



EXECUTIVE SUMMARY



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ES1 BACKGROUND

The Wilpinjong Coal Mine is an existing open cut coal mining operation situated approximately 40 kilometres north-east of Mudgee, near the Village of Wollar, within the Mid-Western Regional Local Government Area, in central New South Wales (Figure ES-1).

The Wilpinjong Coal Mine is owned and operated by Wilpinjong Coal Pty Limited (WCPL), a wholly owned subsidiary of Peabody Energy Australia Pty Limited (Peabody Energy).

Construction of the Wilpinjong Coal Mine commenced in February 2006, and the mine is approved to produce up to 15 million tonnes per annum of run-of-mine coal.

Up to 12.5 million tonnes per annum of thermal coal products from the Wilpinjong Coal Mine are transported by rail to domestic customers for use in electricity generation and to port for export.

Management and monitoring plans and control strategies have been developed in consultation with relevant agencies and are implemented as part of the Wilpinjong Coal Mine Environmental Management Strategy. These plans and control strategies are periodically reviewed as part of ongoing operations.

This document is an Environmental Assessment for a proposed modification to the Wilpinjong Coal Mine.

ES2 OVERVIEW OF THE MODIFICATION

WCPL has identified that a number of minor alterations to the approved Wilpinjong Coal Mine are required, including:

- development of incremental extensions to the existing open cut pits that would extend the open cuts by approximately 70 hectares (Figure ES-2) and would result in the recovery of approximately 3 million tonnes of additional run-of-mine coal over the life of the mine;
- higher rates of annual waste rock production in order to maintain approved run-of-mine coal production;

- minor coal handling and preparation plant upgrades (Figure ES-2) to improve fine coal reject management (installation of a belt press filter) and an increase in the rate of run-of-mine coal beneficiation;
- upgrade of the existing reverse osmosis plant to a water treatment facility (Figure ES-2) with the addition of pre-filtration and flocculation/dosing facilities to improve plant efficiency;
- amendment of the waste emplacement strategy to include:
 - development of an elevated waste rock emplacement landform (Figure ES-2);
 - disposal of some inert building and demolition waste that is produced from off-site building demolition in the approved mine waste rock emplacements;
 - co-disposal of fine coal reject material produced by the belt press filter with coarse rejects; and
- operation of a light vehicle servicing workshop at an existing farm shed.

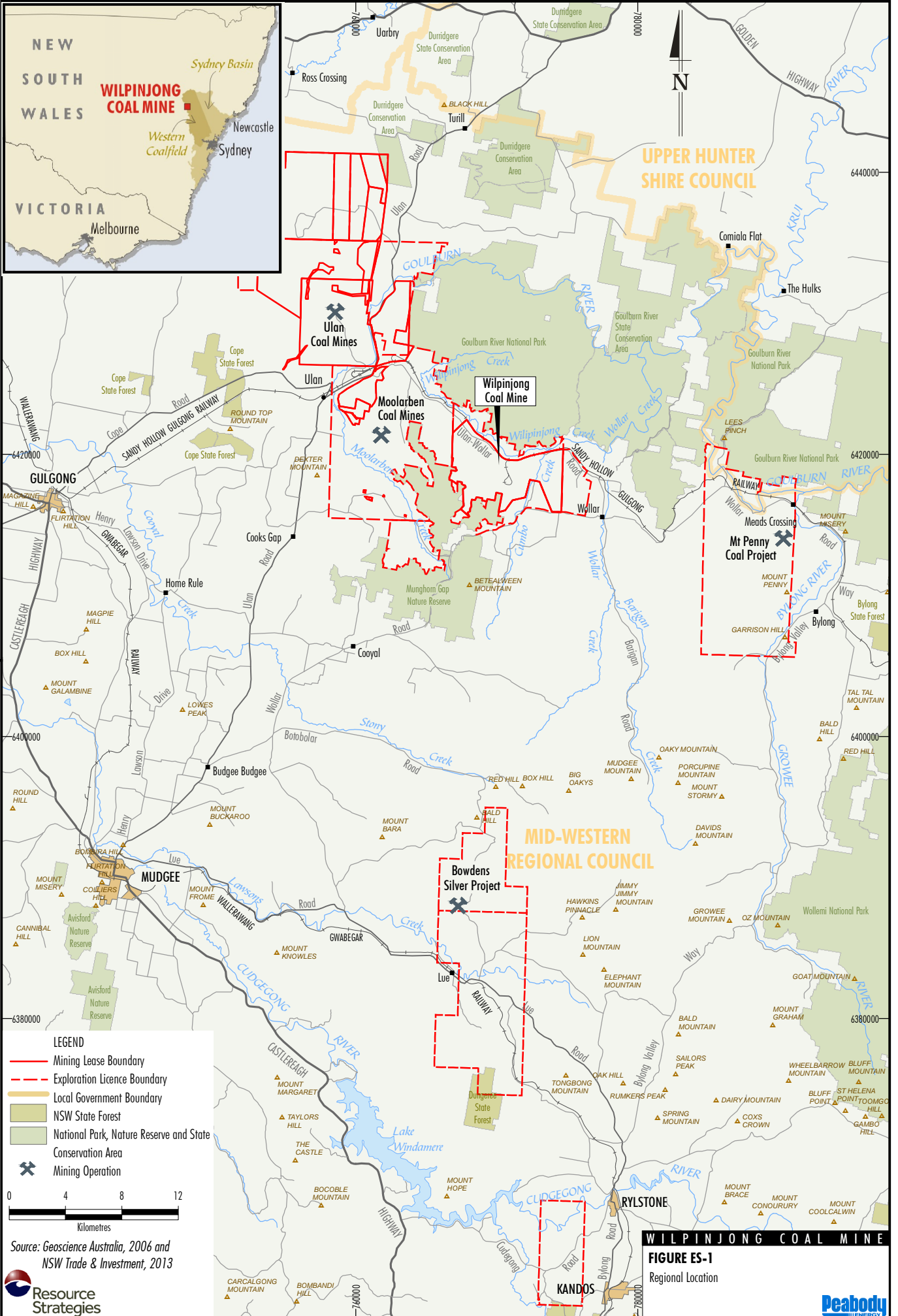
The frequency of larger open cut blasts would increase as a result of the higher rates of waste rock production, and the mining sequence would be adapted to include the additional open cut extension areas.

