



Planning,  
Industry &  
Environment

# Mangoola Coal Continued Operations Project

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**IPC Public Hearing**

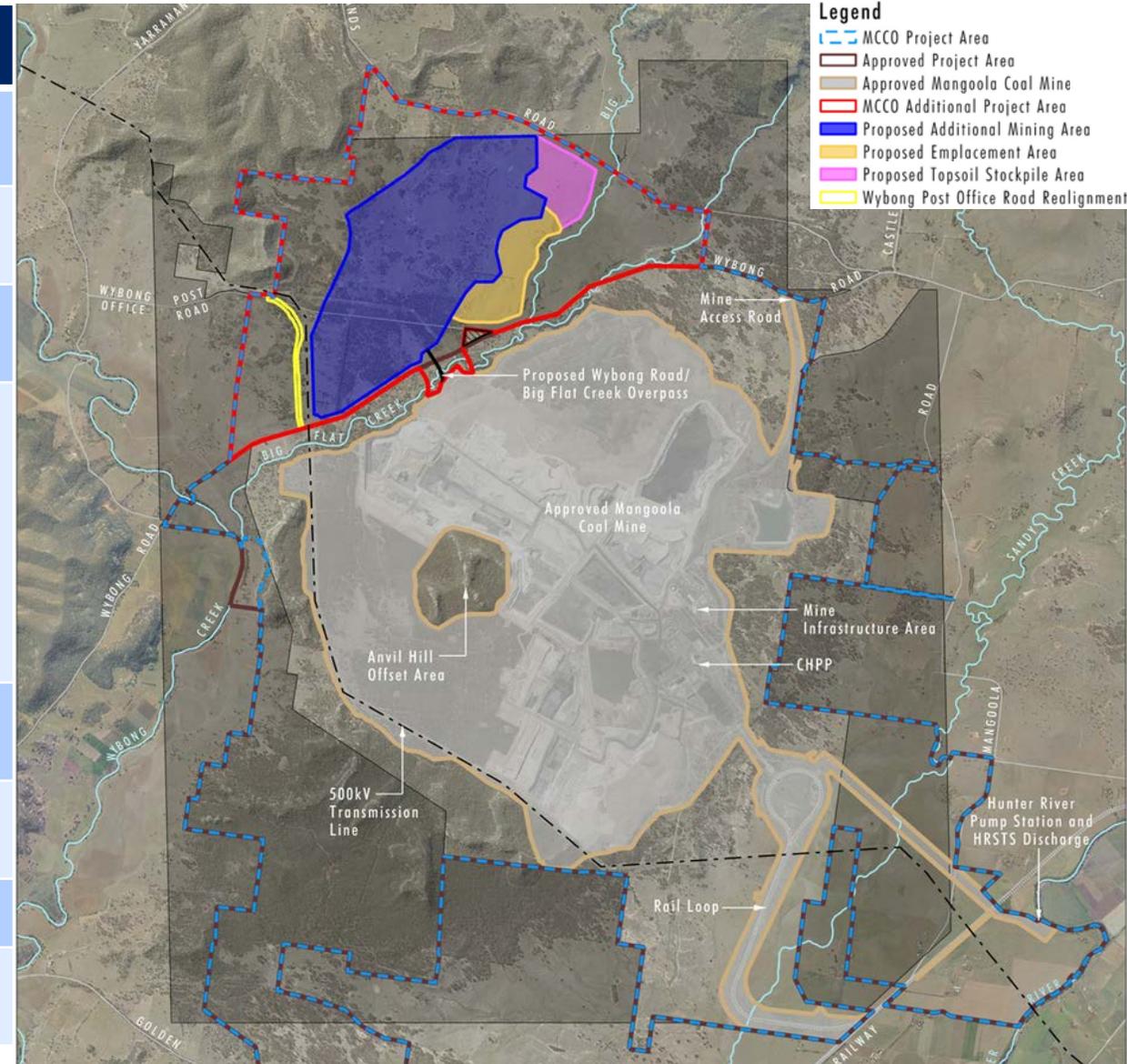
Matthew Sprott - Director Resource Assessments

