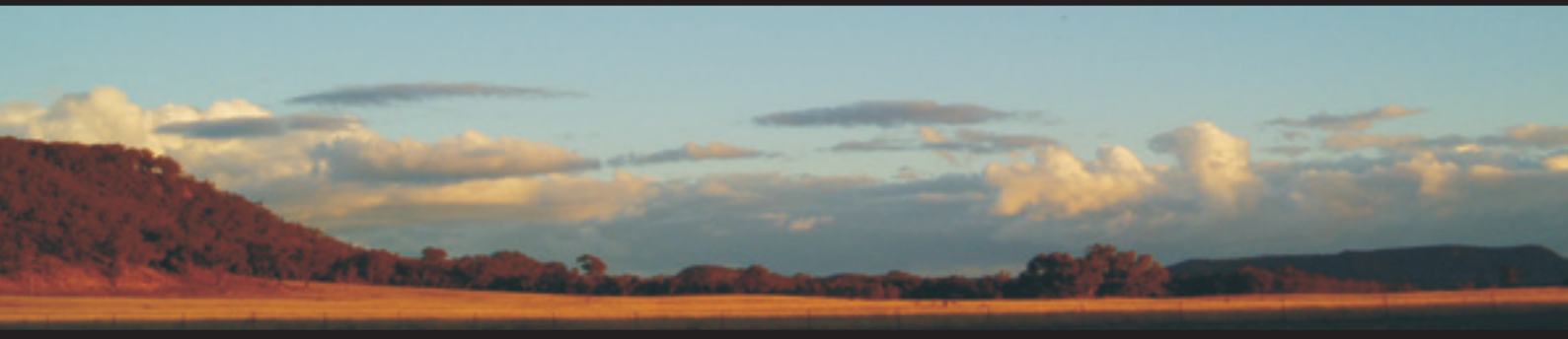


WILPINJONG COAL PROJECT



Project Overview

ENVIRONMENTAL
IMPACT
STATEMENT



Wilpinjong Coal Pty Limited

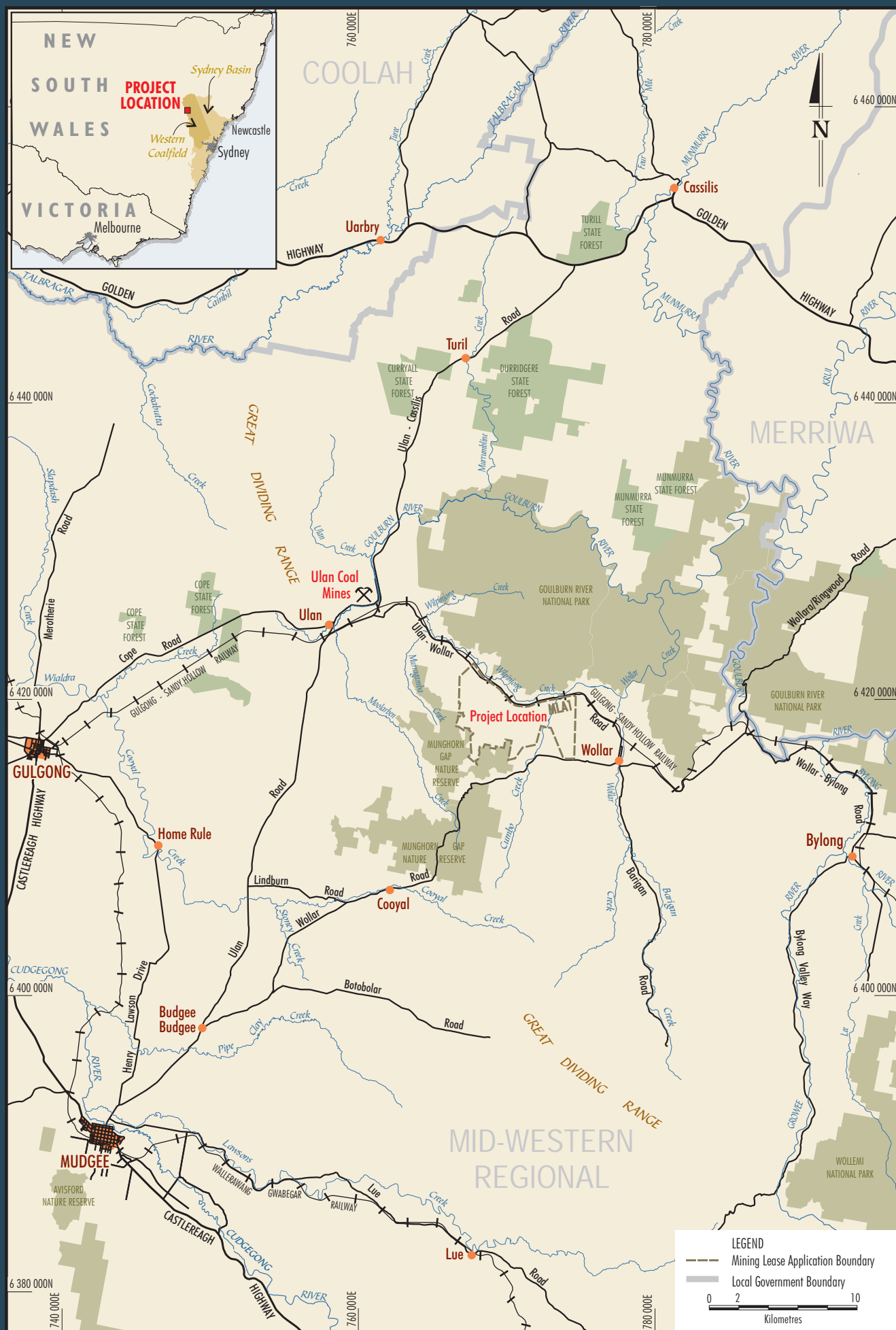


FIGURE 1

WILPINJONG COAL PROJECT

This document provides an overview of the proposed Wilpinjong Coal Project and accompanying Environmental Impact Statement (EIS).

