

**ACLAND and
its KOALAS:
heritage + habitat under
threat from mining**



Objectives:

- Provide a brief history of the township of Acland on the Darling Downs, Queensland
- Show how koalas and people have always co-existed in this community until now
- Outline the proposed expansion of a nearby large open-cut coal mine and its threat to this town and surrounding environment
- Discuss the real threat of coal mining to large areas of koala habitat in Queensland
- Discuss the shortcomings of the EIS process in terms of koalas
- Offer suggestions for Acland, and other mining developments :
 - During the EIS period
 - During the life of the mine
 - Post mining period and mitigation with respect to koalas
- Introduce the concept of mining company funded KOALA AUDITS and KOALA LEVIES to protect this species for the future.



Acland is a town where people and koalas have always lived together

The town owed its beginning to a small underground colliery which operated from 1913 to 1984

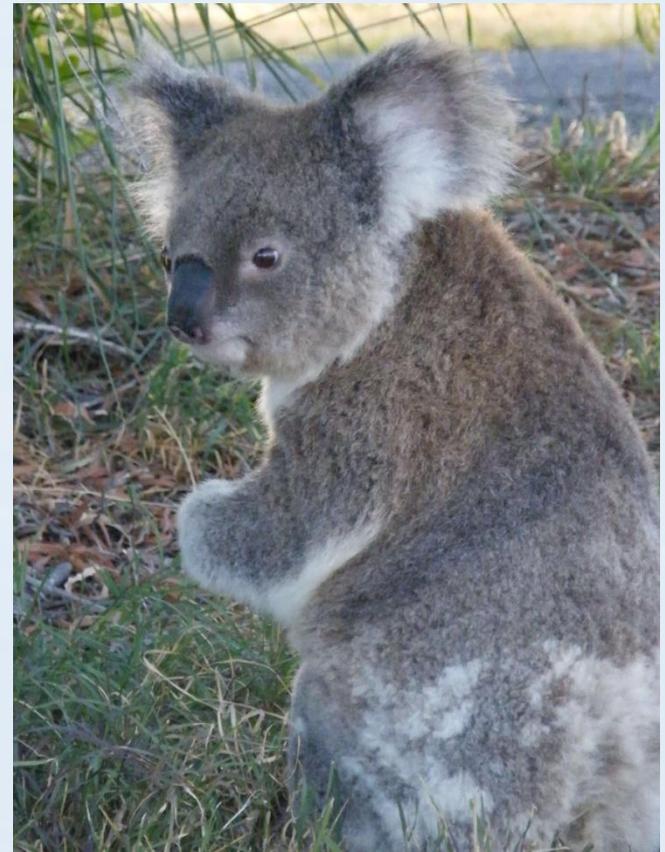


The Acland No 2 Colliery is rare in Queensland for its high degree of intactness as an early small underground coalmine. It is the most intact mine site of its age and type.
(*Queensland Heritage Register*)

The historic colliery and town stands on Poplar Box woodland, a favoured koala tree



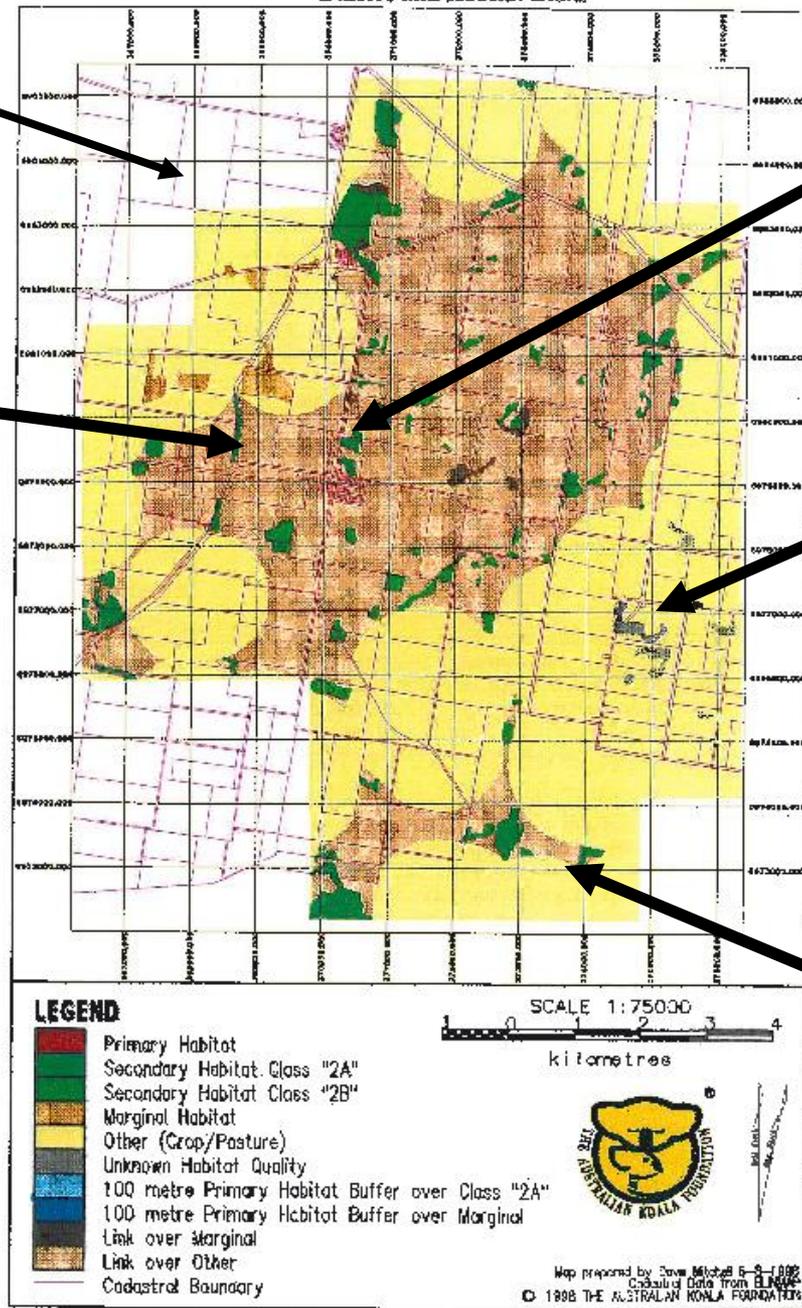
A drawcard for visitors to Acland are the frequent koala sightings



