



APPENDIX 3

Community Information Sheets

Mount Owen Continued Operations Project

01

COMMUNITY INFORMATION SHEET

DECEMBER, 2012

Where to from here – next steps?

The issues and concerns raised by you have given us a clear focus for project studies moving forward.

We are committed to working with the local community, Singleton Council, government agencies and other interested stakeholders. Thanks to your feedback, we have now started our technical, environmental and social impact studies in the key areas you have nominated, as well other areas that may be impacted.

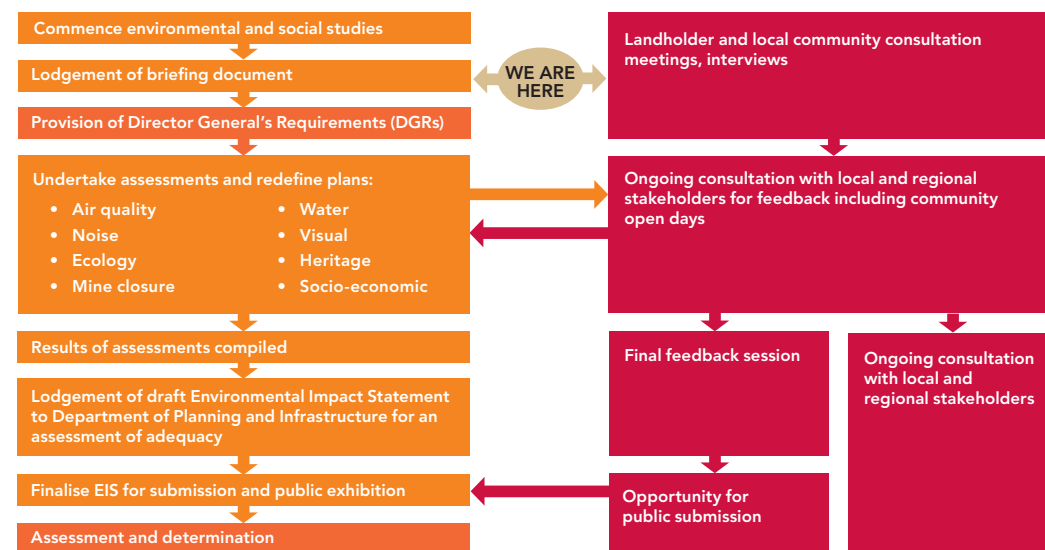
These include:

- noise
- air quality
- visual impacts
- water
- ecology
- archaeology and Aboriginal cultural heritage
- closure, post mining land use and landform

In the next phase of consultation on the project, we will be seeking further feedback and input on the initial findings of our studies.

We will continue to engage with you throughout the Environmental Impact Assessment program through ongoing face-to-face meetings and community open days. You will also be kept up to date on project status through the issuing of regular information sheets and project postcards.

The following diagram provides an indication of the planning process and the steps that still need to be taken to finalise our project submission to Government.



Want more information?

If you would like to be involved in the consultation program, please contact:

Vicki McBride
Mount Owen Continued Operations Approvals Manager
T 0438 646 286
E vmcbride@xstratacoal.com.au

Pam Simpson
Environment and Community Manager – Mount Owen
T 6570 0802 or 0418 786909

We look forward to working with the local community and other key stakeholders as we move forward with the Mount Owen Continued Operations project, and welcome your participation and feedback.



Pam Simpson (above left) and Vicki McBride

COMMUNITY INFORMATION SHEET

DECEMBER, 2012

Mount Owen Continued Operations Project

Xstrata Coal's Mount Owen mine has been part of the greater Ravensworth community since 1993.

In that time, we have worked hard to safely reach our production targets while operating to achieve minimal impacts on our neighbours. This includes a rehabilitation and forestry regeneration program that has achieved recognition as best practice in restoration of native forests.

We have now reached a point in our mine planning that requires development of a blueprint for continued operations at Mount Owen.

This information sheet provides details about Xstrata Coal's proposed plans for its Mount Owen mine, which we have named the Mount Owen Continued Operations Project.

The project will maintain employment at Mount Owen, which currently stands at approximately 660, of which 57% are based in the Upper Hunter Region, and will continue to support local service providers and businesses.

We will not be increasing the rate of mining or changing our operating hours, and the proposed mining area remains within existing Mount Owen-owned land and mining leases. Our commitment to industry-leading rehabilitation practices at Mount Owen will continue.

This information sheet also outlines studies currently underway to deliver a roadmap that will guide future mining, and ensure that we continue to be a responsible member of the local community.

We recently began consultation in an effort to gain a better understanding of the key impacts, issues and concerns you might have on the proposed project. This is providing important feedback that will inform our management plans, mine designs and environmental and social impact assessments.

The key outcomes of this initial consultation, as well as a brief outline of our planning, are provided in this information sheet.

We would like to take this opportunity to thank all community members who have participated in the consultation for their time and initial feedback.

To ensure that the planning, environmental and social issues and impacts are appropriately considered we have engaged Umwelt Australia to undertake an Environmental Impact Assessment program for the project.

We are also working closely with social impact specialists (Coakes Consulting) to conduct a Social Impact and Opportunities Assessment to support our community and stakeholder consultation programs.

Our studies and consultation are an important part of our planning process. Feedback from these reports will help design our mining options, identify key social and environmental impacts, and develop plans to minimise those impacts.

Our aim is to provide opportunities for active involvement and input from all stakeholders into our final project designs.

We will be talking with you throughout the project development process and Environmental Impact Assessment.



Xstrata commitment to sustainable development

We are committed to the goal of sustainable development. We balance social, environmental and economic considerations in how we manage our business. We believe that operating to leading standards of health, safety and environmental management, contributing to the development of sustainable communities, and engaging with our stakeholders in two-way, open dialogue, regardless of our location, enhances our corporate reputation and is a source of competitive advantage. This enables us to gain access to new resources, maintain a licence to operate, attract and retain the best people, access diverse and low-cost sources of capital, identify and act upon business opportunities, and optimise our management of risks.

What is the Mount Owen Continued Operations Project?

Our Mount Owen Continued Operations Project will extend the life of Mount Owen mine and support the continued employment of mining sector workers and providers in the area.

We will not be increasing the rate of mining or changing our operating hours, and the proposed mining area remains within existing Mount Owen-owned land and mining leases.

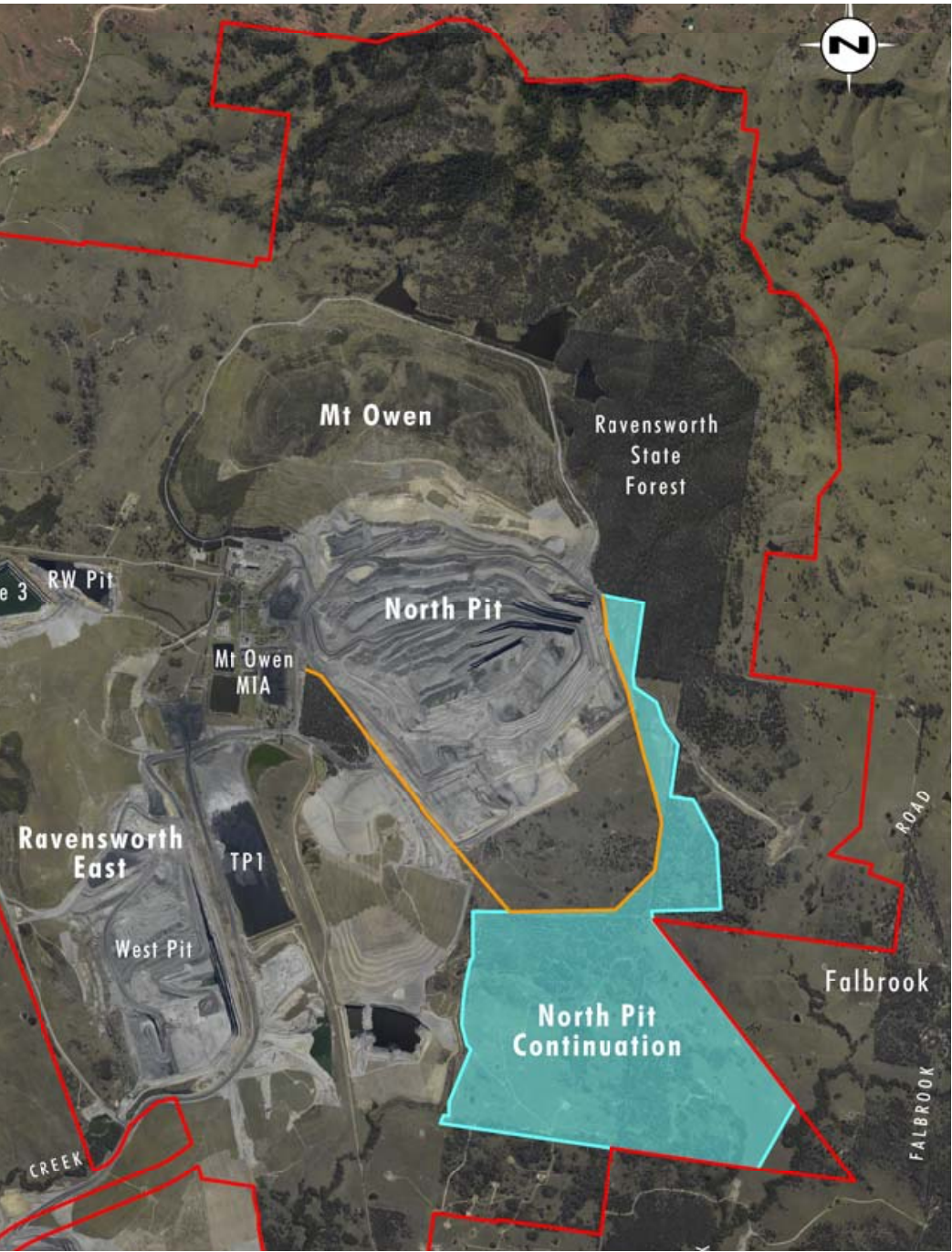
The key features of the project are:

- continuation of existing operations, with the mine footprint extending to the south (refer to Figure below)
- continued employment at Mount Owen, which currently stands at approximately 660, with an approximate additional workforce of 210 required for the construction phase

- no increase in the rate of mining or change in operating hours
- an increase in the maximum allowable rate of coal processing to match the existing mining production rate of the Mount Owen Complex, from 15 to 17 million tonnes per annum run-of-mine coal

- use of existing Ravensworth East conveyor infrastructure to send run-of-mine coal and gravel to Xstrata's neighbouring Liddell Operations
- upgrades to a section of Hebden Road and building a two way bridge across Bowmans Creek and the railway
- alterations to the existing Mount Owen rail spur with an additional line and northern turn out, and
- upgrades to the existing mine infrastructure area and product coal stockpile.

Our proposed project will continue Xstrata Coal's highly regarded rehabilitation practices and the proposed mine designs will not encroach into our designated biodiversity offset areas.



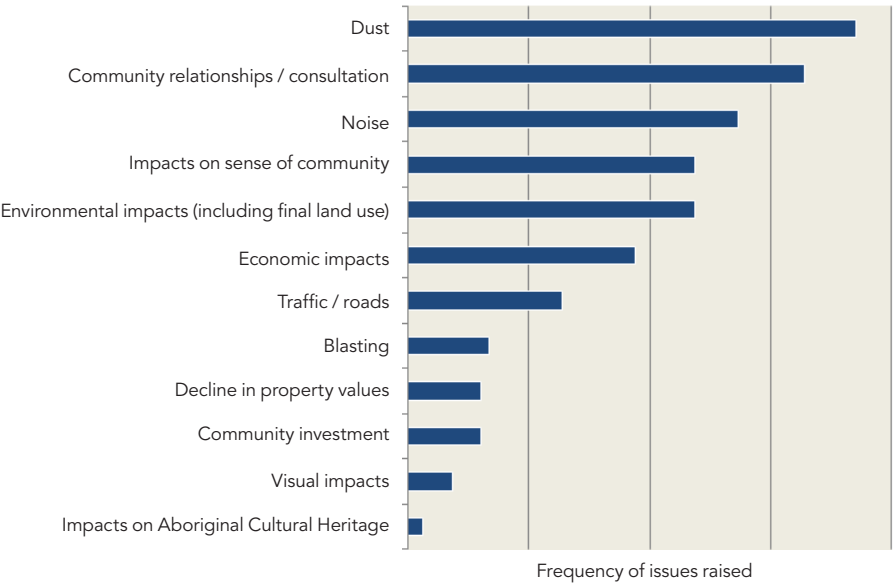
- Legend**
- Project Area
 - North Pit Continuation
 - Currently Approved Pit Shell

What you have told us so far...

We've discussed a range of different thoughts, opinions, issues and ideas with you about the existing operation, the proposed project and open cut coal mining in the Hunter Valley in general.

Understandably, there are concerns around impacts from the Mount Owen mine (for example, noise) as well as the cumulative impact of mining across the region (for example, dust).

The issues raised most frequently through these discussions are shown on the following graph.



Proposed upgrade to Hebden Road

An important part of the Mount Owen Continued Operations Project is upgrade to a section of Hebden Road, near the New England Highway intersection.

The proposed works will include construction of an overpass over the Main Northern Railway Line and a two way bridge across Bowmans Creek. The objective of these works is to improve safety for all road users.

The figure at left shows a three-dimensional image of the current proposed design and alignment of the new section of road.

Aboriginal Cultural Heritage

We commenced some onsite investigations over the last month, including the initial stage of the archaeology study for the project, with a number of the Registered Aboriginal Parties participating in this early work. Throughout 2013, we will be working with Traditional Knowledge Holders to develop Cultural Heritage Assessments for the area.



The Mount Owen complex would like to acknowledge the Traditional Owners of the Mount Owen area – the Wonnarua people – and pay respect to their cultural heritage, beliefs and continuing relationship with the land. We pay respect to the Elders, both past and present, for they hold the memories, traditions, culture and hope of Aboriginal people in the area.

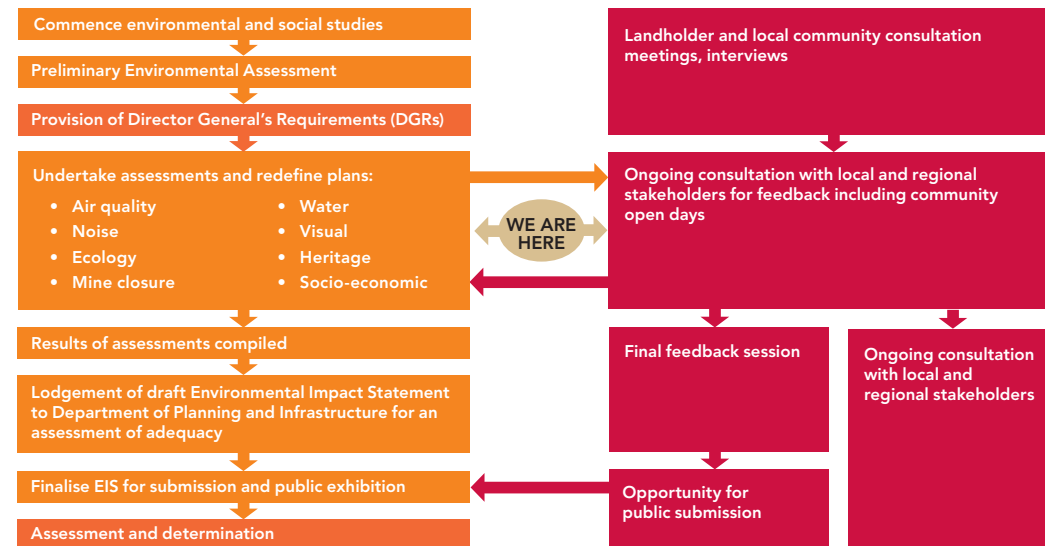
Mount Owen Continued Operations Project

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COMMUNITY INFORMATION SHEET

APRIL, 2013

Where to from here – next steps?



As noted in the above diagram, we are now well advanced in our technical studies, and have provided preliminary information on consultation outcomes to date and our study progress in this Information Sheet.

Lodging the Environmental Impact Statement

In February 2013, we lodged the Preliminary Environmental Assessment and were issued with

the Director General's Requirements (DGR's) for the Project from the NSW Department of Planning and Infrastructure. The DGR's set the specific criteria that our Environmental Impact Statement must include to be considered for approval by the NSW State Government. The lodgement of the Environmental Impact Statement will occur in November 2013 following completion of the technical

studies and further sessions with the community.

If you would like to find out more about the DGR's or the Preliminary Environmental Assessment please go to the NSW Department of Planning and Infrastructure's website: www.majorprojects.planning.nsw.gov.au and search for Mount Owen Continued Operations Project.

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regardless of our location, enhances our corporate reputation and is a source of competitive advantage. This enables us to gain access to new resources, maintain a licence to operate, attract and retain the best people, access diverse and low-cost sources of capital, identify and act upon business opportunities, and optimise our management of risks.

COMMUNITY INFORMATION SHEET

APRIL, 2013

Update on the Mount Owen Continued Operations Project

As many of you will now be aware, the Mount Owen Continued Operations Project is seeking approval for the continuation of the Mount Owen Mine for approximately 10 to 15 years from 2016. This proposal will provide for continued employment of approximately 660 people whilst supporting local service providers and businesses currently associated with the existing operations.

Project assessment and community consultation

Since our last Community Information Sheet in December 2012, we have continued to progress individual technical studies as part of preparing the Environmental Impact Statement for the Project. Further detail

of these studies and the project itself is provided in this newsletter.

We have also been reviewing and refining the Project design in light of the ongoing feedback provided by our stakeholders – community groups, Council representatives and local landholders.

Consultation with key stakeholders and neighbouring residents and landholders is a very important component of the Project. To date, meetings have been undertaken with government and community stakeholders and approximately 40 local residents/landholders around the current Mount Owen operations, in the Camberwell, Falbrook, Middle Falbrook and Goorangoola rural localities.

During these meetings, residents have taken the opportunity to discuss issues and impacts associated with current mining

operations and the project, with our Project team. Outcomes of this consultation are presented in the following section with further details of the technical studies currently being undertaken.

Feedback from these meetings is being used to define the Project design and impact mitigation plans. It is also informing our Social Impact and Opportunities Assessment (SIOA), which is being undertaken for the Project Environmental Impact Statement.

Whilst the proposed Project will maintain the existing Mount Owen Mine production rate and operating hours, we are reviewing where we can do more to improve our operations and impact management, based on feedback received and study outputs.

Community information sessions

To allow the Mount Owen Project team to continue to work closely with the community in the development of its optimal mining plan, further engagement meetings are planned over the next six months.

What's on in May?

An open day and information session at Mount Owen Mine will be held on Sunday 19th May 2013 to provide an opportunity for the community to view the current mining operations and discuss the various aspects of the proposed mine plan and assessment process with Project staff.

An invitation to the mine open day and information session is enclosed with this Information

Sheet. This day will provide the community with further context on the Project and the assessment process. We encourage you to come along and view the data collected, ask questions of the Project and operational team and provide your feedback.

It would be appreciated, if you can let us know whether you and/or your family can attend by phoning Samantha Honeysett, at Mount Owen Mine, on phone 6570 0880 or email shoneysett@xstratacoal.com.au.

Our Project team will also be conducting further information days to provide results of our technical studies prior to lodgement of the Environmental Impact Statement (EIS).

Thank you

We would like to take this opportunity to thank all those

Community Information Day

Sunday 19th May
Mount Owen Mine
9am – 2pm

Please come and join us to learn more about the Mount Owen operations and our project planning.

people who have participated in the Project assessment to date – we appreciate your time and input.

Over the coming months, there will be opportunities for further input into our plans and we look forward to working with you as our project planning progresses.

Study update

This section provides an overview of the outcomes of our consultation to date, highlighting the key issues/impacts identified by local residents/landholders that reside in proximity to the Mount Owen operations.

Further detail on the technical studies that are progressing to better understand the impacts and identify management strategies for the Project is also provided below.

The results of these studies will be detailed in the EIS being prepared by Umwelt, and will also be presented to the community through further Information Sheets, individual meetings and information sessions, prior to lodgement with the NSW Department of Planning and Infrastructure.

Air Quality

"We have trouble with westerly winds."

Air quality was one of the main issues identified by local landholders in relation to Mount Owen's current operations and an issue of potential concern in relation to the Project. Residents spoke of the impacts of dust in and around their homes, which was seen to worsen in particular weather conditions. Techniques and methods for dust monitoring and management were also discussed, as well as the potential impact of dust on community health. Air quality was considered a key cumulative issue due to the proximity of a number of other mining operations in the area.

To address these issues, Pacific Environment will use the NSW EPA prescribed method for undertaking air quality modelling and assessment in NSW. This method includes the use of predictive modelling, developed from local meteorology, topographic details and air quality monitoring data collected from the existing Mount Owen monitoring network. Model predictions (for dust and fine particles (PM10 and PM2.5)) will be compared to EPA criteria to provide an assessment of the predicted air quality impacts in relation to amenity and health considerations.



Noise and Blast Vibration

"Noise is noticeable early mornings, especially on weekends."

Noise was one of the most reported issues by local residents. Specific issues related to the experience of noise at varying times of the day, notably early mornings and evenings; different types of noise e.g. reversing beepers, scraping of buckets, rail noise; and the influence of weather conditions e.g. wind, temperature change. With respect to blasting, landholders noted the impact of vibration and tremors on their houses in particular, and dust and noise generated by blasting. Once again, the cumulative nature of this issue was also raised.

As with air quality, the independent noise and blast specialists' use predictive modelling which has been developed from recorded climatic conditions, external scientific studies and results gathered over time from the current mining operations at Mount Owen's monitoring sites. The models are tested and compared to recent operational monitoring results, as part of the current modelling of the Project impacts.

Traffic

"We get held up by the trains."