Background

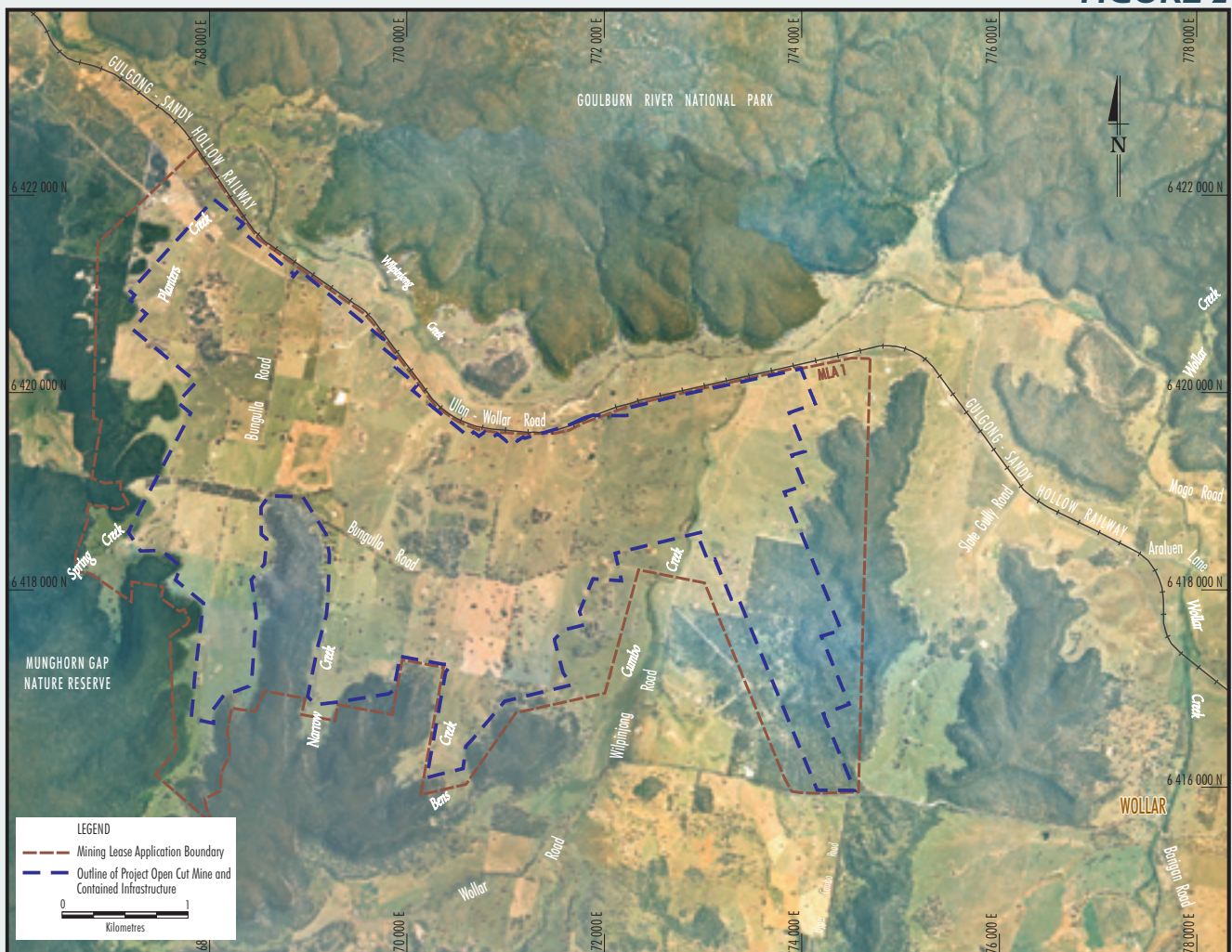
Wilpinjong Coal Pty Limited (WCPL) (a wholly owned subsidiary of Excel Coal Limited) proposes to develop the Wilpinjong Coal Project (the Project). The Project is located approximately 40 kilometres north-east of Mudgee within the Mid-Western Regional local government area (LGA) in New South Wales (NSW) (Figures 1 and 2).

In December 2002 the Department of Mineral Resources initiated an open tender process, on behalf of the NSW Government, seeking tenders for the development of the Wilpinjong coal resource. At the same time, Macquarie

Generation, as the owner and operator of the Bayswater and Liddell Power Stations, issued an Invitation to Tender for the long-term coal supply from the Wilpinjong coal resource.

WCPL was selected as the preferred tenderer and entered into a contract with Macquarie Generation for the long-term supply of coal conditional on, among other things, obtaining relevant approvals including development consent. In December 2003, the Minister for Mineral Resources granted Exploration Licence 6169 to WCPL under the *Mining Act, 1992*.

FIGURE 2



Project Overview

The Project includes the development of an open cut mining operation and the construction and operation of associated infrastructure. Exploration has delineated a coal resource in the order of 523 million tonnes (Mt), including an estimated total open cut run-of-mine (ROM) coal reserve of approximately 251 Mt.

Infrastructure required for the Project would include: a Coal Handling and Preparation Plant; water supply bores and associated pump and pipeline system; an on-site temporary construction camp; mine access road; internal access roads; rail spur and rail loop; and coal handling and train loading infrastructure.

Other activities associated with the Project would include the closure of Wilpinjong and Bungulla Roads, relocation of Cumbo Creek, transportation of coal to market via train, rehabilitation and revegetation of areas disturbed by the Project, regeneration of areas of WCPL-owned land outside of Project disturbance areas and the establishment of Enhancement and Conservation Areas on areas of WCPL-owned land which currently contain remnant vegetation and grazing land, as well as known and potential Aboriginal cultural heritage sites.

The Project is scheduled to commence in the first quarter of 2006. A 21 year mine plan has been prepared at a mining



rate of up to 13 Mt per annum of ROM coal that is expected to produce approximately 147 Mt of product coal for sale to domestic electricity generators and approximately 33 Mt of product coal to export. Open cut mining operations would require the excavation of some 330 million bank cubic metres of waste rock.