How many koalas live in the Acland district?

- Counts in nearby Oakey suggest 1 koala/hectare of bushland
- Cooby Dam-Highfields 0.4 koalas/ hectare
- A figure between these two may be reasonable
- Anecdotal evidence suggests numbers declining over the past 20-30 years
- 30-40% decline between 2005-07 due to drought (D. Dique pers comm)
- Acland is outside of SE Qld 'Koala Coast Plan'

FIGURE 4 Koala Habitat Atlas for Acland Study Area showing Habitat Buffers and Habitat Links



Greenhaughs owned the mine museum. Koala numbers declined drastically in the 80's due to Chlamydia

Sharps report declining numbers on eastern side of lease (15 koalas to very few) due to tree dieback

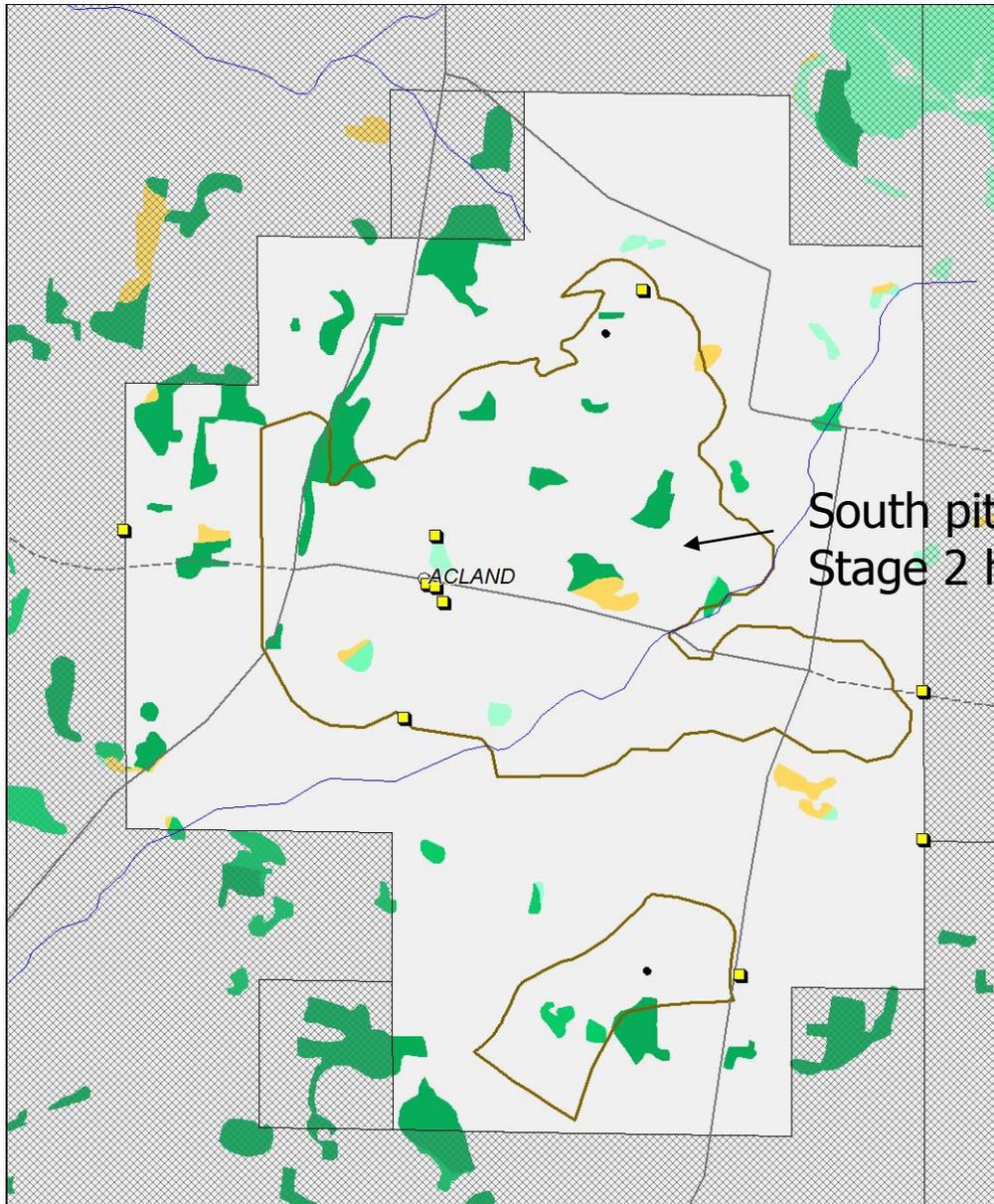
Marie, now 78 years young, learnt to count by counting koalas on the road to Oakey. It was common to see more than 20 animals per trip!