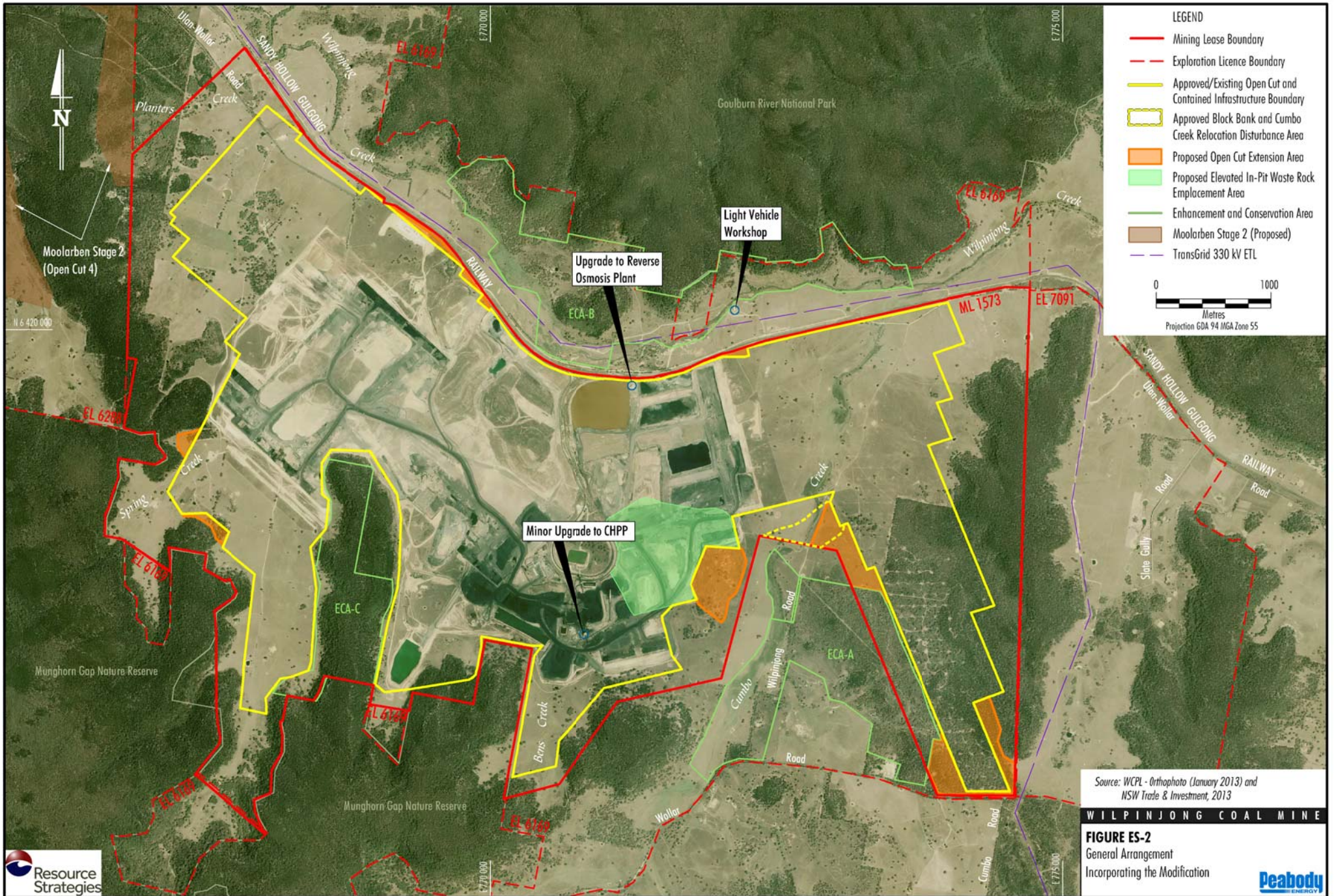
The above variations to the approved Wilpinjong Coal Mine (the Modification) would not require any significant alteration to the existing approved mining operations and general supporting infrastructure.