It is anticipated that the Project would require a construction workforce of up to 250 employees with an average of approximately 200 employees. The operational workforce of the Project would be in the order of 162 employees at peak production with an average of 100 employees. Nominal shift times during construction would be 7.00 am to 6.00 pm up to seven days per week while the Project would operate 24 hours per day, seven days per week.

Environmental Assessment Process

As required by the provisions of the *Environmental Planning and Assessment Act, 1979* (the Act) the development application for the Project is accompanied by an EIS. Under the provisions of the Act, the Director-General of the

Department of Infrastructure, Planning and Natural Resources prepared "Director-General's Requirements" for the Project specifying the key study areas to be addressed in the EIS.

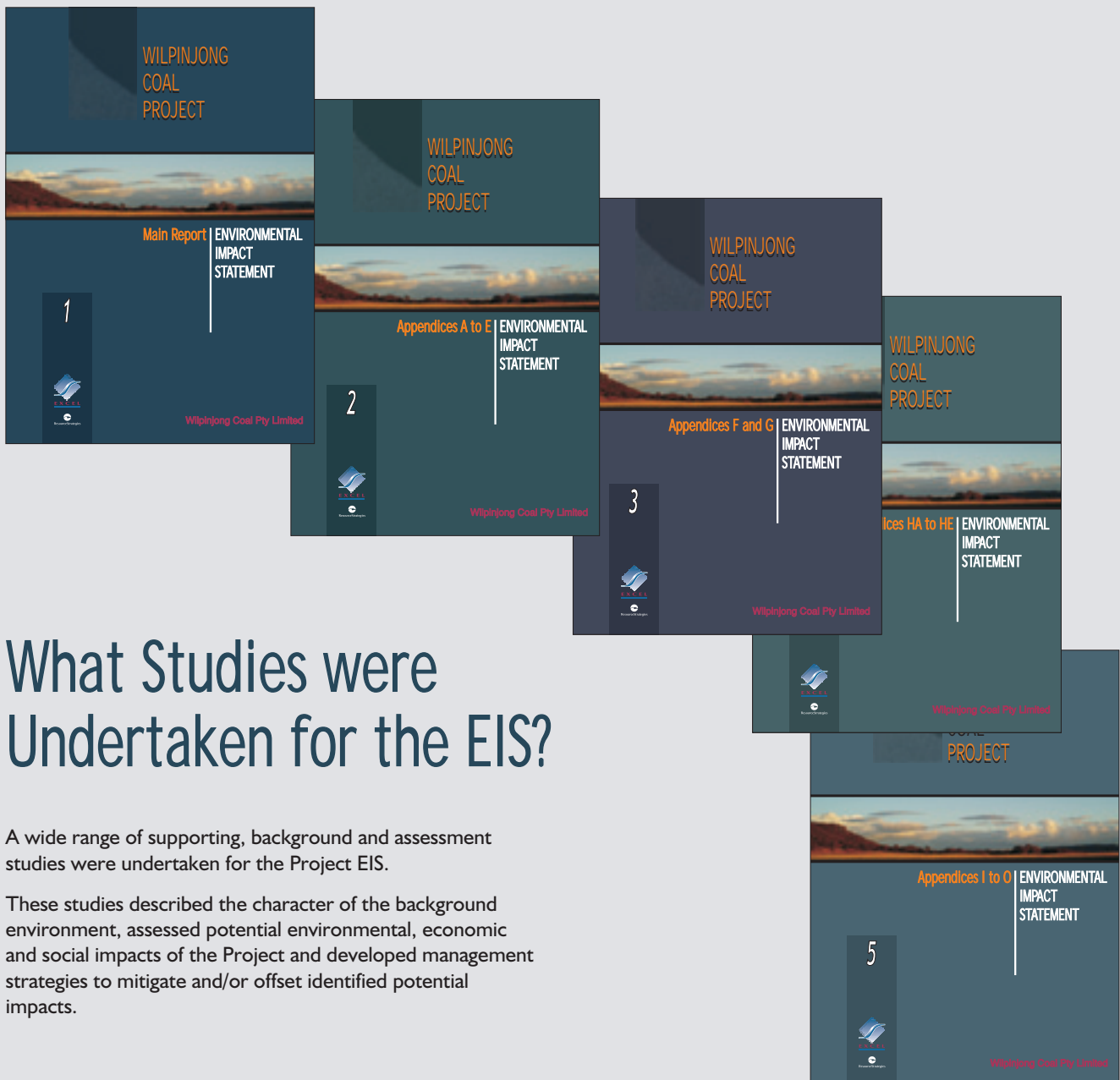


What is an EIS?

An EIS is prepared pursuant to Schedule 2 and clause 72 of the *Environmental Planning and Assessment Regulation, 2000* (the Regulation). In accordance with Schedule 2 of the Regulation, an EIS must include:

- a summary;
- a statement of the objectives of the development;
- an analysis of any feasible alternatives to the carrying out of the development;
- an analysis of the development;
- a compilation of the measures proposed to mitigate any adverse effects of the development on the environment; and
- the reasons justifying the carrying out of the development in the manner proposed.

In accordance with clause 73 of the Regulation and the Director-General's Requirements, the Project EIS must also address key issues relating to surface water, groundwater, noise, blasting and vibration, air quality, Aboriginal heritage, non-Aboriginal heritage, fauna and flora, soil, traffic, transport, utilities and services, hazards, visual impact, waste management and social and economic impacts. Consideration must also be given to relevant planning instruments and State Environmental Planning Policies.



What Studies were Undertaken for the EIS?

A wide range of supporting, background and assessment studies were undertaken for the Project EIS.

These studies described the character of the background environment, assessed potential environmental, economic and social impacts of the Project and developed management strategies to mitigate and/or offset identified potential impacts.

Surface Water

The Project lies in the Wilpinjong Creek catchment and is drained by a number of local tributaries of Wilpinjong Creek including Cumbo Creek, Planters Creek, Spring Creek, Narrow Creek and Bens Creek. Wilpinjong Creek flows into Wollar Creek which flows into the Goulburn River.