Wieck family reported declining numbers (15 to 1 or 2 occasionally)

The mine haulage road started to be heavily used in 2003. Vehicle accidents have decimated koala numbers according to a driver

1998 koala habitat atlas- (pre New Hope Mine) and local anecdotal reports

- An already fragmented ecosystem, a colony under pressure



www.savethekoala.com



KOALA HABITAT ATLAS

Remnant Ecosystems
and
High Value Regrowth

Acland, Darling Downs QLD

Edition 2 January 2011

Koala Habitat Classes

- Secondary Habitat (Class A)
- Secondary Habitat (Class C)
- Other vegetation

- Wildnet Koala record

- Coal Exploration Permit

- Measured Coal Resource

0 5 km

Map Copyright AKF 2011

Based on Regional Ecosystem data V6 and
High Value Regrowth data Copyright DERM 2011
Mineral resource data Copyright 2011 QLD Gov't

Acland was a sustainable community

(before the term was even trendy...)

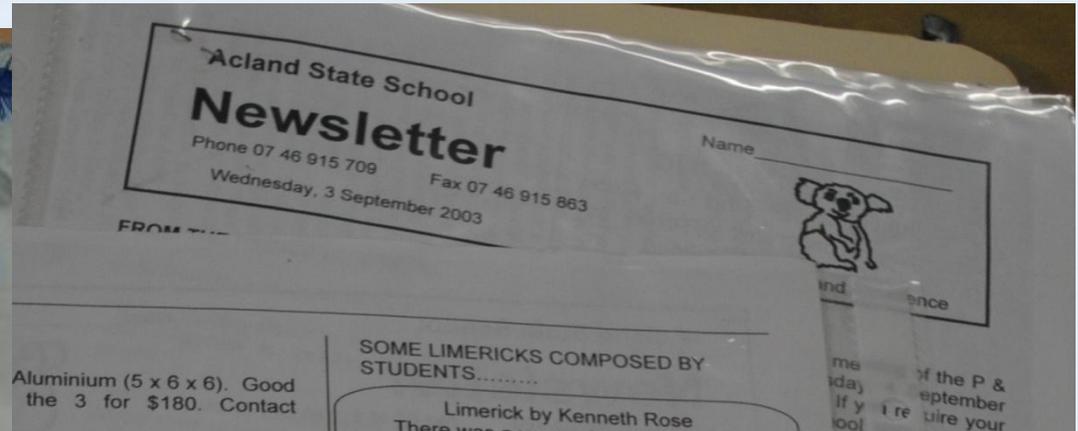
- **Miners worked underground, and their families lived in the town above. At one stage the population reached 200.**
- **Farmers farmed the land above the mine.**
- **They saved water and power by necessity. They recycled, grew vegies and caught the rail motor to high school or town.**
- **They helped each other out when needed.**
- **They worked hard to make their town a beautiful place...**



Mining in Acland in the 20th century (1913-1984)

- 1000 tons was removed per annum, using explosives, pick and shovel and later mechanisation. (ave 9-20 miners)
- The market for the coal was the Railway, Toowoomba Foundry, Base Hospital, Abattoirs and Kleinton brick works (all within 40 miles)
- Coal was loaded directly onto rail skips (part of the Oakey Cooyar railway) until 1960's
- The mine site was a koala habitat!
- Greenhouse gas emissions from underground operations were likely to be small

Acland has always embraced her koalas.



After the railway closed in the 60's
Mr & Mrs Beutel, Mr Jensen and
helpers established a beautiful park
on the former railway reserve



For their efforts they were awarded
QLD's inaugural Tidiest Town in
1989



Acland had 20 years continuous participation in the Tidy Town competition (from 1982-2002)

An attraction of the town is the large number of beautiful Bottle Trees



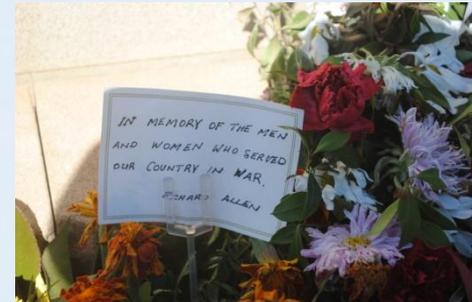
Many hundreds of visitors came to look at Acland's park and gardens over the years.