In particular, no changes are proposed to the approved rates of production of run-of-mine coal (15 million tonnes per annum) or product coal (12.5 million tonnes per annum) and the current Wilpinjong Coal Mine owner operator mobile fleet would not require augmentation.

The current operational workforce of approximately 550 WCPL employees and full-time equivalent on-site contractors would also be unchanged.

Construction activities may require a temporary construction workforce of up to 20 people for a period of approximately six months in 2014.





Benefit cost analysis identified the estimated net production benefits of the Modification mining extensions (over and above the economic benefits of the existing approved Wilpinjong Coal Mine) at some \$28 Million. The Modification would also have positive impacts on regional business turnover, household income and direct and indirect jobs.

A summary of the key findings of these environmental reviews and key commitments with respect to managing potential impacts is provided in Table ES-1.

These reviews indicate that with some amendments, the existing environmental management and monitoring measures would continue to be applied to minimise the potential impacts of the Wilpinjong Coal Mine on existing environmental values and the nearest private dwellings.

ES3 ENVIRONMENTAL REVIEW

In order to assess the potential environmental impacts of the proposed Modification, a number of environmental reviews were completed.

**Table ES-1
Key Outcomes of the Environmental Review**

Environmental Aspect	Summary of Environmental Assessment Conclusions	Key Management, Mitigation or Monitoring Measures for the Modification
Operational Noise	<p>Noise modelling identified that four private dwellings outside of the Village of Wollar would have potential exceedances of project specific noise criteria due to the Wilpinjong Coal Mine operations incorporating the Modification.</p> <p>For comparison, noise modeling for the previous Mining Rate Modification (2010) identified 15 private dwellings would experience exceedances of project specific noise criteria.</p>	<p>Real-time noise controls (e.g. mobile equipment stand-downs) would be implemented under relevant adverse meteorological conditions to achieve continued compliance with project specific noise levels in the Village of Wollar.</p> <p>WCPL would continue to implement the real-time noise management system and associated response protocols in the Noise Management Plan. The Plan would be reviewed and, if necessary, revised for the Modification.</p>
Blasting	<p>Relevant ground vibration and airblast criteria were not predicted to be exceeded at any private receiver.</p>	<p>The Blast Management Plan would continue to be implemented and the Plan would be reviewed and, if necessary, revised for the Modification.</p>
Dust and Particulate Matter	<p>Air quality modelling indicates that no exceedances of applicable air quality criteria are predicted at private dwellings.</p>	<p>The real-time air quality monitoring system and response protocols detailed in the Air Quality and Greenhouse Gas Management Plan would continue to be implemented. The Plan would be reviewed and, if necessary, revised for the Modification.</p>
Spontaneous Combustion	<p>The Modification would not significantly alter the potential for spontaneous combustion events at the Wilpinjong Coal Mine.</p> <p>To minimise the risk of spontaneous combustion occurring in the elevated waste rock emplacement it would be designed and constructed with designated carbonaceous material zones to avoid future exposure of carbonaceous material.</p>	<p>WCPL is undertaking a general review of carbonaceous waste material management on-site and any improvements that arise from this review would be included in a revision of the existing Spontaneous Combustion Management Plan that would also be applied to the Modification.</p>
Groundwater	<p>The Modification would have negligible effect on other groundwater users and no discernable impact on stream baseflows, groundwater upflow or groundwater quality beyond the effects of approved mining.</p> <p>WCPL and Peabody Energy hold adequate licence entitlements to account for the potential take of water associated with the approved operations and the Modification.</p>	<p>Groundwater monitoring and management would continue to be conducted in accordance with the Groundwater Monitoring Programme and Surface and Ground Water Response Plan. The Plans would be reviewed and, if necessary, revised for the Modification.</p>