Potential impacts on surface water quality relate to lowering the surface water quality by runoff or release of mine water containing sediments, soluble salts, process reagents (i.e. flocculant/magnetite), fuels, oils and grease. Potential impacts on surface water flows include the potential for the Project to affect flows in Wilpinjong Creek as a result of reductions in overland flow from the Project catchment and indirectly through reductions in the rate of discharge of groundwater to the creek.

Project water management strategies include the minimisation of disturbance areas, isolation of runoff from undisturbed areas, containment and recycling of runoff from disturbed areas, progressive stabilisation and revegetation of disturbed areas and erosion and sediment control.

The Project water management system would be developed in accordance with accepted water management principles including minimising contamination of water and maximising re-use of mine water.

The Project would include the relocation of Cumbo Creek to enable flows from the south to continue through the Project area and into Wilpinjong Creek during mining operations.

Potential impacts of the Project on the aquatic ecosystems are primarily associated with the construction of water management infrastructure and the extraction of groundwater by mine dewatering and operation of the borefield.



Mitigation of potential impacts on Wilpinjong Creek would be in the form of maximising the diversion of clean runoff around the site and via the proposed revegetation and exclusion of livestock from 10 kilometres of Wilpinjong and Cumbo Creeks on WCPL-owned land.

Groundwater

There are approximately 68 registered bores and wells within approximately 10 km of the Project area. The majority are located on WCPL-owned land, at Wollar village or at Ulan Coal Mines to the west of the Project. These bores and wells extract water from various aquifers including the Illawarra Coal Measures, the Nile Subgroup, Wilpinjong Creek alluvium, Cumbo Creek alluvium, Wollar Creek alluvium, Murragamba Creek alluvium and a volcanic intrusion north of Wollar village.

Impacts to groundwater levels would be predominantly restricted to WCPL-owned bores. Only two potentially impacted bores are not located on WCPL-owned land. No bores or wells installed in the Wilpinjong Creek alluvium or Wollar Creek alluvium and no privately-owned springs are expected to be affected.

Groundwater modelling indicates that the Project would reduce the long term average baseflow of Wilpinjong Creek. However, results of the modelling also indicate that following cessation of groundwater extraction from the Project borefield, gradual groundwater level recovery would be accompanied by corresponding recovery of creek baseflow.

Should groundwater monitoring indicate that the Project is having an adverse effect on existing groundwater users (i.e. reduced groundwater yield from existing bores), then the water supply would be re-instated by WCPL either by deepening the existing bore, construction of a new bore or piping water from an external source.

Mitigation of the predicted reduction in average flows in Wilpinjong Creek would be in the form of designing the Project water management system to maximise the diversion of runoff from undisturbed areas around Project construction/development and operational areas, together with progressive rehabilitation to reinstate free-draining completed mine landforms and the exclusion of livestock and revegetation of 10 kilometres of Wilpinjong and Cumbo Creeks on WCPL-owned land.

Acoustics

A noise and blasting impact assessment was undertaken for the Project utilising assessment criteria derived in accordance with policies/guidelines recommended by the Department of Environment and Conservation.

Select Project mobile equipment would be modified to reduce noise emissions as the open cut operations move towards the edge of the Project area and closer to receptors (e.g. dwellings).

Modelling of daytime, evening and night-time noise emissions from the Project indicates that there would be exceedances of the Project specific noise criteria at a number of nearby dwellings and privately owned vacant lands. Modelling also indicates that noise emissions in the adjoining Munghorn Gap Nature Reserve and Goulburn River National Park would be below the relevant criteria.

Noise management procedures for dwellings and privately owned vacant lands would include:

- noise monitoring on-site and within the community;
- prompt response to any community issues of concern;
- refinement of on-site noise mitigation measures and mine operating procedures where practicable;
- discussions with relevant landowners to assess concerns and develop practical mitigation;
- consideration of acoustical mitigation at receivers; and
- consideration of negotiated agreements with landowners.

The blast emission assessment found that the relevant building damage criteria would be met at all dwellings. Similarly, all emission levels would be well below the damage criteria for Wollar's two churches (i.e. St Luke's Anglican Church and the St Laurence O'Toole Catholic Church).

Predictive modelling, including changes to the blast design, indicates that the recommended human comfort vibration and airblast criterion would be met at all except one receptor (i.e. one nearby dwelling). In addition, modelling indicates that vibration velocities at nearby Aboriginal rock art sites are below the geological damage criterion.

Air Quality

The air quality impact assessment considered the likely impact of predicted Project air emissions. The assessment accounted for existing background air quality and future emissions from relevant surrounding mining operations.

Predictions indicate that one nearby dwelling and an area of vacant land would experience either suspended particulates or dust deposition levels above the relevant assessment criteria at some time over the Project life.

A range of controls would be employed to reduce dust emissions from the Project. These controls are based on procedures developed at contemporary NSW coal mines and techniques recommended by the Department of

Environment and Conservation. The main components of controls for wind blown dust would include minimisation of disturbance areas, progressive rehabilitation of mine waste rock emplacement areas, utilising water carts to minimise wind blown and traffic generated dust and maintaining water sprays on product coal stockpiles.

A greenhouse gas assessment determined that the major source of Project-related emissions of greenhouse gas would be the combustion of diesel fuel. Minimising fuel usage by mobile plant (and associated greenhouse gas emissions) is an objective of mine planning and Project cost control systems. Additional management/minimisation of greenhouse gas emissions would include regular maintenance of plant and equipment, consideration of energy efficiency in plant and equipment selection/purchase and establishment of significant areas of woodland vegetation over the Project life.

Flora

The condition of native vegetation in the Project area and surrounds varies, with the most disturbed areas generally occurring along watercourses and on flat and undulating areas which have been cleared for agriculture. There are some small uncleared areas of remnant vegetation scattered throughout the Project area and surrounds and these are mainly associated with stony outcrops.

A total of 403 plant species including 298 native and 105 introduced species in eight vegetation communities were recorded by the flora survey and assessment.