Koala frequent the park. Bedrooms and lounge areas are nearly as important as dining rooms!

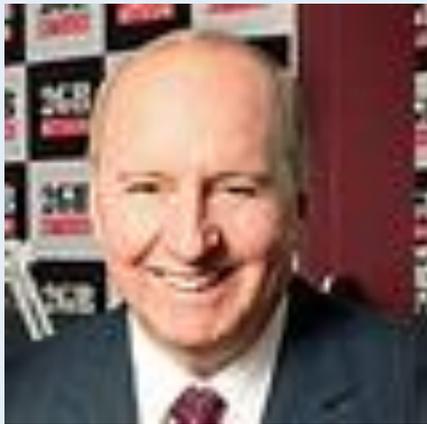


87 service men and women served in 4 conflicts. 8 young men from the district fought in the Vietnam war. The town fund-raised for a war memorial, given pride of place in Tom Doherty Park.



The Acland Anzac Day ceremonies now attract hundreds of people.

Some well known people were born and bred in Acland



Alan Jones's father ran a small farm and was an underground miner

Jones labels town's decline as 'sickening'



By MADELEINE LOGAN
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"BUGGER them". Two fighting words sum up Alan Jones' attitude to New Hope Coal, the mining company set to turn his hometown, Acland, into a 40m pit.

The radio presenter, who lived on a property about seven kilometres outside the town, grew up the son of Charlie Jones — a farmer and some time coal miner "everybody knew" for his work ethic.

Speaking from Sydney...

Buying people off might sound fine but when it destroys communities and history.

— Alan Jones

horse to outside the school one last time," he said.

"The notion of some great conglomerate destroying the town and its history is sickening.

"Growing up there...

Source- Toowoomba Chronicle

In 2002 New Hope Coal started open-cut mining just north of Acland.



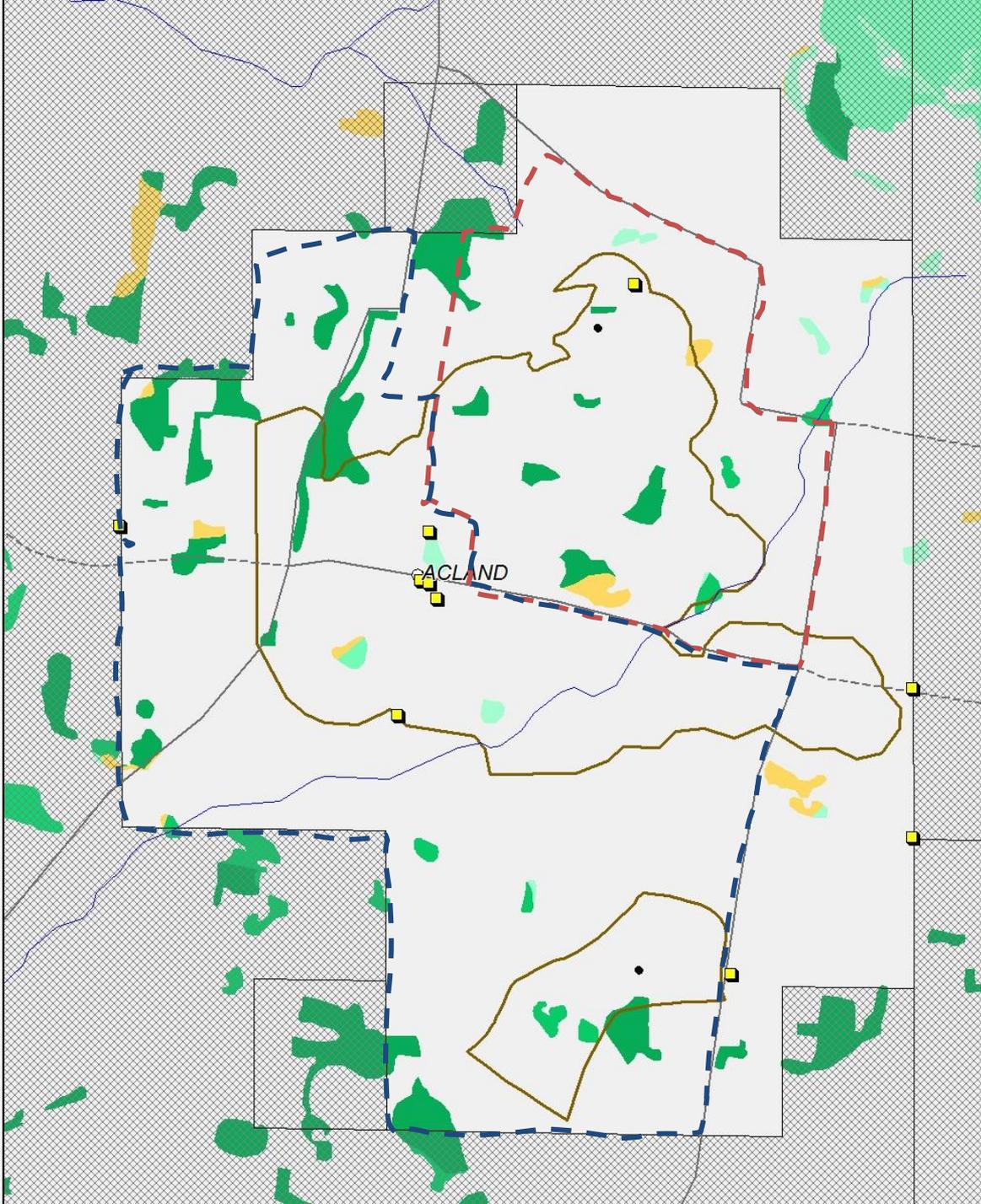
Many farms were bought up and resumed for mining. Stage 2 expansion, which abutted the township of Acland, followed in 2005. Currently, New Acland Coal Mine (NAC) produces 4.8 million tonnes per annum (Mtpa) of saleable coal by open cut methods

