Daunia Coal Mine - West Infrastructure Project

Application Number: **03312** Commencement Date: **28/01/2026** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Daunia Coal Mine - West Infrastructure Project

1.1.2 Project industry type *

Mining

1.1.3 Project industry sub-type

Coal

1.1.4 Estimated start date *

01/07/2027

1.1.4 Estimated end date *

30/06/2057

1.2 Proposed Action details

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

Background of existing operations

Whitehaven Daunia Pty Ltd (Daunia) owns and operates the Daunia Mine (DNM), an open-cut coal mining operation that produces hard coking coal product for the export market. The DNM is located approximately 30 kilometres (km) southeast of Moranbah in central Queensland (QLD), on mining leases (ML)1781, ML70115 and ML70116, granted by the State Government of QLD under *the Mineral Resources Act 1989* (MR Act) (**Figure 1**). The DNM was approved with conditions on 26 October 2009 by the Coordinator-General under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). Operations at the DNM are authorised by Environmental Authority (EA) EPML00561913 and EPBC approval 2008/4418.

The DNM is approved for a 30-year mine plan covering defined multi-seam extents commencing in 2013 and scheduled to end in FY2041. Mining activities at the DNM comprise mining at seven pits, namely Titan Central, Titan North, Titan East, Titan West, Atlas East, Pandora North and Pandora South. Mining at the DNM targets the Leichhardt and Upper Vermont Seams for the Rangal Coal Measures.

The DNM operations include a Coal Handling and Preparation Plant (CHPP), an out-of-pit-dump (OOPD), and water management and supporting infrastructure (i.e. roads, powerlines, laydown area, workshop and offices). Product coal is loaded using the conveyor system to the train loadout facility (TLF) for rail out via the rail spur located on ML70312.

Overview of the Action

The Action is located to the west of and adjacent to ML1781 (the Project Area), within the Exploration Permit (Coal) (EPC) EPC27334 and EPC1951. A mining lease application (MLA) for the Project Area has been submitted as part of the Action, with the new ML being ML700085. The Action consists of the construction and operation of an OOPD, haul roads, and two surface water dams (where these components are located beyond the extent of ML1781) to support ongoing mining operations within the existing DNM MLs. The Action will facilitate a Run-Of-Mine (ROM) coal production of up to 6.5 million tonnes per annum (Mtpa) at DNM. The Project Area and proposed layout is presented in **Figure 2**.

Detailed Description of the Action

The proposed OOPD will have a maximum height of 250 meters Australian Height Datum (m AHD) and will be 363 hectares (ha) in area located on ML700085 and 61 ha is located on the existing ML1781, where the OOPD will integrate into existing operations. It will provide a dedicated area to accommodate the overburden material from open-cut mining activities within the existing DNM MLs, in line with the proposed 6.5 Mtpa ROM production capacity.

Haul roads will provide access to the OOPD from the DNM. The mine-affected water (MAW) dam in the north of the Project Area will have a storage capacity of 513 megalitres (ML) and will be used to assist in the management of MAW and capture and manage run-off from the catchment north of the OOPD. The sediment dam located south of the OOPD will be designed to hold a capacity of 144 ML, with the aim to intercept and treat sediment-laden runoff from the OOPD.

Site preparation and construction activities will involve vegetation clearing across the disturbance footprint, formalisation of access tracks and haul roads, and excavation and earthwork activities to construct the dams.

The OOPD will be constructed gradually from the overburden material sourced from the progressive mining of the DNM pits. It will be designed to a maximum final slope angle of around 3H:1V (≈18°) or flatter to ensure long-term erosion control. Benches (10 - 20 m lift) will be constructed to break slope length and manage run-off. The OOPD is to achieve a factor of safety of ~1.3-1.5 to ensure permanent stability. Construction of the OOPD will be undertaken in accordance with relevant regulations, Mining Waste Management Plan (WHC, 2024) and the WHC Coal Landform Design Guideline (WHC Document number 012714007).

Following operations, the Action will be decommissioned and closed as per the Progressive Rehabilitation and Closure Plan (PRCP) for DNM, ensuring the final landform is retained as a stable and safe structure in the long-term, compatible with surrounding land uses. The PRCP is currently under assessment by Queensland's Department of Environment, Tourism, Science and Innovation (DETSI). The conceptual final landform is presented in **Figure 8**.

All activities will be conducted in accordance with the conditions stipulated in the DNM EA (EPML00561913) and relevant legislation including the *Environmental Protection Act 1994* (EP Act). The Action will adhere to the DNM management plans, which will be reviewed and updated to accommodate the Action where required. The management plans in place at DNM include, but are not limited to:

- Water Management Plan (WMP) (WHC, 2025a)
- Groundwater Monitoring and Management Program (GMMP) (WHC, 2023)
- Mining Waste Management Plan (WHC, 2024)
- Waste Management Plan (WHC, 2025b)
- Erosion and Sediment Control Plan (WHC, 2025c)
- Cultural Heritage Management Plan (BMA, 2010), and
- Weed and Feral Animal Procedure (WHC, 2022).

These management plans are provided in **Attachment A – Management Plans**.

Timing

The life of the OOPD is approximately 7 years (up to and including rehabilitation). The preparation for development of the OOPD is estimated to commence in approximately financial year (FY) 2028.The indicative progressive management of overburden is outlined on **Figure 4** to **Figure 8**. The OOPD will be a future elevated landform, the conceptual final landform is shown in **Figure 8**. The indicative haul road progression from FY2027 to FY2036 is presented across **Figure 9** to **Figure 12**.

Activities not included in the Action

The Action is separate from, but related to, the controlled action approved under EPBC 2008/4418, the Daunia Coal Mine Project (DCMP). The Action only includes all new/additional operations and components of the Action that reside within the Project Area, and which are not already approved under EPBC 2008/4418 or EA EPML00561913. The Action therefore excludes the mining operations and other components of the DNM already undertaken or approved under EPBC 2008/4418 or EA EPML00561913 (including, for example, all surface disturbance already approved by EPBC 2008/4418).

For the avoidance of doubt, the Action (which is the subject of this Referral) does not include:

- The components and operations of the DNM which are approved under EPBC 2008/4418 or EA EPML00561913, whether those components or operations have been constructed or commenced, and irrespective of where those components or operations are located. For example, the Action does not include the continued use of existing water supply related infrastructure to extract/transfer water from external surface water and groundwater sources for the purpose of the approved DNM.
- The initial development activities for the purpose of the Action that involve only minor ground disturbance, including, but not limited to, survey and demarcation activities, exploration, archaeological, environmental and geotechnical investigations and installation of temporary buildings and fencing.
- The relocation of the Ergon Single Wire Return (SWER) Line.
- Maintenance and use of existing infrastructure including access tracks.
- Existing mining and associated activities undertaken on current MLs at DNM, and
- Ongoing exploration or drilling activities (including the establishment or maintenance of exploration access tracks) approved or permitted to be carried out under existing tenements issued under the *Mineral Resources Act 1989* (MR Act).

Motivation why the Action is considered a Controlled Action

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) an Action requires approval from the Minister if it has, will have, or is likely to have, a significant impact on Matters of National Environmental Significance (MNES). Daunia consider the Action is likely to be considered a 'controlled action' requiring further assessment under the EPBC Act for impacts to threatened species and threatened ecological communities and for a water resource in relation to a large coal mining development, details of which are outlined in the appropriate sections of this Referral.

Acronyms, References & Figures

Figures referenced throughout this Referral are provided throughout. The acronyms and references used in this Referral application are provided in **Attachment B – Acronyms and References.**

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

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

No

1.2.4 Related referral(s)

EPBC Number	Project Title
2008/4418	Develop an Open Cut Coal Mine at Daunia

1.2.5 Provide information about the staged development (or relevant larger project).

The Action is related to the existing operations at DNM, which are approved under the EPBC Act (EPBC 2008/4418) and EP Act (EA EPML00561913). The Action proposes the construction and operation of an OOPD, which is to accommodate waste rock materials produced from mining operations on DNM MLs. The Action also includes the construction of haul roads which provide access between existing DNM MLs and the proposed OOPD.

As the purpose of the Action is to facilitate ongoing DNM operations, the Action subject of this Referral would not be required if the DNM was not approved or developed. As such, the DNM operation is considered a relevant larger project to the Action.

Further details regarding the background of existing DNM operations are discussed in Section 1.2.1 of this Referral.

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

Commonwealth Environmental Protection and Biodiversity Conservation Act 1999

The Action is subject to assessment and approval under the EPBC Act. Daunia anticipates the Action to be considered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) as a 'Controlled Action' due to potential significant impacts to threatened species and threatened ecological communities and for a water resource in relation to a large coal mining development.

Relevant guidelines and policies have been considered when preparing this Referral, including:

• *Significant impact guidelines 1.1 Environmental Protection and Biodiversity Conservation Act 1999 Matters of National Environmental Significance* (Commonwealth of Australia, 2013).

• *Significant impact guidelines 1.3 coal seam gas and large coal mining developments – impacts on water resources* (Commonwealth of Australia, 2022).

Commonwealth *Native Title Act 1993*

The *Native Title Act 1993* (NT Act) provides recognition for the rights and interests over land and water possessed by Australian Indigenous people under traditional laws and customs. The NT Act sets out specified processes that must be followed for any 'future act' on land or waters that would affect native title rights and interests. The Barada Barna native title determination in 2016 found that native title has been extinguished over the Project Area (QCD2016/007).

Commonwealth *EPBC Act Environmental Offsets Policy 2012,* Queensland *Environmental Offset Act 2014* and *Environmental Offsets Policy 2017*

The Action may require offsets under the *EPBC Act Environmental Offsets Policy 2012*, *Environmental Offset Act 2014* and *Environmental Offsets Policy 2017* for significant residual impacts to MNES and/or Matters of State Environmental Significance. Offsets under State and Commonwealth jurisdiction can be addressed together under a consolidated Environmental Offset Strategy.

Daunia is working to secure appropriate offsets for the Action and will develop an Environmental Offset Strategy and Offset Area Management Plans in due course and in accordance with the relevant legislation.

Queensland *Mineral Resources Act 1989*

Under the MR Act, Daunia holds Mining Leases (ML) ML1781, ML70115 and ML70116 and surface area rights, which provide rights to access coal at the Daunia Mine (DNM). The proposed Project Area is immediately southwest of the DNM and overlies sections of EPC27334 and EPC1951, also held Daunia and granted under the MR Act. Daunia has submitted a specific purpose Mining Lease application (MLA) over parts of EPC27334 and EPC1951 to allow the construction and operation of the Action (ML 700085). No resource extraction will be undertaken within the MLA area.

Queensland *Environmental Protection Act 1994*

Daunia is approved to conduct mining operations at the DNM in accordance with the conditions set out in the EA EPML00561913,.the latest version of which took effect on 13 November 2025 An EA Amendment application was submitted on 9 December 2025 to incorporate the new ML into EPML00561913 and authorise the development of the Action. It is anticipated that the Action will be a major amendment under the EP Act as components of the Action are expected to exceed the minor amendment threshold as outlined in the DETSI *Guideline -Major and minor amendments* and *Guideline – Criteria for environmental impact statements for resource projects under the Environmental Protection Act 1994.*

Queensland *Water Act 2000*

No watercourse diversions or modifications to existing or approved watercourse diversions are proposed for the Action. The DNM has a Licence to Take Water (Underground Water No. 603817) for dewatering associated with approved open cut mining at ML1781 and ML70115. There are no requirements under this Act as a result of this Action.

Queensland *Aboriginal Cultural Heritage Act 2003*

The Barada Barna People are the statutory Aboriginal Party for the Project Area in accordance with the *Aboriginal Cultural Heritage Act 2003* (ACH Act). Daunia and the Barada Barna People have entered into a CHMP agreement to satisfy the Duty of Care provisions in accordance with the ACH Act. DNM operates in accordance with the CHMP to identify, protect, manage, and conserve Aboriginal cultural heritage.

Queensland *Heritage Act 1992*

The Queensland *Heritage Act 1992* (Heritage Act) provides for the protection and conservation of Queensland's non-Indigenous cultural heritage for the benefit of the community and future generations.

At a State level, the Heritage Act:

- Establishes the Queensland Heritage Council.
- Establishes the Queensland Heritage Register.
- Provides for the protection of Queensland's historical heritage places and areas.

At a local level, the Heritage Act:

- Requires each local government to identify places of local historical cultural heritage significance and record them in a local heritage register or in its planning scheme.
- Specifies that each place entered in a local heritage register must have enough information to identify the location and boundaries of the place and a statement about its heritage significance (s.114).

The Isaac Region Planning Scheme 2021 is the current planning scheme for Isaac Region LGA and includes policies for local heritage places in Part 5 - Tables of assessment and Part 7 - 7.2.8 Heritage overlay code and identifies heritage places within a heritage overlay (Heritage Overlay Map 9.2 - Rural Areas (northeast)).

There is no local heritage places listed within the Isaac Region Planning Scheme 2021 located within the Project Area.

Queensland *Human Rights Act 2019*

The *Human Rights Act 2019* (HR Act) commenced on 1 January 2020. Since then, in Queensland, all public entities are required to act and make decisions in a way that is compatible with human rights.

The main objects of the HR Act are:

- To protect and promote human rights
- To help build a culture in the Queensland public sector that respects and promotes human rights, and
- To help promote a dialogue about the nature, meaning and scope of human rights.

Queensland *Planning Act 2016*

Development approvals under the *Planning Act 2016* (Planning Act) are not required for infrastructure contained within an ML.

Queensland *Nature Conservation Act 1992*

Under the Queensland *Nature Conservation Act 1992* (NC Act), permits and licenses are required to authorise interference with native species, including for the clearing of native plants, tampering with animal breeding places and catching and relocating wildlife.

There is the potential for habitat and species specified under the NC Act to occur within the Project Area. Daunia will apply for relevant licenses and permits under the NC Act as required. Determination of required licenses and permits will be made as part of pre-clearance surveys.

Queensland *Vegetation Management Act 1999*

The *Vegetation Management Act 1999* (VM Act) regulates the clearing of vegetation in Queensland. Under the VM Act, clearing of remnant vegetation requires development approval under the Planning Act unless an exemption applies (e.g., if the clearing is carried out in the course of a mining activity). Accordingly, any clearing of remnant vegetation conducted within the new ML will not require development approval and will be regulated by the EA (once amended to include proposed ML).