Road traffic generated by mine employees travelling to and from existing mining operations in the local area was also raised. This was seen to impact road safety and road infrastructure. Residents highlighted a number

of roads requiring improvement and/or further maintenance e.g. Hedben Road Corner and the McInerney Road-New England Highway intersection. Many residents consulted were very supportive of Mount Owen's efforts to improve the Hedben Road crossing, given frustration at having to wait at train crossings and potential health and safety issues e.g. blocking emergency service access to local roads.

The traffic impact assessment for the Project includes a study of the impacts of the continued operations, including the proposed improvements to Hedben Road, as well as consideration of cumulative traffic from other sources. We are reviewing the data and outcomes of the study and will consult with Singleton Council, NSW Roads and Maritime Service and emergency service providers. The Project is expected to improve traffic flows and safety on Hedben Road.

Water

"We have noticed a change in the river water and quality."

The majority of community concerns in relation to water related to the cumulative impact of coal mining on water quality and quantity in the area. Some residents discussed issues relating to groundwater and impacts on their use of local wells/bores.

Water modelling examining impacts on groundwater and surface water are underway. These studies include the management of groundwater and surface water from any

exposed mining areas to manage the impacts to the surrounding catchments. The water studies will also include a water balance to help inform our storage designs and identify opportunities for the ongoing sharing and reuse of water through Xstrata's Greater Ravensworth Water Sharing Scheme. The studies will also look at post mining land use catchments and clean water discharge to surrounding watercourses.

Social impacts

"We are concerned over the loss of sense of community."

"Support to local sports is great."

In relation to social impacts, local residents raised a number of issues, both positive and negative regarding impacts of the current operations on local communities in the area. In this regard, impacts on sense of community e.g. changing community spirit, attachment to place were noted. However, residents also acknowledged the monetary contribution of the Mount Owen operations to the community and were appreciative of the process put in place by Xstrata in consulting with the community in relation to the Project.

The social impact and opportunities assessment (SIOA) will be addressing the social impacts associated with the Project. Profiling of the communities relevant to the Mount Owen operations is being undertaken and informed by information from the current Mount Owen workforce regarding residential locations, household expenditure, community participation and use of local services. This information will assist in further defining the social and economic linkages that exist between the operations and the community. Through the consultation program for the Project, perceived issues and impacts from the community's perspective are also being documented and fully assessed as part of this assessment.

Historic heritage

Although not a widespread issue, some residents expressed concern regarding the cumulative impact of mining on areas of heritage value in the area.

A specialist consultant has been commissioned to examine known sites within the Project area and undertake a survey for any sites not previously recorded. This study includes consultation with community members and both the Singleton and Muswellbrook Historical Societies and will provide a better understanding of heritage sites that may be potentially impacted by the Project. There are no significant sites in the proposed disturbance footprint.

Agricultural impact assessment

"The land was never good land – coal activity would be the best thing to happen."

Community members were mixed regarding the impact of the project on other land uses in the area; with some residents expressing that the land within the Project Area was not considered valuable for other uses.

A specialist agronomist has undertaken fieldwork on the Project area and commenced investigation of surrounding areas to understand the impact on agricultural land. The agricultural impact assessment will be completed in accordance with relevant NSW State Government guidelines.

Land management

"Fire management is a worry on mine owned land, I would like to avoid fires"

A number of landholders identified issues associated with management of vacant mine owned land in and around the existing Mount Owen operations. Such issues included weed and pest control e.g. dingos, kangaroo, rabbits, wild dogs; and the need for effective fire management.

In this regard, a bushfire assessment has commenced which includes discussions with the Rural Fire Service regarding management strategies for the Project. These discussions will continue throughout the

coming months. Ongoing land management will also be a focus of plans for continued operations.

Visual impact

"We see a glow but not direct light."

Whilst many residents noted they had limited visibility of existing operations, others noted light impacts from the Western out-of-pit dump within the Mount Owen Complex. This issue was also considered cumulative given the presence of other mining operations.

Visual photomontages are being developed from key viewing points in the surrounding community to indicate how the Project will appear throughout its life. The majority of workings are well shielded from views in the Camberwell, Falbrook, Middle Falbrook and Goorangoola areas by the local topography.

Rehabilitation and final land use

"Rehab needs to be hilly and mountainous. Keep it diverse."

"The land wasn't valuable anyway, you could make it better than it was."

Issues relating to rehabilitation and end land use were quite frequently raised by the landholders consulted. It was suggested that existing rehabilitation practices could be improved e.g. more natural, appropriate contouring; and there was a desire to better understand options for the end land use, once mining ceased.

Rehabilitation designs are currently being developed. The designs consider landform shape, vegetation types, drainage, final land use, public safety and long term management after mining. The work is being supported by feedback from the community, government guidelines and industry specialists. The designs include flora and fauna corridors and provision of a landform which blends with the local landscape.

Ecology

Impacts of the project on flora and fauna were not identified by those consulted as an issue. However, issues regarding

management of pests was noted (see Land Management). Residents did react positively to XMO retaining the commitment from 2004 to not impact the existing biodiversity offset areas.

Seasonal studies of both flora and fauna have been completed. We have made changes to the Project design to minimise ecological impacts and we will not be disturbing the Ravensworth State Forest or existing offset areas. We are also preparing an ecology impact mitigation and offsetting plan for the Project to discuss with the NSW Office of Environment and Heritage and Singleton Council.

Economic

"Employment is a positive."

"Redundancies are now an issue."

Stakeholders consulted identified a range of economic impacts associated with Mount Owen's existing operations and the proposed project, particularly the positive economic contribution of the company through continued local employment and strong wages. Other economic issues included cost of living, housing affordability, and competition for skilled workers in other sectors. It was also raised that not enough benefits, including royalties, are returned to the local community, where the impact of mining is felt most strongly. The impact of recent redundancies in local mining operations was also noted.

Economic impacts of the Project are being assessed on a local, regional, state and national level. This study will include a cost benefit analysis for the project in addition to a detailed economic analysis. Potential economic impacts to other industries in the locality will also be considered as part of this study.

Greenhouse gases

While not identified as a key local landholder issue, a Greenhouse Gas Assessment has commenced to understand the emissions associated with the Project.

In accordance with relevant guidelines, the study will consider the downstream impacts, including rail, shipping and use of the mined coal in either power generation or steel making.

Aboriginal cultural heritage assessment

Cultural heritage information is being gathered by members of the Aboriginal community and recorded. An archaeological survey of the Project area has been completed to determine the sites which exist in the local landscape.

Cultural experts and the Aboriginal community are currently assessing the cultural significance of the land proposed to be disturbed. There have been a number of visits to the Project area by elders and community members including filming and recording of the land.

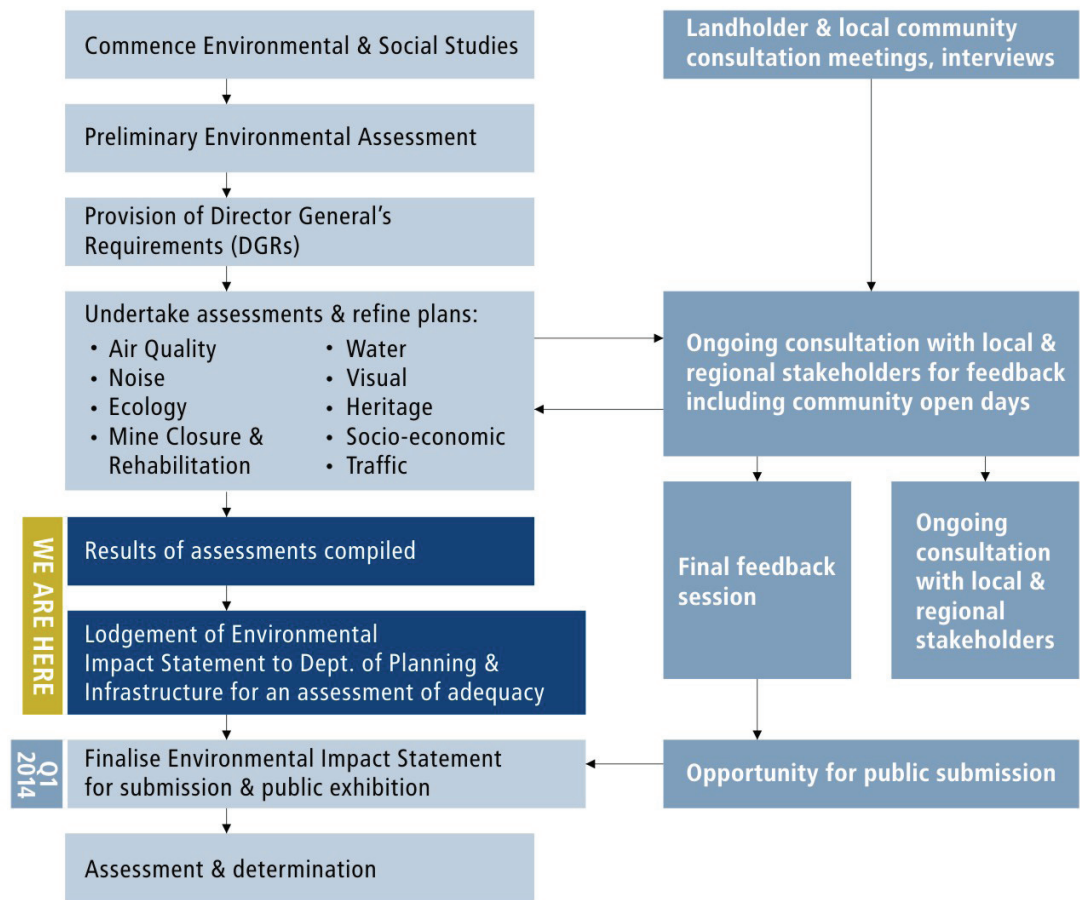


What next

We are currently in the process of compiling our EIS which will go on public exhibition with the Department of Planning and Infrastructure early next year.

Between now and then we will continue to consult on the Project with local and regional stakeholders.

Steps of the Assessment Process



If you would like more information at any time please contact:

Vicki McBride

Mount Owen Continued Operations
Project Approvals Manager
T: 0438 646 286
E: Vicki.McBride@glencore.com.au

Glenn Cook

Mount Owen Complex Environment
and Community Manager
T: 0417 731 621
E: Glenn.Cook@glencore.com.au

Tim Browne

EIS Project Manager - Umwelt
T: 0488 229 179
E: tbrowne@umwelt.com.au

We hope you have found this booklet useful and look forward to your continued feedback on the Mount Owen Continued Operations Project.

MT OWEN CONTINUED OPERATIONS

A GLENCORE Project

November 2013

Project Summary

03

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We are now in the process of finalising our Mount Owen Continued Operations (the Project) Environmental Impact Statement (EIS). Our aim for the Project has been to develop a plan for the continuation of mining at the Mount Owen Mine until around 2030, whilst managing our impacts on our nearest neighbours at Falbrook, Middle Falbrook, Greenlands and Camberwell.

We see ourselves as a member of this local community and to achieve our plan we have listened to feedback from our stakeholders during the design of the Project and identification of our mitigation and management measures.

We anticipate that the EIS for the Project will be on public display early in 2014 and will also be available on our website (www.mtowencomplex.com.au).

This booklet provides information on our Project and a summary of the information that will be included in the EIS based on the outputs of our environmental and social studies.

We'd like to take the opportunity to thank everyone who has provided us with feedback during the assessment and design phase.

About the Mount Owen Complex

The Mount Owen Complex has been operating for over 20 years and is located within the Upper Hunter Valley of New South Wales (NSW), approximately 20 kilometres north-west of Singleton, 24 kilometres south-east of Muswellbrook and to the north of Camberwell village.

The Complex consists of three open cut operations, Mount Owen (North Pit), Ravensworth East (West Pit and Ravensworth East Resource Recovery (RERR) Mining Area) and Glendell (Barrett Pit). The mining operations at the Complex include the integrated use of the Mount Owen coal handling and preparation plant (CHPP), coal stockpiles and the rail load-out facility.

The Mount Owen Mine open cut operation is currently approved to produce 10 million tonnes run of mine coal (ROM) per year. This is not proposed to change, however we would like to extend the length of mining to approximately 2030.



This Booklet

In an effort to keep those closest to the Project informed, we are providing this summary booklet before the EIS goes on public exhibition.

The booklet presents detailed information about:

- what we are proposing to do
- when the changes are proposed
- why we are proposing to do them
- what impacts are expected

Project plan

Project Planning

Consultation with the community has been a key component of our assessment process and the Project team has considered much of this feedback in developing the Project and refining the mine plan. Early in the process you also told us you wanted more information about our existing operations and Project plans, so our assessment process has involved ongoing consultation with stakeholders, particularly our near neighbours.

Minimising our footprint

A key objective of our Project design is to maximise the use of previously disturbed mining and existing infrastructure areas, thereby minimising the overall proposed disturbance area and impacts relating to the Project. We have also designed the mining footprint and operations to avoid disturbance of watercourses, the Ravensworth State Forest and existing Biodiversity Offset Areas.

Road and Infrastructure Upgrades

As part of the Project, we propose to construct a new rail overpass and a new dual lane bridge over Bowmans

Creek at Hebden Road. This will improve road safety and reduce traffic delays currently experienced at the rail level crossing and existing single lane bridge. Construction of the road upgrades and other Project infrastructure is planned to be undertaken early in the Project.

Noise and Dust Management

During consultation, you told us that air quality and noise were two of the biggest issues when living in an area with multiple mining operations. As such, we have designed the Project with 'built-in' noise and air quality controls, such as the building of haul roads below the natural surface level, temporary treatment on exposed areas, and modifying our operations in response to adverse weather conditions.

What happens after we are gone?

We are seeking to ensure sustainable post mining land use options, including native woodland areas that connect to existing native vegetation areas to optimise local and regional flora and fauna linkages, as well as areas suitable for sustaining potential future agricultural activities such as grazing.

Rehabilitation at Mount Owen

Mount Owen's unique approach to rehabilitation has set new industry standards and led to the Mount Owen model – the Ravensworth State Forest Vegetation Complex – achieving international recognition as a 'highly commended' site on the Global Restoration Network of the Society for Ecosystem Restoration (www.globalrestorationnetwork.org).

The program reconstructs forest and woodland in areas disturbed by mining as well as surrounding land used for biodiversity offset purposes.



Nest/roost boxes are placed at heights and aspects appropriate to the species.



Unique research partnership

Central to the site's rehabilitation success has been our partnership with experts from the University of Newcastle's Centre for Sustainable Ecosystem Restoration (CSER).

The partnership, initiated in 1995, is unique due to its continual feedback loop whereby Mount Owen incorporates CSER's research outcomes into the site's adaptive management plan. The partnership has also resulted in publication of new guidelines, "Establishing Native Vegetation", which drew from over 40 experiments and investigations undertaken on the Mount Owen site.

Protecting Plants and Animals

Mount Owen's Flora and Fauna Management Plan was developed by an Advisory Group consisting of representatives from the State government, NGOs and Mount Owen.

Fauna surveys are conducted prior to issuing a clearing permit and habitat trees are identified and marked prior to clearing. Clearing is undertaken as close as practicable to the mining of the cleared area, and timed to avoid fauna breeding cycles.

Due to its important reserve of indigenous seed and microflora, topsoil removal is coordinated as closely as possible with operations to ensure minimal handling and storage.

Rehabilitation uses endemic species, and seed that has been collected prior

to clearing where suitable vegetation exists. Large ground debris and dead timber is collected and redistributed for habitat purposes. Nest/roost boxes, specially designed for target species, are placed at heights and aspects appropriate to the species.

Extensive Monitoring

Fauna monitoring includes assessment of impacts on local populations such as birds, reptiles, mammals and frogs. Flora monitoring is currently undertaken seasonally to look at colonisation rates of native species and to develop a complete list of the species present within the project area. Areas of remnant vegetation are used as control sites for comparison with rehabilitated areas.



Economic Assessment

Government requirements for the Project mean that a project must be shown to deliver a net benefit to NSW. To assess this, we commissioned Deloitte Access Economics to undertake a Cost Benefit Analysis (CBA) of the Project.

A CBA is a method of obtaining a consolidated estimate of the net economic value of a project by identifying the incremental costs and benefits of a project relative to the base case of not doing the project – or ‘business as usual’.

The CBA looked at a range of factors including the financial outputs from the mine’s production, such as coal sales, as well as broader implications for external stakeholders such as the Singleton community, the broader Hunter and Central Coast region, and beyond.

The Cost Benefit Analysis concluded that overall, the Project is expected to generate net benefits, and is also expected to generate increased economic activity and employment within the NSW community. The continuation of operations of the Mount Owen mine will have a

significant positive economic impact, for the Hunter Valley and the State of NSW.

The assessment found that the Project will generate just under \$825 million for the Hunter and \$1.2 billion for NSW. This includes a net benefit to the Singleton community of around \$214 million over the life of the Project. It will also provide direct and indirect employment for a peak of 900 full time equivalent workers (including generator or ‘flow on’ effects), of which about 800 are estimated to be employed in the Hunter region.

The Project will involve an upfront capital investment of approximately \$168 million, much of which is expected to be spent in the Hunter region.

It will also generate royalties of an estimated \$153 million, which will be paid to the NSW Government who will distribute it according to the Royalties for Regions project.

Visual

A visual assessment of the Project noted two public viewing locations and one resident that have views of the existing Mount Owen mine and the proposed continuation.

Visual impacts will be reduced through the screening effect of progressive rehabilitation and the development of a final landform that seeks as far as practicable to conform to the surrounding natural environment. Ensuring that final landforms are designed to be ‘as natural’ as possible, was a key request by local community members during the consultation process.

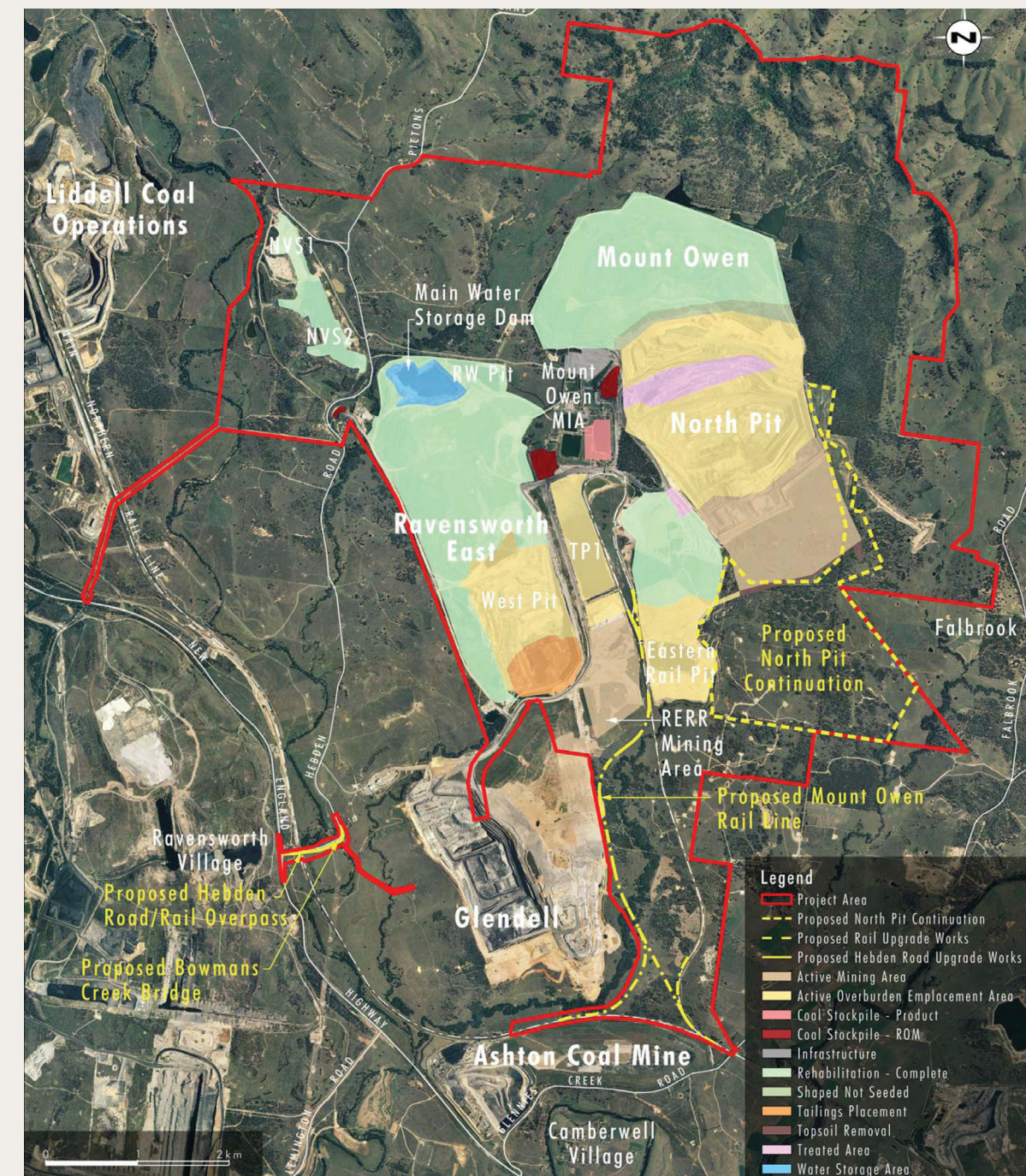
Once rehabilitation is completed on existing emplacement areas the visual impacts of the Project will be less than the present visual impacts.

To reduce night time impact, permanent lights will be placed so that they are shielded and we will continue our current practice of selecting the most appropriate locations for mobile lighting.

The development of the Project

In response to requests for more information on how the development of the Project will occur over time, the following three pages chart the key stages of the Project and their approximate timing should it be approved.