Mike Young - Executive Director Energy, Industry and Compliance

3 March 2021

# Mangoola Coal Continued Operations Project

Aspect	Description
<b>Project Life</b>	8 years of mining in the extension area, representing a 13 month extension to the existing Project Approval
<b>Mining Method</b>	Open cut mining using a truck and excavator fleet
<b>Resource Recovery</b>	Additional 52 Mt run-of-mine (ROM) coal at a rate of up to 13.5 Million tonnes per annum of ROM coal
<b>Surface Facilities</b>	<p>Continued use of existing Mangoola Mine infrastructure, including a Coal Handling and Processing Plant, rail loop and loading facilities and ancillary infrastructure.</p> <p>Construction of a haul road overpass over Wybong Road and Big Flat Creek to connect the Northern Extension Area with the existing Mangoola Mine.</p>
<b>Product Transport</b>	Rail transport of product coal from existing Mangoola Mine train loading facility, up to 10 trains per day.
<b>Hours of Operation</b>	24 hours / 7 days
<b>Employment</b>	145 construction jobs and 480 continued operational jobs
<b>Capital Investment</b>	\$52 million



# Engagement

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- The Environmental Impact Statement (EIS) was exhibited for 42 days from July to August 2019.
- The Department received 320 community and interest group submissions, comprising 230 submissions in support and 90 (87 unique) submissions objecting to the proposal.

Key Reasons for Objection	Key Reasons for Support
Noise and air quality impacts on the amenity and health of the local community	Ongoing job security and employment opportunities
Negative socio-economic impacts on the community	Positive socio-economic benefits to the community and State
Potential impacts on water resources	Increased wellbeing associated with employment and local and regional investment
Cumulative impacts of mining in the Hunter Valley	Proposed improvements in environmental and landform outcomes for existing open cut operation
Concerns with the effects of coal mining on climate change and greenhouse gas emissions	Glencore's record of support for local businesses, community organisations and charities
Other concerns: visual, blasting, biodiversity heritage impacts and rehabilitation concerns	

# Agency advice

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- Advice from 14 NSW Government agencies, including
  - EPA
  - DPIE Water
  - Biodiversity Conservation Division
  - Heritage NSW
  - Transport for NSW
  - Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC)
- None of the NSW Government agencies or the IESC objected to the Project
- All NSW Government agencies are satisfied that the impacts of the Project can be managed and regulated in accordance with the Department's recommended conditions of consent and other applicable regulatory instruments
- However, the Department understands that at its meeting with the Commission on 24 February 2021, Council has now advised that it objects to the Project.