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. *

The current operations operate under an existing stakeholder engagement program that outlines key stakeholders including but not limited to State and Commonwealth Government regulatory authorities, Isaac Regional Council, local landowners, the Barada Barna People, existing DNM workforce, relevant infrastructure and service providers and neighboring mine owners and operators. Daunia will continue to engage with the relevant key stakeholders in relation to the Action as an extension of the key stakeholder engagement program. Additionally, the Action will include the continued use of the existing formal complaint procedure in place at DNM.

The EA Amendment application has been determined by DETSI as a Major Amendment and will likely require a public notification period of 30 business days. This allows the public to provide a submission to DETSI. The MLA process also provides the opportunity for public comment, which will likely occur in concurrence with the EA public notification period – as provided for under the EP Act and MR Act.

The underlaying land tenure in the Project Area is owned by Allan and Jeanette William (Olive Downs). Daunia are currently negotiating with the landowner to establish a non-residency agreement requiring the homestead to remain unoccupied for the period covering the life of the DNM.

Daunia will also undertake a review of the CHMP for DNM and consult with the Barada Barna People to undertake appropriate pre-disturbance cultural heritage duty of care surveys.

A summary of the consultation has been undertaken has been provided in Attachment K - Community Consultation Register, all sensitive information like names has been redacted.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	28672143583
Organisation name	WHITEHAVEN DAUNIA PTY LTD
Organisation address	Level 28, 259 George Street SYDNEY NSW 2000

Referring party details

Name	Brendan Dillon
Job title	Approvals Manager
Phone	0436648938
Email	bdillon@whitehavencoal.com.au
Address	Level 31, 12 Creek Street, Brisbane, QLD, 4000

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	28672143583
Organisation name	WHITEHAVEN DAUNIA PTY LTD
Organisation address	Level 28, 259 George Street SYDNEY NSW 2000

Person proposing to take the action details

Name	Brendan Dillon
Job title	Approvals Manager
Phone	0436648938
Email	bdillon@whitehavencoal.com.au
Address	Level 31, 12 Creek Street, Brisbane, QLD, 4000

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. *

Whitehaven Daunia Pty Ltd is the proponent of the Action and is a wholly owned subsidiary of Whitehaven Coal Limited (WHC).

Daunia prioritise responsible environmental management as a core principle of its operations and have a strong commitment to the communities and the environments in which it operates. Daunia has a good record of sustainable practices and engagement with stakeholders including its workforce, the local community, and regulators. Daunia complies with its environmental approvals and monitors its compliance with its own policies and procedures implemented to give effect to Daunia's obligations. Daunia are subject to regular reviews of environmental performance and release publicly available reports on progress, as a part of the DNM EA and internal WHC sustainability reporting requirements.

Daunia maintains several environmental management and monitoring plans for the DNM, which will form the basis of environmental management for the Action. Several of these environmental management and monitoring plans in place at DNM are outlined in **Attachment A – Management Plans** and include, but are not limited to, the following:

- WMP (WHC, 2025a)
- GMMP (WHC, 2023)
- Mining Waste Management Plan (WHC, 2024)
- Waste Management Plan (WHC, 2025b)
- Erosion and Sediment Control Plan (WHC, 2025c)
- Cultural Heritage Management Agreement - Daunia Mine (BMA 2012), and
- Weed and Feral Animal Procedure (WHC, 2022).

WHC has an ongoing focus on improving its environment, social and governance (ESG) program and metrics to attain its own targets to meet or exceed industry expectations for greenhouse gas emission (GHG) reduction, and energy use efficiency and progress of sustainability measures including beneficial waste practices and minimising impacts on biodiversity. WHC also undertakes progressive rehabilitation of mining related disturbances across its sites. The WHC Sustainability Report 2025 is provided in **Attachment C – WHC 2025 Sustainability Report** and provides further detail about the ESG matters within WHC's operations, including DNM.

Daunia has a current approval under the EPBC Act (2008/4418), this approval covers the existing Daunia operation. Daunia is not, to its knowledge in December 2025, subject to any proceedings or actions relating to its management of the environment. Daunia is a responsible environmental manager to all its interests.

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

Whitehaven has a documented Health, Safety, Environment and Community policy that applies to the Action, which is summarised as follows.

Whitehaven intends to conduct business in a way that maintains a safe and healthy workplace for its workers, visitors and the surrounding community, and protects the environmental, community and cultural heritage values of the area throughout all stages of exploration, development, operation, closure and associated activities. Whitehaven aims to:

- Achieve zero workplace injuries and illnesses.
- Achieve zero environmental incidents.
- Maintain mutually beneficial relationships with the communities which host our operations.
  Whitehaven will strive to achieve these goals by:
    - Considering health, safety, environment and community (HSEC) matters when planning and undertaking work activities.
    - Consulting and communicating HSEC matters in a fair and effective manner.
    - Having processes in place for identifying and eliminating or minimising HSEC risks and impacts and sharing and applying learnings in a timely manner.
    - Working to continuously improve HSEC performance.
    - Providing an effective injury management and return to work program for workers.
    - Complying with applicable HSEC legal and other requirements.
    - Providing workers with necessary HSEC information instruction, training and supervision to enable effective performance of the work.
    - Utilising HSEC resources and processes to implement and maintain the requirements of the Policy and associated management systems.

Whitehaven workers' responsibilities are as follows:

- Workers have a responsibility to comply with applicable legislation, this policy and associated management systems.
- No work is to be undertaken without a clear understanding of a safe method that minimises the risk of injury or illness, plant or equipment damage, environmental, community or cultural harm.
- Workers must present for work in a fit and healthy state, take reasonable care for their own health and safety and have an obligation to take reasonable care for the health and safety of others.
- Workers must report any workplace incidents or injuries to their supervisors in a timely manner.
- Workers must also comply with any reasonable instruction given by Whitehaven. This policy applies to all workers and visitors at sites managed by Whitehaven and its subsidiaries. Disciplinary action may be taken for a breach of this policy or associated management systems.

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	28672143583
Organisation name	WHITEHAVEN DAUNIA PTY LTD
Organisation address	Level 28, 259 George Street SYDNEY NSW 2000

Proposed designated proponent details

Name	Brendan Dillon
Job title	Approvals Manager
Phone	0436648938
Email	bdillon@whitehavencoal.com.au
Address	Level 31, 12 Creek Street, Brisbane, QLD, 4000

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

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

ABN/ACN	28672143583
Organisation name	WHITEHAVEN DAUNIA PTY LTD
Organisation address	Level 28, 259 George Street SYDNEY NSW 2000
Representative's name	Brendan Dillon
Representative's job title	Approvals Manager
Phone	0436648938
Email	bdillon@whitehavencoal.com.au
Address	Level 31, 12 Creek Street, Brisbane, QLD, 4000

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.

Same as Referring party information.

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.

Same as Person proposing to take the action information.

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

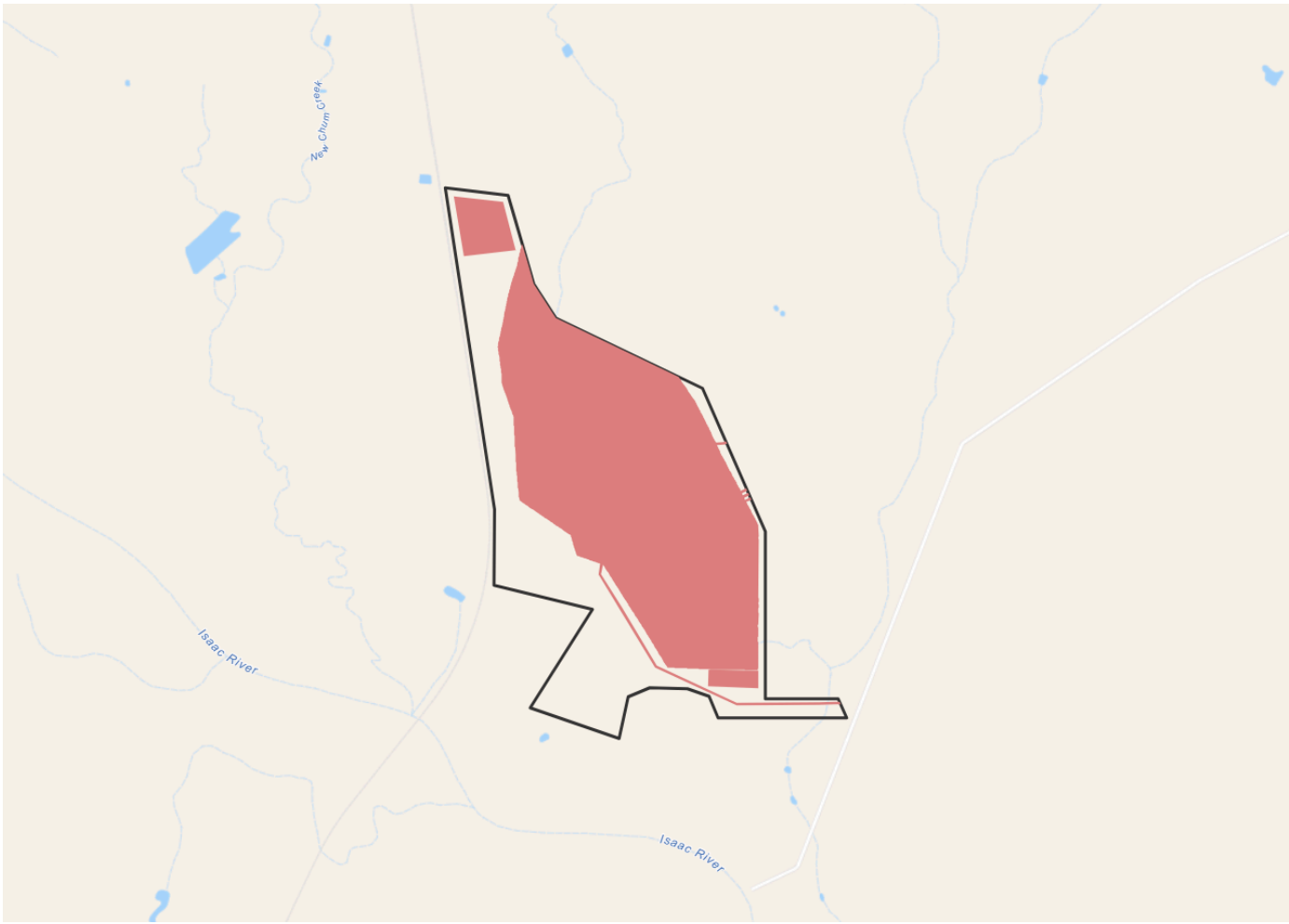
1.4 Payment details: Payment allocation

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

Proposed designated proponent

2. Location

2.1 Project footprint



Project Area: 501.80 Ha **Disturbance Footprint:** 325.32 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Daunia Mine, Daunia Mine Access Road, Coppabella QLD 4741

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? *

No

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

The Action is located on portions of EPC27334 and EPC1951 (both owned by Daunia). A MLA has been submitted across the Project Area and covers portions of EPC27334 and EPC1951 (reference: ML700085). Underlying tenure and tenements are illustrated on **Figure 13**.

The land underlying the Project Area is Freehold land (Lot 3 GV90).

3. Existing environment

3.1 Physical description

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

The Project Area is located within a highly modified landscape subject to agricultural and mining activities. The Project Area resides directly south of the DNM ML1781, with Poitrel Mine approximately 2 km to the east and Olive Downs Mine approximately 5 km west. The nearest town is Moranbah, located approximately 30 km northwest of the Project Area.

The Project Area itself is located on Lot 3 on GV90, which is zoned as 'rural' under the Isaac Regional Council Planning Scheme. This land is owned by a private landholder, with Daunia holding the overlying EPC27334 and EPC1951.

The Project Area has been subject to recent and historical disturbance by the land holder for cattle grazing. As such, the majority of the Project Area has been cleared and consists primarily of non-remnant vegetation, including pasture improvement grasses, aside for four patches of remnant vegetation, identified as regional ecosystem (RE) 11.3.3 in the centre within the disturbance footprint, RE 11.3.1 in the southeast of the Project Area, and RE 11.5.3 in the southwest of the Project Area (**Figure 14**).

Immediately south of the Project Area are several remnant vegetation communities and environmentally sensitive areas which comprise least concern, of concern and endangered REs as classified under the EP Act and VM Act. These vegetation communities are largely associated with the banks of the Isaac River which, at its closest point, is approximately 1 km directly south of the Project Area (**Figure 14**).

All watercourses (including the Isaac River 1 km south of the Project Area), and drainage features in the vicinity of the Project Area are ephemeral and only flow in response to rainfall of sufficient intensity and duration to generate runoff (**Figure 15**). After significant rainfall, perched ponded water may remain in some drainage lines/creeks/water holes that are used as water sources by livestock. Drainage systems are relatively intact, although modified. A drainage line traverses the Project Area, flowing into the Isaac River approximately 2.5 km southeast of the Project Area. No diversions are required to accommodate the Action.

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

The Project Area is located in the Bowen Basin where mining and petroleum exploration activities have been conducted for several decades. The current land use within the Project Area is predominantly cattle grazing.

A number of existing and approved/proposed coal mines surround the Project Area including Poitrel Mine, Winchester South and Moorvale South Mine. The Project Area also has the Norwich Park Railway to the West which is part of the Goonyella System.

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

There are no outstanding natural features or other important or unique values within the Project Area.

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 natural topography of the Project Area is generally inclined to the southwest towards the Isaac River. Elevations range from approximately 200 m AHD in the north of the Project Area on ML1781, to 187 m AHD at the Isaac River to the south of the Project Area (riverbank elevations).

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.

Five terrestrial ecology field survey programs were undertaken across four years (2021 to 2025) to describe the terrestrial ecology of the Project Area and 20 km buffer area (the Study Area). The outcomes of the combined survey efforts and associated desk-based assessments are provided in the Terrestrial Ecology Assessment Report (SLR, 2025a), provided in **Attachment D – Terrestrial Ecology Assessment Report**. Surveys were conducted during April-May (autumn) and November (spring) 2021, November (spring) 2023 and September (spring) 2025, ideal survey times for vegetation community description, targeted searches for EPBC Act listed threatened species, and fauna trapping surveys (DES, 2020; Neldner et al., 2022; Eyre et al., 2022).