Year 1: approximately 2016



Key features of the Project at this stage:

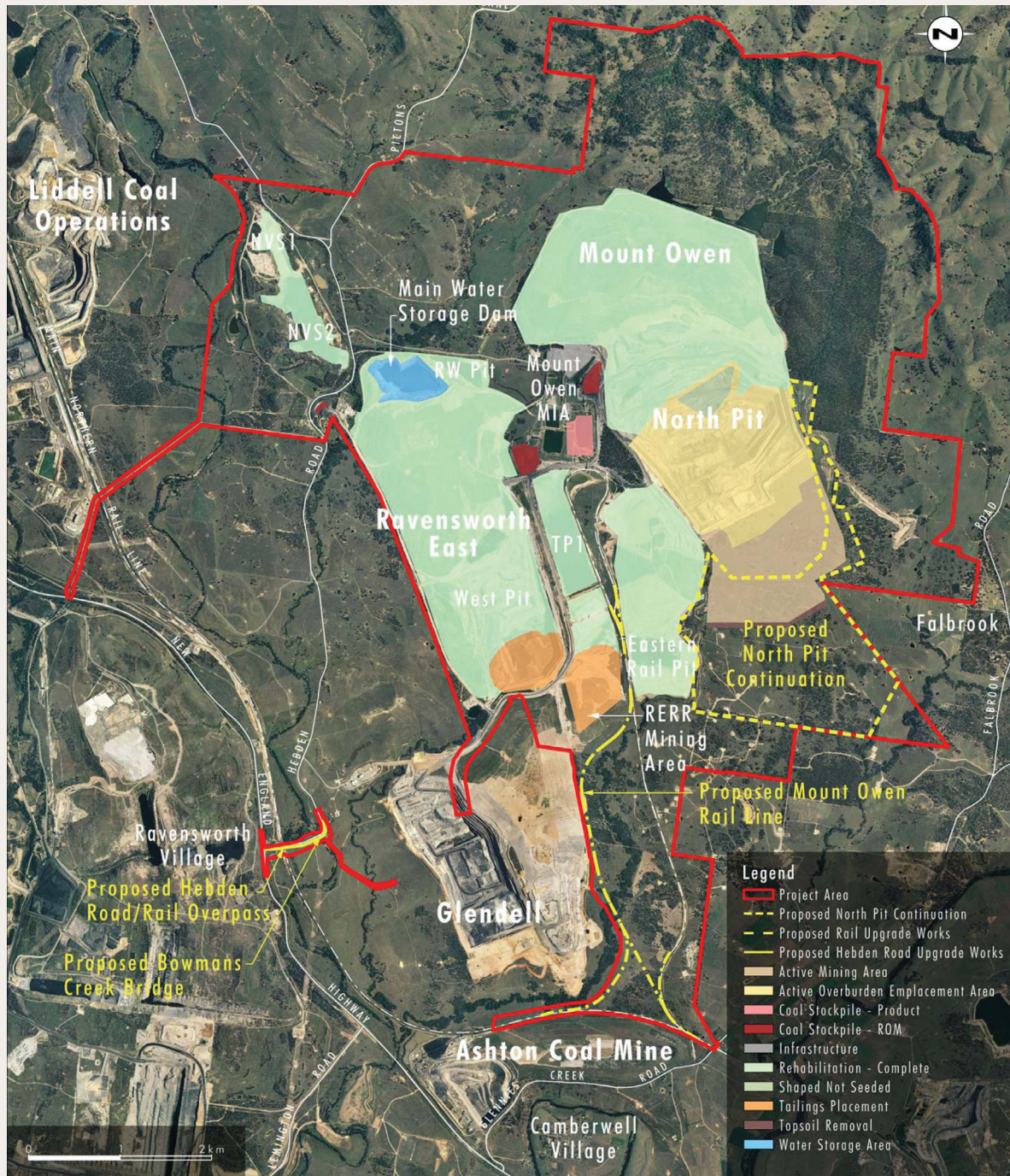
- Excavator and truck mining operations continue in the North Pit with progressive rehabilitation of emplacement areas
- Mining operations in the Ravensworth East mining area ongoing
- Glendell Mine continues to haul its ROM coal to the Mount Owen CHPP for processing
- The Ravensworth East emplacement areas are being progressively rehabilitated and the Eastern Rail Pit and TP1 tailings areas are being capped
- The southern portion of the West Pit is being used for tailings emplacement and coarse reject is being emplaced in the North Pit

Construction works have commenced including:

- Hebden Road rail overpass and the Bowmans Creek bridge works
- Preparation works for the new northern rail turn out and rail line
- Mine infrastructure upgrades, including workshop and stockpile extension

The development of the Project

Year 5: approximately 2020



Key features of the Project at this stage:

- Mining operations in North Pit have progressed south and we will be at our peak extraction rate
- The North Pit emplacement areas are being progressively rehabilitated, with the emplacement heights reducing as mining progresses south
- Mining operations are expected to have ceased at Ravensworth East and the voids are being used for tailings emplacement
- Ravensworth East overburden emplacement areas are being rehabilitated
- Mine haul roads are being built into the western highwall of North Pit as the mine progresses south
- Glendell Mine continues to haul its ROM coal to the Mount Owen CHPP for processing
- All construction works have been completed and the new rail overpass and dual lane bridge at Bowmans Creek are open with the rail line and turnout operating and all new mine infrastructure works being utilised
- Coarse reject continues to be emplaced within the North Pit emplacement area
- Temporary tailings cells may be constructed in the North Pit emplacement area

Assessing the social impacts

A risk based approach was used to assess the social impact of the Project, which looked at both the technical risks presented by the Project, as well as community perceptions of those risks.

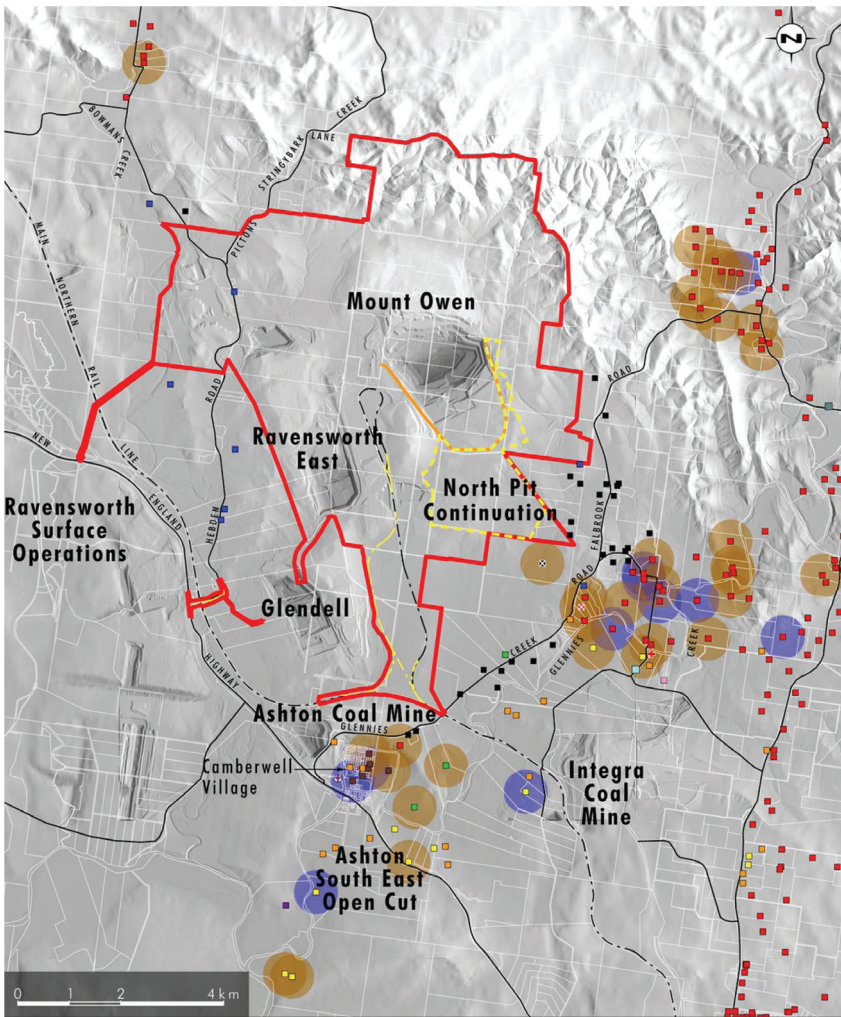
This included consideration of impacts on social amenity, housing and accommodation, transport, health and wellbeing, community sustainability, and other issues identified by stakeholders as important during consultation.

The findings of the EIS technical studies conclude that impacts associated with social amenity and health, such as noise, dust and blasting, can be effectively managed to minimise local impact; however, consultation found that concern may remain with some local residents.

As operational employment will continue in line with current levels, there will be no significant population change as a result of the Project.

Construction workforce modelling predicted that approximately 60% of the construction workforce is likely to be sourced locally, and that any incoming workers will be able to be accommodated without housing or social infrastructure strain.

The full outcomes of the SIOA, including the strategies developed to reduce potential impacts and enhance positive impacts, will be included in the EIS to be put on public display and will be available to view on our website.



Spatial distribution of existing visual amenity concerns regarding mining (including cumulative) mapped from consultation with 43 landholders. The brown dots show the geographic areas where landholders consulted did not raise visual amenity concerns, and the purple dots show where concerns were raised. Spatial issues mapping was also undertaken for other key impact themes.

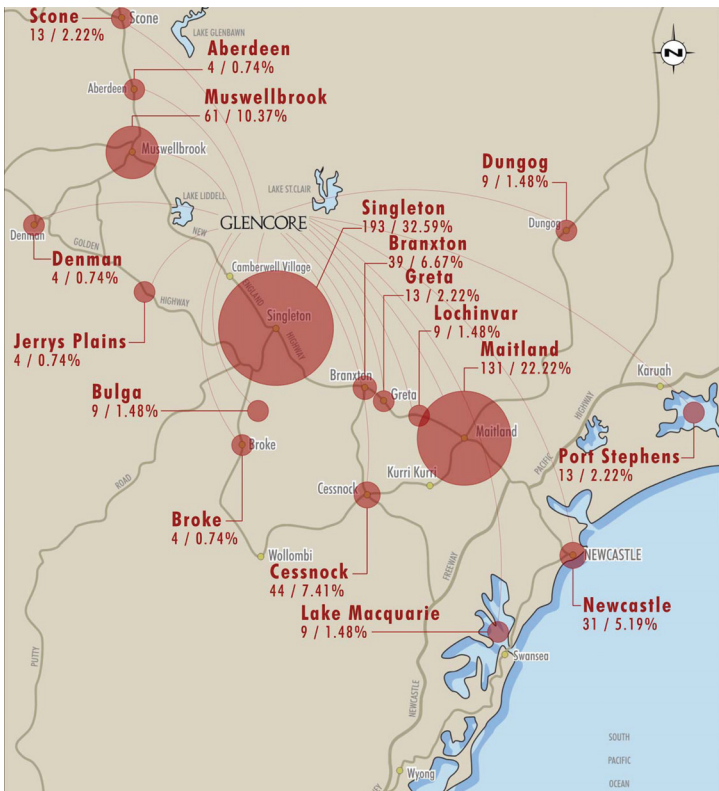
Socio-economic linkages

The SIOA also used information gathered from our employees and suppliers to understand the associations between Mount Owen and the broader region.

The study found that not only is Mount Owen highly linked to the township and LGA of Singleton, but it also has strong connections with other nearby towns such as Maitland and Muswellbrook.

This tended to be where our employees, contractors, suppliers and their families live, spend their money, participate in the community, access education and healthcare services.

This work has helped us understand the links we have with our local and regional towns, as well as other areas across the State and the country. It also provides a valuable local level analysis to complement findings of the broader Economic Assessment. The full analysis is provided in the SIOA.



Place of residence of the existing Mount Owen workforce.

Social Impacts and Opportunities

The Project's Social Impact and Opportunities Assessment (SIOA) has involved a number of phases of work to help us understand the positive and negative social impacts of the Project. The SIOA has also considered cumulative issues relating to mining within the Singleton area.

Community Consultation

Approximately 200 stakeholders have been engaged in the Project assessment program and have contributed to the identification of issues and the development of appropriate strategies to address impacts.

This has included informative discussions with the local community that have been undertaken over the last 12 months.

Issues identified by local residents as most important were air quality, noise and economic impacts. Blasting, water, traffic, visual amenity, community sustainability, and final land use were also discussed. These are shown graphically below, and an example of

the way that the SIOA has mapped residents' concerns is included on the next page.

Conversations regarding noise and air quality focused mainly on cumulative impacts, with landholders identifying these issues as the most challenging associated with living in an area with a number of active mining operations present.

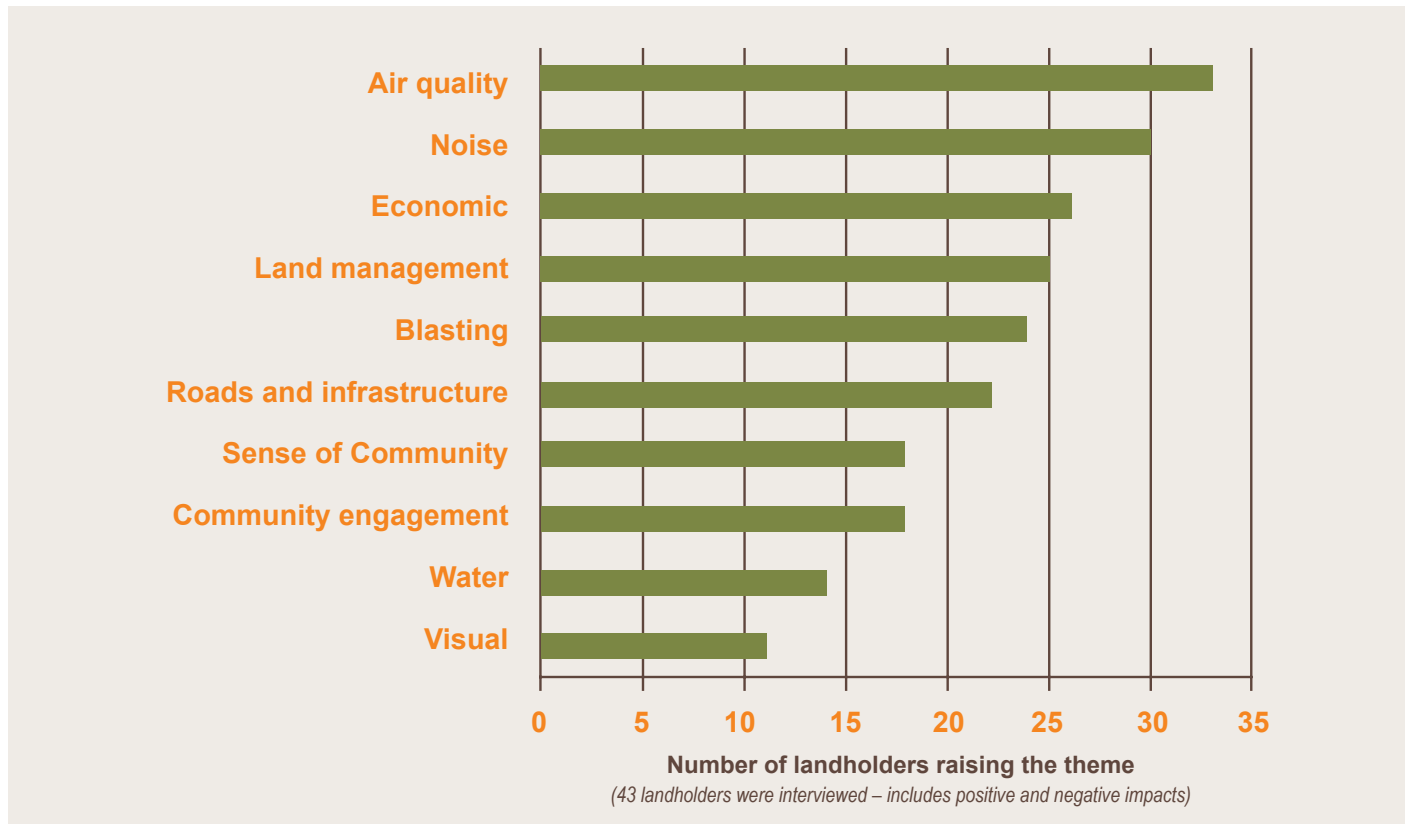
Economic discussions were overwhelmingly positive, with

continued local employment, business generation and investment in community activities and infrastructure identified as key benefits of the Project.

Concern regarding land devaluation, pressure to rental housing and effects on other businesses looking for skilled workers were also expressed, although again these were discussed in a cumulative sense.

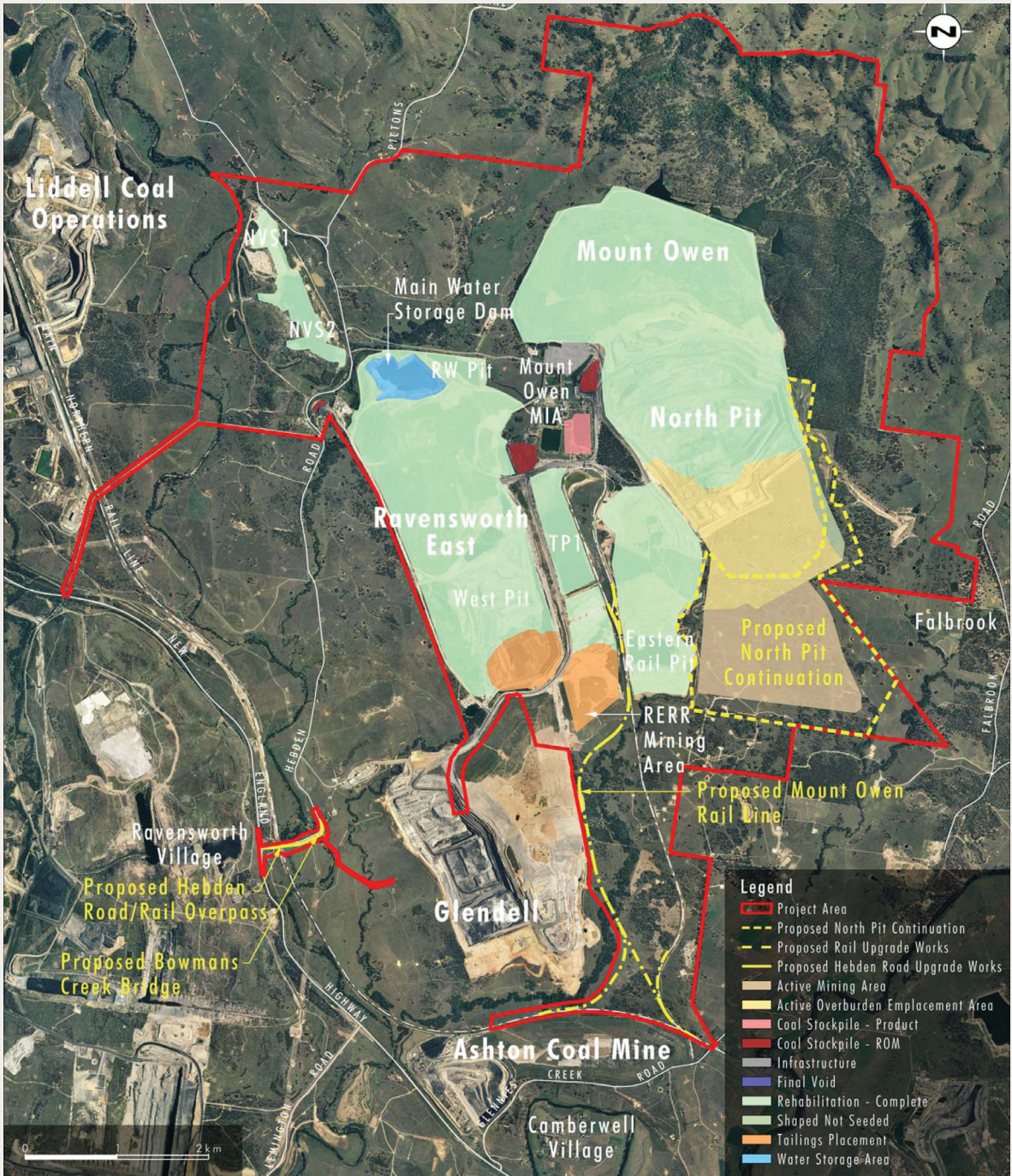


Community members at Mount Owen's recent Open Day in May 2013.



The development of the Project

Year 10: approximately 2025



Key features of the Project at this stage:

- Mining operations in Mount Owen North Pit have reached the southernmost limit of the Project
- The primary overburden and coal haulage in North Pit is via select haul roads constructed below natural surface in the western highwall. Strategically located haul roads will also be bundled
- The southern portion of the Ravensworth East mining area voids continue to be used for tailings emplacement and coarse reject continue to be emplaced in the North Pit
- Temporary tailings emplacement may continue in the North Pit emplacement area
- Progressive rehabilitation of North Pit emplacement area

Infrastructure upgrades

Upgrades to Hebden Road

The Project seeks approval to construct an overpass over the Main Northern Rail Line that crosses Hebden Road and a new bridge over Bowmans Creek. These works will improve road safety for road users and minimise traffic delays on Hebden Road that result from the existing rail level crossing and single lane Bowmans Creek Bridge. Hebden Road is the primary employee and services access to the Mount Owen Complex, as well as being an important road for local business (quarries) and residents.