Table ES-1 (Continued)
Key Outcomes of the Environmental Review

Environmental Aspect	Summary of Environmental Assessment Conclusions	Key Management, Mitigation or Monitoring Measures for the Modification
Surface Water	The Modification would have no discernible impact on stream baseflows, beyond the effects of approved mining. In addition, the incremental effect of the Modification catchment area changes would be negligible in terms of change in streamflow in both Wilpinjong and Cumbo Creeks.	Surface water monitoring and management would continue to be conducted in accordance with the Site Water Management Plan. The Plan would be reviewed and, if necessary, revised for the Modification.
Flora and Fauna	<p>The Modification open cut extension areas would involve direct disturbance of approximately 51.7 hectares of native vegetation (29.8 hectares of woodland and 21.9 hectares of grassland).</p> <p>The Modification (including the implementation of existing biodiversity management measures, rehabilitation and a biodiversity offset) would not have a significant impact on threatened flora, fauna or their habitats.</p>	<p>Flora and fauna management would continue to be conducted in accordance with the Rehabilitation Management Plan and Bushfire Management Plan.</p> <p>A biodiversity offset comprising approximately 211 hectares is proposed to offset the residual ecological impacts associated with the Modification.</p> <p>The biodiversity offset includes approximately 193 hectares of existing forest/woodland and 18 hectares of grassland/shrubland adjoining Goulburn River National Park.</p>
Aboriginal Heritage	An Aboriginal Cultural Heritage Assessment was prepared in consultation with eight Aboriginal parties. A total of 24 Aboriginal sites or values are known to occur directly within or immediately adjacent to the Modification open cut extension areas that may be subject to direct disturbance or indirect disturbance.	The management of Aboriginal heritage within the Modification open cut extension areas would be guided by a revision of the existing Aboriginal Cultural Heritage Management Plan prepared in consultation with the Aboriginal community.
Road Transport	<p>WCPL is co-funding the Ulan Road Strategy with Ulan Coal Mines, Moolarben Coal Mines and the Mid-Western Regional Council. Ulan Road will be upgraded to meet applicable design standards with a range of intersection upgrades, road safety measures, road rehabilitation and road maintenance works.</p> <p>No significant impacts on the performance, capacity, efficiency and safety of the road network are expected to arise as a result of the Modification.</p>	WCPL will continue to work with the Mid-Western Regional Council, Ulan Coal Mines and Moolarben Coal Mines to implement the Ulan Road Strategy.
Land Resources	The Modification open cut extension areas are not considered to be highly productive agricultural land and potential impacts on agricultural enterprise as a result of the Modification would be minimal.	The existing Rehabilitation Management Plan would be revised to incorporate the Modification and a number of measures for improved soil management.
Visual	<p>The Modification primarily involves incremental extensions to existing open cut pits and these would be generally consistent with the nature and scale of the approved Wilpinjong Coal Mine.</p> <p>The Modification would also include removal of part of a minor ridgeline, and construction of an elevated waste rock emplacement within the footprint of the mine (Figure ES-2).</p>	<p>WCPL would temporarily rehabilitate the elevated waste rock emplacement following construction with aerial seeding, prior to reshaping and rehabilitation of the landform as a component of closure and final rehabilitation works.</p> <p>WCPL would also establish additional native vegetation screening on Wollar Road that, once established, would limit potential views of the mine from Wollar Road.</p>
Building and Demolition Waste	The disposal of approximately 2,000 cubic metres of inert building and demolition waste from Peabody Energy owned land in the Wilpinjong Coal Mine waste rock emplacements is not expected to result in any significant additional environmental impacts.	WCPL would prepare a Waste Management Plan for the on-site disposal of inert building and demolition waste.
Community Infrastructure and Services	The current operational workforce would be unchanged. The short-term construction activities are likely to have negligible impact on community infrastructure and services because most of the 20 workers required would already reside in the region.	WCPL financial contributions to the Mid-Western Regional Council in accordance with Wilpinjong Coal Mine Planning Agreements and contributions to various education, community development, health, environmental, arts, culture, and youth services causes would continue.