The Study Area contains a moderately diverse fauna assemblage. Diurnal birds were the most diverse group, in part due to their conspicuous nature; 83 species were recorded in total across the Project Area and up to 2 km surrounding. Bird families represented were diverse; common and species-rich families included *Meliphagidae* (honeyeaters), *Acanthizidae* (thornbills and allies), *Accipitridae* and *Falconidae* (hawks, eagles, falcons), *Psittacidae* and *Cacatuidae* (parrots and cockatoos), and *Artamidae* (butcherbirds and woodswallows). The most prevalent species were generalists adapted to open woodlands and semi-intact and disturbed landscapes, including Torresian Crow (*Corvus orru*), Australian Magpie (*Gymnorhina tibicen*) and Magpie-lark (*Grallinacyanoleuca*). One EPBC Act listed threatened bird species, Squatter Pigeon (southern) (*Geophaps scripta scripta*) was recorded in the Study Area. Squatter Pigeon (southern) was encountered at several locations, in non-remnant vegetation, within and adjacent to remnant vegetation, adjacent to the rail corridor, cattle dams, cattle yards, and along the roadside on various occasions between 2021 and 2025. This species is further discussed under *Section 4.1 Threatened Species and Ecological Communities* of this referral.

Mammal species were poorly represented, likely due in part to the cryptic nature of several species; 26 species were recorded in total, of which 12 species were microbats (nocturnal echolocating bats of the order Microchiroptera). Other mammals included macropods (kangaroos and wallabies), possums and gliders, native rodents and carnivorous marsupials, one species of fruit bat, and one monotreme (Short-beaked Echidna; *Tachyglossus aculeatus*). Two EPBC Act-listed threatened mammals expected to occur—Koala (*Phascolarctoscinereus*) and Greater Glider (southern and central) (*Petauroides volans*)—were confirmed by targeted survey to occur in the Study Area. The 2025 September survey detected Koala scratches on a stand of trees approximately 260 m southwest of the Project Area within a patch of vegetation that is spatially separated from eucalypt woodland within the Project Area by approximately 400 m of cleared paddock. The 2025 September survey also incidentally recorded three greater gliders located in riparian vegetation along the Isaac River outside of the Project Area. This species is further discussed under *Section 4.1 Threatened Species and Ecological Communities* of this referral.

Reptiles and amphibians were poorly represented, likely due to a combination of cryptic behaviour, low population density (specifically of higher-order predators such as pythons, varanids and large elapid snakes) and reduced site accessibility after rain when these animals tend to be most visible. The skinks (family Scincidae) were the predominant reptile group, accounting for seven of the total 16 spp. recorded; five amphibian species were recorded of which four were native (of the treefrogs and allies (family Hylidae) and the Australian ground frogs (*Limnodynastidae*)) and one was invasive (Cane Toad, *Rhinella marina*). Habitat for one EPBC Act listed threatened reptile species, Ornamental Snake (*Denisonia maculata*), was assessed as present in the Project Area; though the species was not observed during field surveys, no confident assessment of absence could be made as targeted survey efforts were hampered by site conditions. Ornamental Snake is known to occur nearby and extensive suitable and marginal habitats for the species occur in the Project Area. This species is further discussed under *Section 4.1 Threatened Species and Ecological Communities* of this referral.

In total, 157 flora species were recorded within the Study Area. Ecologically dominant trees in the Study Area were the eucalypts, including the genera Eucalyptus and Corymbia, and the wattles (Acacia). Specifically, Poplar Box (*Eucalyptus populnea*), *Corymbia spp*. (especially *C. dallachiana*, *C. clarksoniana* and *C. tessellaris*), Forest Blue Gum (*Eucalyptus tereticornis*), Coolibah (*Eucalyptuscoolabah*), Mountain

Coolibah (*Eucalyptus orgadophila*), and Brigalow (*Acacia harpophylla*) were the dominant species in the vegetation associations of the Study Area. Other common tree species included Sally Wattle (*Acacia salicina*), Native Bauhinia (*Lysiphyllumhookeri*), Yellowwood (*Terminalia oblongata*), Whitewood (*Atalayahemiglauca*), Weeping Paperbark (*Melaleuca fluviatilis*) and River She-oak (*Casuarina cunninghamiana*).

Shrubs were generally poorly represented; shrub layers were sparse and generally occupied by 4-6 spp. Common shrubs included Leichardt Bean (*Cassia brewsteri*), Conkerberry (*Carissa ovata*), Desert Lime (*Citrus glauca*), Dead Finish (*Archidendropsis basaltica*), Sandpaper Fig (*Ficus opposita*), and Scrub Boonaree (*Alectryondiversifolius*).

The ground layer was generally dominated by pasture improvement grasses. Exceptions were in Poplar Box woodlands and narrow ephemeral drainage features, where native species were more prevalent. Common native ground cover species included Brigalow Grass (*Paspalidium caespitosum*), Canegrass (*Leptochloa digitata*), Wiry Nine-awn (*Enneapogonlindleyanus*), Umbrella Grass (*Enteropogon acicularis*), Rough Grewia (*Grewia savannicola*), Feathertop Wiregrass (*Aristidalatifolia*) and Wombat Berry (*Eustrephus latifolius*).

Of the 157 flora species identified, 22 species were non-native species. Most of these were environmental weeds and were of minor or negligible consequence to local flora and fauna. The non-native species associated with greatest impact to terrestrial ecology values in the Project Area were pasture improvement grasses, especially Buffel Grass (*Cenchrusciliaris*), Purple Panic (*Panicum coloratum*) and Sabi Grass (*Urochloa mosambicensis*). These species were most prevalent in cleared environments but were also present in remnant vegetation, often suppressing native forb and grass species and, in extreme cases, forming dense carpets that inhibited tree recruitment. Three species of weed listed as Weeds of National Significance (WoNS) were recorded: Lantana (*Lantana camara*), Parthenium (*Parthenium hysterophorus*) and Velvety Tree Pear (*Opuntiatomentosa*). These species were widespread in suitable environments but rarely caused transformative impacts; dense thickets of Lantana on the banks of the Isaac River were the exception to this.

No EPBC Act listed threatened flora species were recorded in the Study Area.

An Aquatic Ecology Assessment (SLR, 2025d) was undertaken for the Action and is provided in **Attachment I – Aquatic Ecology Assessment**. The assessment included a desktop assessment and results from field surveys of the Project Area undertaken in May 2025 and July 2024.

The desktop assessment indicated that three common species of turtle (*Chelodina longicolis*, *C. expansa* and *Emydura macquarii krefftii*) occur in the local area and may therefore periodically occur in the Project Area. None of the turtle species known or likely to occur in the Project Area are listed threatened species under the EPBC Act or NC Act. During the July 2024 field survey, no turtles were recorded. During the May 2025 survey one turtle was recorded: a broad-shelled river turtle (*Chelodina expansa*).

There are no records of platypus from the Isaac River or its tributaries, and closest records to the Project Area are from the Connors River (ALA, 2025). No platypus or platypus burrows were recorded during the July 2024 or May 2025 field surveys.

Waterways of the Project Area are temporary and only hold water after significant rain. Thus, fish would only be present in the waterways of the Project Area after significant flow events that create hydrological connectivity with downstream refugia pools from which fish could migrate upstream and colonise the otherwise dry waterways. While 53 native species of fish are known from freshwater reaches of the Fitzroy River Basin (DESI, 2024), database searches (ALA, 2024; DESI, 2024) and previous surveys indicate that only eight native fish species have been recorded from the Project Area and surrounds: Agassizi's glassfish (*Ambassis agassizii*), Blue catfish (*Neoarius graeffei*), Eastern rainbowfish (*Melanotaenia splendida splendida*), Fly-specked hardyhead (*Craterocephalus stercusmuscarum*), Spangled perch (*Leiopotherapon unicolor*), Bony bream (*Nematalosa erebi*), Southern purple spotted gudgeon (*Mogurnda adspersa*), and Common gudgeons (*Hypseleotris spp.*).

It is likely that the following species would also occur periodically in or near the Project Area: Hyrtl's tandan (*Neosilurus hyrtlii*), Sleepy cod (*Oxyeleotris lineolata*), and Longfin eel (*Anguilla reinhardtii*).

These are all common species that are tolerant of harsh environmental conditions (e.g. variable flow, fluctuating water quality) that are typical of ephemeral watercourses of the region (Pusey et al. 2004).

None of the fish species or macroinvertebrate taxa known or likely to occur in the Project Area are listed threatened species under the EPBC Act or NC Act (further details are provided in Section 4.10 of **Appendix I – Aquatic Ecology Assessment**). No stygofauna were recorded during the surveys.

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

Nine vegetation assessments were previously conducted in and immediately around the Project Area and an additional twelve were conducted in the 2025 September survey. The assessments found that clearing by the landholder has occurred regularly within the last 15 years in the Project Area, and also recently prior to the September 2025 surveys. As such, vegetation in the Project Area largely consists of non-remnant vegetation, including pasture improvement grasses. However, four patches of remnant vegetation were identified within the Project Area, which have been classified as two areas of RE 11.3.3, one area of RE 11.3.1 in the southeast, and one area of RE 11.5.3 in the southwest of the Project Area (**Figure 14**).

Previous studies confirmed the presence of two TECs within and adjacent to the Project Area, Brigalow (*A. harpophylla*) dominant and co-dominant and Poplar Box Grassy Woodland on Alluvial Plains (SLR, 2023). The Brigalow TEC occurs within the Project Area approximately 13 m to the south of the disturbance footprint's haul road and the Poplar Box TEC occurs approximately 450 m to the southwest of the disturbance footprint, outside of the Project Area (**Figure 14**).

In accordance with Brigalow (*A. harpophylla* dominant and co-dominant) conservation advice (DCCEEW, 2001), areas of regrowth that have been cleared in the previous 15 years are unlikely to be considered to meet the key diagnostic criteria for the EPBC Act listed Brigalow TEC. Furthermore, extensive areas of exotic perennial grasses (e.g., buffle grass, or Indian bluegrass) are present across the disturbance footprint and likely comprises in excess of 50% of the vegetation cover at the ground layer, meaning any Brigalow patch present is also unlikely to meet the TEC condition thresholds on this basis.

The soils within the Project Area are predominantly heavy clay Vertosols and lighter sandy Arenosols, with some areas containing sodic Chromosols. Topsoil layers, generally 10–40 cm thick, are neutral in pH, non-saline, and non-sodic, with moderate organic matter and low to moderate nutrient levels. Subsoils, which extend 40–100 cm, range from neutral to mildly alkaline and exhibit variable sodicity from non-sodic to strongly sodic, as well as moderate salinity in deeper horizons (SLR, 2025c).

As discussed in Section 4.11 of the Aquatic Ecology Assessment (SLR, 2025d) (**Attachment I – Aquatic Ecology Assessment**), aquatic plant communities of the region are typically species-poor and have low per cent cover, which is likely due to the short duration of flows in ephemeral watercourses resulting in unsuitable habitat for many aquatic plant species (Van Manen, 2005). Database searches (ALA, 2024; DESI, 2024) and previous surveys in the Isaac River area, indicate that aquatic plants that have been recorded in and near the Project Area are dominated by species with an emergent growth form that often grow on dry bed or banks.

None of the recorded aquatic plant species are listed as threatened species under Queensland's NC Act. There are no records of aquatic weeds, including those species that are biosecurity matters, from the Project Area and surrounding 20 km radius (ALA 2024; DESI 2024).

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.

There are no Commonwealth heritage places or other places recognised as having heritage values relevant to the Project Area.

The Queensland Heritage Register (November, 2023) includes no culturally significant sites in the general vicinity of the Project Area. The closest significant site as listed in the Queensland Heritage Register is located in Nebo, 75 km north-east of the Project Area.

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

The Indigenous heritage values in the Project Area are managed under a Cultural Heritage Management Agreement, executed in 2010 with the Barada Barna People. The agreement is to satisfy the Duty of Care provisions in accordance with the *Aboriginal Cultural Heritage Act 1993.* Under the agreement, the DNM has been subject to cultural heritage assessments and salvage since 2010 (BMA, 2010).

The Barada Barna native title determination in 2016 found that native title has been extinguished over the Project Area.

Management and relocation of sites identified within the Action disturbance footprint will be managed in accordance with the processes outlined in the Cultural Heritage Management Agreement as clearing progresses. All Indigenous cultural heritage clearance activities will be undertaken in accordance with the Queensland *Aboriginal Cultural Heritage Act 2003*.

A copy of the Cultural Heritage Management Agreement for DNM has is provided in Attachment A - Management Plans. Please note that this agreement has been redacted in some portions of the agreement due to commercial reasons.

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

Watercourses and drainage features within and in proximity to the Project Area are shown on **Figure 15**. These include:

- The Isaac River - located approximately 1 km south of the Project Area.
- New Chum Creek - a tributary to the Isaac River approximately 1 km west of the Project Area. The tributary traverses northeast to southwest across the northern section of ML70116, before running south to join the Isaac River 2.8 km west of Pandora Pit, outside the proposed Project Area, and
- Two unnamed secondary drainage lines run from the southern end of ML1781 (the southern end of Pandora Pit and the proposed OOPD) southward to the Isaac River.

Historical flow and river height monitoring data (1968-2025) for the Isaac River at Deverill (DNRME monitoring station 130410A), located to the southeast of the Project Area, shows that flows are most likely to occur during the summer months. Stream flows are highly variable, with the river drying out during winter and early spring. Some pools are expected to hold water for extended periods. On average, the daily flow at Deverill is 753 ML per day.

Surface water resources within the vicinity of the Action are scheduled under the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* as:

- Waters of the Isaac River northern tributaries of the Isaac River Sub-basin of the Fitzroy Basin water plan (WQ1301), and
- Waters of the Isaac and lower Connors River main channel of the Isaac River Sub-basin of the Fitzroy Basin water plan (WQ1301).

The environmental values (EVs) for these areas are:

- Aquatic ecosystems,
- Primary industries,
- Recreational use,
- Drinking water,
- Industrial use, and
- Cultural and spiritual values.

Water quality sampling at DNM has been regularly undertaken in accordance with the EA and as a part of the Fitzroy Regional Receiving Environment (FRREMP). Six (6) surface water monitoring points are located upstream and downstream of the Project Area. Sampling locations are shown in **Figure 15**. All watercourses in the vicinity of the Action are ephemeral and only flow in response to rainfall of sufficient intensity and duration to generate runoff. After significant rainfall, perched ponded water may remain in some drainage lines/creeks/water holes that are used as water sources by livestock. Drainage systems are relatively intact, although modified.