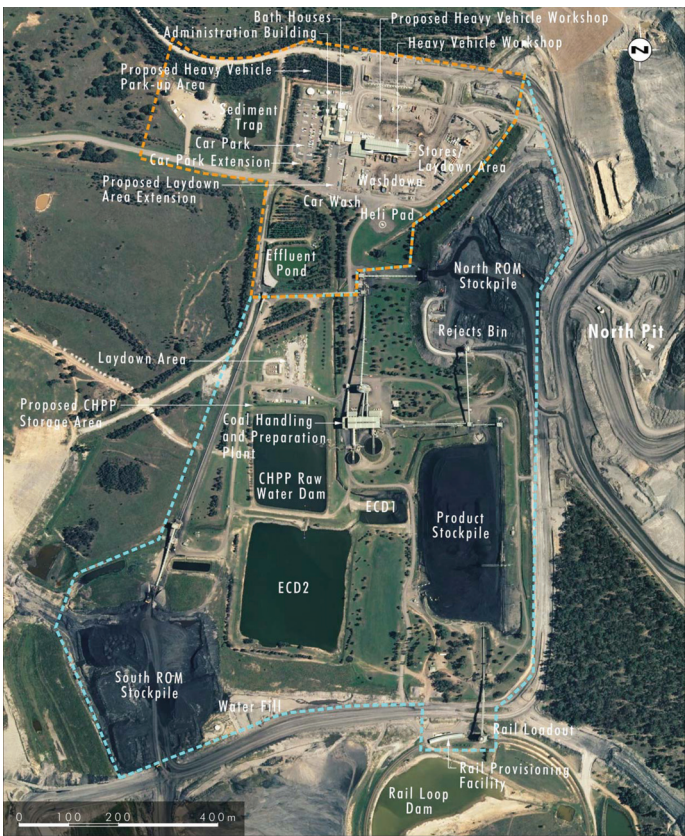
Rail line augmentation

The Project proposes to construct an additional rail line and northern turn-out west of the existing Mount Owen Complex rail line. This will allow the existing Mount Owen rail line to be used as a siding for the parking of Glencore trains and allow Glencore trains to turn around within the Mount Owen rail loop, thereby reducing unnecessary train movements on the Main Northern Rail Line.

On-site infrastructure

The Project will extend Mount Owen’s existing product stockpile and improve the coal handling functionality of the stockpile. It will also upgrade the capacity of the existing heavy vehicle workshop and fuel farm in the Mine Infrastructure Area (MIA), provide a new heavy vehicle parking area and replace associated site services, such as the raw water system, to meet current standards.

Mine Infrastructure Area upgrades



Proposed Rail Alignment



Traffic

A traffic assessment has been undertaken to help us understand the impacts on traffic from our Project. This takes into account the proposed rail overpass and dual lane bridge over Bowmans Creek on Hebden Road, which have been assessed as providing a long term benefit in terms of improving traffic flow and road safety on this road.

Traffic flow

The Project will maintain the current workforce numbers of the existing operation and we expect that the employee traffic levels associated with continued operations will be similar to those currently experienced.

For the short period of construction (approximately 18 months), traffic will increase temporarily primarily due to vehicles associated with the construction workforce. Construction traffic for the rail line works, will travel from the New England Highway via Glennies Creek Road and Forest Road, whilst all other construction traffic will exit the Highway via Hebden Road. The assessment indicates that during construction both the New England Highway intersections (with Hebden Road and with Glennies Creek

Road) will still operate at good service levels with minimal delays and queue lengths, including during periods of peak traffic demands.

To help manage the traffic during this period, a Construction Traffic Management Plan will be prepared in consultation with Singleton Council and the Roads and Maritime Services for these works.

Road safety

The proposed upgrades to Hebden Road will increase road safety for all road users. This will include reducing wait times and traffic queues associated with the existing level crossing at Hebden Road, which have been known to extend onto the New England Highway.

Road safety during the construction phase will be managed to reduce the potential for traffic disruption and distraction and for unnecessary vehicle / vehicle and vehicle/ pedestrian interaction. Information regarding proposed scheduled activities will be communicated to the local road users and measures such as road and site signage will be used.

Rail improvements

We are not seeking to change approved annual rail movements for Mount Owen as part of the Project however, in an effort to increase rail efficiencies, we are seeking approval to construct an additional rail line. This will allow trains to be handled more efficiently and should result in an overall improvement across the rail network.

Below is a 'before' shot of the current rail level crossing on Hebden Road, with the illustration at bottom showing the proposed upgrade works.



Existing level crossing - Hebden Road.



Proposed Hebden Road upgrade works.

Agricultural and Land Management

The Mount Owen Complex has a long history of coexisting with agriculture. The land within the Project Area includes part of the existing mining operations in addition to lands owned by Glencore which are currently managed as grazing enterprise.

We have prepared an Agricultural Impact Statement to assess the potential impacts on agricultural resources and industries in the areas in and around the Project. The study found that the Project will have no impact on Biophysical Strategic Agricultural Land (BSAL) or any Critical Industry Clusters (viticulture, equine or agricultural). The majority of land within the proposed disturbance is class 5 and below which has moderate to low agricultural capacity and is generally suited to grazing and conservation.

It also found the Project to have negligible impact on agricultural resources including water resources and landform, as well as local and regional agricultural services and infrastructure.

Pest and Weed Control

As a major landholder within the local area, we understand the needs and challenges associated with maintaining healthy, working, productive land and properties. We understand that it is important to work with local stakeholders and landowners toward a coordinated approach to land management, including pest and weed control. For example, over the last few years we have participated in the local community's large scale baiting program for wild dogs.



Bushfire

We will continue current bushfire management controls set out in the Mount Owen Complex Bushfire Management Plan. This will include the ongoing review of the existing Bushfire Management Plan in consultation with the Rural Fire Service as the operations progress and the site changes. This will assist us in managing ongoing bushfire risk.



Air quality

Air quality was one of the main concerns identified by community members during the consultation process. To address this issue, a detailed air quality impact assessment has been undertaken in accordance with the Director General's Requirements (DGRs) for the Project, using the NSW EPA prescribed method for undertaking air quality modelling and assessment.

Modelling

Dust emission modelling has taken into account local meteorology, topographic details and air quality monitoring data collected from the existing Mount Owen Air Quality Monitoring Network.

Air quality model predictions for dust (including PM10 and PM2.5) were compared to Department of Planning and Infrastructure (DP&I) and Environment Protection Authority (EPA) criteria to provide an assessment of the predicted air quality impacts in relation to amenity and health considerations.

Results

The modelling has shown that our mine planning and dust controls will help us manage our impacts.

It shows that later in the Project (approximately Year 10) when we are closest to the residents of Falbrook and Middle Falbrook, worst case weather conditions could lead to two



Air quality sampling

private residences exceeding the air quality criteria 24 hour average PM10 criterion ($50 \mu\text{g}/\text{m}^3$) and therefore have acquisition rights. A number of mine owned residences are also predicted to have 24-hour PM10 levels in excess of the criterion in Year 5 and Year 10.

There are no privately owned residences, without current acquisition rights, predicted to exceed the cumulative annual average PM10 criteria of $30 \mu\text{g}/\text{m}^3$ for all modelled years of the Project.

The figure left shows the 24 hour average PM10 air contour for the Project that is predicted to occur in the worst case scenario modeled for Year 10 of the Project. The red line refers to the Project area boundary, and the blue line delineates the area within which residences exceed the relevant criteria ($50 \mu\text{g}/\text{m}^3$).

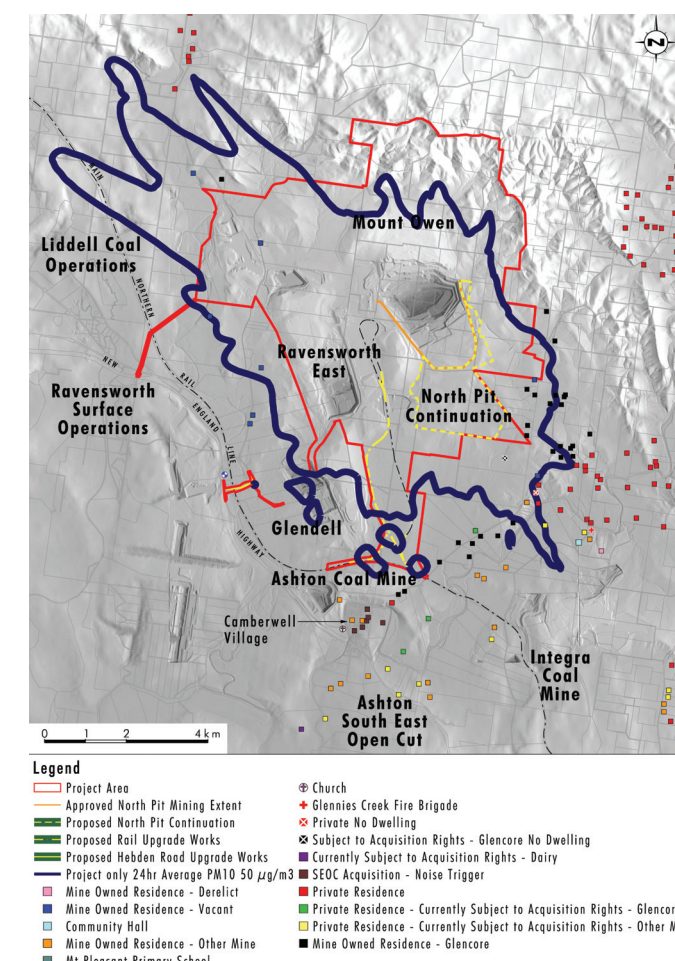
Full results will be presented in the EIS early next year and will be on our website.

Management

We recognise that air quality is an important issue for local residents, and are very committed to doing all that we can to minimise dust, diesel and blast fume emissions potentially generated by the Project. To do this, we will apply a range of measures and technologies for dust control, including near-field and community based real-time monitoring, haul road dust control, and temporary treatments (for example, early temporary revegetation) to overburden, to reduce wind erosion prior to final rehabilitation. At exposed locations, and in specific weather conditions, we will further modify our operations to further reduce dust emissions.

Particulate Sizes

- TSP – total suspended particulate matter - all suspended particles in the air. The upper size range is typically $30 \mu\text{m}$ – $50 \mu\text{m}$.
- PM10 –particles with equivalent aerodynamic diameters of less than $10 \mu\text{m}$.
- PM2.5 –particles with equivalent aerodynamic diameters of less than $2.5 \mu\text{m}$ diameter (a subset of PM10). Often referred to as the fine particles.



Noise

Noise from mining operations was another key concern for landholders, and we have worked hard to minimise our impacts from all potential noise sources such as mining operations, construction, traffic and rail.

Modelling

A Noise Impact Assessment was undertaken for the Project with a methodology developed in accordance with the NSW Industrial Noise Policy. The assessment considered recorded local climatic conditions and noise monitoring data from the Mount Owen Complex noise monitoring network.

The predictive noise modelling investigated the potential noise impacts at the surrounding noise sensitive receivers under a full range of adverse and non-adverse weather conditions.

Direct noise impacts associated with the Project, as well as the cumulative noise impacts associated with the Project and other approved mining operations, were assessed.

The Project design process included extensive iterative mine planning and noise modelling to minimise noise impacts, which involved rerunning noise models throughout all project phases to see how changes to the operational scenarios would affect noise. As a result, the Project incorporates all reasonable and feasible noise control measures.

Results

The study found that noise impacts associated with the Project are predicted to increase in later years as mining within the North Pit Continuation progresses towards the Falbrook and Middle Falbrook residences located to the east, southeast and south of the Project Area, with the worst case being Year 10 of the Project. Worst case noise propagation conditions have been assessed to be winter nights, under inversion conditions.

Under these worst case conditions, noise modelling indicate that 2 private residences are predicted to be affected by Project related noise levels more



Noise monitoring in Middle Falbrook.

than 5 dB above the relevant Project Specific Noise Level (PSNL). The PSNL is the noise criteria determined in accordance with the Industrial Noise Policy, and an exceedance of more than 5 dB is considered an appreciable increase in noise level, likely to be noticeable by most people. For this reason, these land owners are expected to be provided with acquisition rights in any development consent granted for the Project.

6 private residences are predicted to experience Project related noise levels between or greater than 2dB and less than 5dB above the relevant PSNL. This is considered a moderate noise level, not noticeable by some people and may be noticeable by others. These land owners will be offered opportunity for residence specific mitigation measures such as double glazing of windows etc.

10 private residences are predicted to experience Project related noise levels up to 2 dB above the relevant PSNL. These are considered minor noise level increases, not noticeable by most people. Ongoing and targeted noise monitoring (at the request of the landowner) will be conducted at these properties.

The full results will be available in the EIS and on our website early next year.

Management/commitments

Mount Owen are committed to the ongoing development and implementation of mitigation measures to minimise the impact of all noise sources associated with the Project including mining operations, construction, traffic and rail. Noise will be managed by a mix of innovative design and operational initiatives, such as building haul roads to be below the natural surface and the use of strategically located noise bunds.

Other practical measures include the ongoing use of noise attenuated trucks and machinery and modifying operations during adverse meteorological conditions that may have potential to elevate noise levels above those predicted.

Noise will be monitored by both 'continuous' and 'attended' (implemented by a person) monitoring technologies during the life of the Project and we will continue to implement adaptive management, considering and responding to noise monitoring results and emerging technologies. We will also undertake appropriate measures on properties affected by noise levels above relevant criteria, based on discussions with the relevant landowners.



Final landform and end use

We have designed our closure strategy to ensure sustainable post mining land use options and to maximise the potential for local and regional flora and fauna linkages. This includes the development of native woodland areas that connect to existing native vegetation areas, as well as areas suitable for sustaining potential future agricultural activities such as grazing.

Progressive rehabilitation will include the shaping of overburden emplacement areas to create a suitable

final landform. The final landform will include a final void in the southern area of the North Pit Continuation. The Main Water Storage Dam will remain (north of the Ravensworth East Mining Area) to be utilised within the Greater Ravensworth Water Sharing Scheme.

The retention of the Mount Owen Complex Rail Line may also be investigated for continued use by Glencore trains.

The figure above shows the Project's conceptual final land use.

Final landuse, rehabilitation & ecology

Progressive rehabilitation

The Project’s closure and rehabilitation strategy has been designed to build on the success of existing rehabilitation techniques implemented at Mount Owen.

Rehabilitation will continue to be undertaken progressively with disturbed areas being rehabilitated as soon as practicable throughout the life of the Project. Rehabilitation will

aim to recreate similar ecosystems and vegetation communities removed by mining (i.e. using species consistent with those communities), as well as targeting some areas to be returned to grazing.

The rehabilitation strategy looks at the “bigger picture” and will integrate with the strategies for rehabilitation and final land use at Glendell and other Glencore mines within the greater Ravensworth area.

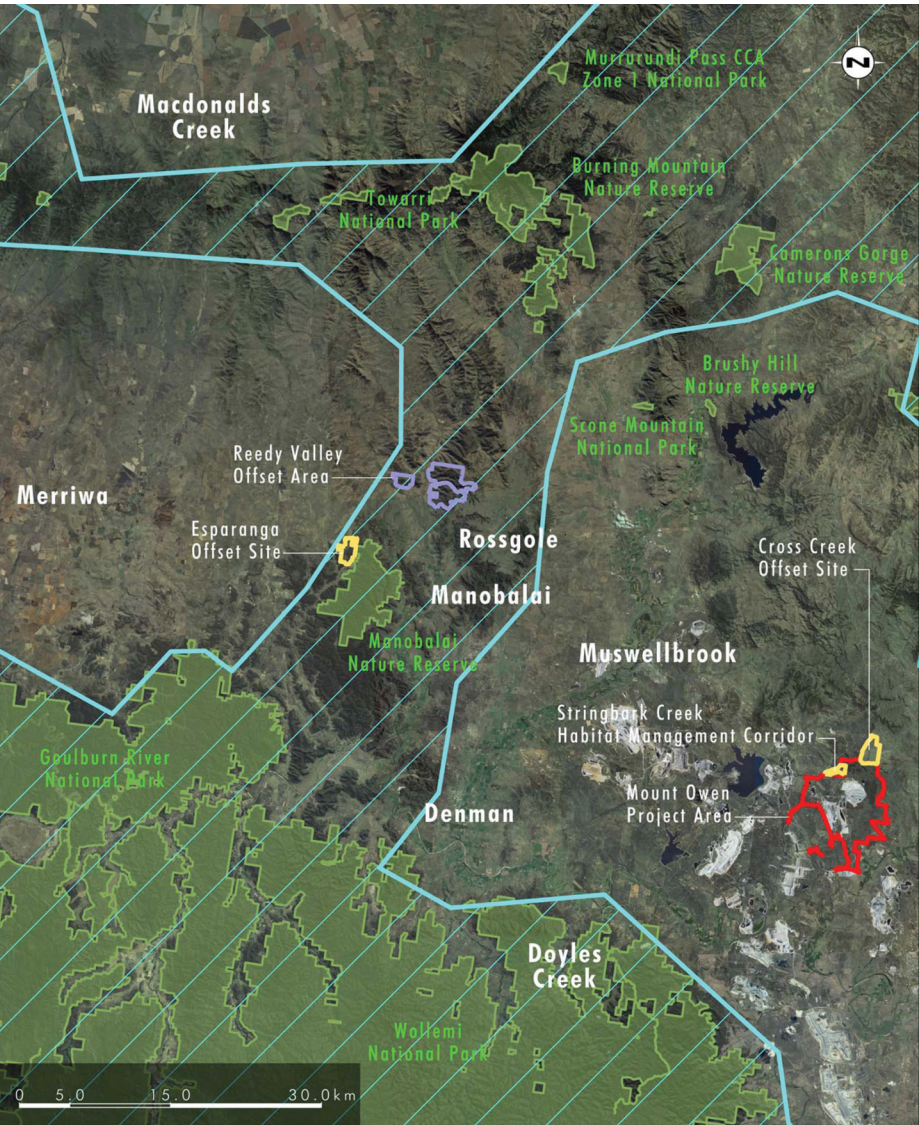


Ecology and offsets

One of our key objectives is to maximise the use of previously disturbed areas and avoid disturbing existing Biodiversity Offset Areas and the Ravensworth State Forest. The Project does avoid disturbance to these areas, however it still requires the clearing of approximately 433 hectares of vegetation which includes 219 hectares of native woodland, forest and riparian vegetation and 214 hectares of derived native grassland. Two Endangered Ecological Communities will be impacted by the Project: the Central Hunter Grey Box – Ironbark Woodland and the Central Hunter Ironbark – Spotted Gum – Grey Box Forest.

To offset this, we are proposing to protect a 355 hectare property (Cross Creek Offset Site) and a 303 hectare area (Esparanga Offset Site) located near a number of existing and proposed Glencore Biodiversity Offset Areas. These areas will provide appropriate vegetation and habitat, with additional opportunities for environmental improvement in the area.

Additionally, the Stringybark Creek Habitat Management Corridor will provide a 97.5 hectare vegetation corridor linking existing high quality habitat within the existing Mount Owen Biodiversity Offset Areas and Liddell Coal Operations and include commitments regarding establishment of spotted-tailed quoll habitat. This figure to the right shows the Project’s proposed offset area.



Legend
Project Area
Proposed Offset Site
Bulga and Liddell Operations Offset Area
National Parks and Reserves
Great Eastern Ranges Conservation Corridor Initiative

Aboriginal cultural heritage assessment

The Project undertook an Aboriginal Cultural Heritage Assessment to better understand the cultural heritage values of the Project area which was once occupied by the Wonnarua people.

In consultation with 60 registered Aboriginal parties, Knowledge Holders and the local Lands Council, we have sought knowledge and advice regarding the social, historic, aesthetic and scientific values that exist within the Project area.

The three Knowledge Holder groups consulted also provided their own cultural heritage assessment reports.

This has included oral stories, cultural knowledge, historical research and walks on Country, as well as an

archaeological survey of the area in order to understand the level of impact the Project may have, on the cultural heritage values of Aboriginal sites and the landscapes.

The cultural heritage assessment has shown that the wider regional cultural landscape surrounding the Project area does hold high cultural and historical significance to Wonnarua people.

The historical associations with early settlement, conflict, dispossession and survival are important, and the nature of the area as a surviving cultural landscape of significance to numerous members of the Wonnarua people makes this area significant.

Management measures have been developed collaboratively with the registered Aboriginal parties involved in the assessment and will be undertaken in consultation and participation of our knowledge holders and community stakeholders.

The management measures have considered both the Project and regional area.



Archaeological survey for Aboriginal artefacts as part of cultural heritage management.

Historic heritage

A detailed Historic Heritage Assessment has been undertaken for the Project. No heritage items or sites listed on National, State or local Heritage Registers were identified within the Project area. There were 2 items of State and Local significance identified within the vicinity of the Project area, however none of these will be directly impacted by the Project, including by blasting.

It is considered that the area of Ravensworth Village, which is near Hebden Road may have a locally significant archaeological resource. As such, an on-site archaeological investigation of that area will be undertaken prior to the commencement of construction of the Hebden Road upgrade works.

Example of site with local heritage significance.





Water

Water management system

Water management for the Project will be integrated within the existing Water Management System currently in place for the Mount Owen Complex. This includes continuing to manage water resources in accordance with the Mount Owen Complex Water Management Plan (which is a condition of our development consent), our Environmental Protection Licence and the Hunter River Salinity Trading Scheme.

Downstream flow

The surface water assessment has found that the Project is expected to have negligible impacts on flows, water quality and water users downstream of the Project Area.

It found that the Project will not reduce the annual flow volumes in Main Creek compared to the currently approved landform, thus maintaining basic landholder rights on Main and Glennies Creeks. It also found that the Project will have negligible impact on the catchment area of Bowmans Creek and Glennies Creek and, as such, is considered to have negligible impact on basic landholder rights downstream.

Erosion and sediment control

Erosion and sediment control measures will be applied at all stages during the Project to limit the potential impacts of the Project on downstream water quality. This includes rigorous measures such as clean water diversions, silt fences, sediment dams and vegetation cover, to be implemented during construction, operational and rehabilitation phases.

Groundwater

A detailed assessment of the potential impacts of the Project on groundwater resources has been completed. The Project has been designed specifically to minimise impacts on the alluvial groundwater systems. This includes modification of the mine plan to include a 200 metre setback from Main Creek.