No individual flora species listed as threatened under the NSW *Threatened Species Conservation Act, 1995* (TSC Act) or the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act) were recorded within the Project disturbance area.

The White Box, Yellow Box, Blakely's Red Gum Woodland/Grassy White Box Woodlands endangered ecological community (the endangered ecological community) (listed under both the TSC and EPBC Acts) was recorded within the Project disturbance area.

The Project would result in the removal of approximately 290 ha of remnant vegetation including approximately 47 ha of the endangered ecological community.



Mitigation measures relevant to vegetation clearance activities would include the retention of areas of existing native vegetation and avoidance of clearance, development of a vegetation clearance protocol, re-use of cleared vegetative material, management of topsoil resources and progressive clearance of vegetation in conjunction with open cut mining operations and progressive rehabilitation of completed landforms.

An Environmental Protection Plan has been developed for the Project which would provide for an overall net increase of some 1,095 ha in woodland vegetation through rehabilitation and regeneration, the enhancement and conservation of remnant vegetation and the establishment of links between the rehabilitation areas, regeneration areas and existing remnant vegetation.

Fauna

Terrestrial fauna surveys undertaken for the Project identified a total of 185 fauna species, including 11 introduced species and comprising six amphibians, 17 reptiles, 123 birds and 39 mammals. Threatened fauna species listed under the TSC Act and/or the EPBC Act recorded by the Project surveys included ten birds and seven mammals.

Vegetation clearance associated with the Project has the potential to impact terrestrial fauna through the reduction in opportunities for foraging, breeding, nesting, predator avoidance and movement between areas. Indirect impacts of the Project on terrestrial fauna include disruptions to dispersal/migration of fauna as a result of fragmenting vegetation remnants, increased populations or concentrations of introduced species, disruptions to routine activities as a result of Project noise and blasting, increased incidence of fauna mortality via vehicular strike, modification of behavioural patterns as a result of Project lighting and an increased risk of accidental bushfires altering fauna habitat.

In addition, the Project has the potential to indirectly impact on the fauna of Goulburn River National Park and Munghorn Gap Nature Reserve by increased noise levels, incursion of introduced species, night lighting and increased incidence of bushfire.

Mitigation measures relevant to vegetation clearance activities would include the development of a vegetation clearance protocol, consideration of seasonal factors to minimise disturbance to potential breeding and hibernation activities, development of fauna management strategies to minimise the impact of clearing activities on resident fauna in the short-term and to minimise the loss of habitat in the long-term, the placement of nesting boxes in suitable habitat for birds and arboreal mammals, the relocation of habitat features salvaged from felled trees and the establishment of hollow-developing tree species.

An Environmental Protection Plan has been developed for the Project which would provide for an overall net increase of some 1,095 ha in woodland vegetation through rehabilitation and regeneration, the enhancement and conservation of remnant vegetation and the establishment of links between the rehabilitation areas, regeneration areas and existing remnant vegetation. This would include the conservation of areas of known habitat for a number of threatened fauna species.

Aboriginal Cultural Heritage

A survey and assessment of Aboriginal cultural heritage within the Project area and associated enhancement and conservation areas was conducted in conjunction with local Aboriginal groups. A total of 235 Aboriginal cultural heritage sites were identified during the surveys including isolated finds and artefact scatters in open contexts, rock shelters with surface artefacts and/or potential or confirmed archaeological deposits, rock shelters with rock art, possible and probable Aboriginal scar trees, potential archaeological deposits and reported places of Aboriginal cultural significance.

The majority of the Project disturbance area was identified as having limited subsurface archaeological potential. Some areas were considered to have more archaeological potential to provide a chronology of occupation. These areas include alluvium associated with Wilpinjong and Cumbo Creeks, alluvial terraces, colluvium and alluvial fan deposits in the heads of narrow valleys, sand and gravel deposits associated with *in-situ* weathering and rock shelters.

Potential impacts on items of Aboriginal heritage include surface disturbance associated with construction activities and open cut mining operations, the effects of blasting or dust on rock art sites and inappropriate visitation or vandalism of sites.

Appropriate licensing for all sites located within the Project disturbance area would be sought under Sections 87 and/or 90 of the *National Parks and Wildlife Act, 1974*.

Mitigation measures for items of Aboriginal heritage developed in consultation with local Aboriginal groups include:

- a number of modifications to the Project layout that were made during the EIS process to avoid disturbance of Aboriginal cultural heritage sites;
- a commitment to develop an Aboriginal Cultural Heritage Management Plan in consultation with the Aboriginal community;
- the continued involvement of the Aboriginal community in the management of Aboriginal cultural heritage over the life of the Project;
- collection and relocation of selected Aboriginal objects to a "Keeping Place" prior to disturbance for documentation and storage prior to being replaced in the landscape following final rehabilitation works;
- salvage excavation, analysis and reporting for selected sites/areas prior to disturbance; and
- the establishment and management of the enhancement and conservation areas to conserve Aboriginal cultural heritage.



Non-Aboriginal Heritage Impact Assessment

Within the Project area and surrounds, 21 structures or sites were identified to contain some historical interest and nine were considered of local heritage significance. No sites of regional or state significance were identified.

All nine heritage sites of local significance have been photographically recorded to an archival standard in accordance with Heritage Office guidelines and these records will be provided to the Mudgee Historical Society.

Two of the local heritage sites identified during the survey are to be removed in accordance with a pre-existing development approval from the Mid-Western Regional Council. Four heritage items of local significance were identified within the Project disturbance area. The majority of these sites are in poor or ruined condition and all would be removed when mining through these locations.

A number of the sites contain materials such as stone and wooden slabs that would be salvaged and offered to local landholders or the Mudgee Historical Society for conservation or re-use.



Land Resources

Studies undertaken to characterise the land resources and landscape in the vicinity of the Project included a visual impact assessment, an assessment of agricultural condition (i.e. soils, rural land capability and agricultural suitability) and a land contamination history.

In the vicinity of the Project, the Goulburn River National Park and Munghorn Gap Nature Reserve incorporate elevated sandstone plateau areas with steep and blocky sandstone escarpments forming sharp boundaries with cleared lowland areas.