Water monitoring conducted between 2015 and 2025 has indicated several exceedances in the water quality objectives associated with the above EVs. The results show water quality is influenced by seasonal changes, upstream land use, and mining activities.

Section 2.0 of **Attachment F – Surface Water Assessment** provides further details of the existing surface water environment.

Groundwater

The hydrostratigraphic units relevant to the Action are described below:

- Cainozoic sediments:
    - Quaternary alluvium – unconfined aquifer (variably water-bearing strata of permeable unconsolidated sand or gravel) localised in close proximity to the south-west of Pandora Pit and the OOPD and regionally along the Isaac River, and to the east along North Creek, and

    - Quaternary to Tertiary colluvium and weathered bedrock (regolith) – unconfined and largely unsaturated unit at DNM and in the Pandora Pit area.
- Permian coal measures with:
    - Low permeability interburden units comprising mudstone, siltstone and fine sandstone, and
    - Coal seams which are more permeable water bearing units within the coal measures due to secondary porosity (cleats and fissures).

An Early Cretaceous granitoid igneous body occurs approximately 1.7 km east of the DNM. The rock is solid in nature with a very fine groundmass and unlikely to have significant primary porosity that would facilitate storage and transmission of groundwater, and is therefore considered to have aquitard properties.

The coal seams within the Rangal Coal Measures can be characterised as confined fractured rock aquifers, with the Leichardt Seam and combined Vermont Seams being the main aquifer units within the Project Area. The overburden above the Leichardt Seam, including the Rewan Group where present, acts as an aquitard and is typically dry, or very low yielding.

Significant structural faulting associated with the Jellinbah Thrust System occurs at DNM and within the surrounding area and has a significant influence on the regional groundwater system. Field investigations into the hydraulic parameters of the closest major fault southwest of DNM were undertaken in 2019 as part of the Winchester South Project EIS (SLR, 2020). The investigations found that the major structural features are effectively barriers to groundwater flow perpendicular to the faults. The major faults that repeatedly truncate the lateral east-west extent of the Permian units to both the west and east of DNM result in hydrogeological compartmentalisation of the Permian groundwater system.

The Project Area lies within the Isaac Connors Groundwater Management Area (GMA – Zone 34) of the Fitzroy Basin under the *Water Plan (Fitzroy Basin) 2011*. The Isaac Connors GMA consists of the following groundwater units:

- Isaac Connors Groundwater Unit 1 (also known as the Isaac Connors Alluvium Groundwater Sub-area) - containing the aquifers of the quaternary alluvium, and
- Isaac Connors Groundwater Unit 2 - containing all subartesian aquifers, including Permian coal measures, within the Isaac Connors GMA other than the aquifers included in Isaac Connors Groundwater Unit 1.

The current and historic groundwater monitoring network at the DNM comprises a total of 37 monitoring bores (18 active, 17 inactive and two decommissioned)

In the vicinity of the Project Area and the Isaac River, there are currently no monitoring bores. The Groundwater Dependent Ecosystem (GDE) Atlas shows high, moderate and low potential for groundwater interaction occurring in vicinity of the DNM (refer to **Figure 17**), with moderate to high potential GDEs to the southwest of the DNM and associated with the Isaac River:

- Terrestrial vegetation associated with the Isaac River and adjacent unnamed minor water course mapped as having a moderate potential to be dependent on groundwater
- Aquatic habitat associated with the Isaac River channel and an adjacent unnamed minor watercourse has a high potential to be dependent on the surface expression of groundwater, and
- All other terrestrial vegetation and aquatic habitat in proximity to the DNM is mapped as having a low to moderate potential of being associated with the presence of groundwater (Bureau of Meteorology, 2021).

1. Given the ephemeral nature of the Isaac River and tributaries, the surface expression of groundwater in the creeks and the associated aquatic habitat is likely limited to isolated occasions following significant rainfall where partial saturation of the alluvium may result in some short term baseflow to the Isaac and other watercourses. Alluvial groundwater may also support aquatic GDEs in the form of water holes within the Isaac River channel which support aquatic species through no-flow periods, depending on their permanence.

A recent GDE study was completed for the Action (Watermark Eco, 2025) and is provided as **Attachment E – GDE Study**. The study focuses on the Isaac River and the associated floodplain environment local to the Isaac Downs Project that is also present south of DNM. The study indicated that there is no evidence that terrestrial vegetation is utilising groundwater from deeper confined aquifers associated with Permian coal seams. The only likely GDE within the broader Project Area is associated with the riparian fringe of the Isaac River, with the likelihood of a GDE occurring decreasing with distance from the river channel where the effect of bank recharge during flooding diminishes (**Figure 18**).

4. Impacts and mitigation

4.1 Impact details

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

EPBC Act section	Controlling provision	Impacted	Reviewed
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	No	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. *

A search of the EPBC Act database using the Protected Matters Search Tool (PMST) (DCCEEW, 2025), provided under Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**, shows that no World Heritage properties occur within the Project Area or surrounding 20 km radius.

The nearest World Heritage property is the Great Barrier Reef World Heritage Area (GBRWHA), located over 400 km downstream of the Project Area. The Action is located within the Fitzroy River Basin, which is considered a Great Barrier Reef (GBR) catchment, as the waters from the catchment ultimately flow into the GBR. The Project Area is located within the catchment of Isaac River, which is a tributary of the Fitzroy River. The Fitzroy River ultimately outflows to the Coral Sea, south-east of Rockhampton, near Port Alma, where the GBRWHA resides. **Figure 22** shows the location of the Action in reference to the GBR.

A Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**) undertaken for the Action determined the potential impact of the Action on surface water resources to be negligible. The assessment found the following:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- Effective management of runoff contributions from adjacent sites through controlled drainage systems and levees.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional default guideline values (DGVs). These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and total suspended solids (TSS).
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

Any potential changes in surface water will have negligible impacts downstream at the GBRWHA, given the minor contribution of the Action relative to the extensive Fitzroy River catchment (142,665 km2). Additionally, any potential alterations to water quality – such as changes in sedimentation – will primarily be localized and become negligible at the GBRWHA due to extensive dilution and mixing over the 400 km to the outflow point.

Any potential avenues for impacts to surface water arising from the Action will be further minimised through the existing monitoring, management and mitigation measures in place at DNM. These are outlined in the existing DNM WMP and ESCP (**Attachment A – Management Plans**), which will be reviewed, updated and applied to the Action. The existing management actions are considered adequate to manage surface water in relation to the Action (as discussed further in **Attachment F – Surface Water Assessment**). The broad management actions in the WMP include, but are not limited to:

- Prevent the release of contaminants into the receiving environment.

- Ensure water resource use does not negatively affect the local and regional environment.
- Capture and treat runoff from disturbed areas in sediment dams for reuse in dust suppression or coal processing.
- Divert runoff from undisturbed areas away from disturbed areas using diversion drains and bunds.
- Establish and maintain a long-term sustainable water balance to minimise risks to the environment and operational activities.
- Maximise water reuse on-site to reduce reliance on external water supplies.
- Fulfil the requirements of the EA EPML00561913, including monitoring and reporting obligations.
- Implement contingency procedures for emergencies.
- Transfer water between dams to optimise usage and reduce the risk of uncontrolled discharges.
- Use mine-affected water for operational purposes such as dust suppression and coal handling.

The MAW and sediment dams proposed as a part of the Action will assist in achieving the above actions.

The broad management actions in the ESCP include, but are not limited to:

- Minimise the area of disturbance, where possible, and schedule the disturbance such that it is not exposed for longer than is necessary.
- Clean water should be diverted around the disturbed and/or sensitive areas where possible.
- Rehabilitation should be undertaken to provide a stable and vegetated landform and should be completed in accordance with the WHC-QLD-GDL- Landform Design Guideline.
- Surface treatment must consider the type of material/rock suitable for the required slope and velocity to ensure the selected material is fit for purpose.
- Where disturbance has occurred within a waterway, the area should be revegetated as soon as practical. Consideration should be given to the use of a soil binder, coir mesh or rock/topsoil matrix, depending on the significance of the waterway, to stabilise the surface during vegetation establishment.
- Stabilise the surface of slopes using appropriate slope protection measures.

In regard to surface water monitoring, the existing water quality monitoring programmes demonstrate compliance with regulatory standards and facilitate early detection of potential issues and are suitable for the Action. As such, the water monitoring program undertaken as a part of the FRREMP and in accordance with the EA will continue to monitor any impacts of the proposed Action on surface water resources.

As discussed in detail within **Attachment F – Surface Water Assessment**, the Action is considered to have negligible impact on surface water resources.

From a greenhouse gas (GHG) and climate perspective, a GHG Assessment (GHG) (**Attachment J – GHG Assessment**) was completed for the Action, which found that the Action has an overall positive GHG outcome, and therefore not impact the GBRWHA. It was found that:

- The main impact of the Action would be a reduction in DNM's Scope 1 GHG emissions due to a reduction in diesel consumption for hauling due to the shorter haulage distance for overburden from the Pandora Pit.
- These reductions significantly outweigh the conservatively estimated GHG emissions associated with vegetation clearing for the new OOPD, resulting in the net impact of the Project being a reduction in Scope 1 GHG emissions from DNM of almost 60 kt CO2-e over the life of the Action.
- A reduction in upstream Scope 3 emissions associated with the production and supply of diesel used by DNM of just over 15 kt CO2-e is also estimated, almost entirely due to the reduced diesel consumption.
- Once the OOPD is constructed and being used, the annual reduction in Scope 1 GHG emissions is estimated to range from 11.0 - 19.4 kt CO2-e/annum. This represents a reduction of approximately 5% - 9% of DNM's total Scope 1 emissions.
- The Action would be categorised as a low emitter, even for FY2026 when accounting for potential emissions associated with vegetation clearing. For all other years, the Project is either neutral or has

a mitigating effect on emissions that would have occurred without the Action.

In considering the above, the Action will not have a direct or indirect impact on the GBRWHA or on any World Heritage properties.

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.

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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. *

A search of the EPBC Act database using the PMST (DCCEEW, 2025), provided under Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**, shows that no National Heritage places occur within the Project Area or surrounding 20 km radius.

The nearest National Heritage is the Great Barrier Reef National Heritage Place (GBRNHP) located over 400 km downstream of the Project Area. The Action is located within the Fitzroy River Basin, which is considered a Great Barrier Reef (GBR) catchment, as the waters from the catchment ultimately flow into the GBR. The Action is located within the subcatchment of Isaac River, which is a tributary of the Fitzroy River. The Fitzroy River outflows to the Coral Sea, south-east of Rockhampton, near Port Alma, where the GBRNHP resides. **Figure 22** shows the location of the Action in reference to the GBR.

A Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**) undertaken for the Action determined the potential impact of the Action on surface water resources to be negligible. The assessment found the following:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- Effective management of runoff contributions from adjacent sites through controlled drainage systems and levees.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional DGVs. These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and TSS.
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

Any potential changes in surface water will have negligible impacts downstream at the GBRNHP, given the minor contribution of the Action relative to the extensive Fitzroy River catchment (142,665 km2). Additionally, any potential alterations to water quality – such as changes in sedimentation – will primarily be localized and become negligible at the GBRNHP due to extensive dilution and mixing over the 400 km to the outflow point.

Any potential avenues for impacts to surface water arising from the Action will be further minimised through the existing monitoring, management and mitigation measures in place at DNM. These are outlined in the existing DNM WMP and ESCP (**Attachment A – Management Plans**), which will be reviewed, updated and applied to the Action. The existing management actions are considered adequate to manage surface water in relation to the Action (as discussed in **Attachment F – Surface Water Assessment**). The broad management actions in the WMP include, but are not limited to:

- Prevent the release of contaminants into the receiving environment.
- Ensure water resource use does not negatively affect the local and regional environment.

- Capture and treat runoff from disturbed areas in sediment dams for reuse in dust suppression or coal processing.
- Divert runoff from undisturbed areas away from disturbed areas using diversion drains and bunds.
- Establish and maintain a long-term sustainable water balance to minimise risks to the environment and operational activities.
- Maximise water reuse on-site to reduce reliance on external water supplies.
- Fulfil the requirements of the EA EPML00561913, including monitoring and reporting obligations.
- Implement contingency procedures for emergencies.
- Transfer water between dams to optimise usage and reduce the risk of uncontrolled discharges.
- Use mine-affected water for operational purposes such as dust suppression and coal handling.

The MAW and sediment dams proposed as a part of the Action will assist in achieving the above actions.

The broad management actions in the ESCP include, but are not limited to:

- Minimise the area of disturbance, where possible, and schedule the disturbance such that it is not exposed for longer than is necessary.
- Clean water should be diverted around the disturbed and/or sensitive areas where possible.
- Rehabilitation should be undertaken to provide a stable and vegetated landform and should be completed in accordance with the WHC-QLD-GDL- Landform Design Guideline.
- Surface treatment must consider the type of material/rock suitable for the required slope and velocity to ensure the selected material is fit for purpose.
- Where disturbance has occurred within a waterway, the area should be revegetated as soon as practical. Consideration should be given to the use of a soil binder, coir mesh or rock/topsoil matrix, depending on the significance of the waterway, to stabilise the surface during vegetation establishment.
- Stabilise the surface of slopes using appropriate slope protection measures.

In regard to surface water monitoring, the existing water quality monitoring programmes demonstrate compliance with regulatory standards and facilitate early detection of potential issues and are suitable for the Action. As such, the water monitoring program undertaken as a part of the FRREMP and in accordance with the EA will continue to monitor any impacts of the proposed Action on surface water resources.

From a greenhouse gas (GHG) and climate perspective, a GHG Assessment (GHG) (**Attachment J – GHG Assessment**) was completed for the Action, which found that the Action has an overall positive GHG outcome, and therefore is unlikely to impact the GBRWHA. It was found that:

- The main impact of the Action would be a reduction in DNM's Scope 1 GHG emissions due to a reduction in diesel consumption for hauling due to the shorter haulage distance for overburden from the Pandora Pit.
- These reductions significantly outweigh the conservatively estimated GHG emissions associated with vegetation clearing for the new OOPD, resulting in the net impact of the Project being a reduction in Scope 1 GHG emissions from DNM of almost 60 kt CO2-e over the life of the Action.
- A reduction in upstream Scope 3 emissions associated with the production and supply of diesel used by DNM of just over 15 kt CO2-e is also estimated, almost entirely due to the reduced diesel consumption.
- Once the OOPD is constructed and being used, the annual reduction in Scope 1 GHG emissions is estimated to range from 11.0 - 19.4 kt CO2-e/annum. This represents a reduction of approximately 5% - 9% of DNM's total Scope 1 emissions.
- The Action would be categorised as a low emitter, even for FY2026 when accounting for potential emissions associated with vegetation clearing. For all other years, the Project is either neutral or has a mitigating effect on emissions that would have occurred without the Action.