Stage 3 mine proposal

- New Acland Coal Pty Ltd is now proposing a third expansion to take production up to 10.0 Mtpa and extend the mine life to around 2042
- The Stage 3 expansion of New Acland Coal Mine is a 'Project of State Significance'
- Queensland's Coordinator General approved the EIS for the Stage 3 expansion of New Acland Coal Mine for Public Release and Comment on 10 November 2009
- Stage 3 incorporates 5069 ha, bringing total mining area to 7347 ha (all koala habitat +/- or movement corridors)

Map of Acland district showing proposed Stage 3

- Existing mine lease - - - - -
- Proposed Stage 3 expansion - - - - -



Stage 3.....

- Mine output predicted to be 10 million tonnes per year
- It is proposed to mine under the township of Acland, with total closure of the town
- 8.2km of Lagoon Creek to be diverted
- **Most homes in Acland were purchased and buildings removed before the EIS was submitted**
- New Hope also purchased the Churches, Acland hall, CWA and school buildings
- The mine wished to purchase and remove the old Acland colliery in anticipation of mining (despite its Heritage listing).
- The Toowoomba Regional Council is intending to move the War Memorial



Lagoon Creek- a habitat for koalas



House removals in Acland





Open cut mining near Acland today - a heavy carbon footprint

- Production of 279.7 Million tonnes of product coal over 40 year life of mine.
- The total Stage 3 greenhouse gas emissions for the life of Project are 693 Mt CO₂, or 24 Mt CO₂ on an annual basis. The annual greenhouse gas emissions for the Project represent 4.1% of Australia's 2006 greenhouse gas emissions.
- The greenhouse gas emissions from land clearing were not estimated as part of the EIS, as it was stated they would be partly balanced by sinks created by progressive rehabilitation of mined areas..

What does mine expansion mean to the koalas of Acland?

- Major loss of suitable trees for food
- Loss of corridors for movement
- Increased risk of death from increased traffic esp. heavy vehicles on the haulage road to Jondaryan
- A shrinking habitat further threatened by proposed future major mine expansion to the south and east beyond Stage 3.
- SHORTAGE OF FOOD + HABITAT FRAGMENTATION >>> INCREASED STRESS AND RISK OF DISEASES
- Probability of koala decimation in the area.



How the Stage 3 EIS addressed the koala issue:

The Nature Conservation Act classifies koalas as 'Least Concern Wildlife' due to a generally lower perceived threat to their survival. This meant NAC only had to demonstrate the presence or absence of this species, not perform an accurate count or measure of koala density

METHODOLOGY:

20 trees (Known koala browse species such as Poplar box (and Blue Gum)) were searched for evidence of koalas, or their droppings

...no transects were performed to more accurately assess koala density

Results:

Koalas were found in poplar box woodland throughout the Project site particularly to the northwest and southwest of Acland and along portions of Lagoon Creek.

...no mention of how many!

Proposed mine rehabilitation at Acland:

- construction of a stable final landform comprising rehabilitated back filled voids, out-of-pit dumps and final voids,
- seeding with an appropriate seed mix (grass, shrub and tree species)
- NAC is proposing as part of the Project's planned diversion of Lagoon Creek to rehabilitate the riparian zone to 100 metres either side of the main channel. The 200 metre riparian zone will be progressively re-established along the 8.2 kilometre reconstructed section of Lagoon Creek between 2018-2033
- Rehabilitation of Lagoon Creek's riparian zone will address the loss of 165.2 hectares of remnant State significant ecosystems, comprising *Acacia harpophylla* (Brigalow) and *Eucalyptus populnea* (Poplar Box), and provide **a superior environmental outcome** for the local area by improving the ecological health of the creek and increasing the amount, diversity and connectivity of the available habitat.

On what basis can they justify these outcomes???

Does rehabilitation of black soils work?