The local setting is defined by the largely cleared and gently sloping lands of the pastoral valley landscape unit comprising the Wilpinjong and Cumbo Creek floodplain. Sparsely scattered trees are present across the Project area which is surrounded by the rising and well-vegetated backdrop of the Goulburn River National Park, Munghorn Gap Nature Reserve and wooded ridgelines.

Modifications to the existing topography that would potentially result from the Project relate to the open cut mining operations and the placement of mine waste rock, coarse rejects and tailings into the mined out voids and one out-of-pit tailings disposal area.

Mine infrastructure and landforms have been designed and located to integrate with existing topography and landscape features.

Additional measures that would be employed to mitigate potential visual impacts include the design and construction of Project infrastructure in a manner that minimises visual contrasts, progressive implementation of the rehabilitation programme, early establishment of vegetation on safety bunds along the northern pit boundaries and the establishment of screening vegetation at select locations.

The final landform design concept proposes a balanced outcome, with the aim of establishing the potential for both sustainable agriculture and endemic woodland habitat.



Economic

A benefit cost analysis and regional economic assessment was undertaken for the Project. The assessment found that construction and operation of the Project would stimulate demand in the local and regional economy leading to increased business turnover in a range of sectors and increased employment opportunities.

Regionally, the construction of the Project is estimated to contribute \$40 million (M) in annual regional output or business turnover, \$11M in annual household income and 270 in direct and indirect employment.

The operation of the Project is estimated to contribute to the region, \$244M in annual regional output or business turnover and \$14M in annual household income. State-wide, the

Project is expected to contribute \$359M in annual regional output or business turnover and \$25M in annual household income.

The benefit cost analysis conducted for the Project indicates that the Project would result in incremental production benefits of approximately \$1,454M. The figure of \$1,454M represents the opportunity cost to society of not proceeding with the proposal.

Hazard and Risk

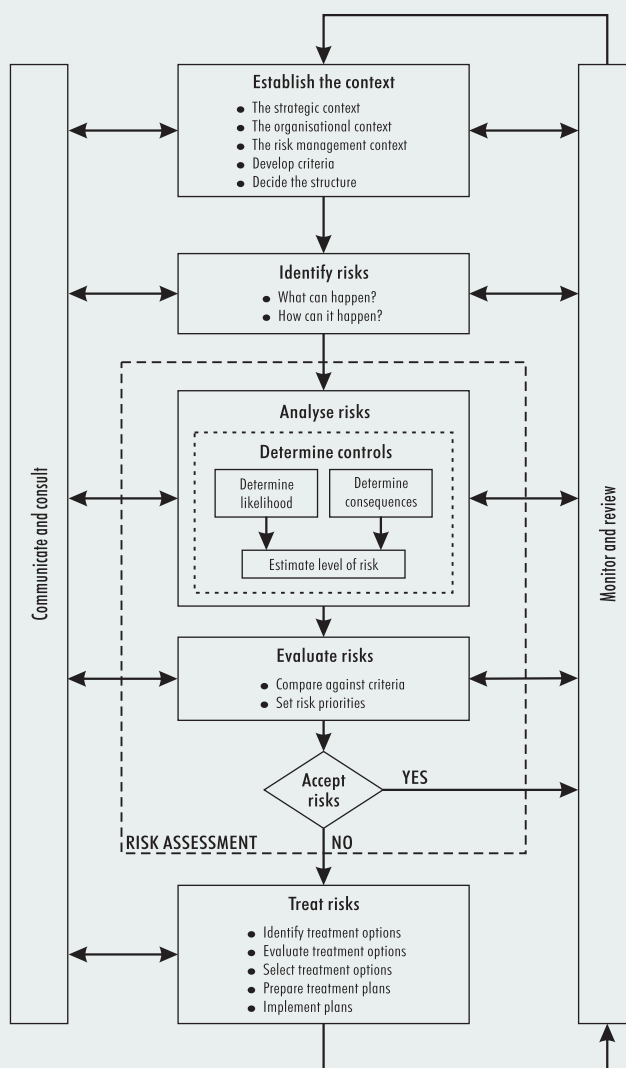
A preliminary hazard analysis was conducted for the Project to gain an understanding of the associated potential hazards and risks. Potentially hazardous materials required for the Project are generally limited to the storage and usage of conventional explosives, diesel, petrol and hydrocarbons. Risks posed by the usage of these materials for the Project would include transport, handling and consumption.

The preliminary hazard analysis found that the proposed Project infrastructure layout provides for an appropriate buffer between the mine infrastructure and storage areas and potential off-site receptors such as watercourses, public roads and private property.

A number of hazard preventative and mitigative measures would be described in management plans for the Project, including the Blast Management Plan, Bushfire Management Plan, Site Water Management Plan and the Traffic Management Plan.

In addition, several hazard mitigation/preventative measures would be adopted for the Project including:

- ongoing and timely maintenance of all mobile and fixed plant and equipment;
- appropriate staff training;
- construction of mining and civil engineering structures in accordance with applicable codes, guidelines and Australian Standards;
- implementation of site specific management measures to reduce the potential for off-site impacts of blast vibration and overpressure;
- management of coal stockpiles to reduce the potential for spontaneous combustion; and
- the development of emergency response procedures manuals and systems.



