 Narrabri, NSW, Australia

# Narrabri Mine

## Narrabri Underground Mine Stage 3 Extension Project

IPC-Proponent Briefing  
Independent Planning Commission

4 February 2022



# Introduction

## NCOPL Attendees:

- Paul Flynn  
CEO and Managing Director
- Mark Stevens  
EGM Project Delivery
- David Ellwood  
Director NCO Stage 3 Project
- Tom MacKillop  
Principal (Resource Strategies)



# Agenda

1. Whitehaven Coal Overview
2. Community Sentiment
3. Narrabri Stage 3 Project Overview



# Whitehaven Coal Overview





# Whitehaven is the largest independent producer of high-CV coal in Australia

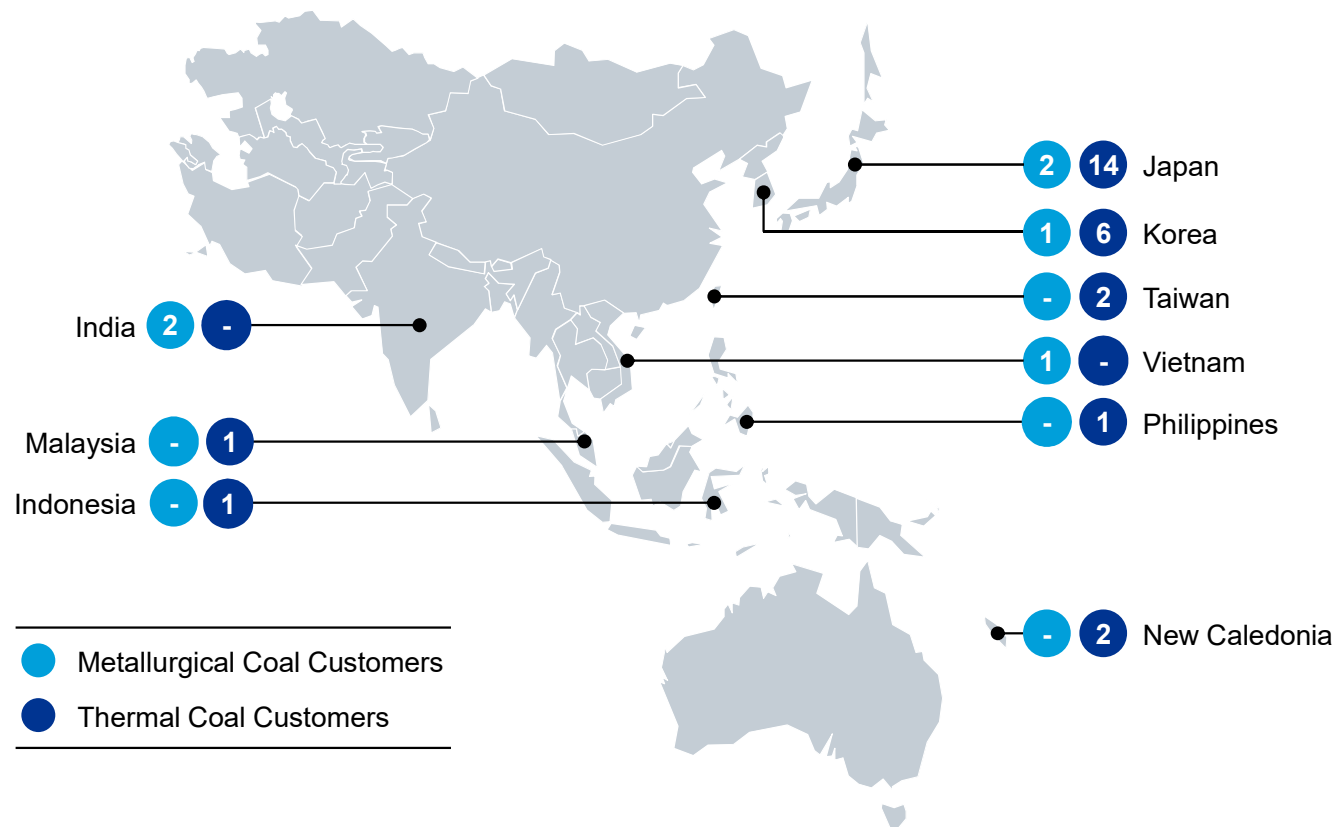


We produce and sell high quality coal products into premium Asian markets

In FY21 managed coal sales, including purchased coal, were 19.8Mt (17.2Mt thermal and 2.6Mt metallurgical)



# Whitehaven's customer base is in Asia



Whitehaven's coal products are exported to Asia

Our coal products are used:

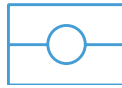
1. In high efficiency, low emission (HELE) electricity generation
2. to make steel; and
3. in nickel smelting and other industrial applications

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# Sustainability highlights FY21



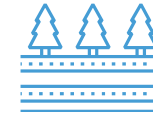
**Approx. 75%**  
of 2,500-strong  
workforce based in  
regional areas



**9%**  
of workforce  
identifies as  
Aboriginal and/or  
Torres Strait Islander



**\$344.7 million**  
spent with  
local suppliers



**267ha**  
of land  
rehabilitated



**12.4%**  
female  
participation in  
our workforce



**\$392,300**  
in community  
partnerships  
and donations



**\$5.15 million**  
spent with  
14 Aboriginal and  
Torres Strait Islander  
businesses



**Business resilience  
tested against TCFD  
framework since  
FY19**

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# Our focus is on leaving a legacy beyond mining

**We believe the local community should be the main beneficiary of our presence.**

We're focused on building local prosperity, improving quality of life, and ensuring our regional towns thrive – so the benefits of our presence go beyond our workforce and beyond the life of any single mine.