In considering the above, the Action will not have a direct or indirect impact on the GBRNHP or any National Heritage places.

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. *

A search of the EPBC Act database using the PMST (DCCEEW, 2025), provided under Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**, shows that no Ramsar Wetlands occur within the Project Area or surrounding 20 km radius.

The closest Ramsar Wetlands are the Shoalwater and Corio Bays Area, which comprises 330 km of coastline (including islands) along the central coast of Queensland. The southern boundary, at Corio Bay, and northern boundary, at Broome Head, are approximately 50 km and 125 km north of Rockhampton. The Action is located approximately 190 km west of the Shoalwater and Corio Bays Area and is not a part of the same basin, with the Action being located within Fitzroy River Basin, and the Shoalwater and Corio Bays Area being located within the Shoalwater and Waterpark Creek Basins, respectively. **Figure 22** shows the location of the Action in reference to the Shoalwater and Corio Bays Area.

A Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**) undertaken for the Action determined the potential impact of the Action on surface water resources to be negligible. The assessment found the following:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- Effective management of runoff contributions from adjacent sites through controlled drainage systems and levees.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.
- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional DGVs. These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and TSS.
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

Given the Action is within the Fitzroy River Basin and not within the Shoalwater or Waterpark Creek Basins, there is no waterway pathway for surface water from the Action to impact the Shoalwater and Corio Bays Area. Additionally, any potential changes in surface water will have negligible impacts downstream, given the minor contribution of the Action relative to the extensive Fitzroy River catchment (142,665 km2). Additionally, any potential alterations to water quality – such as changes in sedimentation – will primarily be localised and become negligible at the outflow point, due to extensive dilution and mixing over the 400 km, and even more so once entering the Coral Sea.

Any potential avenues for impacts to surface water arising from the Action will be further minimised through the existing management and mitigation measures in place at DNM. These are outlined in the existing DNM WMP and the ESCP (**Attachment A – Management Plans**), which will be reviewed, updated and applied to the Action. The existing management actions are considered adequate to manage surface water in relation to the Action. These management actions include, but are not limited to:

- Prevent the release of contaminants into the receiving environment.
- Ensure water resource use does not negatively affect the local and regional environment.
- Capture and treat runoff from disturbed areas in sediment dams for reuse in dust suppression or coal processing.
- Divert runoff from undisturbed areas away from disturbed areas using diversion drains and bunds.
- Establish and maintain a long-term sustainable water balance to minimise risks to the environment and operational activities.
- Maximise water reuse on-site to reduce reliance on external water supplies.
- Fulfil the requirements of the EA EPML00561913, including monitoring and reporting obligations.
- Implement contingency procedures for emergencies.
- Transfer water between dams to optimise usage and reduce the risk of uncontrolled discharges.
- Use mine-affected water for operational purposes such as dust suppression and coal handling.

The MAW and sediment dams proposed as a part of the Action will assist in achieving the above actions.

As discussed in detail within **Attachment F – Surface Water Assessment**, the Action is considered to have negligible impact on surface water resources. As such, the Action will not have a direct or indirect impact on any Ramsar Wetlands.

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	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Dasyurus hallucatus	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
Yes	Yes	Denisonia maculata	Ornamental Snake
No	No	Dichanthium queenslandicum	King Blue-grass
No	No	Egernia rugosa	Yakka Skink
No	No	Elseya albagula	Southern Snapping Turtle, White-throated Snapping Turtle
No	No	Erythrotriorchis radiatus	Red Goshawk
No	No	Eucalyptus raveretiana	Black Ironbox
No	No	Falco hypoleucos	Grey Falcon
No	No	Furina dunmalli	Dunmall's Snake
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	Yes	Geophaps scripta scripta	Squatter Pigeon (southern)
No	No	Hemiaspis damelii	Grey Snake
No	No	Lerista allanae	Allan's Lerista, Retro Slider
No	No	Neochmia ruficauda ruficauda	Star Finch (eastern), Star Finch (southern)
No	No	Petauroides volans	Greater Glider (southern and central)
Yes	Yes	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	Poephila cincta cincta	Southern Black-throated Finch
No	No	Polianthion minutiflorum	

Direct impact	Indirect impact	Species	Common name
No	No	Rheodytes leukops	Fitzroy River Turtle, Fitzroy Tortoise, Fitzroy Turtle, White-eyed River Diver
No	No	Rostratula australis	Australian Painted Snipe
No	No	Samadera bidwillii	Quassia
No	No	Stagonopleura guttata	Diamond Firetail

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	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

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 Action is likely to impact the threatened species of the Ornamental snake (*Denisonia maculata*), Squatter pigeon (southern) (*geophaps scripta scripta*) and Koala (*Phascolarctos cinereus*). The Poplar Box TEC and Brigalow TECs identified in historic surveys (**Figure 14**) and located outside of the disturbance footprint, are a sufficient distance from the disturbance footprint such that these TECs will not be subject to direct or indirect impacts. This is discussed further in **Attachment D – Terrestrial Ecology Assessment Report**.

Vegetation clearing and habitat removal is likely to directly impact MNES flora and fauna species by eliminating or reducing the extent/availability of nesting, denning and roosting/shelter habitat, fragmenting habitat, removing or reducing the availability of food and foraging habitat; and increasing competition through reduced availability of resources.

The direct clearing impacts resulting from the Action are as follows:

- Squatter pigeon (southern) – 90.42 ha of breeding and foraging habitat, 49.77 ha of foraging habitat and 58.06 ha of dispersal habitat (**Figure 19**).
- Ornamental snake – 23.66 ha of breeding and foraging habitat, and 48.7 ha of dispersal habitat (**Figure 20**).
- Koala – 16.26 ha of potential breeding and foraging habitat ,and 2.70 ha of dispersal habitat (**Figure 21**).

Introduced flora species disrupt ecosystems by outcompeting and replacing native species, resulting in altered ecosystem diversity and function. Proliferation and spread of environmental weeds and pests may occur with vegetation clearing, soil disturbance and increased movement of heavy machinery and vehicles. Weed seeds can be transported in contaminated landfill, seed and material on machinery, vehicles or personnel. Construction activities have the potential to spread or introduce weeds throughout adjacent environs, resulting in the reduction in vegetation/habitat quality and native species assemblages.

The Action could also result in an increase in the presence and abundance of feral animals through improper waste disposal and increased permanency of water sources (e.g. dams and troughs). This could result in adverse impacts to native fauna occurring within the Project Area such as increased competition of resources, predation, spreading weeds, grazing and trampling of native vegetation, introduction and spread of pathogens, poisoning (e.g., cane toads), soil disturbance (e.g., pig diggings), and reduced water.

Construction and operational activities can disrupt local fauna roosting, breeding and foraging activities as a result of increased exposure to artificial lighting, noise/vibration and dust. Artificial lighting used during construction and operational phases of the Action has the potential to impact fauna (including MNES species) occupying habitat adjacent work areas.

Noise levels in the north of the Project Area will likely increase during construction and operational phases of the Action, due to the shifting of mining operations from the existing mining area. The resulting increase in noise levels may impact fauna occupying habitat adjacent work areas by disrupting communication between individuals, startling or frightening animals, or forcing animals to avoid or abandon areas of nearby habitat.

Construction and operational activities are also likely to generate dust emissions. Excessive deposition of dust on leaves of plants can suppress growth and photosynthesis and result in reduced habitat quality for fauna. High levels of airborne dust particles can also irritate the respiratory systems of fauna and potentially result in ingestion of dust-coated seeds and other foods. Excessive deposition of dust on open water bodies may also degrade water quality and overall habitat quality for fauna, adjacent disturbance areas.

Erosion and contamination of soils and water may occur as a result of construction and operational activities, such as vegetation clearing, unexpected releases and operation of heavy machinery. Erosion can remove the most productive part of the soil profile, the topsoil, resulting in a greatly reduced opportunity for natural regeneration of vegetation communities (unless stockpiled).

Inappropriate disposal of liquid and solid wastes, including spills and leaks from transfers (fuel, chemicals) and inadequate storage may also result in point-source contamination of surrounding land, including habitats of threatened and migratory species.

Increased risk of fire incursion is more likely to be associated with the construction phase of the Action. Construction activities have the potential to increase the risk of fire, causing injury or loss of human life, loss of flora and vegetation, fauna and habitat and impacting surface water quality.

Fauna injury and/or mortality may also result from clearing, earth works and site traffic. Open excavation areas, for dams for example, also pose a risk to fauna with animals falling into open pits or trenches potentially succumbing to injury and/or becoming trapped.

In summary, in the absence of appropriate mitigation measures, potential direct impacts include:

- Loss of breeding, foraging and dispersal habitat for Squatter pigeon (southern), Ornamental snake, and Koala, and
- unintentional fauna mortality or injury resulting from vegetation clearing and other construction works.

Potential indirect impacts in the absence of appropriate mitigation measures include:

- Increased fauna mortality or injury via vehicle strike (vehicle movement is likely to increase, leading to an increased risk of animal collisions and increased mortality per collision),
- Changes to land-based hydrology may impact the presence or persistence of frog species,
- Facilitating pest animal movement into new areas,
- Introduction and spread of disease and pathogens,
- Increased noise, light, vibration and dust,
- Edge effects and disturbance to adjacent habitats,
- Sedimentation of adjacent habitats (including potential TECs), and
- Introduction of new weed species or spread of existing weeds limiting fauna movement.

Refer to Section 7.0 of **Attachment D – Terrestrial Ecology Assessment Report** for further information.

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. *

The Action is considered to be a significant impact to Ornamental snake (*Denisonia maculata*), as assessed against the *MNES significant impact guidelines 1.1* (DoE, 2013). Although no individuals have been recorded within the Project Area during field surveys, due to the cryptic nature of the species, the Project Area may potentially contain an important population.

Additionally, although the species have no clear definition of habitat critical to their survival, the presence of some key values within the Project Area would likely align with attributes and may be considered as critical for the species, and its survival. As such, a precautionary approach has been adopted. The Project Area is adjoined on the southern extent by larger, contiguous, remnant vegetation communities which have an increased density of gilgai, woody debris and permanent waterbodies which could support amphibians. These areas of habitat will not be impacted by the Action.

Clearing ≥2 ha of important Ornamental snake habitat is listed as having a high risk of significant impact (DCCEEW, 2023). The Action will clear 23.66 ha of breeding and foraging habitat, and 48.70 ha of dispersal habitat for the species. If present, the species would continue to persist in the suitable foraging and breeding habitat within the Study area and wider landscape. Despite this, the Action is likely to reduce the area of occupancy of an important population of Ornamental snake and impact habitat critical to their survival and therefore the Project is likely to have a significant impact. Table 7-2 of **Appendix D – Terrestrial Ecology Assessment Report** provides further details.

The impact to Squatter pigeon (southern) (*geophaps scripta scripta*) is not considered to be a significant impact against the *MNES significant impact guidelines 1.1* (DoE, 2013). The population of Squatter pigeon (southern) in the Moranbah region is not considered to be an important population and although the proposed Action will result in a loss of breeding and foraging habitat for the Squatter pigeon, the activity is unlikely to significantly impact an important population or impact connectivity within the region. Provided the recommended mitigation measures are successfully implemented, the proposed Action is considered unlikely to have a significant impact on Squatter pigeon (southern) subspecies. Further details are provided in Table 7-1 of **Appendix D – Terrestrial Ecology Assessment Report**.

The impact to Koala (*Phascolarctos cinereus*) is not considered to be a significant impact against the *MNES significant impact guidelines 1.1* (DoE, 2013). While the proposed Action will result in a net loss of suitable Koala habitat, it is unlikely to have a significantly impact on the local population or disrupt regional habitat connectivity. Existing habitat to the south of the Project Area will remain intact and will not be directly impacted by development of the disturbance footprint. Therefore, the proposed Action is unlikely to have a significant impact on the Koala. Further details are provided in Table 7-3 of **Appendix D – Terrestrial Ecology Assessment Report**.

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 Action is likely to result in a significant impact to Ornamental snake (*Denisonia maculata*).

The significant impact assessment for the Ornamental snake, Squatter pigeon (southern) (*Geophaps scripta scripta*) and Koala (*Phascolarctos cinereus*) are outlined in the previous section, and discussed in further detail in Section 7.0 of **Appendix D – Terrestrial Ecology Assessment Report.**

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. *

As discussed in Section 6.0 of **Appendix D – Terrestrial Ecology Assessment Report**, measures to mitigate potential impacts to ecological values include:

- Clearing carried out in a sequential manner that allows fauna to escape to natural areas away from construction works. In particular, clearing from the northern, and eastern fringes of the Project Area, before moving south. This will support the natural self-relocation of fauna to the retained, remnant vegetation communities south of the Project Area.
- Demarcate clearing areas before works commence to prevent unnecessary clearing of vegetation and minimise accidental damage.
- Engage a suitably qualified person (e.g., ecologist, fauna spotter-catcher) to undertake pre-clearance surveys in areas where habitat removal is required to identify new fauna habitat values and potential breeding sites. The final pre-clearance survey should be undertaken by a suitably qualified person no later than 48 hours prior to clearing.
- Salvage of large woody debris (e.g., logs) within clearing areas and placed in adjacent vegetation, so they can be used for habitat.
- Reduce unnecessary noise and disturbance (e.g., turning off equipment/plant when not in use, use of acoustic barriers around equipment, use of equipment with lower sound power levels where feasible).
- Where possible works should be undertaken outside of the Squatter pigeon (southern) breeding season (November-March).
- If a breeding place for a protected animal (other than Koala) is likely to be disturbed by construction activities, a Species Management Program (SMP) is required to be prepared and approved by DETSI prior to commencement of clearing. If active breeding places for least-concern species are found during pre-clearance surveys and will be disturbed, the Action will require a low-risk of impacts SMP. A high risk of impacts SMP is required to be implemented if active breeding places of conservation significant species (including least concern species that are colonial breeders) are found during pre-clearance surveys and will be disturbed. The SMP would aim to provide an avoidance/prevention framework detailing a hierarchical range of measures to firstly avoid impacts, then mitigate unavoidable impacts. Note the September 2025 surveys did not find any breeding places for conservation significant species. A precautionary high risk SMP for conservation significant species is recommended based on the suitable breeding habitat identified within the Project Area for Squatter pigeon (southern), Ornamental snake and Short-beaked echidna. Koala are not subject to an SMP as there is no defined breeding place for the species.
- Follow the approved WHC QLD Procedure Weed and Feral Animal Management Plan (WHC, 2022, **Attachment A**) which outlines treatment methods and regimes for significant weed species. Treat significant weed species prior to, during and post construction at designated intervals (treatment intervals to be determined by proposed activities, and size and invasiveness of weed infestations) with waterway friendly herbicides and in accordance with relevant site-specific management plans.
- Where deemed necessary, design and implement sediment and erosion control measures which minimise potential indirect impacts on adjacent vegetation communities and fauna habitats. Additionally, environmental management and monitoring plans at DNM are outlined in **Appendix A – Management Plans** and will be updated where necessary and applied to the Action.

