

Protecting the Little Pied Bat

Planning and constructing a mine the size of the Taroborah Project is a tricky task. Building a world-class coal mining operation that is highly productive and achieves low cost of mining is one important goal. An equally important consideration for all of us working on the project is minimising the impact on the surrounding environment.

Ecological assessments of the project site were conducted during both wet and dry seasons, but no plant species of conservation significance were identified.

In terms of fauna, the only conservation-significant species identified on the project site was the Little Pied Bat and the Cattle Egret.

The Little Pied Bat is a small bat weighing just 4–8 grams with a head and body length of approximately 45mm and forearm length of 31–38mm. The bat has long, glossy, black fur on its back that extends to the tail membrane, where it then fades to a brownish black colour. The belly is a faint wash of grey with two white stripes that form a V shape.

This species of bat is found from Greenvale to the Maryborough region and across south-western Queensland, western New South Wales and far north-eastern South Australia. It mostly lives in dry, open woodland communities, dry sclerophyll forests and vine forests. The bat roosts in tree hollows, caves, abandoned mines and buildings. It eats insects such as moths.

The survival of the species is threatened by habitat loss, most commonly caused by:

- removal of hollow-bearing trees in production forests
- large scale clearing of native vegetation for grazing or agriculture
- loss of mature roost trees particularly in riverine areas.

Changing fire regimes is another potential threat to the species. It is because of these threats that the species is currently listed as Near Threatened under Queensland legislation.

We recorded the Little Pied Bat on the Taroborah Project site during two separate terrestrial flora and fauna surveys conducted in September 2011 and August 2012.

The project site has the potential to impact on local populations of the Little Pied Bat by disturbing the bats' shelter and foraging habit.



Photo: Michael Pennay in NSW NPWS.

To lessen the potential impacts on the Little Pied Bat, we have designed the Taroborah Project around retaining the bats' key habitat areas such as the riverine corridor along Taroborah Creek and nearby woodland communities. Retaining roost and feeding habitat in these areas will minimise disturbance to the Little Pied Bat and its surroundings.



Sandra Hobbs

General Manager, Central Highlands Development Corporation

What does the CHDC do?

The Central Highlands Development Corporation is all about facilitating and advocating for sustainable growth and economic development in the Central Highlands.

We promote the region to the rest of the world through, for example, compiling statistical information for investors who are considering setting up shop here.

We also help local businesses succeed and grow by holding networking events, development workshops and Business Excellence Awards. We also have a strong focus on community. We help not-for-profit groups by giving one-on-one advice and holding regular workshops.

And we've just taken over the tourism portfolio from the local council. We have many projects up our sleeve to make the Central Highlands a real tourism hotspot for Queensland.

How did you come into your role?

A move to Emerald with my husband in 2009 gave me the opportunity.

Prior to moving to Emerald I was involved in a range of activities in the Surat Basin and Toowoomba areas, which gave me an insight into just how much development was starting to happen across the resource sector.

What do you think the future holds for the region?

Economically, the future looks great for the Central Highlands and that comes down to our diversity. We don't just rely on one industry.

Examples of upcoming projects include a major redevelopment of Emerald Aquatic Centre, reconstruction works on the Capricorn Highway, the development of the Blue Ridge housing estate in Blackwater, and construction of a new primary school, St Brigid's, in Emerald.

We currently have about 20 mining projects at various stages of development, with an estimated investment of over \$9 billion. The thousands of jobs that come with them will have huge flow-on effects to the region (including more jobs in other sectors).

Our agricultural and forestry industry will also

continue to thrive. The total gross value at the moment is around \$530 million.

Tourism is the sleeping giant of the Central Highlands. The region's home to some of the state's most unique attractions, such as the Sapphire Gemfields. We're especially keen to tap into the grey nomad market, which is predicted to boom over the next decade.

How is mining contributing to the region?

Mining is important beyond direct job creation, with some resource companies supporting the community and its economy by helping to deliver specific projects.

We work with Rio Tinto Coal Australia's Kestrel Mine Community Development Fund to deliver the Community Grants Program that helps not-for-profit groups apply for various funding grants.

We also work with BMA to deliver the Business Support and Development Program, which helps small and medium enterprises enhance business development, innovation and capacity.

Do better communications help or hinder regional development?

Certainly in our case, it's only helped our development. Nothing beats face-to-face interactions but the tyranny of distance no longer applies when you can communicate quickly and effectively with businesses and government agencies from outside the region.