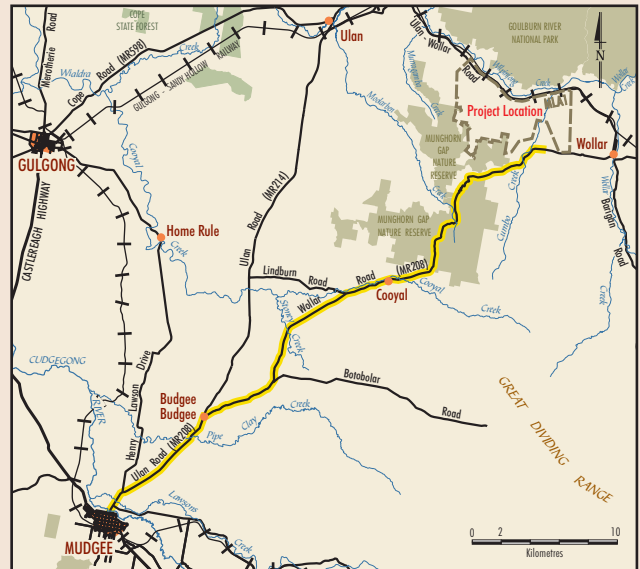
Transport

A road transport assessment was conducted for the Project and assessed the potential impacts of the Project on existing traffic volumes and road conditions. Potential road transport impacts associated with the Project relate primarily to the movement of employees and consumables/deliveries during the operational life of the mine, together with the movement of construction workers and building supplies during the construction phase.

Construction of the Project would result in an increase of both light vehicles and small truck/heavy vehicle movements. Lower levels of employment during the operational phase would result in a reduction of additional traffic movements associated with the Project. The majority of the workforce would be expected to access the site from Mudgee on Wollar Road/Ulan Road (MR208).

All coal would be hauled on internal roads on mine-owned land and transported externally by rail (i.e. no coal would be hauled along public roads). Based on an 8,500 tonne train capacity, the Project would result in the addition of up to 12 train movements in any one day (i.e. six arrivals and six departures).

Measures developed to minimise impacts on the local road transport network include contributing to the upgrade of the



Ulan Road/Wollar Road intersection, designing the mine access road and associated intersection with Wollar Road to comply with relevant guidelines and upgrading sections of Wollar Road to provide a minimum 6 m pavement width on the main access route from Mudgee to the Project.

Community Infrastructure

A community infrastructure assessment was conducted for the Project and assessed potential impacts on housing, education facilities, community services, employment and population.

The Project is expected to employ up to 250 people during construction and have a peak employment operational workforce of 162 direct employees with 243 flow-on employment opportunities. It is expected that approximately 40% of the construction workforce, 50% of the operational workforce and 70% of flow-on jobs would be sourced from within the local region.

It is anticipated that the majority of the non-local operational workforce would settle in the townships of Mudgee and Gulgong with the remainder spread throughout the local rural community. The likely demand for housing in Mudgee, Gulgong and the surrounding rural areas associated with the Project operational phase is expected to be able to be serviced without any undue pressure on land and physical infrastructure services.

In Mudgee and Gulgong, elements of community infrastructure such as education, health and other community services and recreational services generally have sufficient excess capacity to accommodate the increase in population and housing/land demand generated by the Project.

WCPL would contribute to the provision, extension or augmentation of public services currently provided. In addition, WCPL would develop a mine exit strategy in consultation with regulatory agencies and the public to evaluate and ameliorate the potential impacts of reductions in employment that may occur at the end of the Project life.

Community Consultation

WCPL is committed to an open and constructive consultation programme, which aims to:

- inform government and public stakeholders of the nature and status of the Project;
- present information to stakeholders to facilitate a clear understanding of the Project;
- identify local concerns or interests in the Project; and
- establish dialogue between WCPL and government and community stakeholders that would be ongoing, should the Project be approved.

Project consultation commenced in early 2004 with the establishment of a Project Community Consultative Committee (CCC). The Project CCC chairperson was appointed by the Minister for Mineral Resources and the CCC comprises four community representatives, a local council representative and representatives from WCPL and the Department of Primary Industries - Mineral Resources. Several Project CCC meetings have been held which has enabled WCPL to inform the community of its plans and assessment findings and for community representatives to raise any concerns identified by the wider community.

Public meetings/forums held in August 2004, December 2004 and March 2005 at Wollar have also been utilised to encourage the community to raise any concerns they might have during the environmental assessment period.

Other forms of consultation have included regular contact with surrounding landholders, conduct of EIS baseline studies and conduct of a bore census.

Project consultation with the Aboriginal community included introductory meetings to describe the Project and discuss cultural heritage assessment, a site visit for Elders and Aboriginal community members, provision of reports and attendance by WCPL at public meetings advertised/called by the Mudgee Local Aboriginal Land Council.

As a result of the community consultation undertaken, several issues of particular interest to the community were raised. These issues such as the status of Landcare regeneration areas within the Project area and Aboriginal cultural heritage values are outlined and addressed in the EIS.

During the exhibition period, the EIS would be made publicly available including copies to be displayed at the Mid-Western Regional Council office in Mudgee and at the Wollar Service Centre. Following lodgement of the EIS, WCPL will continue to consult with the public regarding the Project. WCPL proposes to discuss the Project individually with interested neighbours as appropriate, conduct an informal information session at Wollar during the EIS exhibition period and provide an opportunity for local people to meet with the company to discuss EIS assessment findings that are of specific relevance to them.



Environmental Protection Plan

A Project Environmental Protection Plan has been developed to provide for environmental management of the Project area and surrounds, the rehabilitation of Project disturbance areas and the establishment, enhancement and conservation of areas of woodland vegetation. The Environmental Protection Plan encompasses:

- Environmental Management and Monitoring;
- Rehabilitation Areas;
- Revegetation Areas;
- Enhancement and Conservation Areas; and
- Mine Closure and Completion Criteria.

Environmental management plans and monitoring programmes covering the Project life (i.e. mine construction, operation and closure) have been developed utilising the findings of the EIS baseline studies and impact assessments.

Environmental management plans that would be prepared for the Project include a Land Management Plan, Erosion and Sediment Control Plan, Bushfire Management Plan, Site Water Management Plan, Water Supply Borefield Plan, Cumbo Creek Relocation Plan, Flora and Fauna Management Plan, Weed and Animal Pest Control Plan, Traffic Management Plan, Aboriginal Cultural Heritage Management Plan, Spontaneous Combustion Management Plan, Mine Closure Plan and Final Void Management Plan.

An environmental monitoring programme would be developed for the Project including meteorology, air quality, noise, blasting, erosion and sediment control, surface water, groundwater, aquatic biology, weeds, animal pests and traffic flows. Monitoring results as well as monitoring site locations, parameters and frequencies would be reviewed annually through the Annual Environmental Management Report process, in consultation with relevant authorities and the Project CCC.