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

Daunia are in the early stages of investigating potential offset strategies for acquitting impacts associated with the Action. In due course, Daunia will develop an Offset Strategy and Offset Area Management Plan to a standard acceptable by DCCEEW. Environmental offsets will be managed under appropriate management plans and subject to monitoring and performance criteria such that offsets are compliant with the Commonwealth Environmental Offsets Policy offset principles.

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	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Cuculus optatus	Oriental Cuckoo, Horsfield's Cuckoo
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Motacilla flava	Yellow Wagtail
No	No	Pandion haliaetus	Osprey

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

No

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

The EPBC Act PMST Report (DCCEEW, 2025) (Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**) identified 16 migratory species as potentially relevant to the Project Area, using a search that incorporated the Project Area and a 20 km buffer thereof. None of these species were recorded during field surveys in 2021, 2023 or 2025; further, all species were assessed as unlikely to occur in the Project Area. 'Important habitat' for migratory species is a key factor for determining whether an action will result in a significant impact. The Action is located within a largely fragmented landscape containing disturbed vegetation with limited habitat values for the migratory species.

Key habitats for migratory shorebirds, waders and waterbirds, including shorebirds of the family Scolopacidae, Painted Snipe (Rostratulidae), and Terns (family Laridae) rely on wetted landscapes including lakes, palustrine and riverine wetlands, soaks and swamps. Apart from livestock watering dam, waters in the Project Area are short-lived. These dams provide very limited habitat value due to small size and lack of vegetation on the margins.

Several migratory passerine birds were returned in the PMST report: Oriental Cuckoo, Satin Flycatcher, and Black-faced Monarch. These species occur at very low densities inland during migration and dispersal, but distributions centre on areas to the east of the Great Dividing Range. Further these species prefer habitats with dense vegetation such as rainforest margins, monsoon forest, vine scrubs, riverine thickets, and temperate to tropical forests. None of these habitats are present in the Project Area.

In addition to the general lack of habitat suitability in the Project Area, most of the above species have not been recorded in proximity to (i.e., within 20 km of) the Project Area and occurrences in the local region are generally clustered on few key resources such as major water storage areas and wetlands. As such, the Project Area is not considered to comprise important habitat, as defined above, for any migratory species listed under the EPBC Act.

Further information is provided in **Appendix D – Terrestrial Ecology Assessment Report**.

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 Action is not a nuclear action.

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.

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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. *

As per the PMST (DCCEEW, 2025), no areas of Commonwealth Marine Area occur within the Project Area or surrounding 20 km (Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**). The nearest Commonwealth Marine Area is situated over 250 km 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 Area is located approximately 125 km directly west of, and over 400 km upstream of the GBR. As discussed previously in the Referral, the Action is located within the catchment of Isaac River, which is a tributary of the Fitzroy River. The Fitzroy River ultimately terminates at the Coral Sea/Great Barrier Reef, south-east of Rockhampton, near Port Alma. **Figure 22** shows the location of the Action in reference to the GBR.

A Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**) undertaken for the Action determined the potential impact of the Action on surface water resources to be negligible. The assessment found the following:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- Effective management of runoff contributions from adjacent sites through controlled drainage systems and levees.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.
- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional DGVs. These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and TSS.
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

Any potential changes in surface water will have negligible impacts downstream at the GBR, given the minor contribution of the Action relative to the extensive Fitzroy River catchment (142,665 km2). Additionally, any potential alterations to water quality – such as changes in sedimentation – will primarily be localized and become negligible at the GBR due to extensive dilution and mixing over the 400 km to the outflow point.

Any potential avenues for impacts to surface water arising from the Action will be further minimised through the existing management and mitigation measures in place at DNM. These are outlined in the existing DNM WMP and the ESCP (**Attachment A – Management Plans**), which will be reviewed, updated and applied to the Action. The existing management actions are considered adequate to manage surface water in relation to the Action. These management actions include, but are not limited to:

- Prevent the release of contaminants into the receiving environment.
- Ensure water resource use does not negatively affect the local and regional environment.
- Capture and treat runoff from disturbed areas in sediment dams for reuse in dust suppression or coal processing.
- Divert runoff from undisturbed areas away from disturbed areas using diversion drains and bunds.
- Establish and maintain a long-term sustainable water balance to minimise risks to the environment and operational activities.
- Maximise water reuse on-site to reduce reliance on external water supplies.

- Fulfil the requirements of the EA EPML00561913, including monitoring and reporting obligations.
- Implement contingency procedures for emergencies.
- Transfer water between dams to optimise usage and reduce the risk of uncontrolled discharges.
- Use mine-affected water for operational purposes such as dust suppression and coal handling.

The MAW and sediment dams proposed as a part of the Action will assist in achieving the above actions.

The broad management actions in the ESCP include, but are not limited to:

- Minimise the area of disturbance, where possible, and schedule the disturbance such that it is not exposed for longer than is necessary.
- Clean water should be diverted around the disturbed and/or sensitive areas where possible.
- Rehabilitation should be undertaken to provide a stable and vegetated landform and should be completed in accordance with the WHC-QLD-GDL- Landform Design Guideline.
- Surface treatment must consider the type of material/rock suitable for the required slope and velocity to ensure the selected material is fit for purpose.
- Where disturbance has occurred within a waterway, the area should be revegetated as soon as practical. Consideration should be given to the use of a soil binder, coir mesh or rock/topsoil matrix, depending on the significance of the waterway, to stabilise the surface during vegetation establishment.
- Stabilise the surface of slopes using appropriate slope protection measures.

In regard to surface water monitoring, the existing water quality monitoring programmes demonstrate compliance with regulatory standards and facilitate early detection of potential issues and are suitable for the Action. As such, the water monitoring program undertaken as a part of the FRREMP and in accordance with the EA will continue to monitor any impacts of the proposed Action on surface water resources.

From a greenhouse gas (GHG) and climate perspective, a GHG Assessment (GHG) (**Attachment J – GHG Assessment**) was completed for the Action, which found that the Action has an overall positive GHG outcome, and therefore is unlikely to impact the GBRWHA. It was found that:

- The main impact of the Action would be a reduction in DNM's Scope 1 GHG emissions due to a reduction in diesel consumption for hauling due to the shorter haulage distance for overburden from the Pandora Pit.
- These reductions significantly outweigh the conservatively estimated GHG emissions associated with vegetation clearing for the new OOPD, resulting in the net impact of the Project being a reduction in Scope 1 GHG emissions from DNM of almost 60 kt CO2-e over the life of the Action.
- A reduction in upstream Scope 3 emissions associated with the production and supply of diesel used by DNM of just over 15 kt CO2-e is also estimated, almost entirely due to the reduced diesel consumption.
- Once the OOPD is constructed and being used, the annual reduction in Scope 1 GHG emissions is estimated to range from 11.0 - 19.4 kt CO2-e/annum. This represents a reduction of approximately 5% - 9% of DNM's total Scope 1 emissions.
- The Action would be categorised as a low emitter, even for FY2026 when accounting for potential emissions associated with vegetation clearing. For all other years, the Project is either neutral or has a mitigating effect on emissions that would have occurred without the Action.

In considering the above, the Action will not have a direct or indirect impact on the GBR.

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. *

Groundwater

The results from the Groundwater Impact Assessment (SLR, 2025b) (**Attachment G – Groundwater Impact Assessment**) found the Action has a low potential for impacts to local groundwater EVs, noting the following key points:

- Increased recharge to the underlying Quaternary-Tertiary deposits and regolith. Conservative modelling of increased recharge (3.7% of total rainfall) shows that groundwater mounding beneath the OOPD could be in the order of 16m, and up to 5m to the south-west within the nearby Isaac River Alluvium. Increased groundwater levels in the alluvium and regolith of up to 1m could extend up to 6 km downstream and 4 km upstream along the Isaac River floodplain from the OOPD. The change (increase) in flux to the alluvium along the affected reach of the Isaac River has been estimated at approximately 0.09 ML/day (~1 L/s) as a consequence of the OOPD.
- Increases in Standing Water Levels at local water supply bores between +2.0 m and +4.2 m, assuming that 100% of the recharge rate applied across the area of the OOPD reaches the water table. This is a conservative assumption and consequently increases in shallow groundwater levels may be lower.
- Groundwater modelling showed groundwater mounding is expected due to higher recharge rates, rather than aquifer depressurisation.
- Groundwater modelling showed minimal impact on surface water. Following periods of simulated Isaac River flow there is an increase in groundwater level in the Quaternary Alluvium due to leakage from the Isaac River. In the following stress periods, a small amount of water (up to 7 ML per year or 0.2 L/s under the 3.7% spoil recharge scenario) is simulated leaving the model via the river (baseflow) where the water table is greater than the riverbed elevation. The short-term periods of baseflow following simulated river flow along the Isaac is slightly higher for the simulation including the OOPD, by up to 0.03 L/s (16% higher) for the maximum simulated short-term period of baseflow.
- There is the potential for water infiltrating through the OOPD to leach substances from the waste rock, which may result in changes in groundwater quality beneath the OOPD. However, a leachability assessment of coal measures samples from DNM (Terrenus, 2025; **Attachment H – Geochemistry Assessment**) presents a number of key findings in relation to the geochemical assessment for the proposed OOPD:
    - DNM spoil is expected to generate pH-alkaline to highly alkaline contact water (run-off and seepage), which is typical for mine spoil in the Bowen Basin.
    - DNM spoil has a low potential to generate acid and metalliferous drainage (AMD).
    - The expected proportions of non-carbonaceous, carbonaceous and coal materials in the OOPD are 90%, 9% and 1% respectively.
    - DNM non-carbonaceous spoil poses a “Low” AMD source hazard, with carbonaceous spoil and coal posing a “Low-Moderate” AMD source hazard.
    - Taking into account material proportions and expected proportion of potentially acid forming materials reporting to the proposed OOPD it is expected to pose a “Low” AMD hazard, with AMD generation rated as “Highly Unlikely”.
- Whilst the leachate data exceeds groundwater quality in the Rangal Coal Measures for some parameters it is well below the WQOs for aquatic ecosystem protection in Isaac Groundwaters (Zone 34). In addition, it is considered likely that the actual quality of water seeping from the OOPD will contain leached substances at concentrations well below the leachate test results due to the nature of the test methodology versus actual water – waste rock interactions in the OOPD.
- Particle tracking indicates that the majority of seepage from the OOPD is likely to migrate back towards the Pandora Pit void where it will be captured. Only seepage from the very western margin of the OOPD is likely to migrate away from DNM and the Pandora Pit void, and the downward vertical hydraulic gradient in this area results in this groundwater remaining within the coal measures and not entering the shallow unconsolidated strata in the range of the water table.

GDEs

The GDE Study (Watermark Eco, 2025) (**Attachment E – GDE Study**) found that overall, the pre-mitigated risk for potential impacts to GDEs from the Action has been assessed as 'insignificant', noting the following:

- Groundwater within and adjacent to the OOPD is typically too deep (>10 m below ground level) to support most woody vegetation species, meaning that they will be reliant on soil moisture to support transpiration.
- Facultative groundwater dependence for riparian vegetation fringing the Isaac River is likely where deep-rooted vegetation can access alluvial groundwater resources on a permanent or seasonal basis, depending on their position relative to the channel and distance from the watercourse.
- The Action does not propose direct clearing of GDEs.
- Surface flows in the Isaac River, the primary source of groundwater recharge to riparian GDEs, will not be interrupted.
- Groundwater mounding will result in a net increase in the groundwater availably to GDEs, resulting in:
- Elevated groundwater levels which may increase the period for which groundwater is accessible in the tree root zone.
- Increased periods of baseflow discharge from perched alluvial groundwater tables into the Isaac River surface flows.
- The Geochemistry Assessment (Terrenus, 2025) (**Attachment H – Geochemistry Assessment**) and Groundwater Impact Assessment (SLR, 2025b) (**Attachment F – Groundwater Impact Assessment**) found the likely impact of leachate from the OOPD on groundwater chemistry. The most salient points are:
- There is the potential for water infiltrating through the OOPD to leach substances from the waste rock, which may result in changes in groundwater quality beneath the OOPD.
- DNM spoil will generate pH-alkaline to highly alkaline contact water (run-off and seepage), which is typical for mine spoil in the Bowen Basin, and will have a low potential to generate acid and metalliferous drainage.
- Expectations are that seepage from the OOPD will pose a "Low" Acid Mine Drainage (AMD) hazard, with AMD generation rated as "Highly Unlikely".
- In addition, particle tracking indicates that seepage from the western edge of the OOPD is likely to migrate off-site, with most of the seepage migrating back towards the Pandora Pit void, captured as mine-affected water (SLR 2025b). It is predicted that only seepage from the western edge of the OOPD is likely to migrate off site, and that this groundwater will remain in the deeper coal measures, below the shallow groundwater system hosted in the Quaternary and Tertiary sediments that may support GDEs.
- Based on the preceding information, there is no predicted impact on the quality of groundwater supporting GDEs.

Surface Water

The Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**), found the Action is expected to have the following impacts on surface water resources, with the overall conclusion that any impacts on surface water quality and hydrology are negligible:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.

- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional default guideline values (DGVs). These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and total suspended solids (TSS).
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

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. *

Groundwater

The results from the Groundwater Impact Assessment (SLR, 2025b) (**Attachment G – Groundwater Impact Assessment**) found the Action has a low potential for impacts to local groundwater EVs, noting the following key points:

- Increased recharge to the underlying Quaternary-Tertiary deposits and regolith. Conservative modelling of increased recharge (3.7% of total rainfall) shows that groundwater mounding beneath the OOPD could be in the order of 16m, and up to 5m to the south-west within the nearby Isaac River Alluvium. Increased groundwater levels in the alluvium and regolith of up to 1m could extend up to 6 km downstream and 4 km upstream along the Isaac River floodplain from the OOPD. The change (increase) in flux to the alluvium along the affected reach of the Isaac River has been estimated at approximately 0.09 ML/day (~1 L/s) as a consequence of the OOPD.
- Increases in Standing Water Levels at local water supply bores between +2.0 m and +4.2 m, assuming that 100% of the recharge rate applied across the area of the OOPD reaches the water table. This is a conservative assumption and consequently increases in shallow groundwater levels may be lower.
- Groundwater modelling showed groundwater mounding is expected due to higher recharge rates, rather than aquifer depressurisation.
- Groundwater modelling showed minimal impact on surface water. Following periods of simulated Isaac River flow there is an increase in groundwater level in the Quaternary Alluvium due to leakage from the Isaac River. In the following stress periods, a small amount of water (up to 7 ML per year or 0.2 L/s under the 3.7% spoil recharge scenario) is simulated leaving the model via the river (baseflow) where the water table is greater than the riverbed elevation. The short-term periods of baseflow following simulated river flow along the Isaac is slightly higher for the simulation including the OOPD, by up to 0.03 L/s (16% higher) for the maximum simulated short-term period of baseflow.
- There is the potential for water infiltrating through the OOPD to leach substances from the waste rock, which may result in changes in groundwater quality beneath the OOPD. However, a leachability assessment of coal measures samples from DNM (Terrenus, 2025; **Attachment H – Geochemistry Assessment**) presents a number of key findings in relation to the geochemical assessment for the proposed OOPD:
    - DNM spoil is expected to generate pH-alkaline to highly alkaline contact water (run-off and seepage), which is typical for mine spoil in the Bowen Basin.
    - DNM spoil has a low potential to generate acid and metalliferous drainage (AMD).
    - The expected proportions of non-carbonaceous, carbonaceous and coal materials in the OOPD are 90%, 9% and 1% respectively.
    - DNM non-carbonaceous spoil poses a “Low” AMD source hazard, with carbonaceous spoil and coal posing a “Low-Moderate” AMD source hazard.
    - Taking into account material proportions and expected proportion of potentially acid forming materials reporting to the proposed OOPD it is expected to pose a “Low” AMD hazard, with AMD generation rated as “Highly Unlikely”.
- Whilst the leachate data exceeds groundwater quality in the Rangal Coal Measures for some parameters it is well below the WQOs for aquatic ecosystem protection in Isaac Groundwaters (Zone 34). In addition, it is considered likely that the actual quality of water seeping from the OOPD will contain leached substances at concentrations well below the leachate test results due to the nature of the test methodology versus actual water – waste rock interactions in the OOPD.
- Particle tracking indicates that the majority of seepage from the OOPD is likely to migrate back towards the Pandora Pit void where it will be captured. Only seepage from the very western margin of the OOPD is likely to migrate away from DNM and the Pandora Pit void, and the downward vertical hydraulic gradient in this area results in this groundwater remaining within the coal measures and not entering the shallow unconsolidated strata in the range of the water table.

GDEs

The GDE Study (Watermark Eco, 2025) (**Attachment E – GDE Study**) found that overall, the pre-mitigated risk for potential impacts to GDEs from the Action has been assessed as 'insignificant', noting the following:

- Groundwater within and adjacent to the OOPD is typically too deep (>10 m below ground level) to support most woody vegetation species, meaning that they will be reliant on soil moisture to support transpiration.
- Facultative groundwater dependence for riparian vegetation fringing the Isaac River is likely where deep-rooted vegetation can access alluvial groundwater resources on a permanent or seasonal basis, depending on their position relative to the channel and distance from the watercourse.
- The Action does not propose direct clearing of GDEs.
- Surface flows in the Isaac River, the primary source of groundwater recharge to riparian GDEs, will not be interrupted.
- Groundwater mounding will result in a net increase in the groundwater availably to GDEs, resulting in:
- Elevated groundwater levels which may increase the period for which groundwater is accessible in the tree root zone.
- Increased periods of baseflow discharge from perched alluvial groundwater tables into the Isaac River surface flows.
- The Geochemistry Assessment (Terrenus, 2025) (**Attachment H – Geochemistry Assessment**) and Groundwater Impact Assessment (SLR, 2025b) (**Attachment F – Groundwater Impact Assessment**) found the likely impact of leachate from the OOPD on groundwater chemistry. The most salient points are:
- There is the potential for water infiltrating through the OOPD to leach substances from the waste rock, which may result in changes in groundwater quality beneath the OOPD.
- DNM spoil will generate pH-alkaline to highly alkaline contact water (run-off and seepage), which is typical for mine spoil in the Bowen Basin, and will have a low potential to generate acid and metalliferous drainage.
- Expectations are that seepage from the OOPD will pose a "Low" Acid Mine Drainage (AMD) hazard, with AMD generation rated as "Highly Unlikely".
- In addition, particle tracking indicates that seepage from the western edge of the OOPD is likely to migrate off-site, with most of the seepage migrating back towards the Pandora Pit void, captured as mine-affected water (SLR 2025b). It is predicted that only seepage from the western edge of the OOPD is likely to migrate off site, and that this groundwater will remain in the deeper coal measures, below the shallow groundwater system hosted in the Quaternary and Tertiary sediments that may support GDEs.
- Based on the preceding information, there is no predicted impact on the quality of groundwater supporting GDEs.

Surface Water

The Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**), found the Action is expected to have the following impacts on surface water resources, with the overall conclusion that any impacts on surface water quality and hydrology are negligible:

- The Action infrastructure will result in minor alterations to local catchment flows. Hydrologic modelling indicates that these changes will have negligible effects on peak discharges and flow velocities in local waterways.
- No significant cumulative impacts on local catchment flows or Isaac River flood behaviour.
- The Action will not alter the flow characteristics of the Isaac River.
- No ingress of Isaac River floodwaters into the residual void for the proposed final landform.
- Predicted peak flood levels and velocities remain within acceptable limits.
- A sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.
- The Action is unlikely to substantially affect the quality of surface waters in receiving environments.

- The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed at DNM. It is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters.
- Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed regional default guideline values (DGVs). These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and total suspended solids (TSS).
- Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities (Gauge, 2023).
- With the implementation of the proposed mitigation measures, including sediment control, any potential contribution to salinity in the Isaac River from sediment dam discharges is expected to be minimal.

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. *

According to Section 4.2 of the *Significant impact guidelines 1.3: Coal seam gas and large coal mining developments—impacts on water resources* (DCCEEW, 2022) an Action is considered to have a significant impact on a water resource if it has a real or not remote chance or possibility of directly or indirectly causing changes in the water's hydrology or quality, which decreases, or risks decreasing, the utility of the water for other users, including for environmental and public benefits.

The Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**), Groundwater Impact Assessment (SLR, 2025b) (**Attachment G – Groundwater Impact Assessment**), and the GDE Study (Watermark Eco, 2025) (**Attachment E – GDE Study**) have found that impacts to the utility of water for other users are either likely to be positive, low or negligible.

Groundwater

Other users of groundwater within the vicinity of the Action include groundwater bore users and GDEs.

As discussed in Section 8.2 of the Groundwater Impact Assessment (SLR, 2025b) (**Attachment G – Groundwater Impact Assessment**), assuming a 3.7% groundwater recharge rate at the OOPD, the Action is predicted to increase the Standing Water Levels at local potentially active private supply bores. These bores are located to the south and southwest of the proposed Action. Specifically, the Knob Hill 1, Knob Hill 2, Winnet Bore, and Bore 9 / House Bore bores by +2.8 m, +2.0 m, +2.2 m and +4.2 m, respectively. However, this is a conservative assumption and consequently increases in shallow groundwater levels may be lower. This is considered an overall positive impact on groundwater bore users in terms of groundwater quantity.

Furthermore, groundwater quality for bore users is highly unlikely to be impacted by the Action. Modelling has concluded any potential leachate particles will remain within the coal measures and not enter the shallow unconsolidated strata in the range of the water table. As discussed in the Geochemistry Assessment (Terrenus, 2025) in **Attachment H – Geochemistry Assessment**, the spoil from the OOPD is expected to generate pH-alkaline to highly alkaline contact water (run-off and seepage), which is typical for mine spoil in the Bowen Basin. The DNM spoil has a low potential to generate AMD. Taking into account material proportions and expected proportion of potentially acid forming materials reporting to the proposed OOPD it is expected to pose a “Low” AMD hazard, with AMD generation rated as “Highly Unlikely”. Additionally, whilst the leachate data exceeds groundwater quality in the Rangal Coal Measures for some parameters, it is well below the WQOs for aquatic ecosystem protection in Isaac Groundwaters (Zone 34).

In Section 3.0 of the GDE Study (Watermark Eco, 2025) (**Attachment E – GDE Study**), the groundwater mounding expected to result from the Action is not considered a significant direct risk to GDEs as increased groundwater levels will likely be met with a commensurate increase in the rate of groundwater discharge through transpiration by deep-rooted vegetation. Additionally, the greatest magnitude of mounding will coincide with wet periods when perched groundwater tables are likely to be already elevated due to recharge from surface flows. Overall, the pre-mitigated risk for potential impacts to GDEs from the Action has been assessed as ‘insignificant’.

Surface Water

As discussed in Section 8.0 of the Surface Water Assessment (WRM, 2025) (**Attachment F – Surface Water Assessment**), hydrologic and hydraulic models indicate no significant cumulative impacts on local catchment flows of Isaac River flood behaviour as a result of the Action. The Action will not alter the flow characteristics of the Isaac River, as confirmed through hydraulic modelling. Flooding impacts from the Action were assessed for events up to and including the 0.1% AEP and PMF events, showing no ingress of Isaac River floodwaters into the residual void for the proposed final landform, predicted peak flood levels and velocities remain within acceptable limits, and sufficient freeboard is maintained above peak flood levels to ensure ongoing flood resilience, even under extreme weather events and climate change scenarios.

The Action is unlikely to substantially affect the quality of surface waters in receiving environments. The additional disturbance footprint associated with the Project Area will increase the volume of sediment water that needs to be contained and managed on the mine site. Based on this, it is unlikely that overflows from sediment dams will have a measurable impact on the quality of the receiving waters. Analysis of water quality data from the Isaac River indicates that several parameters consistently exceed DGVs. These include dissolved aluminium, copper (total and dissolved), iron (total and dissolved), zinc (dissolved), filterable reactive phosphorus, turbidity, and TSS. These exceedances suggest that the current DGVs may not accurately reflect the natural background conditions of the Upper Isaac River. Variability in water quality parameters is primarily influenced by natural enrichment and seasonal changes, rather than mining activities.

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 environmental management and monitoring plans in place at DNM are outlined in **Attachment A – Management Plans** and will be updated and applied to the Action. These measures are detailed below and are designed to ensure that any potential environmental changes are effectively managed and contained within the local area.

Erosion and Sediment Control

Potential impacts resulting from erosion and sediment will be mitigated and managed through the implementation of the ESCP (**Attachment A – Management Plans**). The proposed sediment dam (**Figure 2**) will be used for the Action, specifically to capture and contain sediment-laden runoff from the OOPD (**Figure 2**).

The ESCP requires all disturbance activities to be conducted in accordance with the *WHC-QLD-STD-Erosion & Sediment Control and Mine Affected Water,* which includes considering the risk rating for monthly rainfall prior to conducting construction activities. Where construction must occur during the wet season, appropriate levels of erosion and sediment controls shall be established as includes:

- Stormwater management measures, such as drainage diversions and bunding, will be implemented before works occur, and,
- Emergency response procedures and flood forecasting will be incorporated into operating procedures.

The ESCP identifies monitoring as an essential element of erosion mitigation and management, providing a mechanism for assessing performance against DNM's performance indicators and statutory requirements. Where ESC structures have been installed, inspections will be carried out by every year to ensure that the infrastructure used for managing ESC is in good condition.

The ESCP stipulates that in the event of emergencies, exceptions or incidents, all reasonable actions must be taken by Operations to minimise environmental harm and notification must be given to the regulator (DETSI) either verbally or written, as soon as practicably possible.

Water Management

The WMP provided in **Attachment A – Management Plans** provides an overview of potential sources of water contamination, the water management system, water balance model, management measures and surface water monitoring program at DNM. Key objectives of the WMP are as follows:

- Prevent the release of contaminants into the receiving environment.
- Ensure water resource use does not negatively affect the local and regional environment.
- Separate clean and contaminated waters.
- Capture and treat runoff from disturbed areas in sediment dams for reuse in dust suppression or coal processing.
- Divert runoff from undisturbed areas away from disturbed areas using diversion drains and bunds.
- Establish and maintain a long-term sustainable water balance to minimise risks to the environment and operational activities.
- Maximise water reuse on-site to reduce reliance on external water supplies.
- Fulfil the requirements of the EA EPML00561913, including monitoring and reporting obligations.
- Implement contingency procedures for emergencies.
- Transfer water between dams to optimise usage and reduce the risk of uncontrolled discharges.
- Use MAW for operational purposes such as dust suppression and coal handling.

Water quality sampling is routinely undertaken at six locations upstream and downstream of the Action as part of the FRREMP. The monitoring has been undertaken in accordance with the DNM EA and includes water quality and sediment sampling. The sampling locations are shown on **Figure 15**, and an overview of the latest water quality monitoring results are provided in Section 4.2.3 of **Attachment F – Surface Water Assessment.**

As discussed in the Surface Water Assessment (SLR, 2025b) (**Attachment F – Surface Water Assessment**), the existing DNM water management, monitoring and mitigation measures are suitable to be applied to the Action.

Groundwater Monitoring and Management

The DNM Groundwater Monitoring and Management Plan (GMMP) (WHC, 2023) (**Attachment A – Management Plans**) has been developed to satisfy the groundwater monitoring and reporting regulatory conditions in the DNM EA. The GMMP outlines the conceptual hydrogeological model for DNM, identifies potential groundwater impacts, and established the groundwater monitoring program for the DNM. Several groundwater bores within and off-lease from DNM are monitored on a regular basis for water level and water quality parameters. Once acquired, processed and uploaded to the relevant groundwater database, groundwater level and quality monitoring data will be analysed against trigger levels for the various parameters, as prescribed in EA EPML00561913. If trigger levels are exceeded consecutively over a certain time period, investigations and reporting is required. The GMMP is reviewed and updated every two years by a suitably qualified person.