Ultimately, our compact is to leave an economic and social legacy that outlives our mining operations, and lives on in the areas of education, health, skills and infrastructure.

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## Our community and social compact

**Identify, develop and operate high-quality, long-life, lower-cost coal projects.**

**Leave an economic and social legacy that outlives mining operations.**

**Promote local economic growth and sustainability through permanent job creation and local procurement.**

**Instill community trust through responsible environmental stewardship and community partnerships.**

**Help build local community capacity and viability through direct and indirect intergenerational investment in education, health, skills and infrastructure.**



# Our presence supports regional economic growth

## FY21 community contribution

 **\$392,300**  
in community partnerships and donations

 **\$5.15 million**  
spent with 14 indigenous businesses

**\$210.5 million**  
in wages paid 

**\$189.2 million**  
contributed to federal, state and local  
governments in taxes and royalties 

 **\$344.7 million**  
spent with local suppliers

# We contributed \$489.5m to North West NSW in FY21 alone

Narrabri LGA	
Wages and salaries	\$46.9m
Number of suppliers	81
Procurement spend	\$47.5m
Council rates & VPA payments	\$1.7m



Tamworth LGA	
Wages and salaries	\$19m
Number of suppliers	73
Procurement spend	\$23.8m
Council rates & VPA payments	\$0.02m

Gunnedah LGA	
Wages and salaries	\$66.6m
Number of suppliers	139
Procurement spend	\$270.2m
Council rates & VPA payments	\$1.5m

Liverpool Plains LGA	
Wages and salaries	\$9.2m
Number of suppliers	17
Procurement spend	\$2.6m
Council rates & VPA payments	\$0.5m

# Community Sentiment



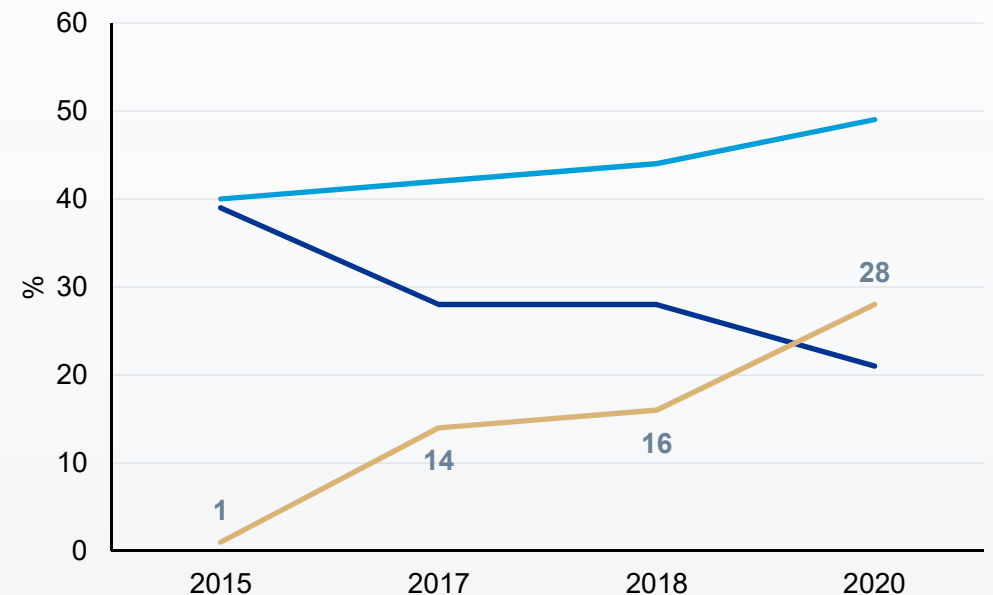
# Our communities increasingly view us positively

Drivers of the statistically significant increase in positive, and decrease in negative, sentiment include growing community recognition of:

- Local employment
- Local procurement
- Community support

Source: Independent quantitative research conducted by Newgate Research. Base: All participants who are aware of Whitehaven Coal: 2020 (n=561), Tamworth (n=134), Gunnedah (n=145), Narrabri (n=143), Liverpool Plains (n=139). 2018 (n=568), 2017 (n=565). 2015 (n=574).