- Scientists warn mining will destroy top-grade agricultural soil (much of the Darling Downs).
- Soil scientist Dr Peter Dart (UQ) says the expansion of New Hope Coal mine at Acland- hailed as 'good news' by Premier Bligh- will destroy prime agricultural land. (Courier Mail Nov 22, 2010)
- The United Nations lists the destruction of farm land and soaring populations as a threat to human survival, with mass starvation tipped (Courier Mail Nov 22, 2010)
- From the koalas perspective, grassland or grazing (the stated objective of NAC mitigation) is not necessarily koala habitat



Before, during and after mining near Acland

Koala map of Queensland

ESTIMATED KOALA STATUS 2010

Queensland, New South Wales & Victoria

www.savethekoala.com



Koala numbers by Federal Electorate with remaining Potential Koala Habitat

**TOTAL ESTIMATED KOALAS NSW QLD VIC
MINIMUM ESTIMATE APPROX. 43,515
MAXIMUM ESTIMATE APPROX. 84,615**

2001 Eucalypt forests/woodlands
Source: National Vegetation Information System (NVIS) Vers. 1.0
(Copyright 2001 Commonwealth of Australia)

----- Great Dividing Range

QUEENSLAND
17,810 - 35,200

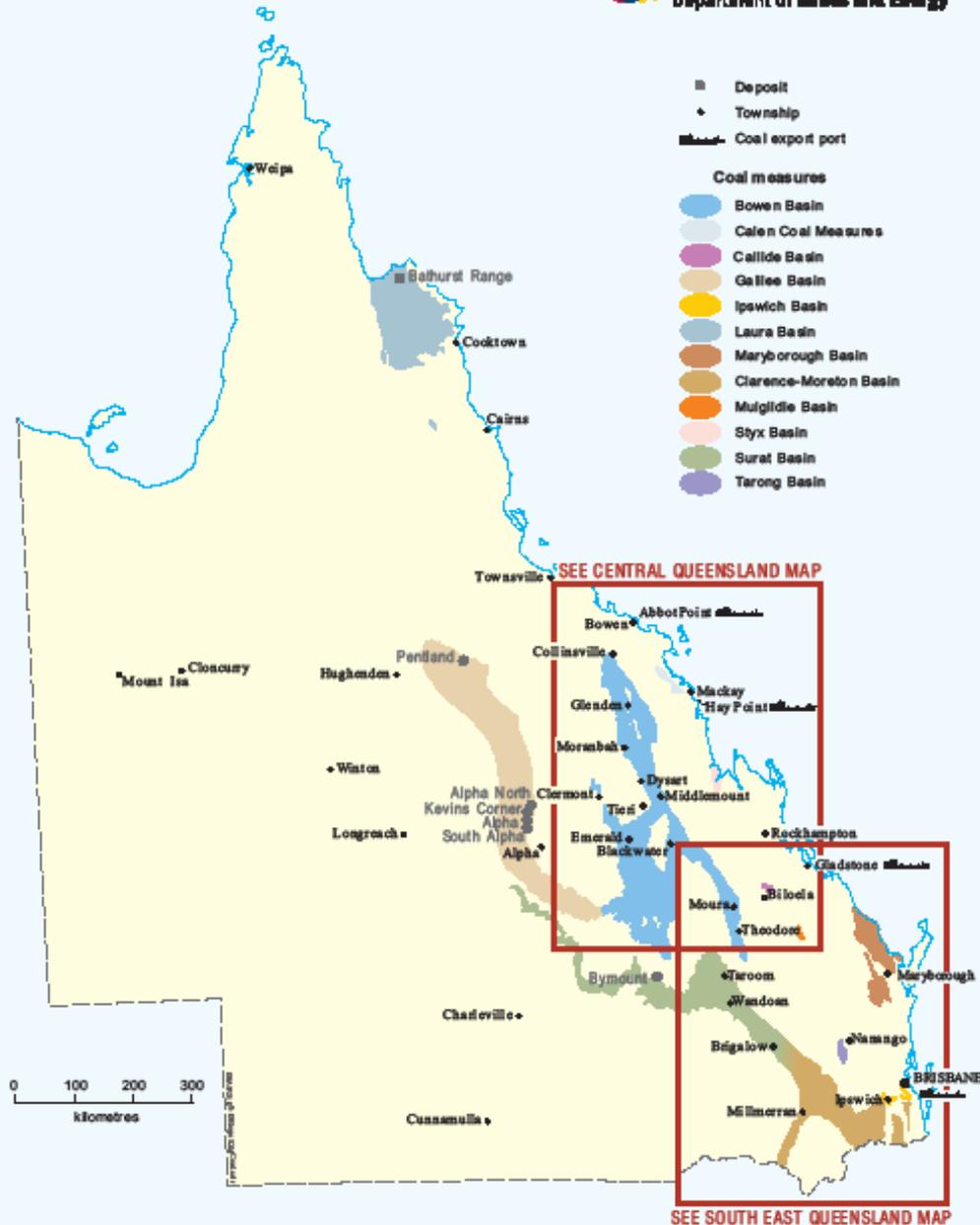
QLD Electorates

Electorate	Estimated_Koalas
Blair	360-720
Bonner	135-270
Bowman	450-900
Brisbane	10-20
Capricornia	1000-2000
Cawson	360-660
Dickson	270-540
Fadden	800-1440
Fairfax	90-180
Fisher	270-540
Flynn	5000-10000
Forde	500-1000
Griffith	15-40
Groom	180-320
Herbert	200-400
Hinkler	180-270
Kennedy	200-400
Leichhardt	extinct
Lilley	20-50
Longman	150-250
Maranoa	6000-12000
McPherson	350-800
Moncrieff	50-100
Monroton	40-80
Oxley	80-160
Patke	50-100
Rainey	225-450
Ryan	135-270
Wide Bay	450-900
Wright	250-400