# Managing Impacts

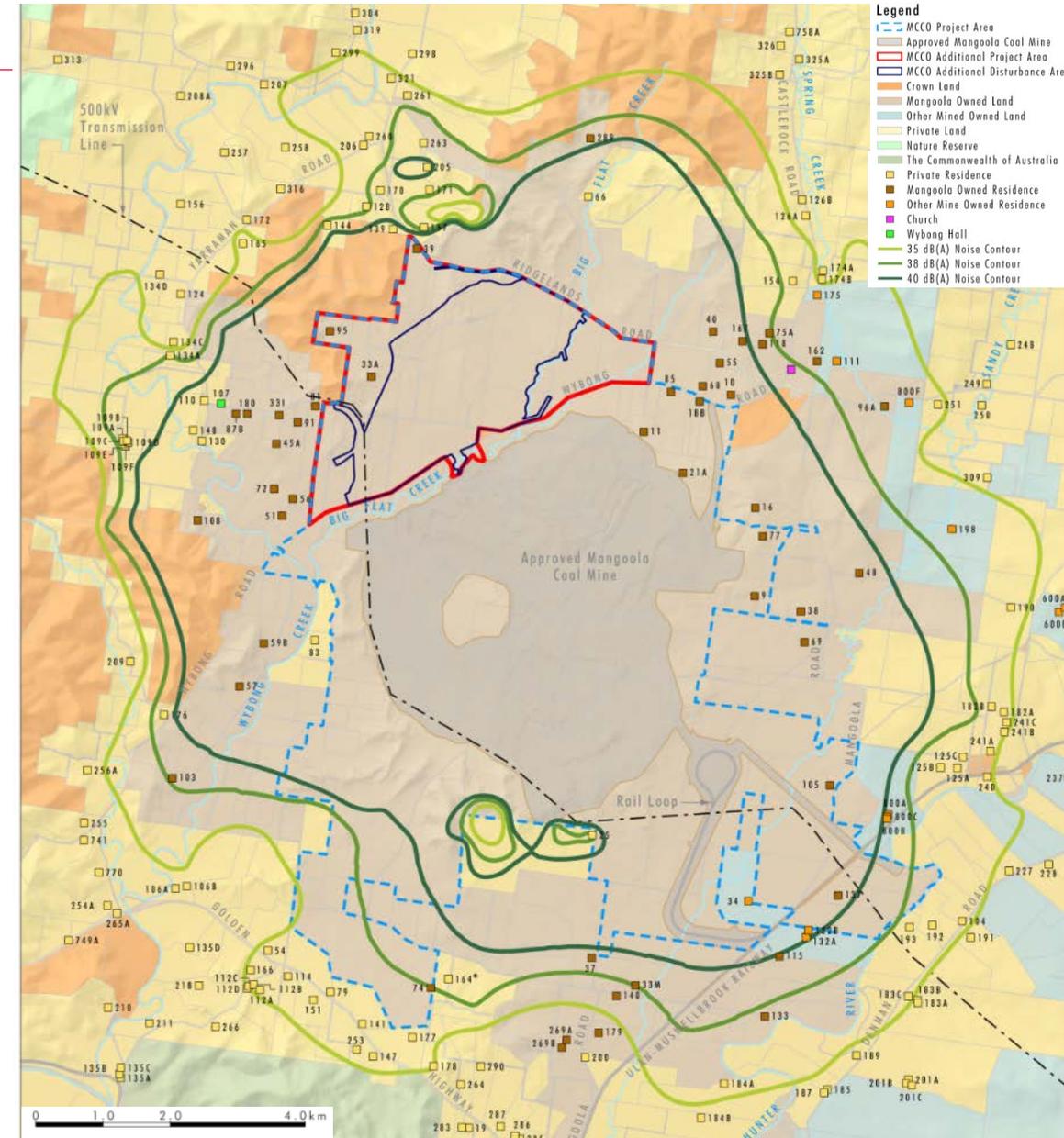
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- The Project involves a shift in mining to the northwest
- Amenity impacts are predicted to shift with the mine front.
- Glencore has sought to manage these impacts through:
  - *Project design* – including use of natural ridgelines
  - *Managing fleet* – numbers and deployment across the Northern Extension Area and existing Mangoola Mine
  - *Adaptive management* – including adjusting operations to account for meteorological conditions
  - *Use of existing infrastructure* – at the Mangoola Mine
  - *Final landform* – integrates with the existing landforms and minimises visual impacts