Local community sentiment towards Whitehaven Coal

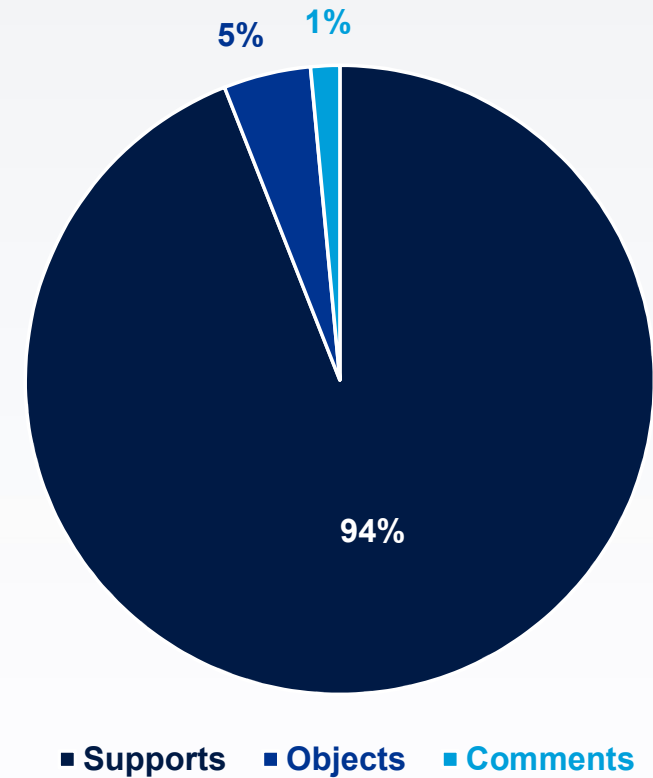


▲ Positive sentiment    ▼ Negative sentiment    ▲ NET sentiment

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# Submissions on Stage 3 EIS

- **67 submissions on the EIS:**
  - 61 public (100% supportive).
  - 3 business groups.
  - 3 special interest groups.
- 94% of submissions were **supportive**.
- None of the 13 government agencies or 2 local councils objected to the Project.



# Narrabri Stage 3 Project Overview





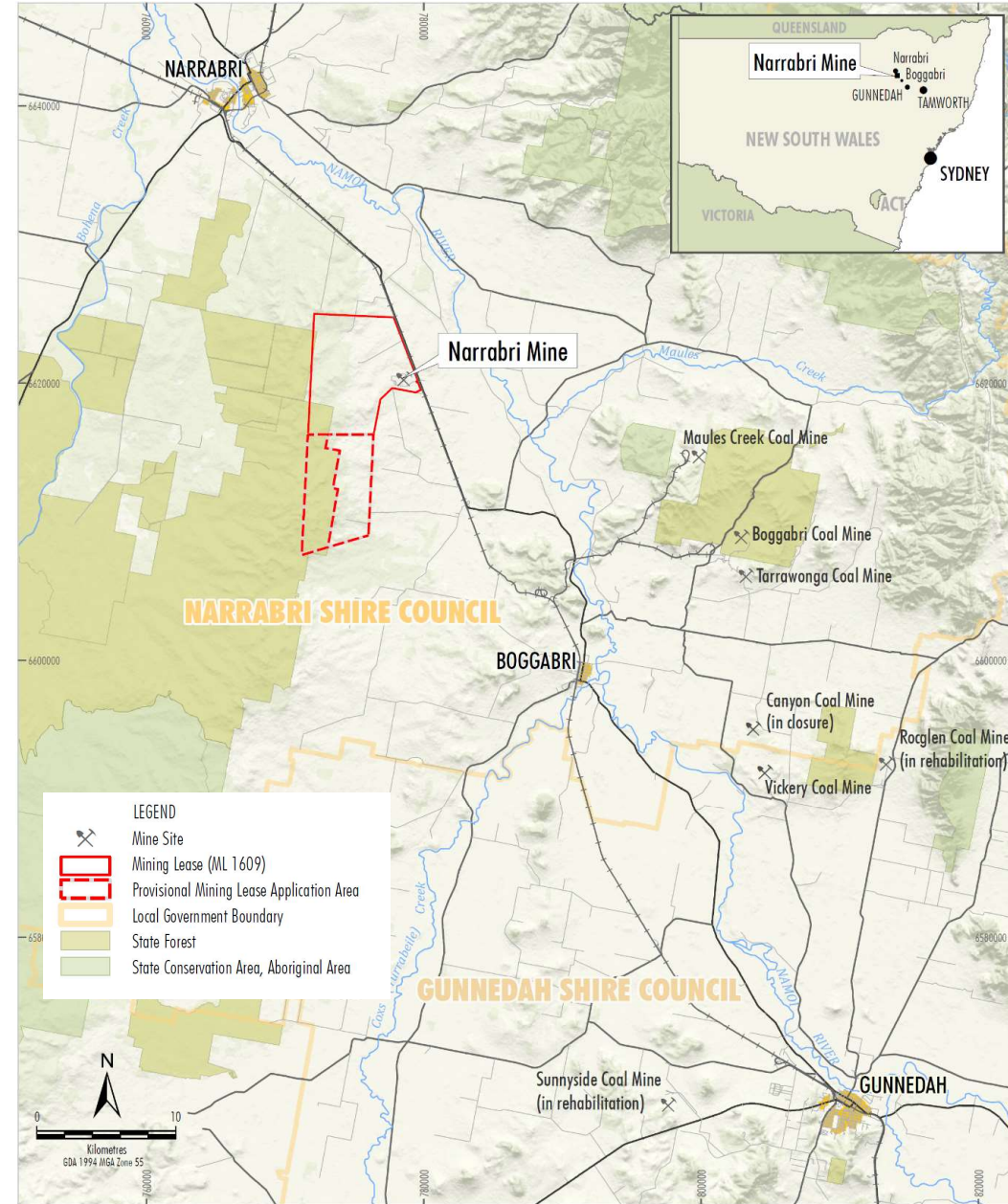
# Project Overview

## Location

- Existing mine located in the Gunnedah Basin.
- 25 km southeast of Narrabri and 60 km northwest of Gunnedah.
- Serviced by existing rail, road, water and power infrastructure.
- In the vicinity of Whitehaven's Maules Creek, Tarrawonga and Vickery Coal Mines.