Rehabilitation and revegetation of areas disturbed by the Project would be undertaken progressively as mining proceeds and as infrastructure is decommissioned. The revegetation programme provides for a combination of woodland and pasture outcomes.



Rehabilitation objectives for the Project include creating safe, stable, adequately drained post-mining landforms that are consistent with the local surrounding landscape, producing a net increase of some 1,095 ha in woodland vegetation, increasing the continuity of woodland vegetation and preserving the existing beneficial use of water resources (Figure 3).

The establishment of woodland vegetation in the regeneration areas would include the revegetation of the banks of Wilpinjong and Cumbo Creeks. The revegetation of the creek banks would include native flora species and would increase the quantity of riparian vegetation along these creeks.

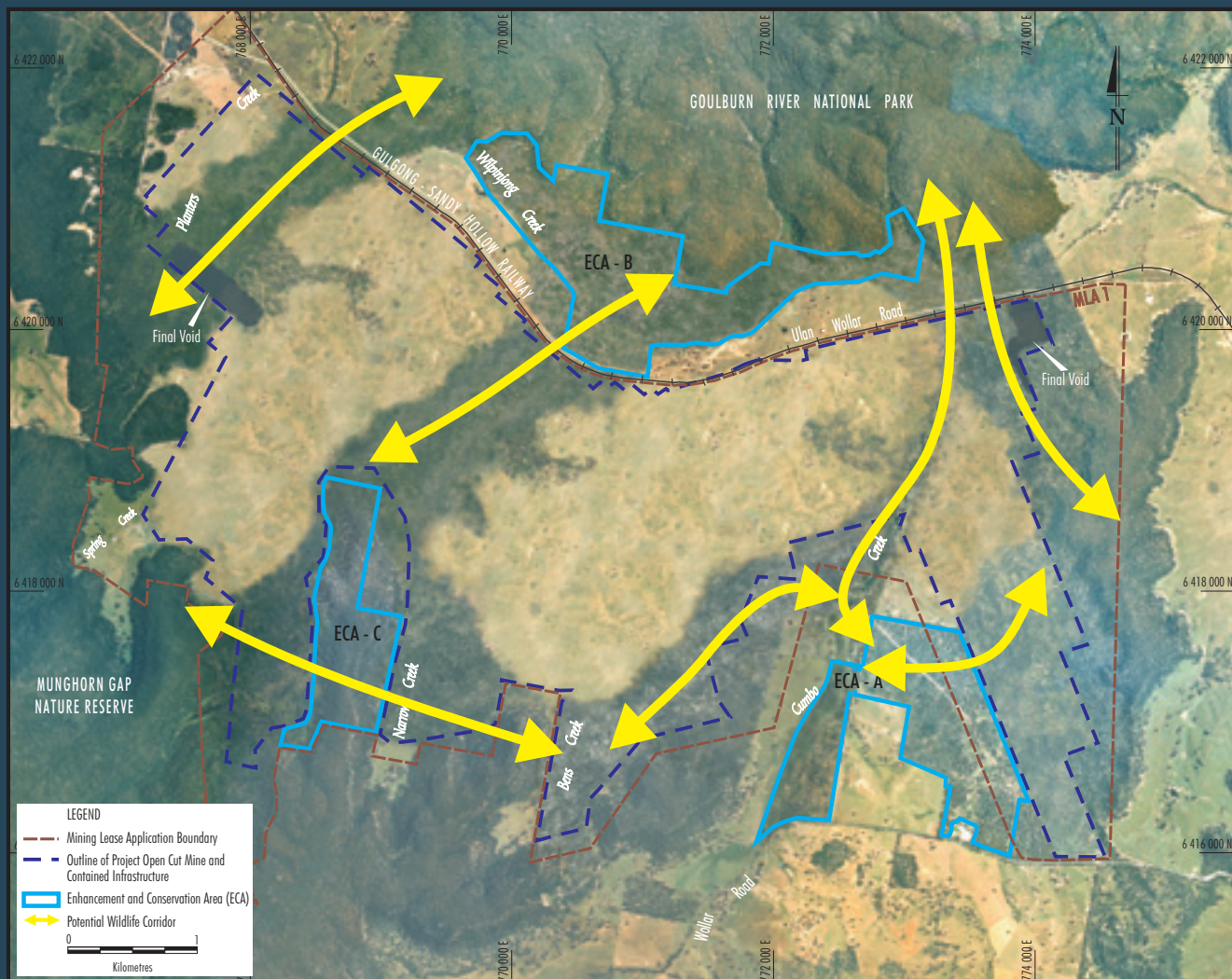


FIGURE 3

Enhancement and Conservation Areas (ECAs) (Figure 3) would be developed by the Project on areas of WCPL-owned land which currently contain both remnant vegetation and grazing land, as well as known and potential Aboriginal cultural heritage sites. The general flora and fauna attributes of the ECAs include:

- existing vegetation remnants (some 295 ha), including some 80 ha of the endangered ecological community that would be subject to enhancement and conservation;
- areas of predominantly cleared grazing land (some 185 ha), available for the establishment of woodland vegetation through natural regeneration/selective planting;
- the opportunity to establish some 50 ha of the endangered ecological community in the areas comprising cleared grazing land;
- known and potential habitat for threatened fauna species;

- the opportunity to establish riparian vegetation along Wilpinjong and Cumbo Creeks through natural regeneration/selective planting; and
- similar landforms to those represented within the Project disturbance area.

Enhancement in the ECAs would be achieved by the implementation of appropriate land management practices such as weed control, management of livestock access to encourage natural regeneration and selective planting. Conservation of the ECAs would be achieved through a rezoning application.

Prior to the completion of mining operations, a Mine Closure Plan would be developed in consultation with relevant authorities and the Project CCC. The Mine Closure Plan would document the final mine closure process, final rehabilitation works and post-closure maintenance and monitoring requirements.