Groundwater monitoring and reporting procedures will continue to be implemented with the Action in accordance with the GMMP.

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

Daunia are in the early stages of investigating potential offset strategies for acquitting impacts associated with the Action. In due course, Daunia will develop an Offset Strategy and Offset Area Management Plan to a standard acceptable by DCCEEW. Environmental offsets will be managed under appropriate management plans and subject to monitoring and performance criteria such that offsets are compliant with the Commonwealth Environmental Offsets Policy offset principles.

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. *

A search of the EPBC Act database using the PMST (DCCEEW, 2025) (Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**) indicates that no areas of Commonwealth Land occur within the Project Area or surrounding 20 km radius.

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. *

A search of the EPBC Act database using the PMST (DCCEEW, 2025) (Appendix A of **Attachment D – Terrestrial Ecology Assessment Report**) indicates that no areas of overseas Commonwealth heritage places occur within the Referral area or surrounding 20 km radius.

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. *

Location

The Action location is defined by the location, nature and scale of the coal deposit. The Action is located in the Bowen Basin, and within EPC 27334 and EPC 1951 which are already held by Daunia. A new ML is required for the Action, which is only possible on EPCs held by the proposed ML holder, i.e. Daunia. The geological strata in the vicinity of the DNM is heavily influenced by the series of easterly dipping thrust faults. The major coal measures in the area of the Action are:

• Rangal Coal Measures,

• Fort Cooper Coal Measures, and

• Moranbah Coal Measures.

Coal resources at DNM are contained within the 100 m thick Rangal Coal Measures, which is underlain by the Fort Cooper Coal Measures and overlain in places by the Rewan Group. The Late Permian Rangal Coal Measures comprise light grey, cross-bedded, fine to medium grained labile and well cemented sandstones, grey siltstones, mudstones, shale and coal seams. The Fort Cooper Coal Measures underlie the Rangal Coal Measures at DNM, and subcrop along the northwestern boundary of DNM. Regionally, the Fort Cooper Coal Measures have a maximum thickness of approximately 350 m. Drilling logs indicate the Fort Cooper Coal Measures comprise lithic sandstone, conglomerate, mudstone, carbonaceous shale, coal, tuff and tuffaceous mudstone. The Moranbah Coal Measures are the lowermost coal-bearing sequence of the Blackwater Group. The Moranbah Coal Measures comprise volcanic lithic sandstones, with lesser siltstone, mudstone, conglomerate and coal. The coal seams to be mined are within coal tenements held by Daunia, i.e., ML1781. In addition, the mining of coal from the DNM is dictated by the geological formations that exist within the ML as described above. In addition, the location of the OOPD has been determined to reduce impacts to environmental values and increase efficiencies in waste material haulage distances.

Constrained Project Disturbance

The initial Project Area was designed to maximise resource recovery within ML1781 and optimise location of the OOPD for operational purposes. The initial footprint extended west into EPC 1951 and south to border the Isaac River, beyond the boundary of EPC 27334. As found in recent terrestrial ecology surveys (**Attachment D – Terrestrial Ecology Assessment Report**), a significant amount of remnant and riparian vegetation is present along the banks of the Isaac River, with numerous REs present. These areas were found to contain habitat suitable for fauna including Echidnas, Koalas and Greater gliders.

The Project Area has since been revised to avoid clearing these areas and to minimise disturbance as far as practicable. The disturbance footprint has been constrained to a smaller area adjacent to the existing DNM operations, and on land subject to prior and existing disturbance.

The revised Project Area has been disturbed by prior vegetation clearing and agricultural activities (i.e., grazing) and contains some remnant vegetation, some of which consists of RE 11.3.3. The initial Project Area would have resulted in substantially greater impacts to remnant vegetation and fauna located immediately south of the revised Project Area.

The proposed haul road in the south of the Project Area is located adjacent to a ground-truthed area of RE 11.3.1. The haul road is unable to be located farther from the RE 11.3.1 as the proposed Project Area is limited by the perimeter of the tenure held by Daunia, that is, EPC 27334. However, the location of the haul road is sufficiently distanced as to avoid any vegetation clearing within this area of RE 11.3.1. **Figure 3** presents the comparison of the currently proposed Project Area and the initial Project Area.

The Project Area has been revised to minimise impacts to threatened species habitats as summarised below:

- Reduced impact to Koala habitat areas,
- No impact to Greater glider habitat areas,

- No impact to Brigalow TEC, and
- Ornamental snake habitat impacts unavoidable however, mostly on marginal/suitable areas.

Consequently, the proposed Project Area presents a lower impact to sensitive habitats when compared to the alternative location (**Figure 3**).

Furthermore, compared to previously proposed locations, the selected Project Area provides shorter haulage distances from the mining areas. Minimising the haulage distance reduces both the consumption of diesel fuel and thereby greenhouse gas (GHG) emissions from haul trucks, and the overall dust and noise emissions along the haul routes.

This revision has resulted in a balance between operational efficiencies and the protection of environmental values. For example, the final landform (including the OOPD) will result in similar final voids sizes but will significantly improve haulage demand due to the reduced cycle times based on the location of the OOPD.

No Project

The Action is constrained by the characteristics of the coal resource, local geographic features, the environmental setting, existing infrastructure, and economic and technical feasibility considerations. However, another alternative is to not proceed with the Action.

The direct consequences of not proceeding with the Action includes the loss of sustained positive economic opportunities for the locality and the region. The potential positive impact of not proceeding with the Action is avoiding the potential environmental impacts. In this case, potential impacts to land, water, noise and air (including carbon dioxide emissions [CO2-e]) (and associated physical, biological and social impacts) arising from the Action, would not occur.

Should the Action not proceed however, the following high-level impacts are highly likely to be realised:

- A reduction in the overall life of the DNM,
- Curtailment of production and potential for earlier mine closure,
- The full benefits of the State’s mineral resources would not be realised,
- A reduction in State and Federal tax revenues from not receiving coal royalties,
- An earlier reduction in the workforce, with the earlier ramping down from the existing ~720 direct jobs provided by DNM, in regional Queensland, and
- Negative economic impacts on local businesses in regional centres such as Moranbah and Mackay.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High
#2.	Document	Attachment B - Acronyms and References.pdf Project Acronyms and References		No	High
#3.	Document	Figure 10-Haul Road FY28.pdf Haul Road FY28		No	High
#4.	Document	Figure 11-Haul Road FY31.pdf Haul Road FY31		No	High
#5.	Document	Figure 12-Haul Road FY36.pdf Haul Road FY36		No	High
#6.	Document	Figure 1-Site Location.pdf Project site location		No	High
#7.	Document	Figure 2-Detailed Project Overview.pdf Detailed project overview		No	High
#8.	Document	Figure 4-Progressive Landform FY28.pdf Progressive Landform FY28		No	High
#9.	Document	Figure 5-Progressive Landform FY31.pdf Progressive Landform FY31		No	High
#10.	Document	Figure 6-Progressive Landform FY34.pdf Progressive Landform FY34		No	High
#11.	Document	Figure 7-Progressive Landform FY37.pdf Progressive Landform FY37		No	High
#12.	Document	Figure 8-Progressive Landform FY42.pdf Progressive Landform FY42		No	High
#13.	Document	Figure 9-Haul Road FY27.pdf Haul Road FY27		No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment K - Community Consultation Register.pdf Community Consultation Register	17/02/2026	No	High

1.3.2.17 (Person proposing to take the action) Proposer's history of responsible environmental management

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans.pdf Management Plans	17/02/2026	Yes	High
#2.	Document	Attachment C - WHC 2025 Sustainability Report.pdf Whitehaven 2025 Sustainability Report		No	High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Figure 13-DNM Mining and Land Tenure.pdf DNM Mining and Land Tenure		No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Figure 14-Ground-Truthed Regional Ecosystems.pdf Ground-Truthed Regional Ecosystems		No	High
#2.	Document	Figure 15-Watercourses, Drainage Features and Surface Water Sampling Locations.pdf Watercourses, Drainage Features and Surface Water Sampling Locations		No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Document	Attachment I - Aquatic Ecology Assessment.pdf Aquatic Ecology Assessment Report		No	High
#3.	Link	Atlas of Living Australia https://www.ala.org.au/			High
#4.	Link	Fitzroy River declared Fish Habitat Area https://www.business.qld.gov.au/industries/farms..			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment I - Aquatic Ecology Assessment.pdf Aquatic Ecology Assessment Report		No	High
#2.	Document	Figure 14-Ground-Truthed Regional Ecosystems.pdf Ground-Truthed Regional Ecosystems		No	High
#3.	Link	Atlas of Living Australia https://www.ala.org.au/			High
#4.	Link	Declared Fish Habitat Area plans and locations Fitzroy River declared Fish Habitat Area https://www.business.qld.gov.au/industries/farms..			High

3.3.1 Commonwealth heritage places overseas or other places that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Queensland Heritage Register https://apps.des.qld.gov.au/heritage-register/			High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment E - GDE Study.pdf GDE Study		No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#3.	Document	Figure 15-Watercourses, Drainage Features and Surface Water Sampling Locations.pdf Watercourses, Drainage Features and Surface Water Sampling Locations		No	High
#4.	Document				

		Figure 17-Potential Groundwater Dependant Ecosystems.pdf Potential Groundwater Dependent Ecosystems	No	High	
#5.	Document	Figure 18-Ground-Truthed Groundwater Dependant Ecosystems.pdf Ground-Truthed Groundwater Dependent Ecosystems	No	High	
#6.	Link	Groundwater Dependent Ecosystems Atlas https://www.bom.gov.au/water/groundwater/gde/map..		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	Attachment A - Management Plans - Updated.pdf Management Plans	17/02/2026	No	High
#2.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#3.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#4.	Document	Attachment J - GHG Assessment.pdf Attachment J - GHG Assessment		No	High
#5.	Document	Figure 22-World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef.pdf orld Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef		No	High
#6.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..			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	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High
#2.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High

#3.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#4.	Document	Attachment J - GHG Assessment.pdf GHG Assessment		No	High
#5.	Document	Figure 22-World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef.pdf World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef		No	High
#6.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..			High

4.1.3.3 (Ramsar Wetland) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026		High
#2.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#3.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#4.	Document	Figure 22-World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef.pdf World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef		No	High
#5.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..			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	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Document	Figure 14-Ground-Truthed Regional Ecosystems.pdf Ground-Truthed Regional Ecosystems		No	High

#3.	Document	Figure 19-Squatter Pigeon Habitat.pdf Squatter Pigeon Habitat	No	High
#4.	Document	Figure 20-Ornamental Snake Habitat.pdf Ornamental Snake Habitat	No	High
#5.	Document	Figure 21-Koala Habitat.pdf Koala Habitat	No	High
#6.	Link	Draft Referral guidelines for the nationally listed Brigalow Belt reptiles https://www.dcceew.gov.au/sites/default/files/do..		High
#7.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..		High
#8.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..		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	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Link	Draft Referral guidelines for the nationally listed Brigalow Belt reptiles https://www.dcceew.gov.au/sites/default/files/do..			High
#3.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..			High
#4.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High
#2.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High

4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.7.3 (Commonwealth Marine Area) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			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	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf		No	High

Surface Water Assessment				
#3.	Document	Attachment J - GHG Assessment.pdf GHG Assessment	No	High
#4.	Document	Figure 22-World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef.pdf World Heritage, National Heritage, RAMSAR Wetlands & Great Barrier Reef	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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment E - GDE Study.pdf GDE Study		No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#3.	Document	Attachment G - Groundwater Impact Assessment.pdf Groundwater Impact Assessment		No	High
#4.	Document	Attachment H - Geochemistry Assessment.pdf Geochemistry Assessment		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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment E - GDE Study.pdf GDE Study		No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#3.	Document	Attachment G - Groundwater Impact Assessment.pdf Groundwater Impact Assessment		No	High
#4.	Document	Attachment H - Geochemistry Assessment.pdf Geochemistry Assessment		No	High

4.1.9.9 (Water resource in relation to large coal mining development or coal seam gas) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Attachment E - GDE Study.pdf GDE Study	No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment	No	High
#3.	Document	Attachment G - Groundwater Impact Assessment.pdf Groundwater Impact Assessment	No	High
#4.	Document	Attachment H - Geochemistry Assessment.pdf Geochemistry Assessment	No	High

4.1.9.10 (Water resource in relation to large coal mining development or coal seam gas) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Management Plans - Updated.pdf Management Plans	16/02/2026	No	High
#2.	Document	Attachment F - Surface Water Assessment.pdf Surface Water Assessment		No	High
#3.	Document	Figure 15-Watercourses, Drainage Features and Surface Water Sampling Locations.pdf Watercourses, Drainage Features and Surface Water Sampling Locations		No	High
#4.	Document	Figure 2-Detailed Project Overview.pdf Detailed project overview		No	High

4.1.10.3 (Commonwealth Land) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..			High

4.1.11.3 (Commonwealth heritage places overseas) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High

#2.	Link	Protected Matters Search Tool https://www.dcceew.gov.au/environment/epbc/prote..	High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment D - Terrestrial Ecology Assessment Report.pdf Terrestrial Ecology Assessment Report		No	High
#2.	Document	Figure 3-Initial and Revised Project Area.pdf Initial and Revised Project Area		No	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	28672143583
Organisation name	WHITEHAVEN DAUNIA PTY LTD
Organisation address	Level 28, 259 George Street SYDNEY NSW 2000
Representative's name	Brendan Dillon
Representative's job title	Approvals Manager
Phone	0436648938
Email	bdillon@whitehavencoal.com.au
Address	Level 31, 12 Creek Street, Brisbane, QLD, 4000

☑ 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, **Brendan Dillon of WHITEHAVEN DAUNIA PTY LTD**, 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.

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.

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, **Brendan Dillon of WHITEHAVEN DAUNIA PTY LTD**, 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, **Brendan Dillon of WHITEHAVEN DAUNIA PTY LTD**, the Person proposing the action, consent to the designation of **Brendan Dillon of WHITEHAVEN DAUNIA PTY LTD** 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.

✔ 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.

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, **Brendan Dillon of WHITEHAVEN DAUNIA PTY LTD**, 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.