**“The Department considers the site to be well-suited for the Project”**

Page xiv, DPIE Assessment Report

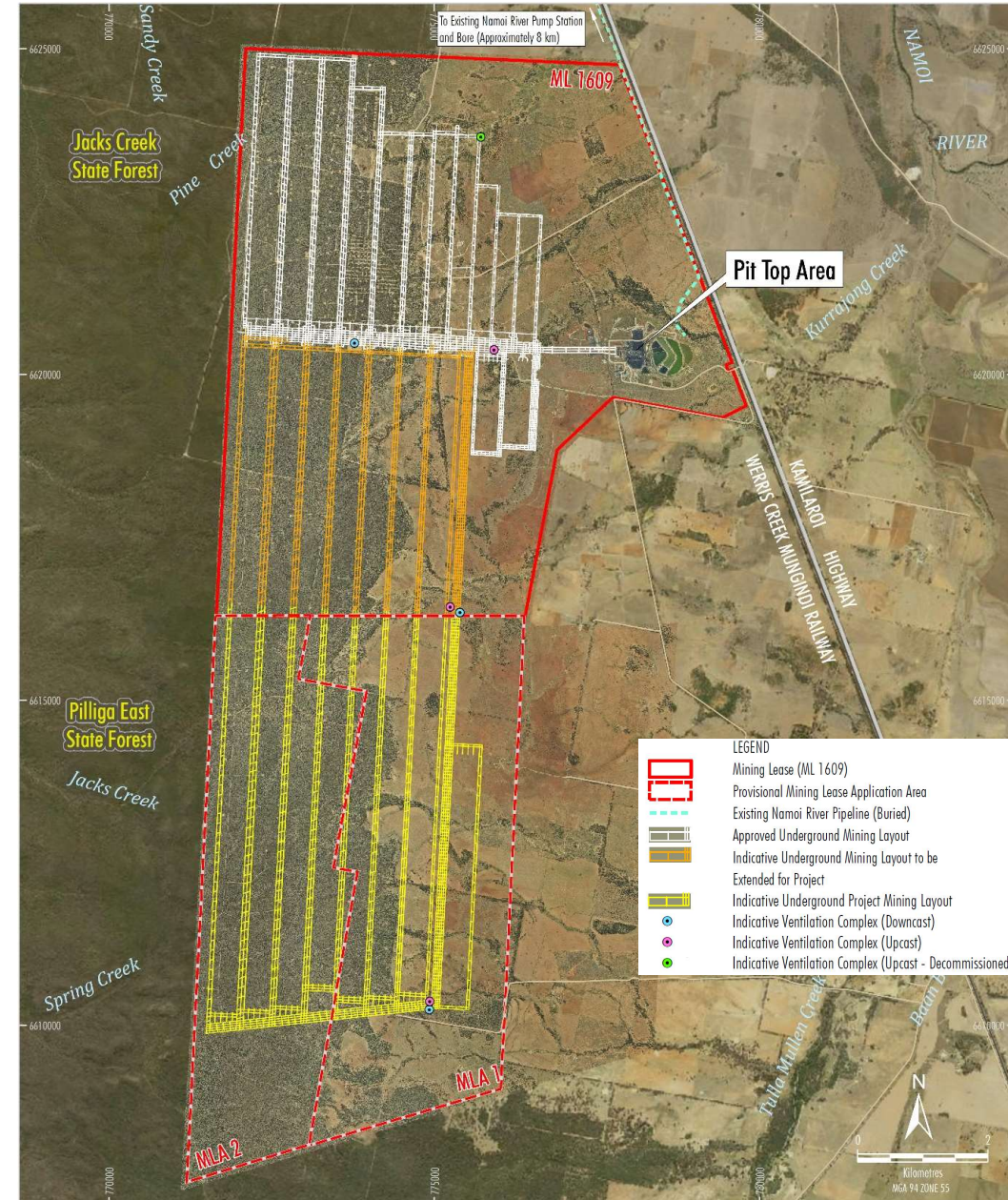




# Project Overview

## Stage 3 Project

- Continuation of underground longwall mining of the Hoskissons coal seam.
- Southern extension into new Mining Lease Application areas.
- Additional 82 Mt run-of-mine (ROM) coal.
- Continued use of the existing and approved pit top and coal handling and processing facilities and other infrastructure.
- Up to 11 Mtpa ROM coal production.
- Micro-siting of surface infrastructure.





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# Project Overview

## Key Benefits

- Mine life extension from 2031 to 2044, providing continued **social and economic benefits** to the region.
- **Continued employment** of up to approximately 520 full-time equivalent personnel.
- Up to approximately **20 additional construction jobs** during development phases.
- **\$259M** additional royalties to NSW.
- Total net benefit to NSW of \$599M (net present value).