Based on detailed modelling, the assessment determined that the Project will result in localised drawdown of groundwater within the alluvial and hardrock aquifers, however the impact of this drawdown on surface water flows within the local creeks is expected to be negligible.

No private groundwater or surface water users will be impacted by drawdown associated with the Project and it is not expected to impact on groundwater quality.



Greenhouse gas

A specialist greenhouse study for the Project assessed emissions from our operational activities ('Scope 1'), the electricity we use ('Scope 2') and the indirect 'downstream' emissions generated by third parties involved in getting our coal to our customers and from end-use of our product (consumption) ('Scope 3'). The assessment showed that the downstream emissions represent 95% of the Projects total emissions.

The study also found that the Project's contribution to national annual emissions is relatively small and it is unlikely to impact national greenhouse gas policy objectives. Mount Owen will continue to mitigate greenhouse gas emissions through

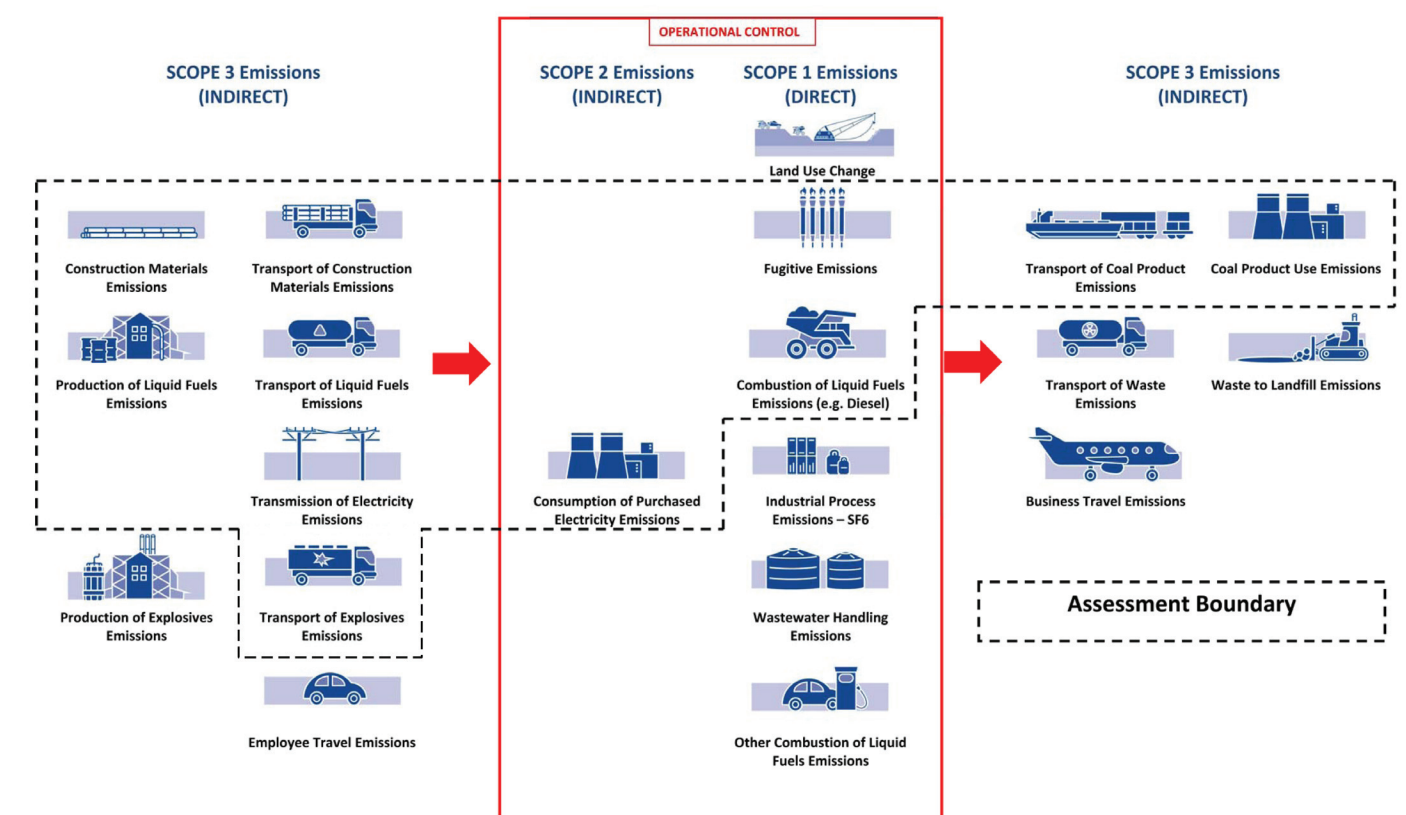
ongoing energy efficiency initiatives, utilising alternative fuel sources and optimising productivity. This includes limiting the length of haulage routes to reduce transport distances and fuel consumption, and selecting equipment and vehicles that have high energy efficiency ratings.

As the world's largest exporter of seaborne thermal coal and a significant consumer of energy, Glencore continues to review its approach to climate change. Our coal business is actively reducing fugitive emissions from mining by utilising coal mine waste gas. Glencore also contributes to research and development on low emission technologies.

Blasting

Blasting for the Project will be located within the North Pit Continuation and Ravensworth East mining areas. A blast assessment for the Project used a ground vibration and air blast predictive model based on vibration and air blast data collected from the blast monitoring stations at the Mount Owen Complex.

The modelling indicates that any potential impacts associated with blasting activities can be managed effectively to ensure there is no exceedance of the relevant blast criteria at any private residence or other blast sensitive location.



What next

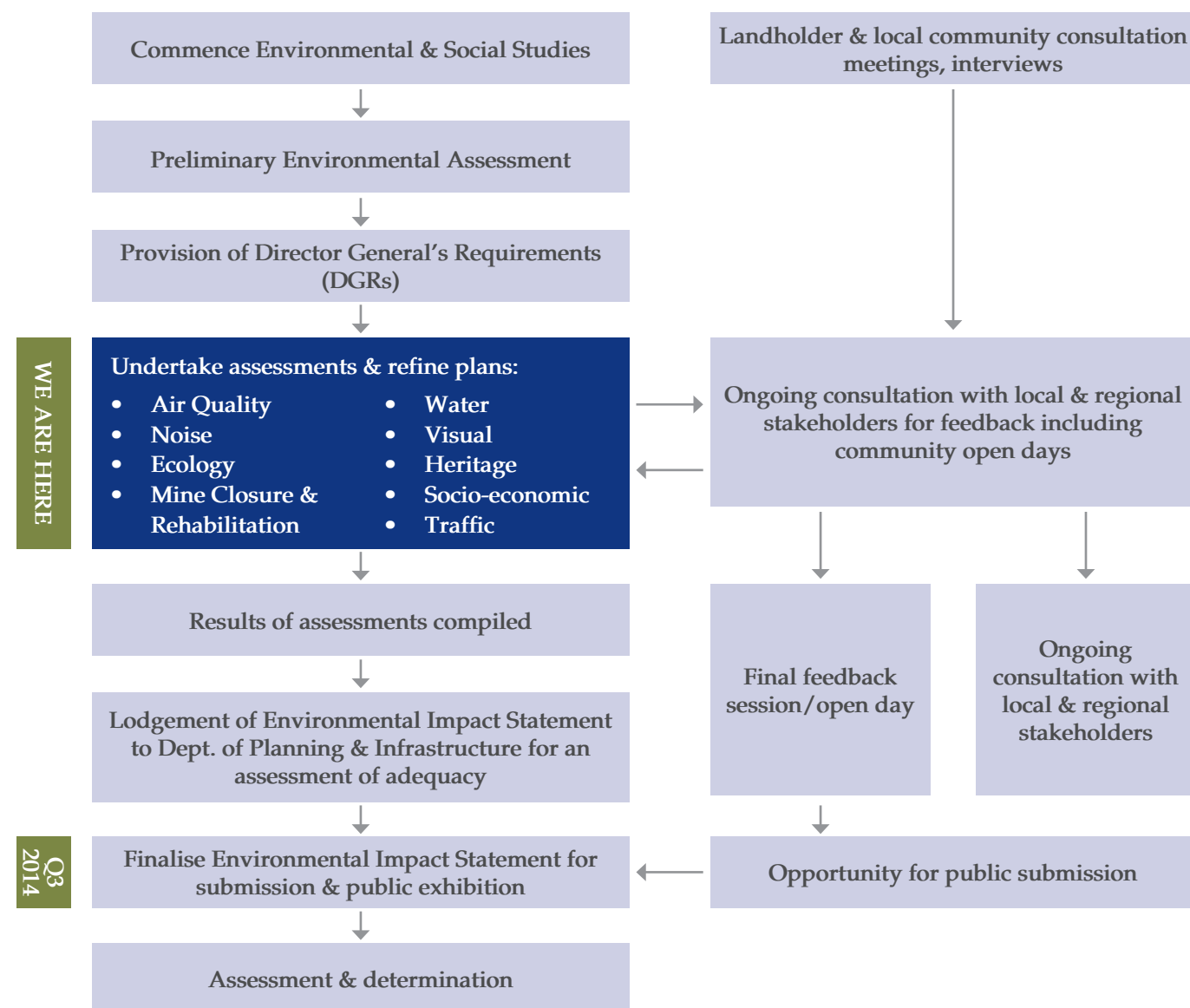
We are currently in the process of updating all relevant technical studies and consulting with relevant government agencies and community members.

Landholders will be contacted when the updated EIS studies are completed and personal meetings offered to discuss the outcomes of the studies, expected to be October this year.

The EIS will be submitted to the Department of Planning and Environment for adequacy review during this period.

The results of the EIS studies will be communicated in an updated Community Information Booklet, similar to the booklet prepared and distributed in December 2013; and a Community Open Day held before the Project goes on public exhibition.

Steps of the Assessment Process



Further information

If you would like more information, or would like to schedule a meeting with the Project team, please contact:

Vicki McBride

Mount Owen Continued Operations Project

Approval Manager

T: 0438 646 286

E: Vicki.McBride@glencore.com.au

Tim Browne

EIS Project Manager – Umwelt

T: 0488 229 179

E: tbrowne@umwelt.com.au

MT OWEN CONTINUED OPERATIONS

A GLENCORE Project



Community Information Sheet
Project Amendments - June 2014

04

Update

This information sheet provides an update regarding the status of the Mount Owen Continued Operations Project, and advises of some recent changes to the proposed Project and how these affect the EIS studies, further consultation and timeline for the government approvals process.

About the Project

The Mount Owen Continued Operations Project (the Project) is currently a proposal to extend the life of the Mount Owen Mine and support the retention of the existing Mount Owen workforce until 2030.

Work on the Environmental Impact Statement (EIS) for the Project commenced in 2011 and over the past 2.5 years detailed assessment studies have been prepared to address government requirements and to meet community expectations.

Over this period, the project team has worked hard at addressing key issues of relevance to the Project and the community; and in doing so have explored a range of iterations of the mine plan and refinements to the Project design.

The most recent Project refinement relates to the inclusion of mining within the northern portion of the previously

disturbed area of the Ravensworth East Mine, referred to as the Bayswater North Pit (BNP); as well as some minor changes (primarily in the east of the proposed North Pit) arising from further mine design optimisation.

The need for such a Project change is being driven by a Glencore-wide focus on optimising the value from all existing resources. This review is involving each operation to consider all potential opportunities that maximise resource recovery within current operational areas and within Glencore held mining leases.

The BNP is located entirely within the approved mining disturbance area and extraction in the area is included as part of the overall approval.

Status of the EIS

Given the current timing of the Project's EIS, we have taken the opportunity to pause finalisation and public exhibition of the EIS in order to include the proposed amendments mentioned above.

All technical studies are in the process of being updated to assess the potential impacts associated with the proposed project amendments, and the community and relevant government agencies will be consulted over the next few months. The

EIS will then be submitted for adequacy review during Quarter 4 2014, prior to being placed on public exhibition.

Discussions with landholders

Assessing perceived impacts and ensuring the community can contribute to the impact assessment process has been a key component of the Project to date.

Throughout the EIS process, we have met with landholders closest to the operations to identify their individual issues and have used this information to inform our project planning. We thank you for your valuable participation to date.

Consequently, we will be continuing this program of consultation and discussing the proposed project amendments, by firstly contacting our near neighbours by telephone, followed by personal meetings in October this year. Once our EIS studies have been updated (expected to be September 2014), we will be able to share the outcomes of these updated studies and any new findings relating to the proposed project amendments. However, if you would like to meet with us earlier to discuss the project amendments in more detail, then please let us know.

Further Project Information

The Mount Owen Complex

The Mount Owen Complex consists of three open cut operations, Mount Owen (North Pit), Ravensworth East (West Pit, Ravensworth East Resource Recovery (RERR) Mining Area and Bayswater North Pit) and Glendell (Barrett Pit). The mining operations at the Complex include the integrated use of the Mount Owen coal handling and preparation plant (CHPP), coal stockpiles and the rail load-out facility.

Bayswater North Pit (BNP)

In late 2013, we undertook a drilling exploration program in the northern portion of the Ravensworth East Mine which identified coal resource in a previously disturbed area, currently approved for mining. Further evaluation in early 2014 confirmed that this area is economically feasible to mine.

Findings from the exploration have identified approximately 12 million mineable coal tonnes within the BNP which lies entirely within the approved disturbance footprint and mining leases for the existing Ravensworth East Mine. Extraction of this coal will enable full recovery of resources in the north of Ravensworth East with an additional 7 years of mine life for this area from that previously proposed.

Ravensworth East Resource Recovery (RERR) Area

The amended Project proposes that mining within the RERR Mining Area will be undertaken sequentially after the BNP is completed, thus increasing the period of employment and other ongoing social benefits to 2027 (this was previously predicted in the EIS to finish in 2019).

The Ravensworth East open cut operation is currently approved to produce 4 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal. This is not proposed to change within either the BNP or RERR Mining Areas.

North Pit Amendment – Additional area in Southeast

In line with our approach to the BNP, we have taken the opportunity to also refine our mine planning for the eastern area of the proposed North Pit continuation in order to further optimise the coal resource

recovery of the Project. This optimisation process has yielded approximately 4 million additional mineable coal tonnes for the Project, extending the life of the North Pit area by approximately 6 months.

This eastern area currently extends beyond the boundary of the disturbance footprint previously identified in the EIS, by approximately 21 hectares. However, our mine planning shows that this additional area is considered important to ensure optimum value is gained for the Project. The proposed extension of the disturbance boundary will not impact existing biodiversity offset areas.

The North Pit open cut operation is currently approved to produce 10 Mtpa of ROM coal. This is not proposed to change, however we would like to extend the length of mining to approximately 2030.

Mount Owen Coal Handling and Preparation Plant (CHPP)

To maximise the opportunities presented by the approved extraction rates at Mount Owen Complex and increased efficiencies at the CHPP, the Project proposed to increase the Mount Owen CHPP processing and rail load out capacity from 15 to 17 Mtpa of ROM coal. The EIS studies completed to date have considered the impacts of this change to processing throughput.

Due to the timing in finalising the EIS studies for the amended Project, the project team will take the opportunity to apply for this increase through submission of an application to modify the existing Mount Owen development consent, to allow the benefits of CHPP operational efficiencies to be realised in this calendar year.

It is expected that this modification application will be submitted to the Department of Planning and Environment early in Quarter 3 2014.

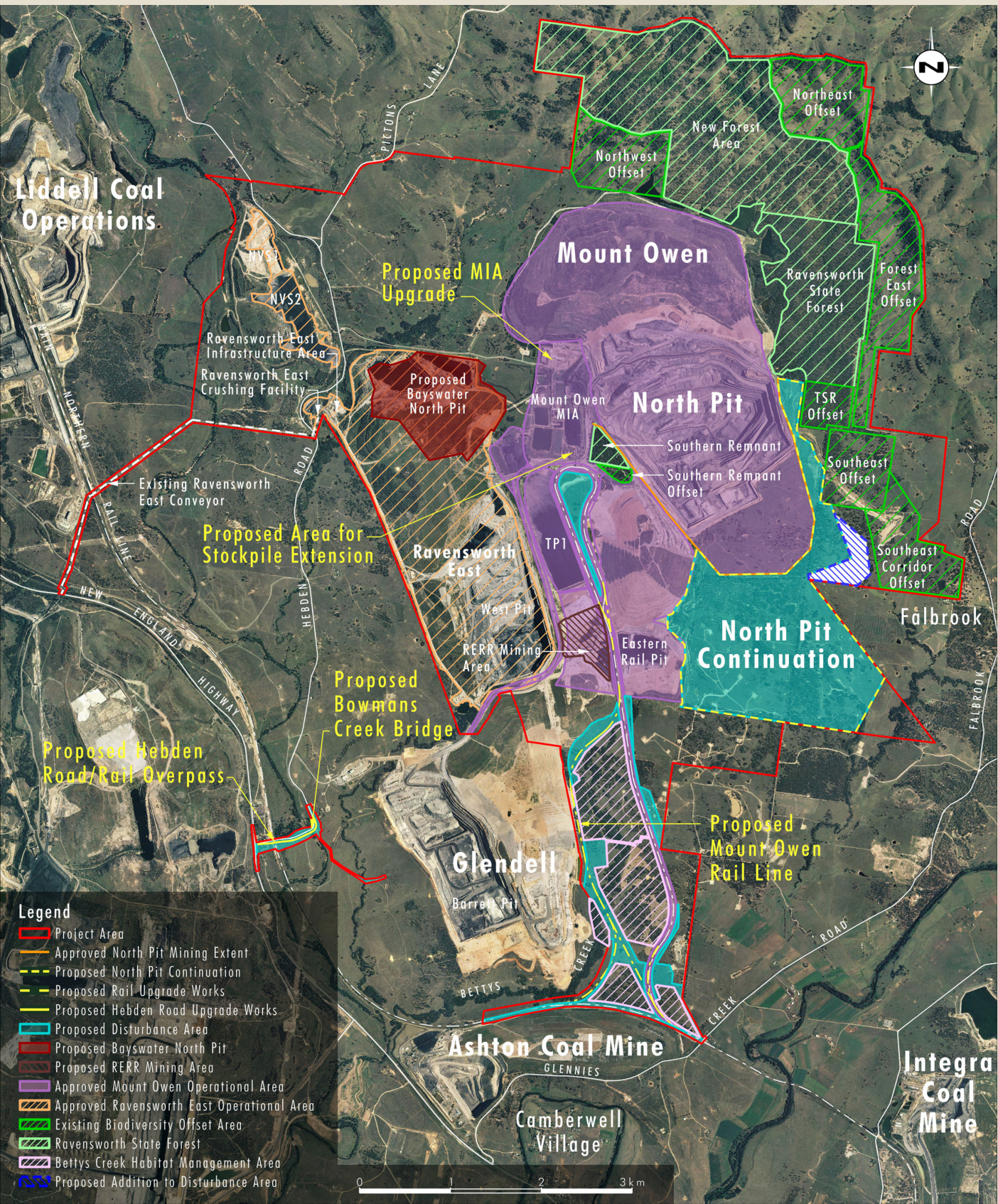
Key aspects of the amended project

What stays the same?

- No changes to the proposed road and infrastructure upgrades (i.e. upgrades to the Hebden Road and the Bowman St bridge are still planned)
- No changes to the number of employees, but an increase in the length of time employed
- No change in approved extraction rates or mining method
- No change to the construction workforce or scheduling of construction
- No changes to the disturbance footprint at Ravensworth East
- No changes to operating hours

What changes?

- Increased length of employment (i.e. additional 7 years of workforce employment at Ravensworth East Mine and an additional 6 months at the North Pit)
- Increased total volume mined (i.e. additional 22Mt) to total of approximately 92 million tonnes of run of mine coal during the Project
- Small increase (21 hectares) to the disturbance footprint in the South East of the previously proposed disturbance area
- Amendments to water management system and tailing cells



MT OWEN CONTINUED OPERATIONS

A GLENCORE Project

October 2014

Project Summary

05

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We are now in the process of finalising our revised Environmental Impact Statement (EIS) for our Mount Owen Continued Operations Project (the Project).

Our aim for the Project has been to develop a plan for the continuation of mining at the Mount Owen Mine until around 2030, whilst managing our impacts on our nearest neighbours at Falbrook, Middle Falbrook, Greenlands and Camberwell.

During the process we have listened to feedback from our stakeholders, which we have used to help us refine the Project design and identify mitigation and management measures.

This community information sheet summarises the key findings of the environmental and social studies that have been undertaken to inform preparation of the EIS. It incorporates information provided in the last two previous community information sheets (distributed in November 2013 and June 2014), combined with updates from the revised Project plan and EIS studies. The most relevant updates resulting from the revised Project relate to changes in modelling results for noise and dust.

We'd like to thank everyone who has provided us with feedback as we have moved through the planning, design and assessment phases of our Project plan.

We anticipate that the EIS for the Project will be on public display late in 2014 and will also be available on our website (www.mtowencomplex.com.au).

About the Mount Owen Complex

The Mount Owen Complex has been operating for over 20 years and is located within the Upper Hunter Valley of New South Wales (NSW), approximately 20 kilometres north-west of Singleton, 24 kilometres south-east of Muswellbrook and to the north of Camberwell village.

The Complex consists of three open cut operations, Mount Owen (North Pit), Ravensworth East (West and Bayswater North Pits) and Glendell (Barrett Pit). The mining operations at the Complex include the integrated use of the Mount Owen coal handling and preparation plant (CHPP), coal stockpiles and the rail load-out facility.

The Mount Owen Mine open cut operation is currently approved to produce 10 million tonnes run of mine (ROM) coal per year with Ravensworth East Mine currently approved to produce 4 million tonnes of ROM coal per year. This is not proposed to change, however we would like to extend the length of mining to approximately 2030.



This Booklet

In an effort to keep those closest to the Project informed, we are providing this summary booklet before the EIS goes on public exhibition.