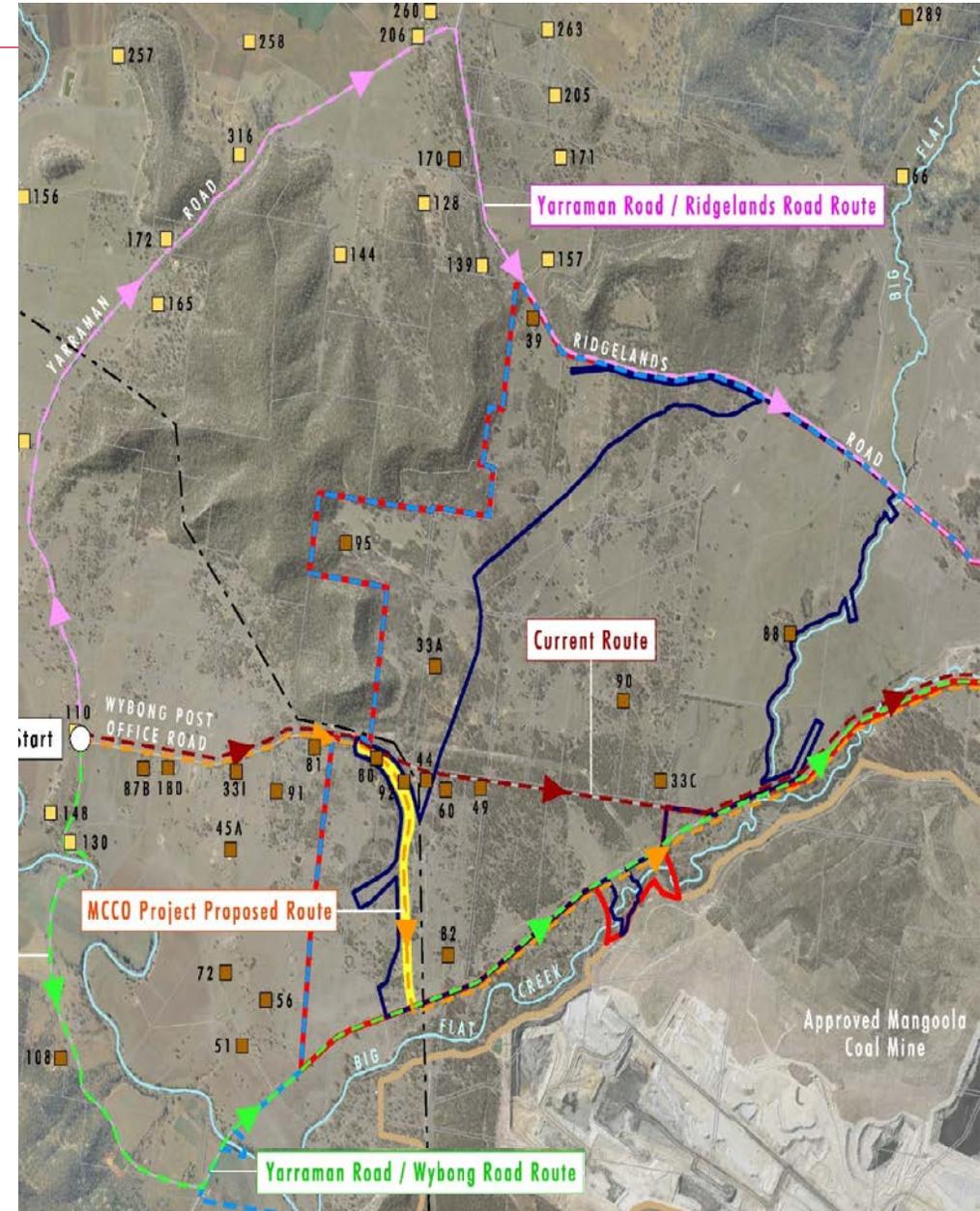
# Amenity

- Predicted operational noise impacts would result in:
  - minimal changes to the south and east; and
  - slight increases in operational noise to the north and west
- Most residences would comply with the EPA's noise assessment criteria or experience only minor exceedances
- Under the *Voluntary Land Acquisition and Mitigation Policy*, the Project's operational noise would result in:
  - 8 additional residences being afforded mitigation rights; and
  - 6 additional residences being afforded acquisition rights.
- The air quality and blasting impacts of the Project would comply with applicable criteria at all nearby residences
- The extension area would not be visible from nearby residences
- The EPA was satisfied with the air quality, noise and blasting assessments and supported the Department's recommended conditions