**“On balance, the Department believes that the Project’s benefits significantly outweigh its residual costs...”**

Page xv , DPIE Assessment Report

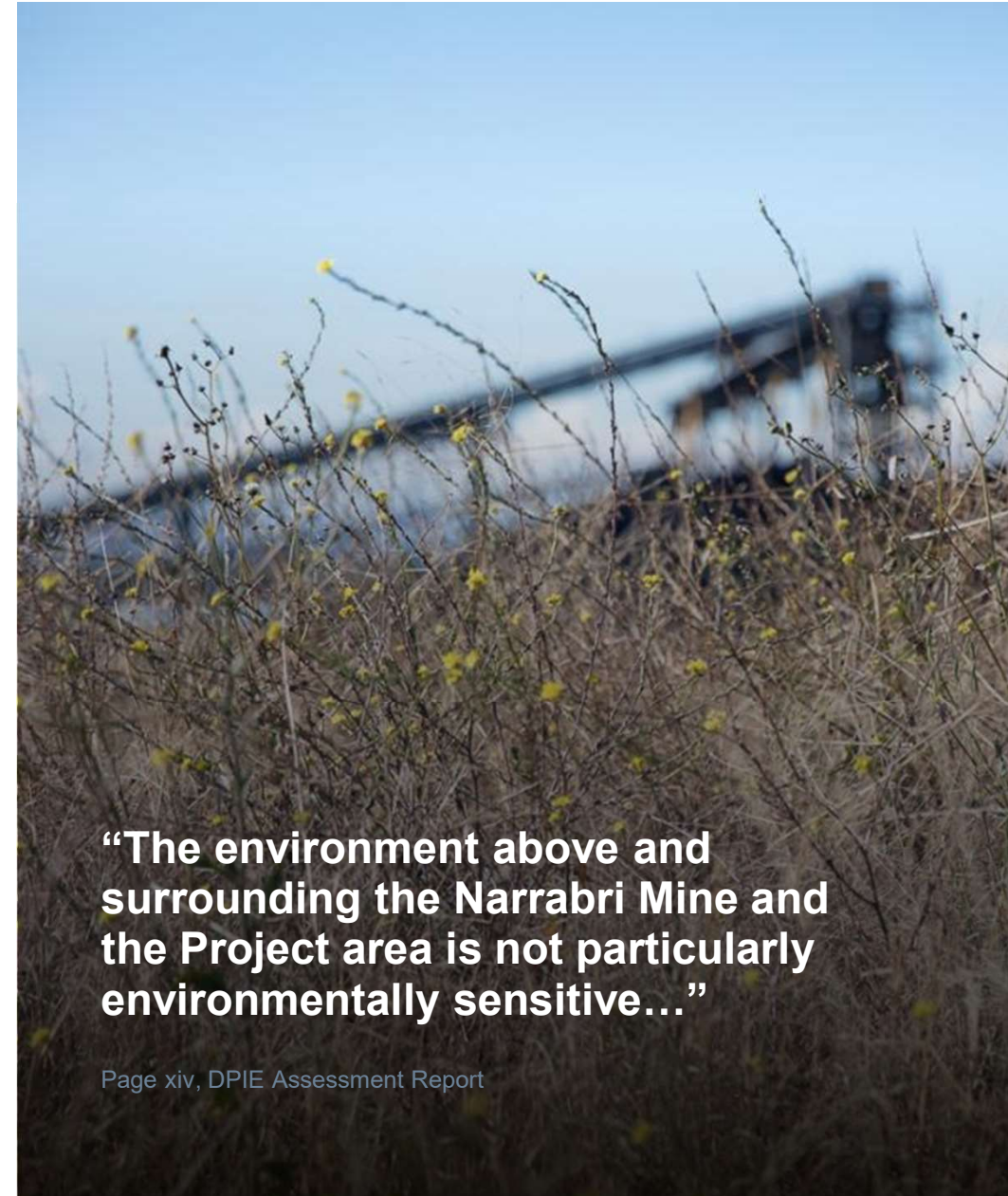


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# Project builds on the existing Narrabri Mine

## Project Description

- Potential impacts are well understood.
- Existing surface facilities and services would be used for the Project.
- The site is well suited for the Project.
- No highly productive agricultural land.
- Minor impacts on highly productive aquifers, located approximately 5 km east of the Project underground mining areas.
- Existing management measures will continue to be implemented and/or improved.



**“The environment above and surrounding the Narrabri Mine and the Project area is not particularly environmentally sensitive...”**

Page xiv, DPIE Assessment Report

# Assessment Process



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# Key Assessment Outcomes

- ✓ **Groundwater** – compliance with the ‘minimal impact’ criteria of the *Aquifer Interference Policy* with the formation of make-good agreements.
- ✓ **Water use** – licences to be held for all licensable take under the *Water Management Act 2000*.
- ✓ **Biodiversity** – micro-siting of infrastructure to avoid or minimise impacts on biodiversity values with offsets for residual impacts as per the *Biodiversity Assessment Method* and *Biodiversity Conservation Act 2016*.
- ✓ **Greenhouse gas** – commitment to flaring pre-drainage gas where conditions allow, a research program to improve abatement of Scope 1 emissions and preparation of a Fugitive Emissions Minimisation Plan.
- ✓ **Air quality** – compliance with *Approved Methods* criteria with compliance of relevant criteria at all private dwellings.
- ✓ **Noise** – compliance with *Noise Policy for Industry, Interim Construction Noise Guideline* and *Rail Infrastructure Noise Guideline* criteria or mitigation/acquisition upon request as per the *Voluntary Land Acquisition and Mitigation Policy*.
- ✓ **Cultural heritage** – no direct impacts from surface disturbance to identified cultural heritage sites.



