of 5 MNES Assessment	23/09/2025	No	High
#2.	Document	Att 2 Part 4 of 5 MNES Assessment Report Section6-9.pdf Part 4 of 5 MNES Assessment	23/09/2025	No	High

4.3.8 Why alternatives for your proposed action were not possible

	<b>Type</b>	<b>Name</b>	<b>Date</b>	<b>Sensitivity</b>	<b>Confidence</b>
#1.	Document	Att 2 Part 1 of 5 MNES Assessment Report SectionsES-3.pdf Part 1 of 5 of MNES assessment report	23/09/2025	No	High

## 5.2 Declarations

## ✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

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ABN/ACN	71079862936
Organisation name	NC COAL COMPANY PTY LIMITED
Organisation address	4743 QLD
Representative's name	Craig Bushell
Representative's job title	Environment and Community Manager
Phone	0438637645
Email	craig.bushell@glencore.com.au
Address	Collinsville Elphinstone Rd, Via Glenden, 4743 QLD

Check this box to indicate you have read the referral form. \*

Check this box to confirm these are the correct identification details. \*

By checking this box, I, **Craig Bushell of NC COAL COMPANY PTY LIMITED**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. \*

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your [profile](#).

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## ✔ Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

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Same as Referring party information.

Check this box to indicate you have read the referral form. \*

Check this box to confirm these are the correct identification details. \*

I, **Craig Bushell of NC COAL COMPANY PTY LIMITED**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. \*

I, **Craig Bushell of NC COAL COMPANY PTY LIMITED**, the Person proposing the action, consent to the designation of **Craig Bushell of NC COAL COMPANY PTY LIMITED** as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. \*

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your [profile](#).

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### **Completed Proposed designated proponent's declaration**

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

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Same as Person proposing to take the action information.

Check this box to indicate you have read the referral form. \*

Check this box to confirm these are the correct identification details. \*

I, **Craig Bushell of NC COAL COMPANY PTY LIMITED**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. \*

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your [profile](#).