- The booklet presents detailed information about:
- what we are proposing to do
- when the changes are proposed
- why we are proposing to do them
- what impacts are expected

Project plan

Project Planning

Consultation with the community has been a key component of our assessment process and the Project team has used this feedback in developing the Project and refining the mine plan. Early in the process you also told us you wanted more information about our existing operations and Project plans, so our assessment process has involved ongoing consultation with stakeholders, particularly our near neighbours.

Minimising our footprint

A key objective of our Project design is to maximise the use of previously disturbed mining and existing infrastructure areas, thereby minimising the overall proposed disturbance area and impacts relating to the Project. We have also designed the mining footprint and operations to avoid disturbance of watercourses, the Ravensworth State Forest and existing Biodiversity Offset Areas.

Road and Infrastructure Upgrades

As part of the Project, we propose to construct a new rail overpass and a new dual lane bridge over Bowmans

Creek at Hebden Road. This will improve road safety and reduce traffic delays currently experienced at the rail level crossing and existing single lane bridge. Construction of the road upgrades and other Project infrastructure is planned to be undertaken early in the Project.

Noise and Dust Management

During consultation, you told us that air quality and noise were two of the biggest issues when living in an area amongst multiple mining operations. As such, we have designed the Project with 'built-in' noise and air quality controls, such as the building of haul roads below the natural surface level, temporary treatment on exposed areas, and modifying our operations in response to adverse weather conditions.

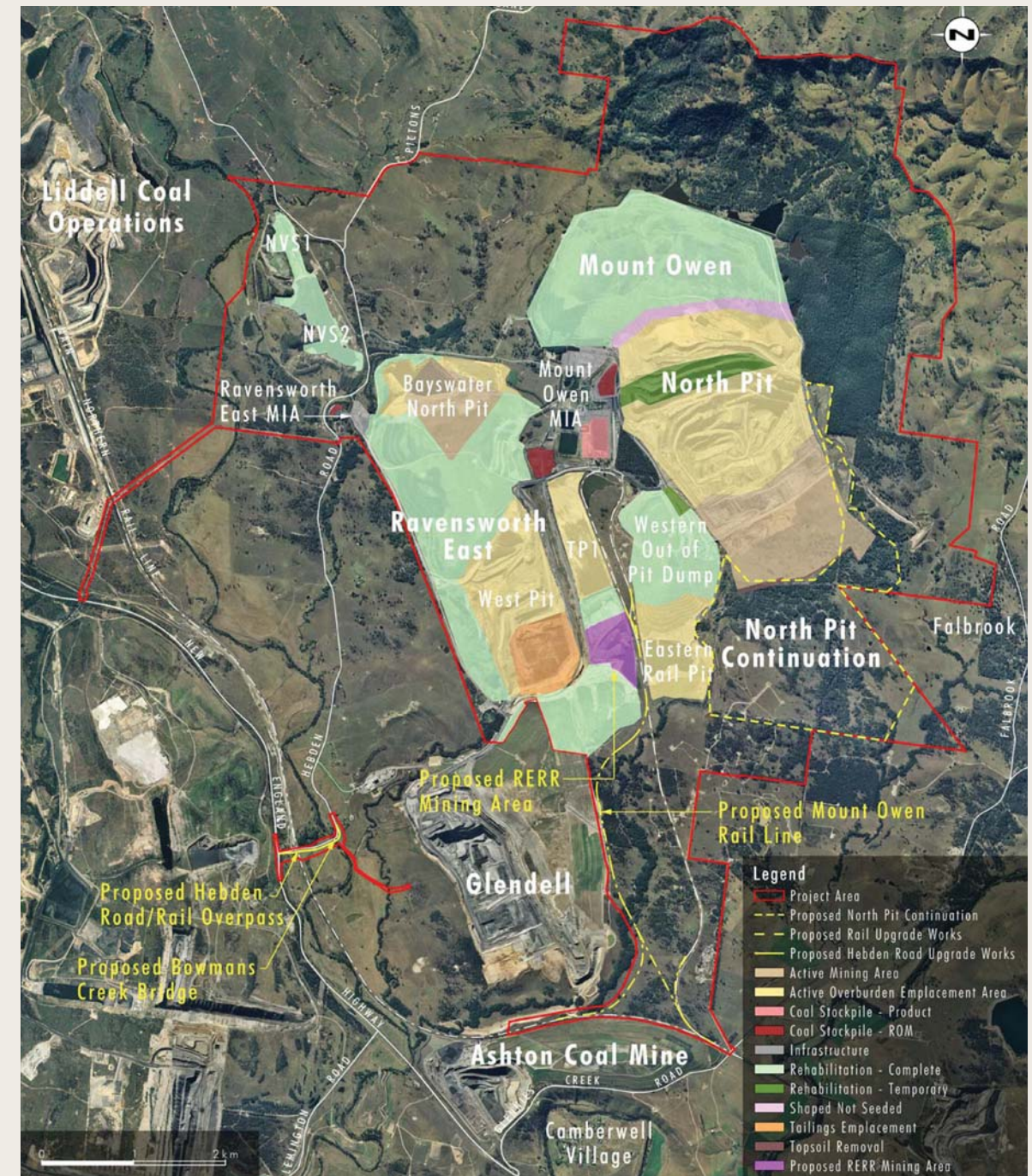
What happens after we are gone?

We are seeking to ensure sustainable post mining land use options, including native woodland areas that connect to existing native vegetation areas to optimise local and regional flora and fauna linkages, as well as areas suitable for sustaining potential future agricultural activities such as grazing.

The development of the Project

In response to requests for more information on how the development of the Project will occur over time, the following three pages chart the key stages of the Project and their approximate timing should it be approved.

Year 1: approximately 2016

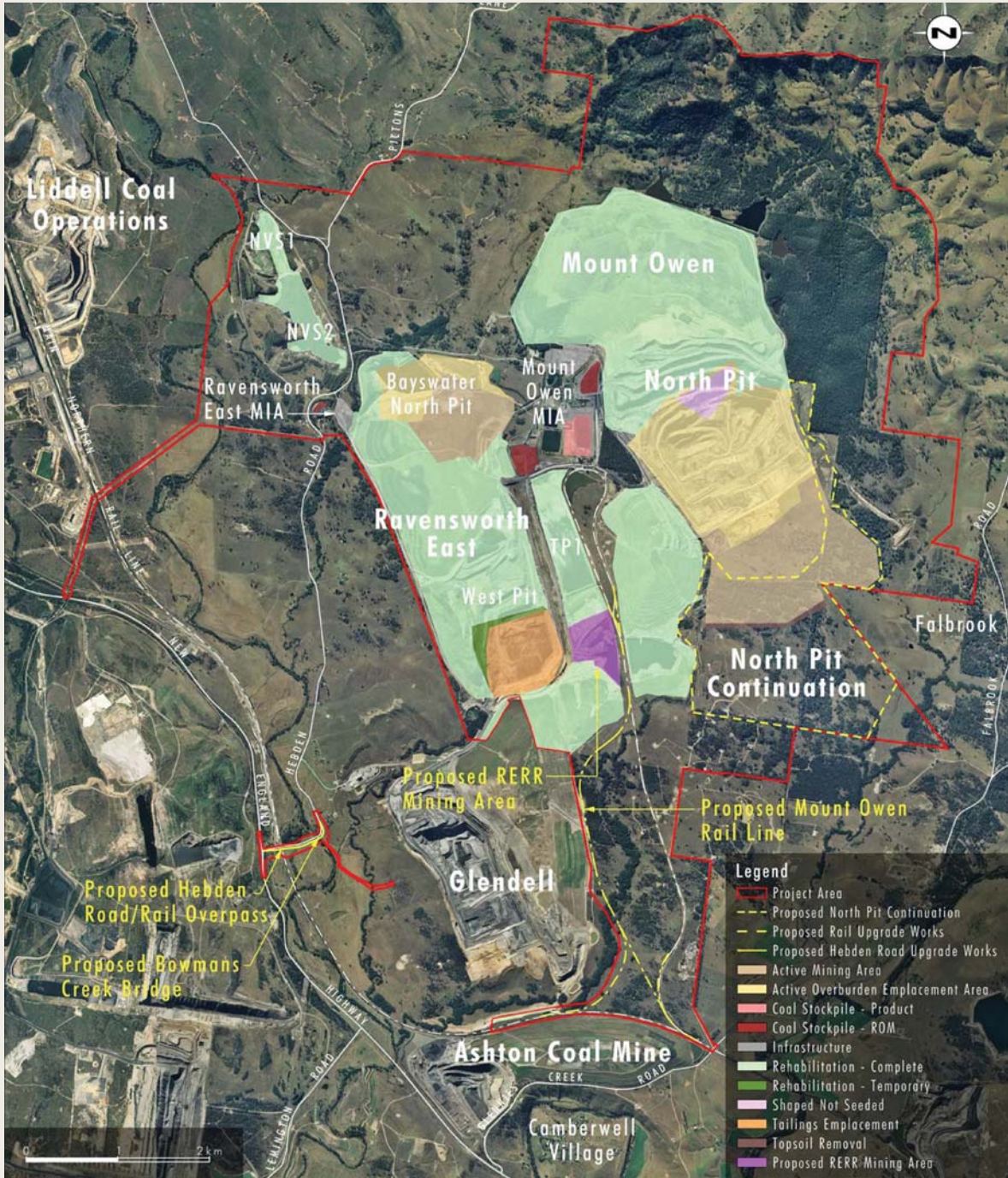


Key features of the Project at this stage:

- Excavator and truck mining operations continue in the North and Bayswater North Pits with progressive rehabilitation of emplacement areas.
- Glendell Mine continues to haul its ROM coal to the Mount Owen CHPP for processing.
- The Eastern Rail Pit and Tailings Pit 1 at Mount Owen are being capped.
- The southern portion of the West Pit is being used for tailings emplacement and coarse reject is being emplaced in North and Bayswater North Pits.
- Construction works are being planned including:
 - Bowmans Creek bridge works and the Hebden Road rail overpass.
 - Preparation works for a new northern rail turn out and rail line.
 - Mine infrastructure upgrades, including workshop and stockpile extension.

The development of the Project

Year 5: approximately 2020

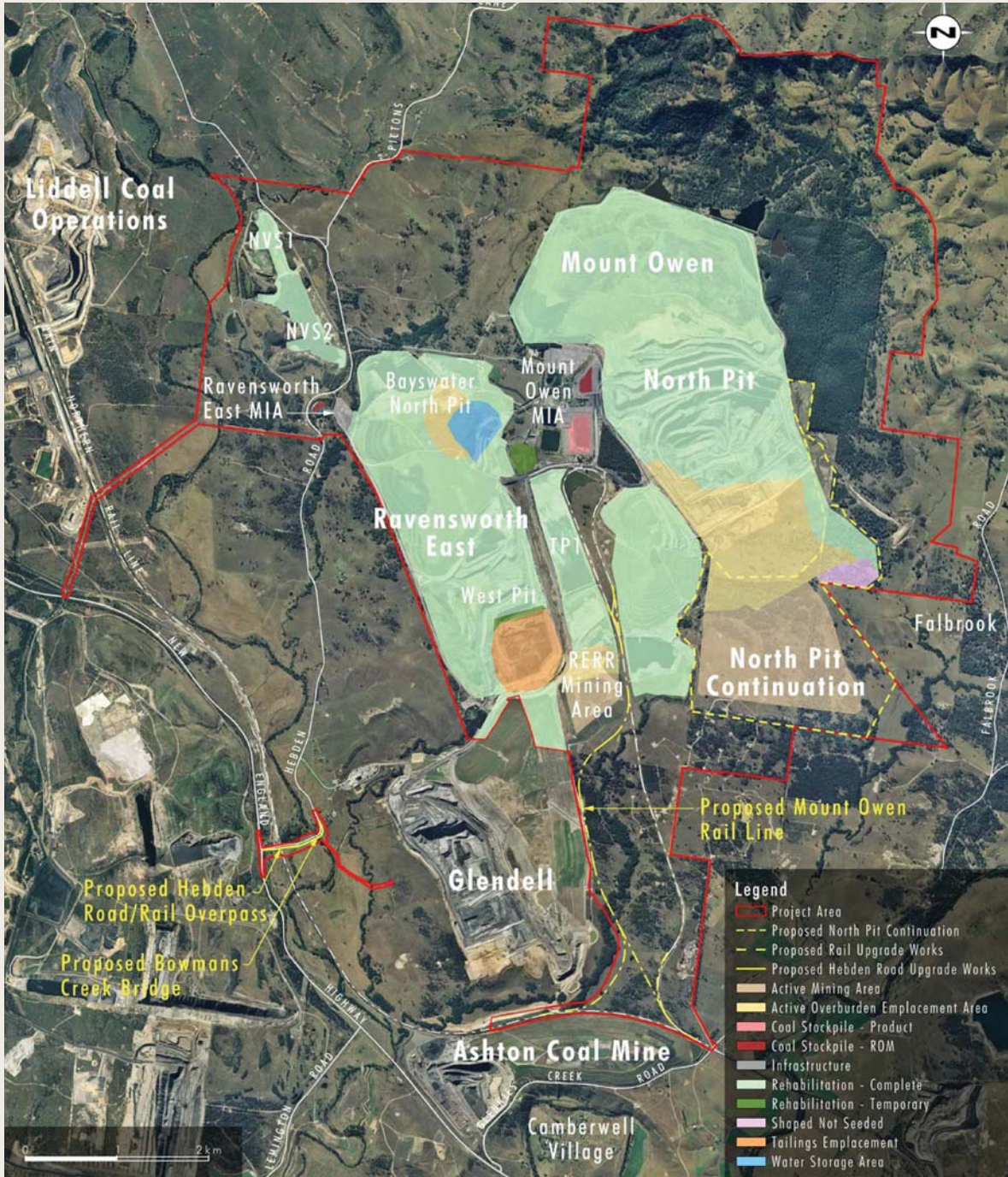


Key features of the Project at this stage:

- Mining operations in North Pit have progressed south and we will be at our peak extraction rate.
- The North Pit emplacement areas are being progressively rehabilitated, with the emplacement heights reducing as mining progresses south.
- Mining within the Bayswater North Pit is continuing at Ravensworth East with the overburden emplacement areas being rehabilitated.
- Mine haul roads are being built into the western highwall of North Pit as the mine progresses south.
- Glendell Mine continues to haul its ROM coal to the Mount Owen CHPP for processing.
- Construction works, including the dual lane bridge at Bowmans Creek, the new rail overpass and the new rail line, are planned to be completed. All new mine infrastructure upgrades are being utilised.
- The southern portion of the West Pit continues to be used for tailings emplacement and coarse reject continues to be emplaced in the North Pit and the Bayswater North Pit.

The development of the Project

Year 10: approximately 2025



Key features of the Project at this stage:

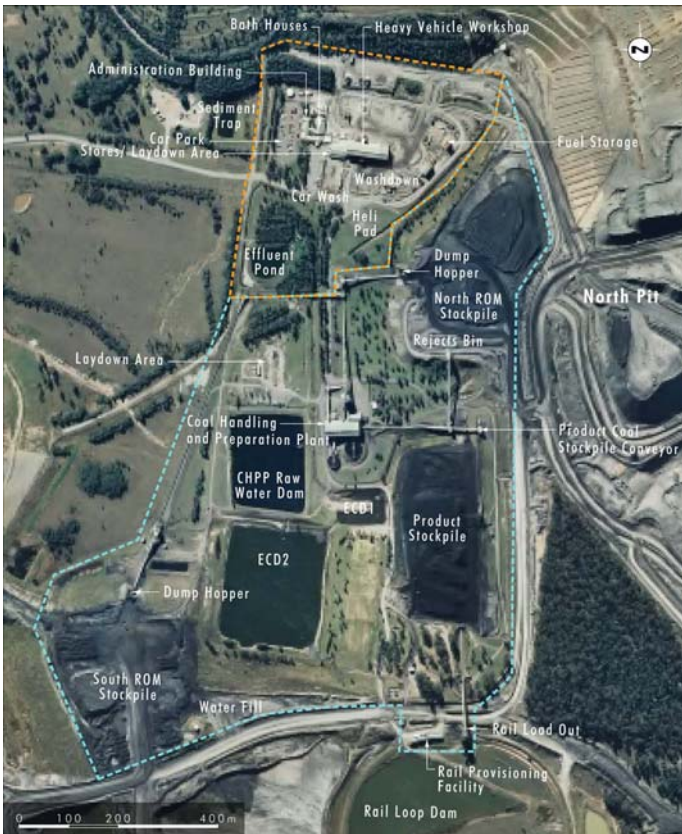
- Mining operations in North Pit have reached the southernmost limit of the Project.
- The primary overburden and coal haulage in North Pit is via select haul roads constructed below natural surface in the western high wall. Strategically located haul roads will also be bunded.
- Coal mining activities within Bayswater North Pit have ceased and mining within the Ravensworth East Resource Recovery Mining Area has commenced.
- The southern portion of the West Pit continues to be used for tailings emplacement and coarse reject continues to be emplaced in the North Pit and the Resource Recovery Mining Area.
- Progressive rehabilitation of North Pit and Ravensworth East Resource Recovery emplacement areas.

Infrastructure upgrades

Upgrades to Hebden Road

The Project seeks approval to construct a new dual lane bridge over Bowmans Creek and an overpass over the Main Northern Rail Line that crosses Hebden Road. These works will improve road safety for road users and minimise traffic delays on Hebden Road that result from the existing single lane Bowmans Creek Bridge and the existing rail level crossing. Hebden Road is the primary employee and services access to the Mount Owen Complex, as well as being an important road for local business (quarries) and residents.

Mine Infrastructure Area upgrades



Legend
CHPP Boundary
MIA Boundary

Rail line augmentation

The Project is providing for an additional rail line and northern turn-out west of the existing Mount Owen Complex rail line. This would allow the existing Mount Owen rail line to be used as a siding for parking Glencore Rail trains when not in service and allow Glencore trains to turn around within the Mount Owen rail loop, thereby reducing unnecessary train movements on the Main Northern Rail Line.

Proposed Rail Alignment



Legend
Project Area
Approved North Pit Mining Extent
Proposed North Pit Continuation
Proposed Rail Upgrade Works

On-site infrastructure

The Project will extend Mount Owen's existing product stockpile and improve the coal handling functionality of the stockpile. It will also upgrade the capacity of the existing heavy vehicle workshop and fuel farm in the Mine Infrastructure Area, provide a new heavy vehicle parking area and replace associated site services, such as the raw water system.

Air quality

Air quality was one of the main concerns identified by community members during the consultation process. To address this issue, a detailed air quality impact assessment has been undertaken in accordance with the Director General's Requirements (DGRs) for the Project, using the NSW Environment Protection Authority (EPA) prescribed method for undertaking air quality modelling and assessment.

Modelling

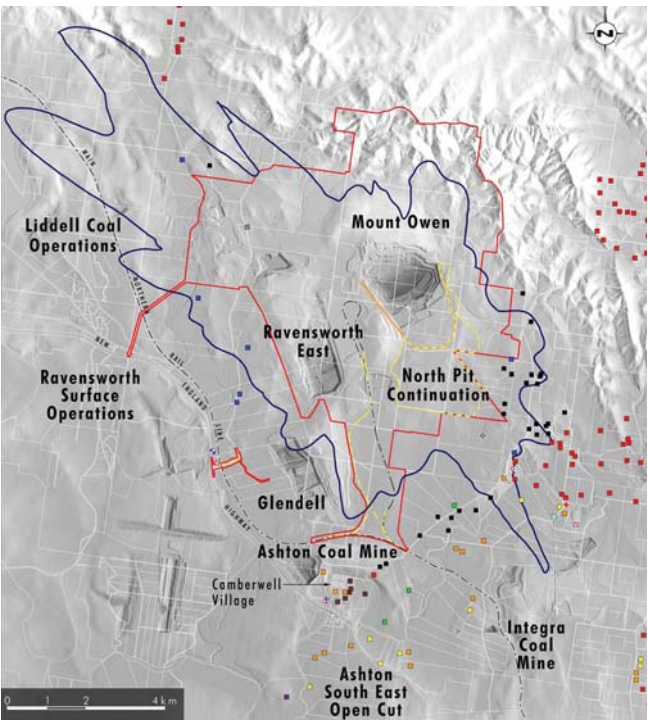
Dust emission modelling has taken into account local meteorology, topographic details and air quality monitoring data collected from the existing Mount Owen Air Quality Monitoring Network.

Air quality model predictions for dust (including PM10 and PM2.5) were compared to Department of Planning and Environment (DP&E) and EPA criteria to provide an assessment of the predicted air quality impacts in relation to amenity and health considerations.

Results

The modelling has shown that impacts can be effectively managed through mine planning and dust controls.

It shows that later in the Project (approximately Year 10), worst case weather conditions could lead to one private residence exceeding the air quality criteria 24 hour average



Legend
Project Area
Approved North Pit Mining Extent
Proposed North Pit Continuation
Proposed Rail Upgrade Works
Proposed Hebden Road Upgrade Works
PM10 - 24 Hour 50µg/m³ Contour
Private Residence
Currently Subject to Acquisition Rights - Dairy
SEOC Acquisition - Noise Trigger
Community Hall
Former Hebden Public School
Church
Doracon Site Office
Mine Owned Residence - Glencore
Mine Owned Residence - Other Mine
Mine Owned Residence - Derelict
Mine Owned Residence - Vacant
Subject to Acquisition Rights - Glencore No Dwelling
Private No Dwelling
Glennies Creek Fire Brigade
Currently Subject to Acquisition Rights - Glencore
Currently Subject to Acquisition Rights - Other Mines



Air quality sampling

PM10 criterion (50 µg/m³) and therefore this landowner is likely to be granted acquisition rights should the Project be approved. A number of mine owned residences are also predicted to have 24-hour PM10 levels in excess of the criterion in Year 5 and Year 10.