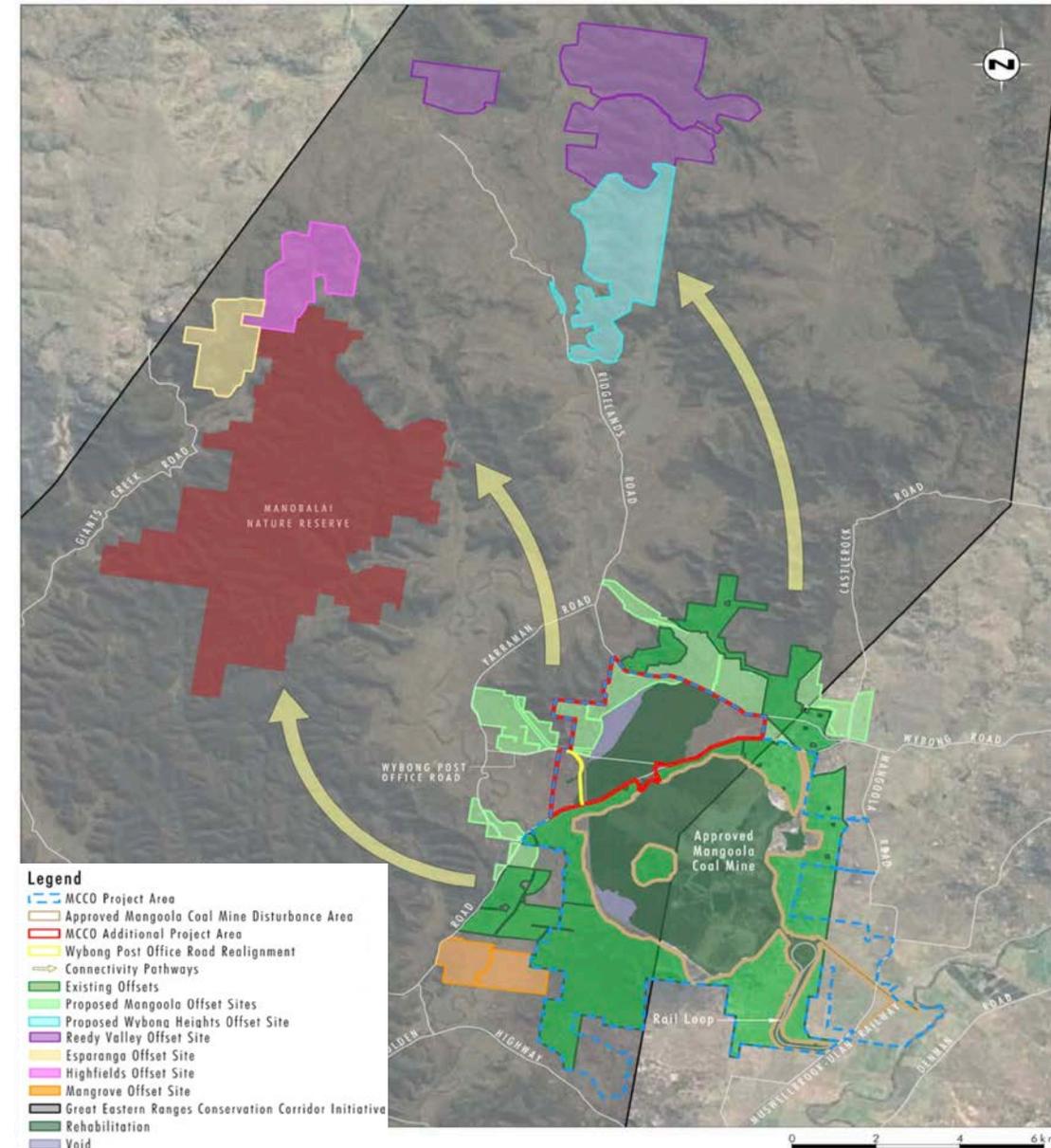
# Traffic and Transport

- *Wybong Road Overpass* - A haul road overpass linking the existing mine with the Northern Extension Area would be built to meet relevant design guidelines and accommodate over-sized over-mass vehicles
- *Road Network Performance* - All intersections would continue to operate at acceptable levels of service during peak periods
- *Rail Transport* - Product coal would continue to be transported by rail
- *Road Closure / Realignment* – Part of Wybong Post Office Road would need to be realigned or closed to access the Northern Extension Area
- Glencore originally proposed to realign the affected section of road and Council has proposed an alternative of closing the eastern end of Wybong Post Office Road and upgrading a section of Yarraman Road
- Glencore is willing to contribute an equal amount to either option