Email, Skype and social media have become a vital part of our business and others, and they're only going to become even more important when the NBN comes online.

Better communications should be the reason services are retained or brought to regions like ours, rather than concentrating them on the coast. Better communications allow you to effectively do business no matter where you are. CHDC is the perfect example of that.



Photo: EIS Project Manager Paul Jackson discusses details of the project with David Brown, Central Highlands Regional Council.

Welcome to issue 2 of the Taroborah Project newsletter.

Read on to see the findings from our study into the Emerald housing market and how we are working to protect the endangered Little Pied Bat found on the project site.

In this edition, you'll also find out more about our Environmental Impact Statement Project Manager, Paul Jackson, and Sandra Hobbs, General Manager of the Central Highlands Development Corporation.

If you have any queries, or want to make a suggestion, please contact us.

We look forward to continuing to be a part of your community.

The Taroborah Team

Contact us

Please contact us if you would like more information or to get involved.

Email: info@taroborah.com.au

Call: 1800 647 446

Post: GPO Box 2579, Brisbane QLD 4000

Emerald information day a great success

The Taroborah Coal Project's Emerald information day was labelled a great success, with well over 150 people attending throughout the day. Present were local landholders, council representative and townspeople.

Those visiting came not just from Emerald, but from across the Central Highlands.

Many took the opportunity to meet the project team face to face, and to ask their own questions about the project.

One question many wanted answered was simple: how soon could they get a job working on the project. The project team were able to reveal that the project's owner, Shenhua International Group, would like to employ locally, but a final decision on development is yet to be made.

Another hot topic was managing the local environment. Environmental studies have been taking place at the project site over the last couple of years. These studies have focused on groundwater, as well as local flora and fauna, among other things.

The key priority is to ensure that as little impact as possible is

experienced in the area of the project. Project Manager, Dave Thomas, said he was pleased with the work done to date.

"We have got a pretty good picture of the major issues, especially groundwater, and we are confident we can minimise impacts.

"However, Shenhua has recently undertaken another round of drilling to install new groundwater monitoring points to make sure our understanding of the site is correct. We want to do this right," Dave said.

As a result of discussions during the information day, the project team will be conducting further consultation with community members before the draft EIS is released later this year.

Some of the results of Shenhua's studies are detailed in this newsletter.

If you want more information feel free to call Dave Thomas on 1800 647 446 or email info@taroborah.com.au.





Paul Jackson EIS Project Manager

What's your background?

I'm an environmental scientist. In the past I've worked on environmental impact statement (EIS) delivery, project management, contaminated land, and surface water and groundwater quality assessment.

What do you contribute to a mining project?

The purpose of the EIS and my role as an environmental scientist is to identify the environmental values on and around the project site before mining commences.

These include terrestrial and aquatic flora and fauna populations, the quality of local surface water, sediments and groundwater, background noise and dust levels, items of cultural heritage, and any contaminated land.

We also assess potential impacts of mining activities, including noise, vibration, dust, greenhouse gas emissions, acid mine drainage and climate change.

We determine the condition of the local land and its pre-mining uses so that we can make sure strategic cropping land and soils that are prone to erosion are avoided when the mine layout is being designed.

Importantly, we also assess any potential reductions in the quality of local viewpoints that may arise while constructing and operating the mine and develop solutions to mitigate these.

What do you do on a daily basis for the Taroborah Project?

I manage the production of baseline assessment reports, production of the EIS, project and budget management, and liaison with State and Federal regulators, the overall Project Manager (IMC), and the project owner, Shenhua.

What do you see is the biggest environmental issue related to the Taroborah Project?

Visual impacts — the spoil dumps and open-cut pit will result in an everlasting modification to the landscape. And subsidence — the local topography will change as a result of underground mining, although the change will not be significant.

How are you addressing these?

The spoil dumps will be stabilised and revegetated to minimise the visual impacts of these structures, both during and post mining activities. We'll also address potential vegetation and drainage impacts where required. In addition, a visual amenity bund will be built along the northern edge of the open-cut mine to reduce visual impacts on the local community.

How can we be sure about the information you're providing on the environmental impacts?

The Taroborah EIS is being produced by third parties and assessed by both State and Federal Government departments. We make sure the information in the EIS is of a suitable standard for the project to be approved by using a wide range of independent government data sources and providing the document to the public and other stakeholders for scrutiny.