There is one privately owned residence, without current acquisition rights, predicted to exceed the cumulative annual average PM10 criteria of 30 µg/m³ in Year 1. The modelling identifies that the Project's contribution to PM10 levels at this residence is very low.

The figure to the left shows the 24 hour average PM10 air contour for the Project that is predicted to occur in the worst case scenario model for all years of the Project. The red line refers to the Project area boundary, and the blue line delineates the area within which residences exceed the relevant criteria (50 µg/m³).

Full results will be presented in the EIS.

Management

We are committed to the ongoing development and implementation of mitigation measures to minimise dust, diesel and blast fume emissions potentially generated by the Project. To do this, we will apply a range of measures and technologies for dust control, including near-field and community based real-time monitoring, haul road dust control, and temporary treatments (for example, early temporary revegetation) to overburden to reduce wind erosion prior to final rehabilitation. At exposed locations, and in specific weather conditions, we will further modify our operations to further reduce dust emissions.

Particulate Matter

- TSP – total suspended particulate matter - all suspended particles in the air. The upper size range is typically 30 µm – 50 µm.
- PM10 – particles with equivalent aerodynamic diameters of less than 10 µm.
- PM2.5 – particles with equivalent aerodynamic diameters of less than 2.5 µm diameter (a subset of PM10). Often referred to as the fine particles.

Noise

Noise from mining operations was another key concern for landholders, and we have worked hard to minimise our impacts from all potential noise sources such as mining operations, construction, traffic and rail.

Modelling

A Noise Impact Assessment was undertaken for the Project with a methodology developed in accordance with the NSW Industrial Noise Policy. The assessment considered recorded local climatic conditions and data from the Mount Owen Complex noise monitoring network.

The predictive noise modelling investigated the potential noise impacts at the properties nearest our operations under a full range of weather conditions.

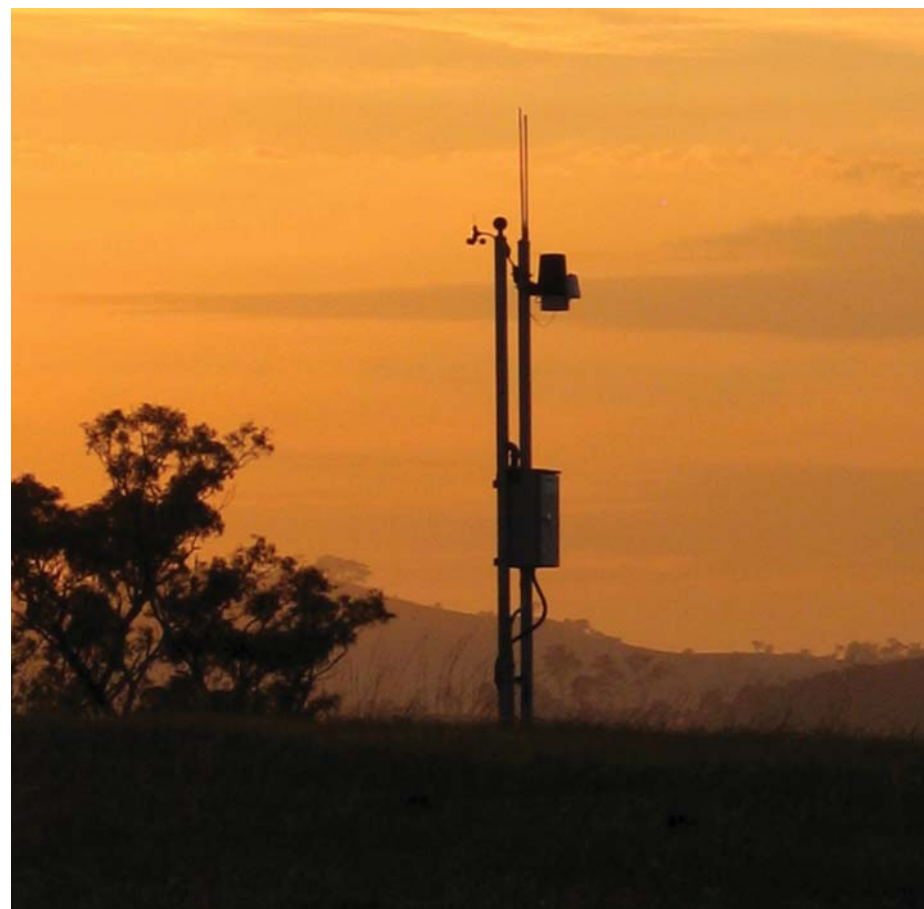
Direct noise impacts associated with the Project, as well as the cumulative noise impacts associated with the Project and other approved mining operations, were assessed.

The Project design process included comprehensive mine planning options and noise modelling to minimise noise impacts, which involved rerunning noise models throughout all Project phases to see how changes to the operational scenarios would affect noise. As a result, the Project incorporates all reasonable and feasible noise control measures.

Results

The study found that noise impacts associated with the Project are predicted to increase in later years as mining in the Project progresses further southeast and south, with the worst case being Year 10 of the Project. Worst case noise propagation conditions have been assessed to be winter nights, under inversion conditions.

Under these worst case conditions, noise modelling has shown that three private residences are predicted to be affected by Project related noise levels greater than 5 dB above the relevant Project Specific Noise Level (PSNL). The PSNL is the noise criteria determined in accordance



Noise monitoring in Middle Falbrook.

with the Industrial Noise Policy, and an exceedance of more than 5 dB is considered an appreciable increase in noise level, likely to be noticeable by most people. For this reason, these landowners are expected to be provided with acquisition rights in any development consent granted for the Project.

Eight private residences are predicted to experience Project related noise levels greater than 2 dB and less than 5 dB above the relevant PSNL. This is considered a moderate noise level, not noticeable by some people and may be noticeable by others. These land owners will be offered opportunity for residence specific mitigation measures such as double glazing of windows etc.

Ten private residences are predicted to experience Project related noise levels up to 2dB above the relevant PSNL. These are considered minor noise level increases, not noticeable by most people. Ongoing and targeted noise monitoring (at the request of the landowner) will be conducted at these properties.

The full results will be available in the EIS.

Management/commitments

Mount Owen is committed to the ongoing development and implementation of mitigation measures to minimise the impact of all noise associated with the Project including mining operations, construction, traffic and rail. Noise will be managed by a mix of innovative design initiatives, such as building haul roads to be below the natural surface and the use of strategically located noise bunds.

Other practical measures include the ongoing use of noise attenuated trucks and machinery, and modifying operations during adverse meteorological conditions that may have potential to elevate noise levels above those predicted.

Noise will be monitored by both 'continuous' and 'attended' (implemented by a person) monitoring technologies during the life of the Project and we will continue to implement adaptive management, considering and responding to noise monitoring results and emerging technologies.

We will also undertake appropriate measures on properties affected by noise levels above relevant criteria, based on discussions with the relevant landowners.

Aboriginal cultural heritage assessment

The Project undertook an Aboriginal Cultural Heritage Assessment to better understand the cultural heritage values of the Project Area which was once occupied by the Wonnarua people.

In consultation with 60 registered Aboriginal parties, Knowledge Holders and the Local Land Council, we have sought knowledge and advice regarding the social, historic, aesthetic and scientific values that exist within the Project Area.

The three Knowledge Holder groups consulted also provided their own cultural heritage assessment reports.

This has included oral stories, cultural knowledge, historical research and walks on Country, as well as an archaeological survey of the area in

order to understand the level of impact the Project may have, on the cultural heritage values of Aboriginal sites and the landscapes.

The cultural heritage assessment has shown that the wider regional cultural landscape surrounding the Project Area does hold high cultural and historical significance to Wonnarua people.

The historical associations with early settlement, conflict, dispossession and survival are important, and the nature of the area as a surviving cultural landscape is of significance to numerous members of the Wonnarua people making this regional area significant.

Management measures have been developed collaboratively with the registered Aboriginal parties involved in the assessment and will be undertaken in consultation and participation of the Knowledge Holders and community stakeholders.

The management measures have considered both the Project and the regional area.



Archaeological survey for Aboriginal artefacts as part of cultural heritage management.

Historic heritage

A Historic Heritage Assessment was undertaken for the Project. No sites/items with any form of statutory heritage listing were identified within the Project Area. None of the identified listed heritage items located within the vicinity of the Project Area will be directly impacted as a result of the Project.

The area of the former Ravensworth Village has the potential for a locally significant archaeological resource, within the area proposed to be disturbed by the Hebden Road upgrade works. As such, an on-site archaeological investigation of that area will be undertaken prior to the commencement of construction of the Hebden Road upgrade works.

Example of site with local heritage significance.





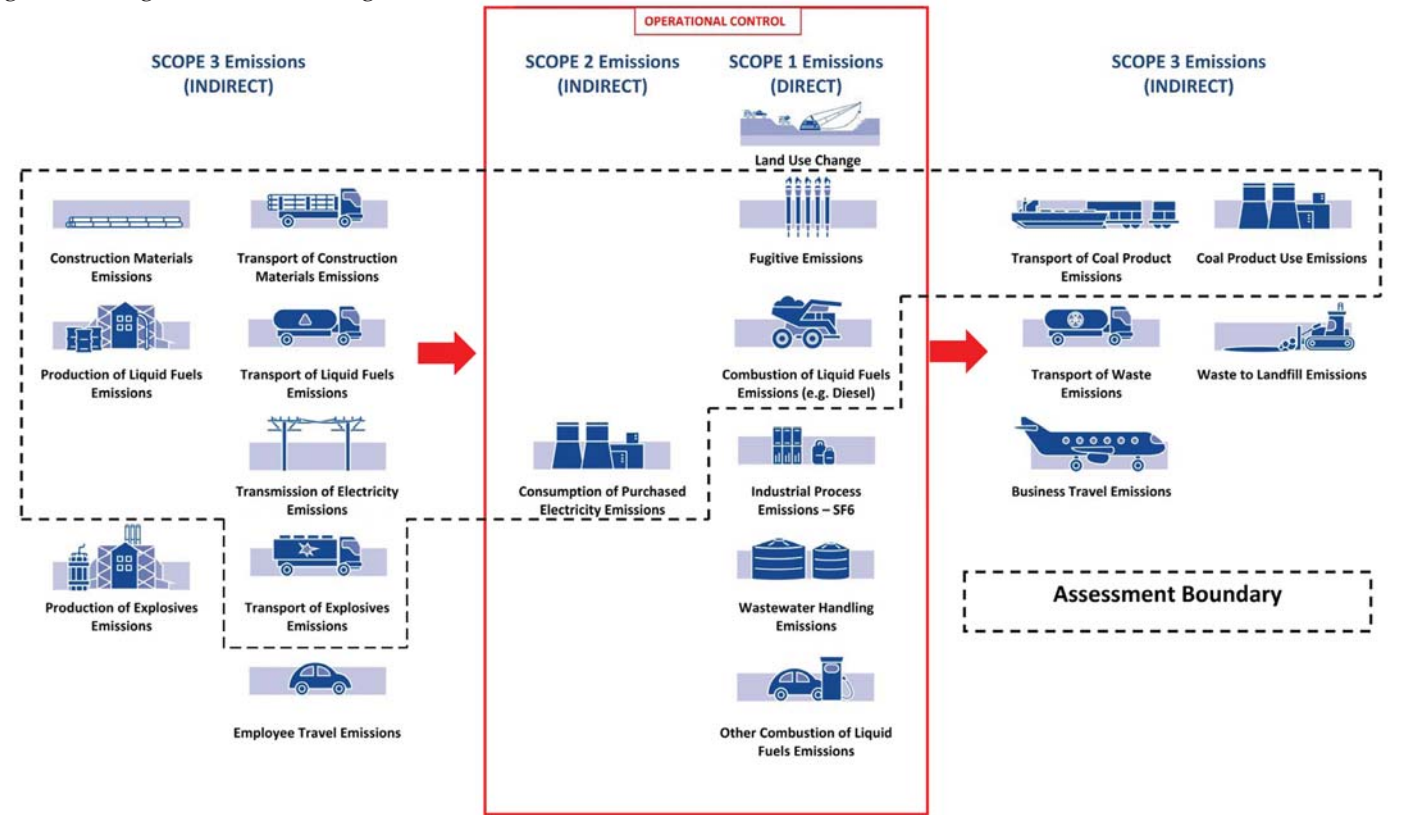
Greenhouse gas

A specialist greenhouse study for the Project assessed emissions from our operational activities ('Scope 1'), the electricity we use ('Scope 2') and the indirect 'downstream' emissions generated by third parties involved in getting our coal to our customers and from end-use of our product (consumption) ('Scope 3'). The assessment showed that the downstream emissions represent approximately 96% of the Project's total emissions.

The study also found that the Project's contribution to national annual emissions is relatively small and it is unlikely to impact national greenhouse gas policy objectives. Mount Owen will continue to mitigate greenhouse gas emissions through

ongoing energy efficiency initiatives, utilising alternative fuel sources and optimising productivity. This includes limiting the length of haulage routes to reduce transport distances and fuel consumption, and selecting equipment and vehicles that have high energy efficiency ratings.

As the world's largest exporter of seaborne thermal coal and a significant consumer of energy, Glencore continues to review its approach to climate change. Our coal business is actively reducing fugitive emissions from mining by utilising coal mine waste gas. Glencore also contributes to research and development on low emission technologies.



Blasting

Blasting for the Project will be located within the North Pit Continuation and the Ravensworth East mining areas. A blast assessment for the Project used a ground vibration and air blast predictive model based on vibration and air blast data collected from the blast monitoring stations at the Mount Owen Complex.

The modelling indicates that any potential impacts associated with blasting activities can be managed effectively and no exceedances of the relevant blast criteria at any private residence or other blast sensitive location are anticipated.

Water

Water management system

Water management for the Project will be integrated within the existing Water Management System currently in place for the Mount Owen Complex. This includes continuing to manage water resources in accordance with the Mount Owen Complex Water Management Plan (which is a condition of our development consent), our Environmental Protection Licence and the Hunter River Salinity Trading Scheme.

In addition, the Mount Owen Complex is an integral part of the Greater Ravensworth Water Sharing Scheme (GRWSS) with other Glencore mines in the greater Ravensworth area. The GRWSS allows flexibility in water management, with water surplus to Mount Owen's needs able to be transferred to other mines, or water imported to meet our needs during periods of high demand. This reduces Glencore's overall reliance on raw water supplies.

Downstream flow

The surface water assessment found that although the Project will result in changes to catchment areas within and surrounding the Project Area,

there will be negligible impacts on flows, water quality and water users downstream of the Project Area. The Project will not reduce the annual flow volumes in Main Creek, Glennies Creek and Bowmans Creek, therefore there will be negligible impact on the volume of water available to downstream water users.

Erosion and sediment control

Erosion and sediment control measures will be applied at all stages during the Project to limit the potential impacts of the Project on downstream water quality. This includes rigorous measures such as clean water diversions, silt fences, sediment dams and vegetation cover, to be implemented during construction, operational and rehabilitation phases.

Groundwater

A detailed assessment of the potential impacts of the Project on groundwater resources has been completed. The Project has been designed specifically to minimise impacts on the alluvial groundwater systems. This includes modification of the mine plan to include a minimum 200 metre setback from Main Creek.

Based on detailed modelling, the assessment determined that the Project will result in localised drawdown of groundwater within the alluvial and hardrock aquifers, however the impact of this drawdown on surface water flows within the local creeks is expected to be negligible.

No private groundwater or surface water users will be impacted by drawdown associated with the Project and it is not expected to impact on groundwater quality.



Final land use, rehabilitation & ecology

Progressive rehabilitation

The Project's closure and rehabilitation strategy has been designed to build on the success of existing rehabilitation techniques implemented at Mount Owen which have been recognised internationally.

Rehabilitation will continue to be undertaken progressively with disturbed areas being rehabilitated as soon as practicable throughout the life of the Project. Rehabilitation will aim to recreate similar ecosystems and vegetation communities removed by mining (i.e. using species consistent with those communities), as well as targeting some areas to be returned to grazing.

The rehabilitation strategy looks at the "bigger picture" and will integrate with the strategies for rehabilitation and final land use at Glendell and other Glencore mines within the greater Ravensworth area.



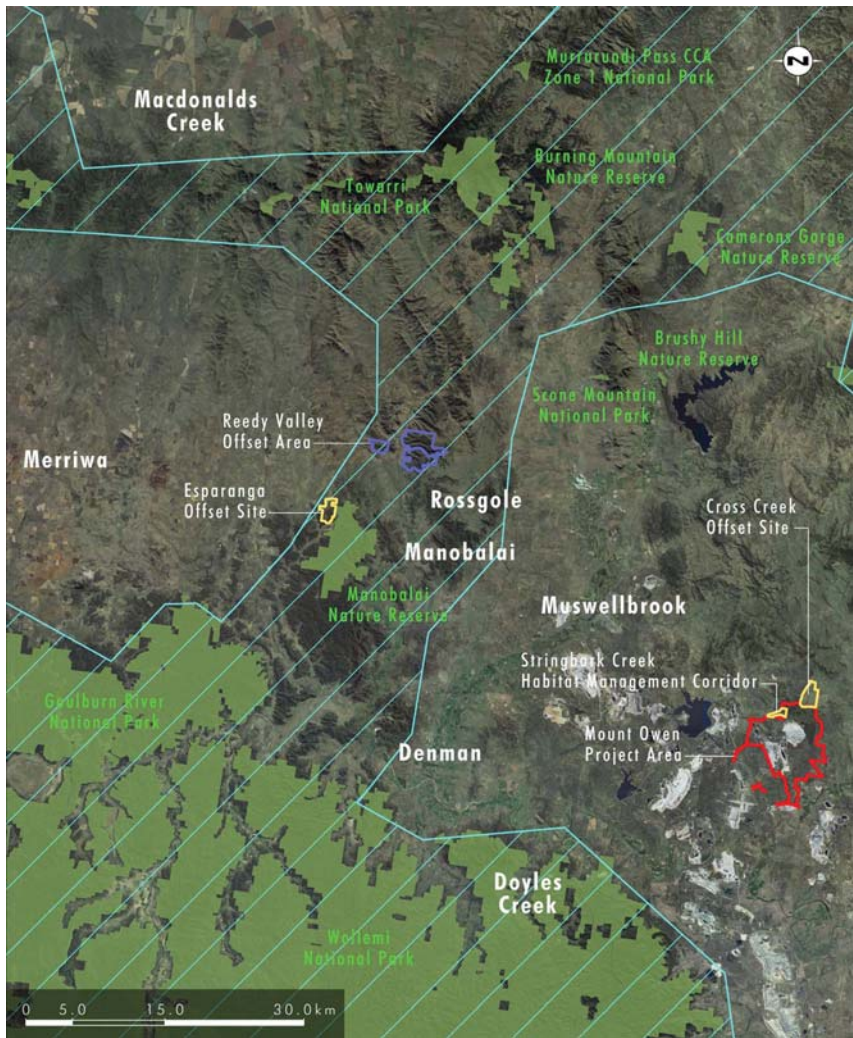
Ecology and offsets

One of our key objectives is to maximise the use of previously disturbed areas and avoid disturbing existing Biodiversity Offset Areas and the Ravensworth State Forest.

The Project does avoid disturbance to these areas, however it still requires the clearing approximately 451 hectares of vegetation which includes 223 hectares of native woodland, forest and riparian vegetation, 4 hectares of shrubland and 223 hectares of derived native grassland. The Project will also result in the clearing of approximately 86 hectares of grassland rehabilitation from within areas previously mined. Three Endangered Ecological Communities, Central Hunter Ironbark – Spotted Gum – Grey Box Forest, Central Hunter Grey Box – Ironbark Woodland and Planted Ironbark – Spotted Gum – Grey Box Forest will be impacted, and the Project has potential to significantly impact on the spotted-tailed quoll and squirrel glider.

To offset this, we are proposing to protect a 357 hectare property (Cross Creek Offset Site) and a 303 hectare area (Esparanga Offset Site) located near a number of existing and proposed Glencore Biodiversity Offset Areas. These areas will provide appropriate vegetation and habitat, with additional opportunities for environmental improvement in the area.

Additionally, the Stringybark Creek Habitat Management Area will provide a 97.5 hectare vegetation corridor linking existing high quality habitat within the existing Mount Owen Biodiversity Offset Areas and Liddell Coal Operations and include commitments regarding establishment of spotted-tailed quoll habitat. The figure to the right shows the Project's proposed offset areas.



Final landform and end use

We have designed our closure strategy to ensure sustainable post mining land use options and to maximise the potential for local and regional flora and fauna linkages. This includes the development of native woodland areas that connect to existing native vegetation areas, as well as areas suitable for sustaining potential future agricultural activities such as grazing.

Progressive rehabilitation will include the shaping of overburden

emplacement areas to create a suitable final landform. The final landform will include a final void in the southern area of the North Pit Continuation. A void will remain in the RERR mining area, however tailings will be emplaced in the void toward the end of the Project. There is also future opportunity for tailings emplacement from other nearby mines. Similarly, a void will remain at Bayswater North Pit, however with the continued operation of the GRWS, there is potential for ongoing utilisation of the

Bayswater North Pit void for water storage. Details of final void usage will be subject to ongoing review and be determined in consultation with stakeholders within five years of mine closure.

The retention of the Mount Owen Complex Rail Line may also be investigated for continued use by Glencore trains.

The figure below shows the Project's conceptual final land use.



Agricultural and Land Management

The Mount Owen Complex has a long history of coexisting with agriculture. The land within the Project Area includes part of the existing mining operations in addition to lands owned by Glencore which are currently managed as grazing enterprise.

We have prepared an Agricultural Impact Statement to assess the potential impacts on agricultural resources and industries in the areas in and around the Project. The study found that the Project will have no impact on Biophysical Strategic Agricultural Land (BSAL) or any Critical Industry Clusters (viticulture or equine). The land within the Proposed Disturbance Area has moderate to low agricultural capacity and is generally suited to grazing and conservation.