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# Make-good Agreements

- Draft agreements have been sent to the eight landholders who own the nine bores which are predicted to experience >2m of groundwater drawdown.
- Replacement bores are proposed to be installed within 2 years of commencement of the Project.



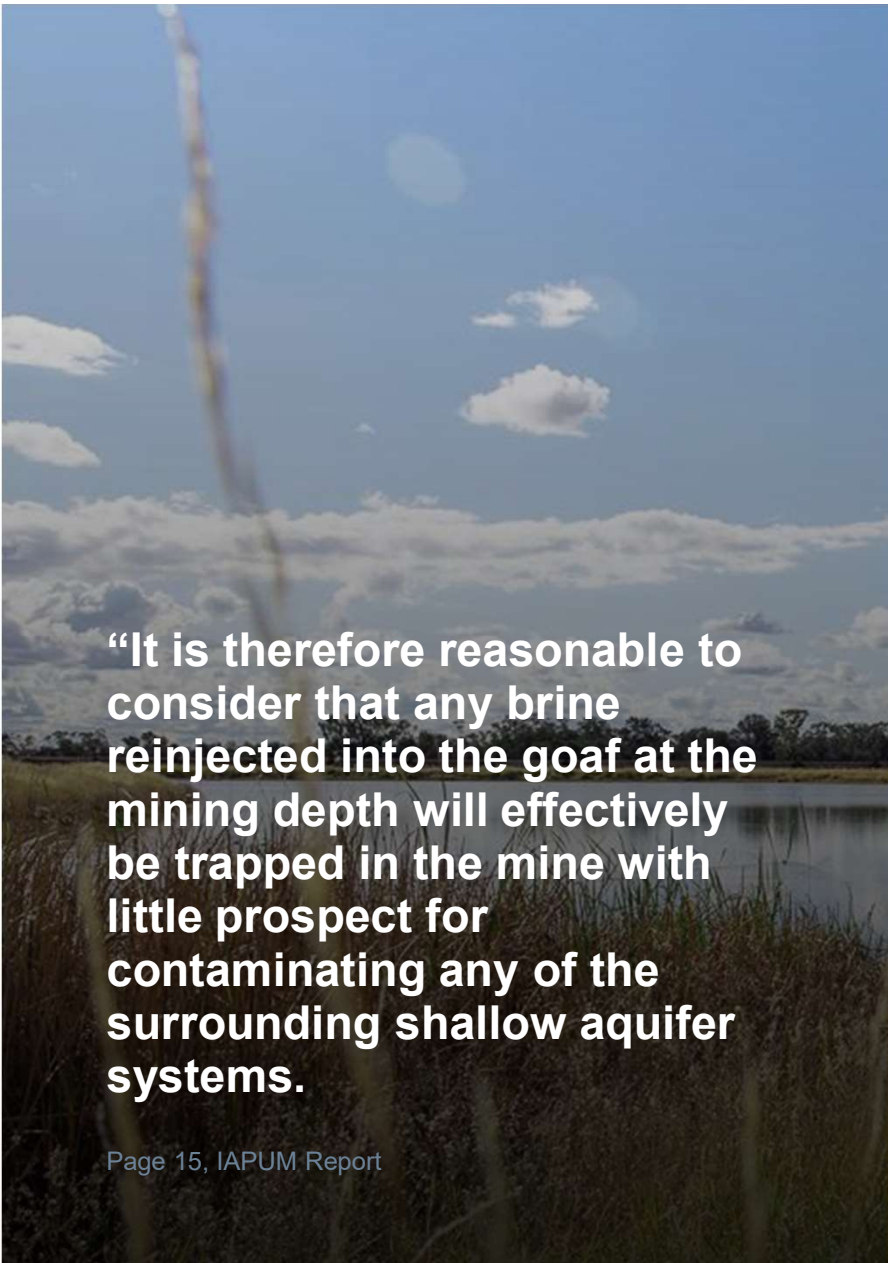
**“There are nine private groundwater bores that are predicted to experience more than 2 m of drawdown, with six of these predicted to experience impairment of water supply. While some of these impacts may not occur for decades, NCOPL has initiated contact with all these landowners and committed to implement make good arrangements. The Department has proposed conditions which strongly encourage NCOPL to make these arrangements within two years of commencing the Project.”**

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# Groundwater Assessment

## Brine Re-injection

- Concept of brine reinjection approved for Stage 2.
- No known previous mining industry applications.
- Majority of the salt load in the brine came from underground in the first place (i.e. was pumped to the surface from the coal seam as part of mine dewatering).
- Calculations were undertaken to quantify the impact of brine re-injection in terms of total salinity – minor increases predicted.
- Post-mining re-injection is considered unlikely to affect potential groundwater usage in the Hoskissons Coal Seam since few, if any, water supply bores in the area target this unit on account of its high background total dissolved solids (TDS).