BRISBANE



Queensland coal



Queensland's Koalas vs coal

ESTIMATED KOALA STATUS 2010 Queensland, New South Wales & Victoria



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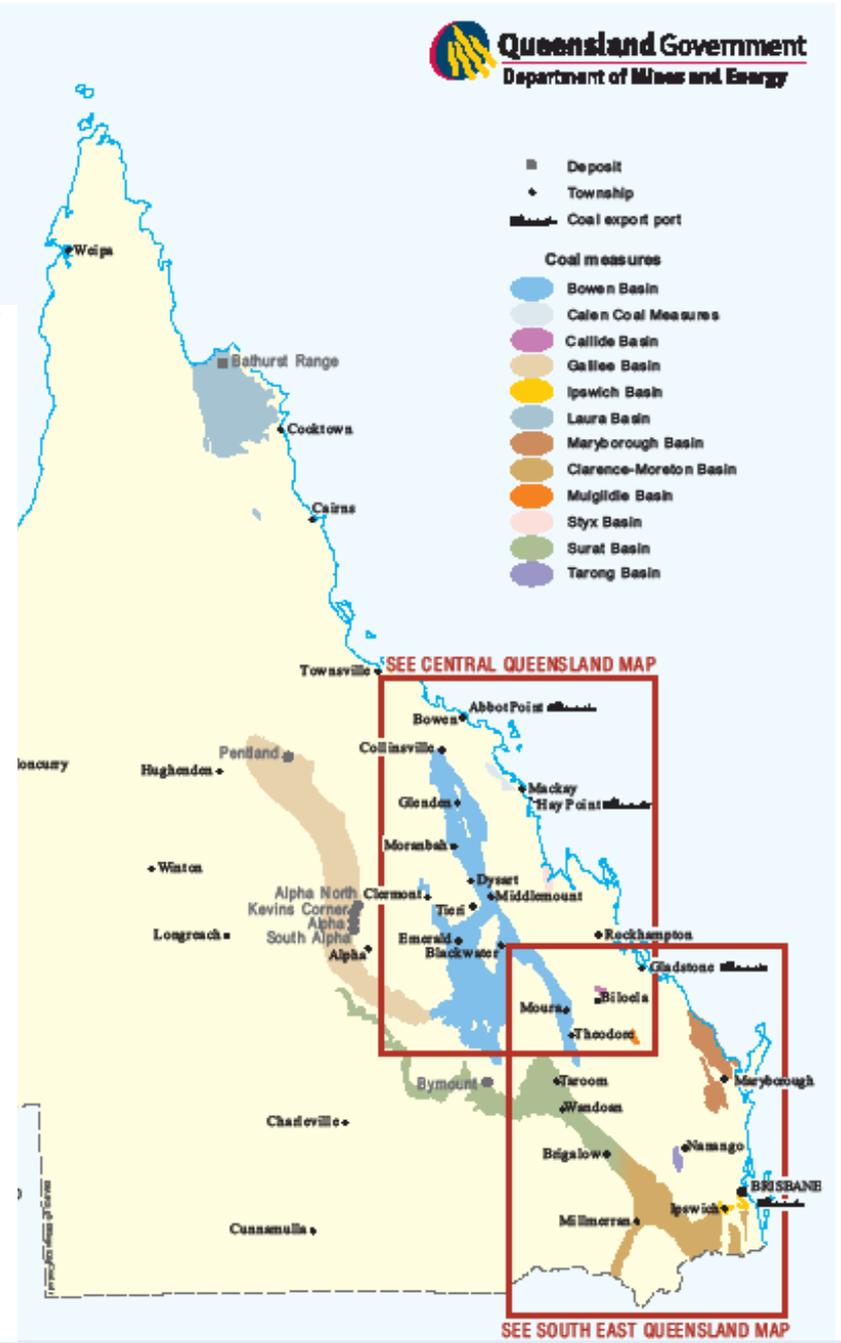
2001 Eucalypt forests/woodlands
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(Copyright 2001 Commonwealth of Australia)

----- Great Dividing Range

QLD Electorates

Electorate	Estimated Koala
Bowen	260-700
Bowen	220-270
Bowen	400-800
Bowen	110-210
Capricorn	100-2000
Cheriton	100-200
Dixon	270-340
Fisher	400-1400
Fleming	80-100
Fleming	200-340
Fleming	100-1000
Fleming	200-300
Gilbert	15-40
Gilbert	100-200
Hester	200-400
Leichhardt	100-200
Leichhardt	200-400
Lilley	20-50
Lilley	100-200
Moray	100-1000
Moray	100-200
Moray	100-200
Moray	100-200
Ormeau	40-60
Ormeau	80-100
Ormeau	80-100
Ormeau	200-400
Ormeau	100-200
Ormeau	100-200
Ormeau	200-400
Ormeau	100-200
Ormeau	200-400