Is mine rehabilitation a concern?

Post-mining, the Taroborah Project will occupy a relatively small footprint. A progressive mine rehabilitation plan will be developed and delivered. The mine will be rehabilitated both during operations and after mine closure to minimise both potential environmental and visual impacts.

How would you mark success at Taroborah?

Minimising the environmental impacts of the project. Minimising the health and safety issues during construction and operation of the mine. Stimulating local and regional economic growth.

Give me land, lots of land and the starry skies above

What can the latest Social Impact Assessment tell us about the Emerald property market?

A cause for concern in small communities where large mining projects take place is what might happen to housing costs. This is an understandable concern, so we thought it important to look into the state of the housing market in Emerald to see what the future might hold.

At the time of the last census in 2011, there were 3,176 separate houses in Emerald. There were also 667 units or townhouses.

Additionally, in 2011, some 56.0 per cent of Emerald residents owned their dwelling (outright or through mortgage), compared to 63.5 per cent across Queensland generally.

That means we had to consider two different markets in our study — the market for homes or units to buy, and the market for properties to rent.

When we looked at house prices, we found the median house price in Emerald had risen from \$340,000 in 2006 to \$460,000 in 2012. That is a rise of 35 per cent in 6 years, although real prices have not risen as much because of inflation. Median unit prices rose 24.9 per cent in the same period, from \$277,000 to \$345,000.

So, housing prices had risen roughly 20.8% in real terms over this 6-year period.

But between March 2012 and February 2013, the price of both houses and units rose slightly before falling away. This is shown in Table 1 below.

Table 1: Emerald median monthly property prices 2012–13

Month	Houses \$	Units \$
Mar-12	461,000	349,000
Apr-12	480,000	329,000
May-12	455,000	375,000
Jun-12	461,000	315,000
Jul-12	469,000	365,000
Aug-12	492,500	387,500
Sep-12	483,000	367,500
Oct-12	449,000	330,000
Nov-12	485,000	317,500
Dec-12	462,500	320,000
Jan-13	475,500	300,000
Feb-13	425,000	290,000

The median house price had dropped to \$425,000 in February this year, a fall of 7.8 per cent in 12 months. Median unit prices had fallen 16.9 per cent in the same time.

A survey of real estate agents bore this out. While there are many more houses currently available for sale in Emerald than a year ago, prices have reduced — with current averages for a three-bedroom house and land package at \$400,000.

The more important question though is how affordable these houses are.

A traditional concern for many regional communities is the impact of additional and well-remunerated mining industry workers on housing affordability. By tracking median house prices against wages and salary information, a housing affordability index can be generated for Emerald, which can be compared with other mining and non-mining Queensland communities.

The results provided in Table 2 below show that while house prices in Emerald are robust, they remain affordable compared to nearby towns and major cities when expressed as a multiple of mean income.

Table 2: Queensland Housing Affordability Index 2011

Location	Mean taxable income \$	Median house price \$	House price: mean income	Median unit price \$	Unit price: mean income
Emerald (4720)	69,392	425,000	6.12	300,000	4.32
Moranbah (4744)	86,186	629,500	7.30	474,000	5.50
Townsville (4810)	64,886	535,000	8.25	392,500	6.05
Brisbane (4000)	73,425	682,500	9.30	446,000	6.07

Pleasingly, the index shows that houses in Emerald are 16.2 per cent more affordable than in houses Moranbah, 25.8 per cent more affordable than houses in Townsville, and 34.2 per cent more affordable than houses in Brisbane.

Lower house prices also lead to lower rental costs. In mid-2011, there were one or two rentals available at most in Emerald; currently there are more than 24. Typically, a four-bedroom rental house that was attracting \$700 per week is now advertised for \$560.



Photo: Mayfair Ridge display home.

Source: Social Impact Assessment, Taroborah Project

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In the 12 months to 30 September 2012, there were 432 dwelling units in new residential buildings approved in the Central Highlands local government area, 300 of which were in Emerald.

Our study shows that there is currently development approval for an additional 2,066 lots or apartments which have not yet been built (in addition to 600 beds in short-term accommodation). That represents an increase of 53.8 per cent in the total number of dwellings over 2011 housing stock.

With the resident population being 13,576 in 2011, and only forecast to rise at 3 per cent per annum, we believe there is significant room for additional population growth without seeing any increase in housing prices. In fact, without new people coming to the town, housing prices may continue to fall for some time.