# Biodiversity

- The Project has been assessed under the FBA, consistent with the *Biodiversity Conservation Act 2016* transitional arrangements
- The Project area has been extensively investigated as part of the Upper Hunter Strategic Assessment and surveys undertaken to inform the Biodiversity Development Assessment Report
- The Project would clear 570 ha of native vegetation, comprising 62% woodland/open forest and 38% derived native grassland
- These impacts would be fully offset through a Biodiversity Offset Strategy, which includes land based offsets, mine rehabilitation and payments into the Biodiversity Conservation Fund
- The offset strategy is supported by an expert report by Dr Stephen Bell which verifies the adequacy of threatened orchid offsets
- BCD is satisfied with the assessment of biodiversity impacts and supports the Department's recommended conditions



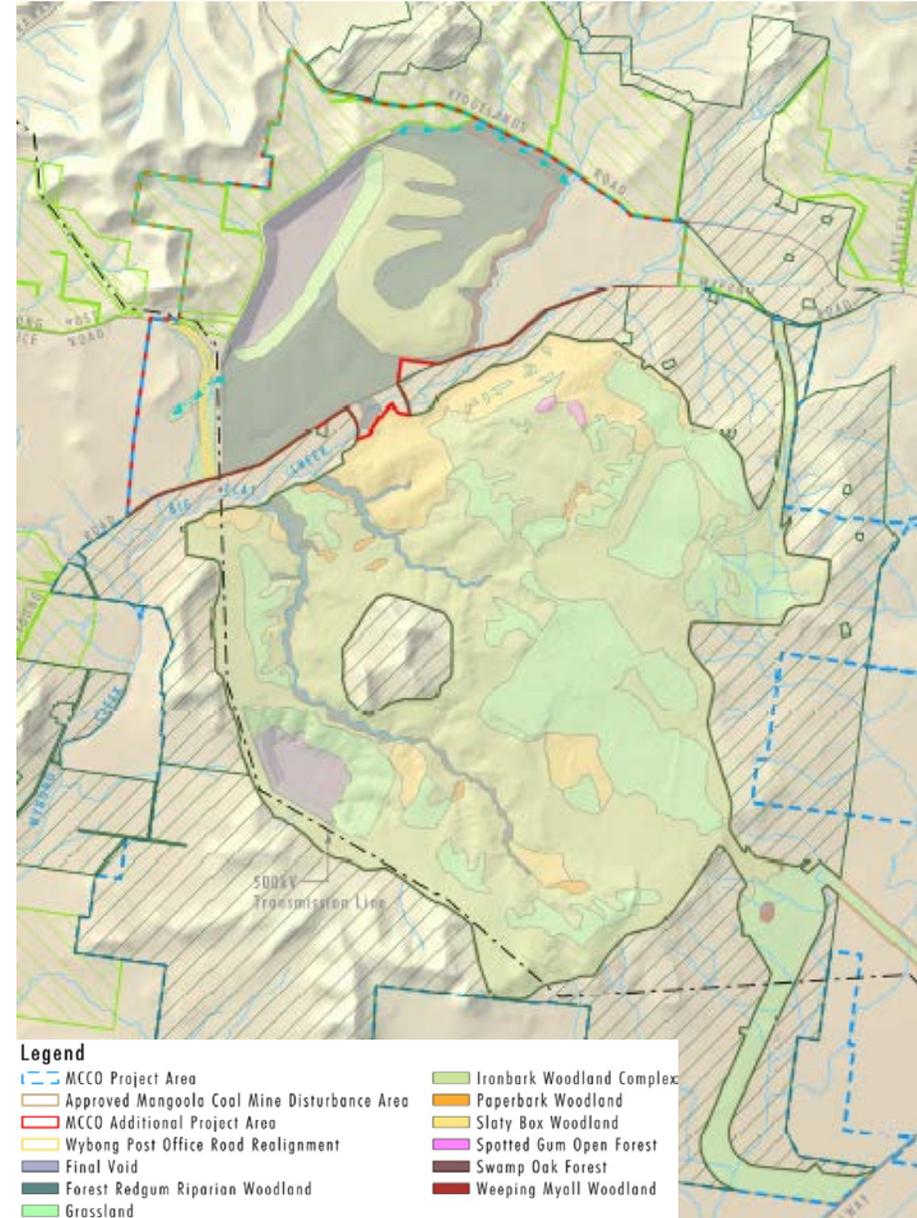
# Water Resources

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- *Water Balance* – Glencore already holds sufficient water licences for all water take associated with the Project
- *Surface Water* – minimal predicted surface water impacts associated with Project relative to the existing operations
- *Groundwater* – groundwater drawdown would comply with minimal impact provisions under NSW Aquifer Interference Policy (AIP) at all but 1 privately-owned groundwater bore. This bore owner is eligible for acquisition rights and would be afforded compensatory measures including an alternative long term supply of water
- *Flooding* – flood modelling indicates no additional impacts to private land during a 1:100 AEP event
- The recommendations of the IESC have been considered and incorporated into recommended conditions
- Government agencies provided strategic advice on the Project and are satisfied with recommended conditions
- The recommended conditions include strict water management performance measures, detailed monitoring requirements and preparation of a comprehensive Water Management Plan and Trigger Action Response Plans

# Rehabilitation and Final Landform

- The final landform incorporates topographic relief, hydro-geomorphologically stable drainage lines and flow paths that integrate with surrounding landscape
- Builds on principles successfully implemented at the Mangoola Mine, which have been subject to case studies on industry leading practice
- The proposed mine plan and landform design was informed by detailed Mine Plan Options Report which reviewed 7 potential mining planning options