QUEENSLAND
17,810 - 35,200



SEE CENTRAL QUEENSLAND MAP

SEE SOUTH EAST QUEENSLAND MAP



Our Suggestions

A. FOR ACLAND



- Protect the town site- including the Heritage listed Colliery (and it's surrounding poplar box woodland), the Tom Doherty Park, the Acland War Memorial and wildlife corridors.
- Conduct robust koala surveys for the proposed Stage 3 land to provide comprehensive population data in order to develop long-term mitigation plans.
- Employ trained, qualified and independent Catcher-spotters searching bushland ahead of mining to remove or redirect animals

Our Suggestions

A. FOR ACLAND (continued)

- Introduce Heavy vehicle driver awareness programs, road signage and even limiting nocturnal haulage on the road to Jondaryan. Reduce speed limits. Consider underpasses or road diversion away from dense habitat?
- Mine revegetation addressing suitable species and numbers of koala trees (not just fringe planting of hardy species and grasses on roadsides).
- Ongoing koala surveys

Our suggestions (cont)

B. To minimise the impact of mining on all of Queensland's precious koalas



1) The EIS stage

- Koalas should be categorised as threatened or vulnerable species, not 'species of least concern'
- True and unbiased evaluation of the risk to koalas in mining area with **experts** performing surveys **being independent and not employed by mining companies.**
- Accurate mapping of habitats and accurate koala counts, including local sightings by landholders over a period of years or months (not days)
- Refusal of mining approval if populations deemed at risk.

Our suggestions

2. During mining period

- Compulsory reporting of koala sightings and koala morbidity/mortality by mine environment officers (and encouragement of reporting by the public). Ongoing education of all mine employees and contractors.
- These observations plus **independent monitoring** to form part of an **ANNUAL KOALA AUDIT** for that mine
- Progressive koala habitat regeneration over the life of the mine. Review and re-evaluate restrictions if necessary.
- Mining companies should be held **accountable** for all environmental outcomes associated with mining.
- Some of these measures may rely on honesty and may be hard to enforce, but the alternative is to do nothing....

Our suggestions

3. Mine rehabilitation stage

- Restoration of species and numbers of trees suitable for koalas
- Consider establishment of larger scale nature reserve sites in areas deemed unsuitable for farming in the short or long term
- Ongoing **independent** monitoring of koala health and numbers > **ONGOING KOALA AUDIT.**
- Enforced compliance with Environmental Protection Act by environmental authorities

Mining companies should finance all these actions- consider a **koala levy** for industry



Section 319 of the EP Act establishes a duty for a person to take all reasonable and practicable measures to prevent or minimise environmental harm when carrying out an activity.

SUMMARY:

- **Coal reserves largely occur in land also providing habitats to koalas**
 - **Coal mining may represent the greatest threat to koalas in this state.**
 - **Decimation of Queensland's koalas is possible during the next 4 decades of mining activity and suburban development**
-
- Let the lessons learned from Acland be applied for the good of other sites in Queensland- for people, the environment and especially koalas.

Thankyou!

Nicola Laws, Cutella, QLD
Glenn Beutel, Acland, QLD



Why should I care about future generations? What did they ever do for me? (Groucho Marx)

Image acknowledgements and sources of information

- All photos copyright G. Beutel or N. Laws except for the following:
- Injured Koala; Dr GA Laws
- Acland hall Ctee; A Kucks
- Acland State School banner; J Janetski
- Acland CWA; Rosalie Historical Society
- St Jude's Church group; D Mason
- NAC Stage 3 EIS information;
<http://www.newhopecoal.com.au/media/6331/091103nac03webpageinfo.pdf>
- With thanks to AKF for the provision of koala habitat maps for Acland.



Frida Forsberg- 'Acland' song
and lyrics (part B)

Acland

Rows of empty houses with their stories in the past
The distant roar of engines rumbles through 'Tha Last Post'
Coloured wreaths and home-made scones, a gentle, warming breeze
It's Anzac Day in Acland, little town brought to her knees

The comp'ny spoke of jobs and schools, salvation for the town
Bit hard to find the place this year since the street signs have come down
Singled out the townfolk, sent them packing one-by-one
But its Anzac Day in Acland and the final deal's not done

Promises are broken once a foot is in the door
For everything it's taken it just keeps on wanting more
Now we see the scope of what was planned right from the start
New Hope has its sights on Acland's township, Acland's heart

We wonder what the mine will do with the memorial
They sent a rep to lay a wreath this year I guess they'll make the call
Diggers sent to die in lands of which they'd never heard
The bosses give the orders and the rest must take their word

Funny how our fears don't always serve our real needs
Water, food and air take a back seat to corporate greed
Our future's only built on what we will believe
Our imaginations sow our future's only seed

If seasons pass and Acland sees another Anzac Day
To the morning service on the Downs I'll make my way
'Cuz it's good to know a fighter and a towel that's not been thrown in yet
So spend Anzac Day in Acland, little town 'Lest we forget'.