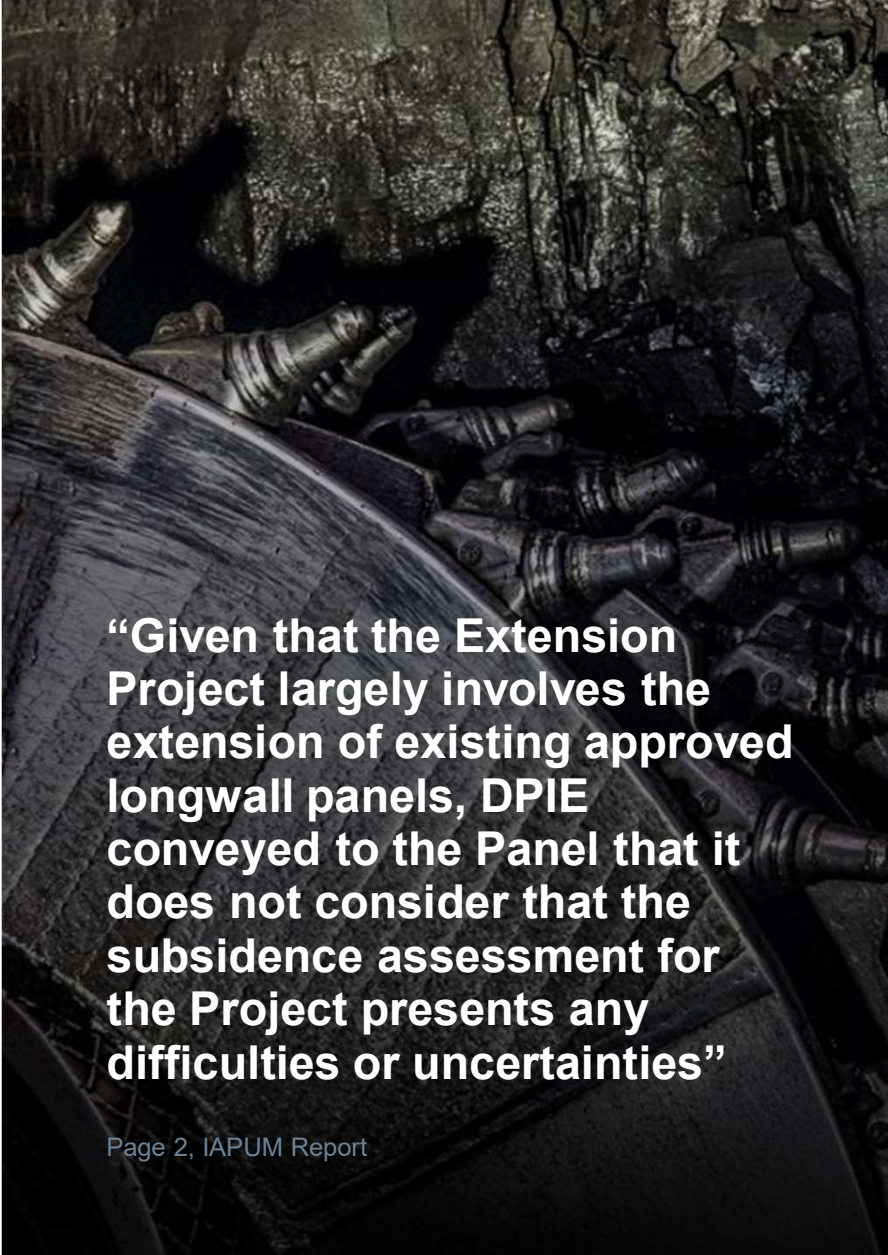
**“It is therefore reasonable to consider that any brine reinjected into the goaf at the mining depth will effectively be trapped in the mine with little prospect for contaminating any of the surrounding shallow aquifer systems.**

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# Mining Method and Subsidence

Potential for Impacts in excess of those experienced in the past

- Impacts on surface water losses from subsidence impacts on ephemeral creeks to date at the Narrabri Mine are assessed as negligible.
- Using conservative assumptions, WRM Water & Environment (specialist water consultants) predicted total of 4.2 ML/year of surface water losses, which is negligible when compared to WRM's assessed annual runoff from the Project area, being 5,524 ML/year.
- This impact would be licensed.



**“Given that the Extension Project largely involves the extension of existing approved longwall panels, DPIE conveyed to the Panel that it does not consider that the subsidence assessment for the Project presents any difficulties or uncertainties”**



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# Greenhouse Gas Assessment


## Feasibility and Efficiency of Flaring

### Pre-drainage would only generally take place when:

- The in-situ gas content of the Hoskissons Coal Seam is greater than 3.5 cubic metres per tonne of coal.

### Flaring would occur when:

- The total gas stream from the pre-drainage has a methane content of greater than 30%, and an oxygen content of less than 6%.
- Portions of Longwalls 204 to 209 contain gas matching these requirements.
- DPIE's benchmark emissions intensities in paragraph 378 of the Assessment Report and Condition B16 are acceptable to Whitehaven.