It also found the Project to have negligible impact on agricultural resources including water resources and local and regional landform, as well as local and regional agricultural services and infrastructure.

Pest and Weed Control

As a major landholder within the local area, we understand the needs and challenges associated with maintaining healthy, working, productive land and properties. We understand that it is important to work with local stakeholders and landowners toward a coordinated approach to land management, including pest and weed control. For example, over the last few years we have participated in the local community's large scale baiting program for wild dogs.



Bushfire

We will continue current bushfire management controls set out in the Mount Owen Complex Bushfire Management Plan. This will include the ongoing review of the existing Bushfire Management Plan in consultation with the Rural Fire Service as the operations progress and the site changes. This will assist us in managing the bushfire risk.



Traffic

A traffic assessment has been undertaken to help us understand the impacts on traffic from our Project. This takes into account the proposed dual lane bridge over Bowmans Creek and the rail overpass on Hebden Road, which have been assessed as providing a long term benefit in terms of improving traffic flow and road safety on this road.

Traffic flow

The Project will maintain the current workforce numbers of the existing operation and we expect that the employee traffic levels associated with continued operations will be similar to those currently experienced.

For the short period of construction (approximately 18 months), traffic will increase temporarily primarily due to vehicles associated with the construction workforce. Construction traffic for the rail line works will travel from the New England Highway via Glennies Creek Road and Forest Road, whilst other construction traffic will exit the Highway via Hebden Road. The assessment indicates that during construction, both New England Highway intersections (with Hebden Road and with Glennies Creek Road)

will still operate at good service levels with minimal delays and queue lengths, including during periods of peak traffic demands.

To help manage the traffic during this period, a Construction Traffic Management Plan will be prepared in consultation with Singleton Council and the Roads and Maritime Services for these works.

Road safety

The proposed upgrades to Hebden Road will increase road safety for all road users. This will include reducing wait times and traffic queues associated with the existing level crossing at Hebden Road, which have been known to extend onto the New England Highway.

Road safety during the construction phase will be managed to reduce the potential for traffic disruption and distraction and for unnecessary vehicle / vehicle and vehicle / pedestrian interaction. Information regarding proposed scheduled activities will be communicated to the local road users and measures such as road and site signage will be used.

Below is a 'before' shot of the current rail level crossing on Hebden Road, with the illustration at bottom showing the proposed upgrade.

Rail improvements

We are not seeking to change approved annual rail movements for Mount Owen as part of the Project however, in an effort to increase rail efficiencies, we are seeking approval to construct an additional rail line. This will allow trains to be handled more efficiently and should result in an overall improvement across the rail network.



Existing level crossing - Hebden Road.



Proposed Hebden Road upgrade works.

Social Impacts and Opportunities

The Project’s Social Impact and Opportunities Assessment (SIOA) has involved a number of phases of work to help us understand the positive and negative social impacts of the Project. The SIOA has also considered cumulative issues relating to mining within the Singleton area.

Community Consultation

Approximately 356 stakeholders have been engaged in the Project assessment program and have contributed to the identification of issues and the development of appropriate strategies to address impacts.

This has included the informative discussions with the local community that we have undertaken throughout the Project.

Issues identified by local residents as most important were air quality, noise and economic impacts. Blasting, water, traffic, visual amenity, community sustainability, and final land use were also discussed. These are shown graphically below, and an example of the way the SIOA has mapped

residents’ concerns is included on the next page.

Conversations regarding noise and air quality focused mainly on cumulative impacts, with landholders identifying these issues as the most challenging associated with living in an area with a number of active mining operations present.

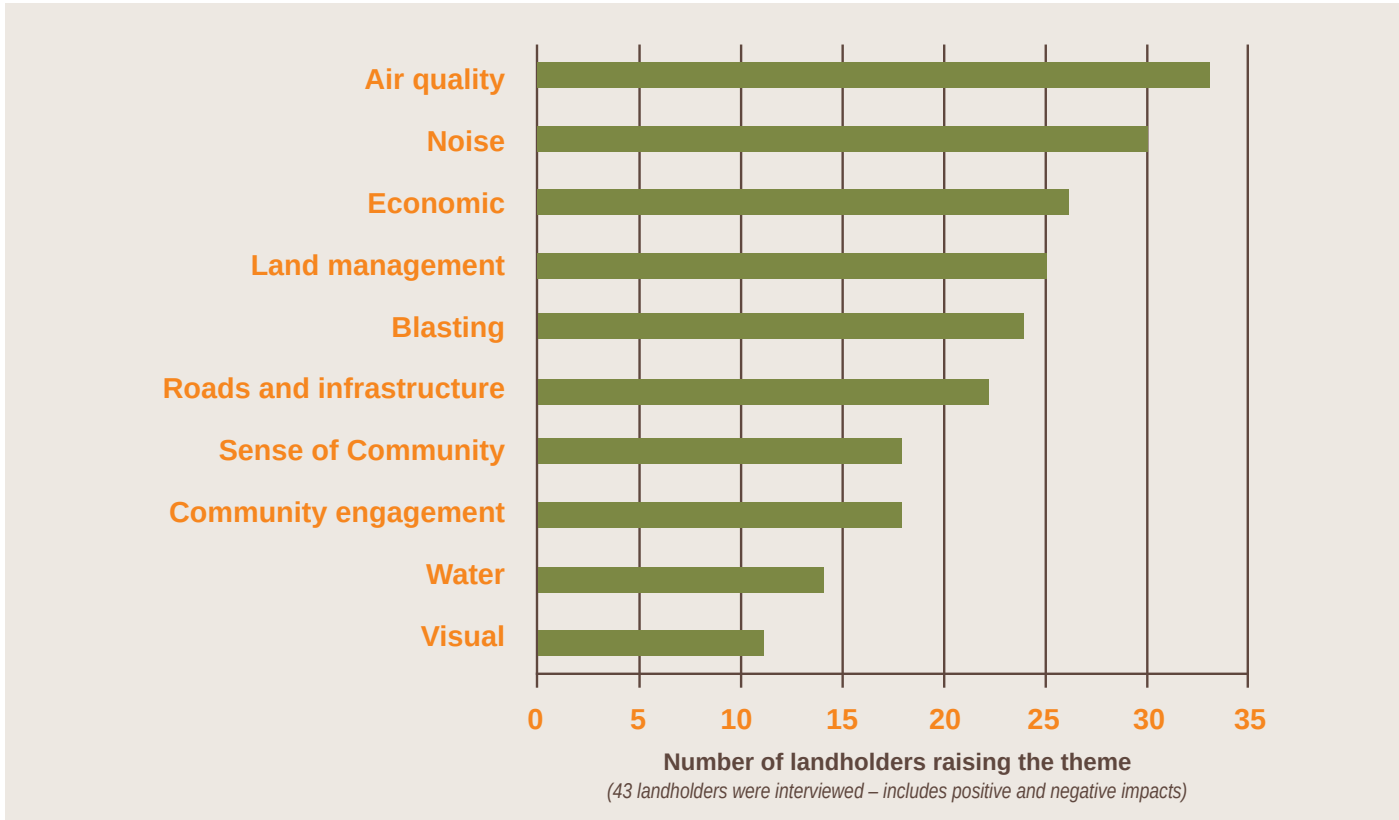
Economic discussions were overwhelmingly positive, with

continued local employment, business generation and investment in community activities and infrastructure identified as key benefits of the Project.

Concern regarding land devaluation, pressure on rental housing and effects on other businesses looking for skilled workers were also expressed, although again these were discussed in a cumulative sense.



Community members at Mount Owen’s Open Day in May 2013.



Assessing the social impacts

A risk based approach was used to assess the social impact of the Project, which looked at both the technical risks presented by the Project, as well as community perceptions of those risks.

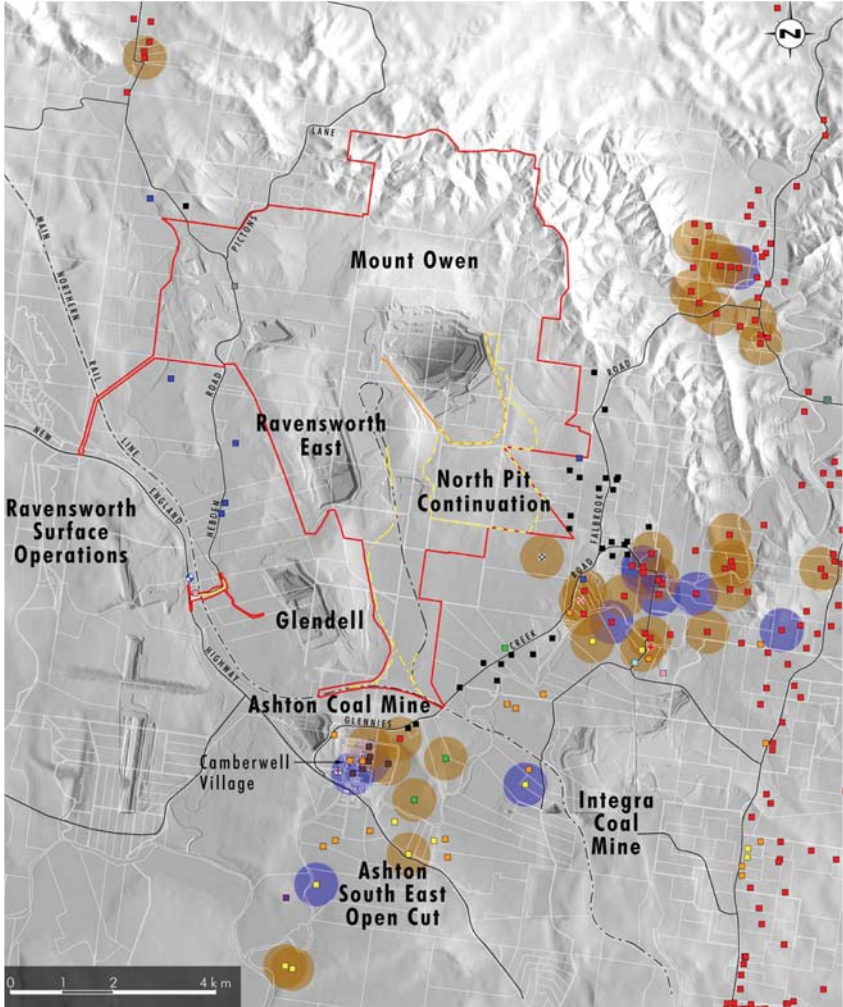
This included consideration of impacts on social amenity, housing and accommodation, transport, health and wellbeing, community sustainability, and other issues identified by stakeholders as important during consultation.

The findings of the EIS technical studies conclude that impacts associated with social amenity and health, such as noise, dust and blasting, can be effectively managed to minimise local impact; however, consultation found that concerns may remain with some local residents.

As operational employment will continue in line with current levels there will be no significant population change as a result of the Project.

Construction workforce modelling predicted that 60% of the construction workforce is likely to be sourced locally, and that any incoming workers will be able to be accommodated without housing or social infrastructure strain.

The full outcomes of the SIOA, including the strategies developed to reduce potential impacts and enhance positive impacts, will be included in the EIS.



Spatial distribution of existing visual amenity concerns regarding mining (including cumulative) mapped from consultation with 43 landholders. The brown dots show the geographic areas where landholders consulted did not raise visual amenity concerns, and the purple dots show where concerns were raised. Spatial issues mapping was also undertaken for other key impact themes.

Socio-economic linkages

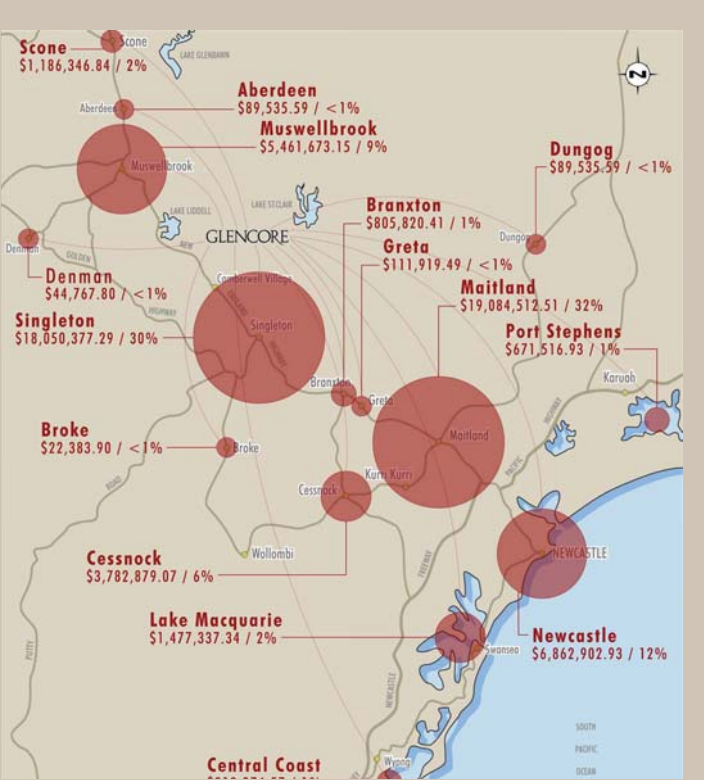
The SIOA also used information gathered from our employees and suppliers to understand the associations between Mount Owen and the broader region.

The study found that not only is Mount Owen highly linked to the township and LGA of Singleton, it also has strong connections with other nearby towns such as Maitland and Muswellbrook.

This tended to be where our employees, contractors, suppliers and their families live, spend their money, participate in the community, and access education and healthcare services.

This work has helped us understand the links we have with our local and regional towns, as well as other areas across the State and the country. It also provides a valuable local level analysis to complement findings of the broader Economic Assessment, including the finding that the current Mount Owen Complex workforce contributes \$60 million in annual household expenditure into various economies.

The figure shows a breakdown of where this \$60 million employee expenditure is spent.



Annual employee expenditure of the existing Mount Owen and Ravensworth East Workforce



Rehabilitation at Mount Owen

Mount Owen's unique approach to rehabilitation has set new industry standards and led to the Mount Owen model – the Ravensworth State Forest Vegetation Complex – achieving international recognition as a 'highly commended' site on the Global Restoration Network of the Society for Ecosystem Restoration (www.globalrestorationnetwork.org).

The program reconstructs forest and woodland in areas disturbed by mining as well as surrounding land used for biodiversity offset purposes.



Nest/roost boxes are placed at heights and aspects appropriate to the species.

Economic Assessment

Government requirements for the Project mean that a project must be shown to deliver a net benefit to NSW. To assess this, we commissioned Deloitte Access Economics to undertake a Cost Benefit Analysis (CBA) of the Project.

A CBA is a method of obtaining a consolidated estimate of the net economic value of a project by identifying the incremental costs and benefits of a project relative to the base case of not doing the project – or 'business as usual'.

The CBA used a rigorous methodology which has been recognised as best practice in similar assessments. It looked at a range of factors including the financial outputs from the mine's production, such as coal sales, as well as broader implications for external stakeholders such as the Singleton community, the broader Hunter and Central Coast region, and beyond.

The CBA concluded that overall, the Project is expected to generate net benefits (approximately \$758 million over its life), and is also expected to generate increased economic activity and employment within the

NSW community. The continuation of operations of the Mount Owen mine will have a significant positive economic impact, for the Hunter Valley and the State of NSW.

The assessment found that the Project will generate just under \$1.3 billion for the Hunter and \$1.9 billion for NSW. This includes a net benefit to the Singleton community of around \$306 million over the life of the Project. It will also provide direct and indirect employment for a peak of 1,200 full time equivalent (FTE) workers (including generator or 'flow on' effects), of which about 1,000 are estimated to be employed in the Hunter region.

The Project will involve an upfront capital investment of approximately \$153 million, much of which is expected to be spent in the Hunter region.

It will also generate royalties of an estimated \$258 million, which will be paid to the NSW Government.

Visual

A visual assessment of the Project noted two public viewing locations and one resident that have views of the existing Mount Owen mine and the proposed continuation.

Visual impacts will be reduced through the screening effect of progressive rehabilitation and the development of a final landform that seeks as far as practicable to conform to the surrounding natural environment. Ensuring that final landforms are designed to be 'as natural' as possible, was a key request by local community members during the consultation process.

Once rehabilitation is completed on existing emplacement areas the visual impacts of the Project will be less than the present visual impacts.

To reduce night time impact, permanent lights will be placed so that they are shielded and we will continue our current practice of selecting the most appropriate locations for mobile lighting.



Unique research partnership

Central to the site's rehabilitation success has been our partnership with experts from the University of Newcastle's Centre for Sustainable Ecosystem Restoration (CSER).

The partnership, initiated in 1995, is unique due to its continual feedback loop whereby Mount Owen incorporates CSER's research outcomes into the site's adaptive management plan. The partnership has also resulted in publication of new guidelines, "Establishing Native Vegetation", which drew from over 40 experiments and investigations undertaken on the Mount Owen site.

Protecting Plants and Animals

Mount Owen's Flora and Fauna Management Plan was developed by an Advisory Group consisting of representatives from the State government, NGOs and Mount Owen.

Fauna surveys are conducted prior to issuing a clearing permit and habitat trees are identified and marked prior to clearing. Clearing is undertaken as close as practicable to the mining of the cleared area, and timed to avoid fauna breeding cycles.

Due to its important reserve of indigenous seed and microflora, topsoil removal is coordinated as closely as possible with operations to ensure minimal handling and storage.

Rehabilitation uses endemic species, and seed that has been collected prior

to clearing where suitable vegetation exists. Large ground debris and dead timber is collected and redistributed for habitat purposes. Nest/roost boxes, specially designed for target species, are placed at heights and aspects appropriate to the species.

Extensive Monitoring

Fauna monitoring includes assessment of impacts on local populations such as birds, reptiles, mammals and frogs. Flora monitoring is currently undertaken seasonally to look at colonisation rates of native species and to develop a complete list of the species present within the Project area. Areas of remnant vegetation are used as control sites for comparison with rehabilitated areas.

What next

A draft EIS has been submitted to the Department of Planning and Environment for adequacy review (this is an initial phase of review whereby the Department checks that all the required studies have been undertaken adequately).

During this period, we will continue to discuss the Project with local and regional stakeholders, including

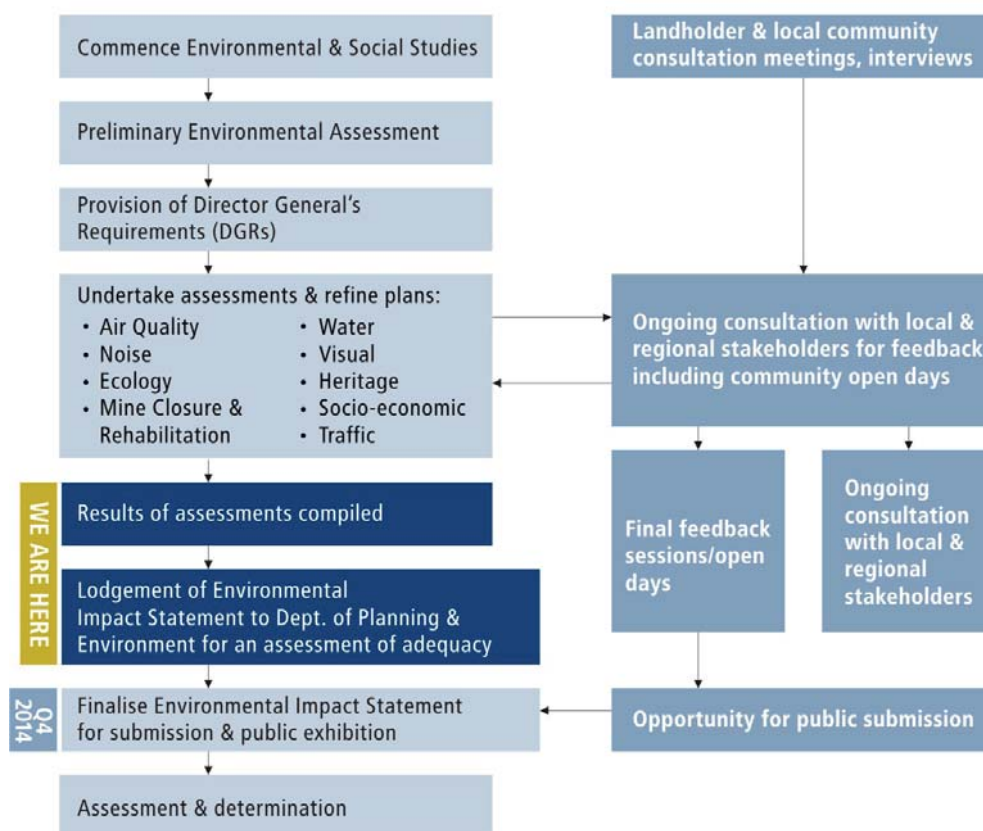
holding Open Days at the Mount Owen Mine to present findings of the EIS in further detail and offer the opportunity to view our existing operations first hand.

The Open Days will be held between 12 and 6 pm on Friday 31st October and between 8 am and 12 pm on Saturday 1st November. If you would like to attend during either of these

sessions, please provide your details to Vicki McBride (Vicki's contact details are below) to assist with our planning.

Following adequacy review and the additional consultation, we will make any final refinements to the EIS, which will then be lodged with the Department of Planning and Environment, and is expected to go on public exhibition later in the year.

Steps of the Assessment Process



If you would like more information at any time please contact:

Vicki McBride - Mount Owen Continued Operations Project Approvals Manager
T: 0438 646 286 | E: Vicki.McBride@glencore.com.au

Tim Browne - EIS Project Manager - Umwelt
T: 0488 229 179 | E: Tbrowne@umwelt.com.au

We hope you have found this booklet useful and look forward to your continued feedback on the Mount Owen Continued Operations Project.



Newcastle

75 York Street
Teralba NSW 2284

Ph. 02 4950 5322

www.umwelt.com.au