- The proposed mine plan would retain two final voids, transfer 50 Mbcm of overburden to the existing Mangoola Mine to improve landform outcomes and result in a low profile northern landform that integrates with existing topography
- The disturbance area would be revegetated with native woodland communities, grassland suitable for grazing and riparian vegetation along Big Flat Creek
- The recommended conditions include detailed rehabilitation objectives and the preparation of a life of mine Rehabilitation Strategy and detailed Rehabilitation Management Plan in accordance with Resources Regulator Guidelines



# Social and Economic considerations

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- The Project would generate a range of economic and social impacts. These include:
  - Continued employment opportunities including 480 operational jobs and 145 construction jobs
  - Net economic benefits to NSW of over \$408 million (NPV)
  - Royalties to the NSW Government of \$129.5 million (NPV)
- The Department considers that the social impacts of the Project would be broadly similar to the existing operations
- However, we fully recognise the concerns of the local community about health and amenity impacts, that some people who are afforded acquisition rights may choose to move out of the area and the effects this may have on the social dynamics of the local community
- The Department has carefully considered these matters and considers that they have been appropriately addressed through a combination of the Project design and the proposed management strategies, including preparation of a detailed Social Impact Management Plan for the Project
- Glencore has also offered to enter into a VPA with Council worth approximately \$5 million

# Summary

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- The Department has completed a comprehensive assessment of the Project in accordance with the relevant requirements of the EP&A Act, having regard to advice from NSW Government agencies, infrastructure providers, Council, the IESC and issues raised in community submissions.
- The Department considers that:
  - the Project has been designed to minimise environmental, amenity and social impacts to the greatest extent practicable;
  - the Project would generally comply with applicable assessment criteria and be consistent with relevant NSW Government policies and guidelines;
  - any residual impacts can be appropriately minimised, mitigated or offset under recommended conditions; and
  - the benefits of the Project outweigh its potential for negative impacts.
- Consequently, the Department considers the Project to be approvable, subject to strict conditions of consent.