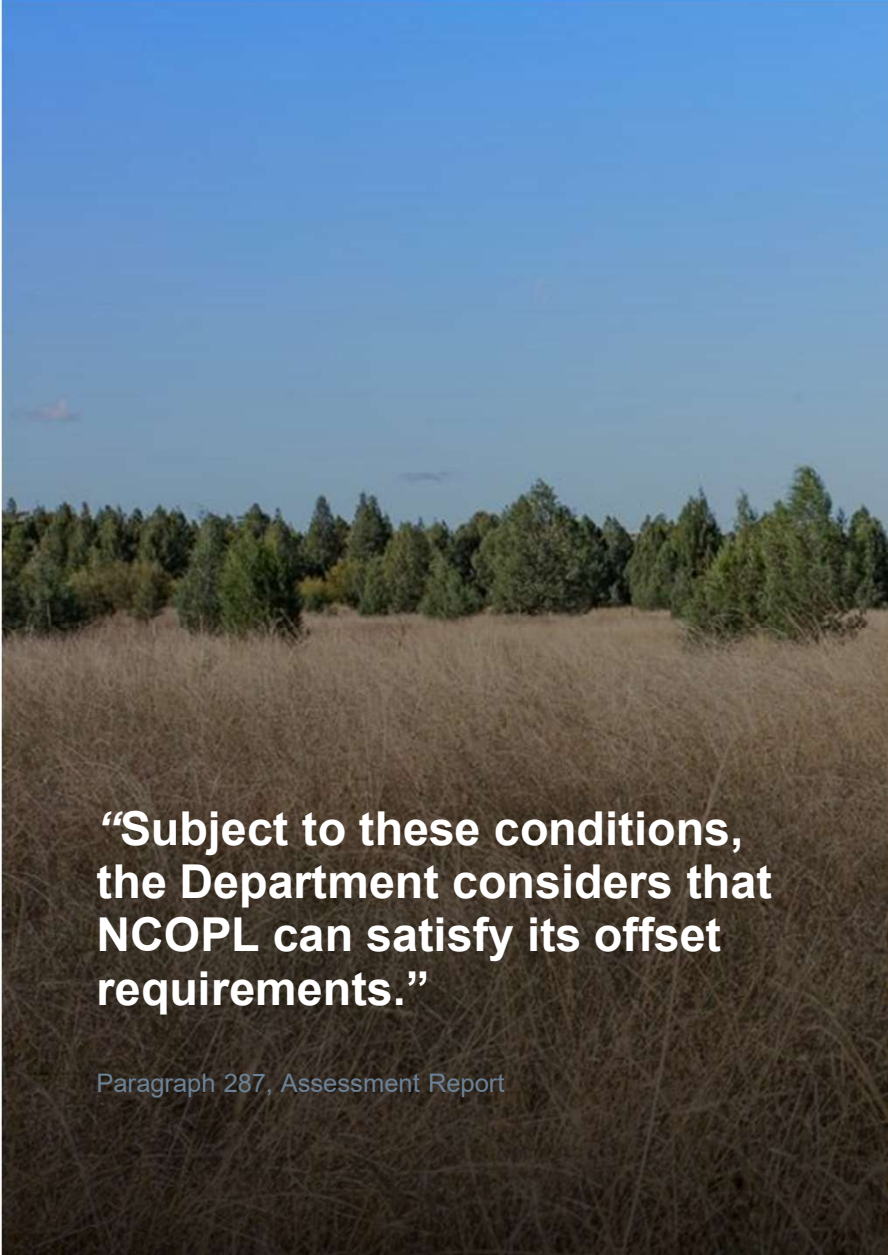
**“The Department has generally adopted the Commission’s approach to GHG emissions in the recent Tahmoor South Project, but also proposed to take it one step further by establishing a mechanism to independently review emissions and potentially ‘ratchet down’ over time”**

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# Biodiversity

## Potential BSAL in Offset Areas

- Whitehaven would address NSW offset requirements by one, or a combination, of the following options, consistent with the NSW Biodiversity Offsets Scheme:
  1. the retirement of biodiversity credits (either like-for-like or in accordance with the variation rules);
  2. the funding of a biodiversity conservation action;
  3. undertaking ecological mine rehabilitation; or
  4. payment into the Biodiversity Conservation Fund.
- Biophysical Strategic Agricultural Land (BSAL) is not a consideration of the Biodiversity Conservation Trust when considering offset proposals.
- Whitehaven's general observation is that land which does not meet BSAL criteria often provides better offsetting potential.



**“Subject to these conditions, the Department considers that NCOPL can satisfy its offset requirements.”**

Paragraph 287, Assessment Report

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# Rehabilitation

## Potential for future Care and Maintenance phase

- Rehabilitation occurs progressively and following the decommissioning of gas drainage infrastructure and completion of drilling programs.
- Any future care and maintenance phase would require a Mining Operations Plan to be in place.
- This document would include progressive rehabilitation required for the relevant period.



**“The environment above and surrounding the Narrabri Mine and the Project area is not particularly environmentally sensitive...”**



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# Voluntary Planning Agreements

- Most recent meetings with both Narrabri Shire Council and Gunnedah Shire Council held on 21 January 2022.
- Revised offers provided to both councils which propose accelerated payment terms.

**“A range of mitigation and offsetting measures for social impacts have been proposed by the Applicant. In particular, this includes offers of substantial VPAs to both NSC and GSC.”**

Page A37, DPIE Assessment Report

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## VPA contribution methodology

- Workforce is roughly evenly distributed across both Council areas.
- Traffic movements.
- Project located entirely within NSC.
- **Narrabri Shire Council offer = \$2.66M**
- **Gunnedah Shire Council offer = \$1.43M**

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# Conclusion

- Mine life extension from 2031 to 2044, providing continued social and economic benefits to the region.
- Continued employment of up to approximately 520 full-time equivalent personnel.
- Up to approximately 20 additional construction jobs during development phases.
- \$259M additional royalties to NSW.
- Total net benefit to NSW of \$599M (net present value).



**“On balance, the Department believes that the Project’s benefits significantly outweigh its residual costs, and that it is in the public interest and is approvable, subject to the recommended conditions.”**

Page 88, DPIE Assessment Report



Thank you