

Re: Public Submission for SSD – 7293, Sancrox Quarry Expansion Project

Thank you for the opportunity to comment on the development proposal.

I wish to formally object to the Sancrox Quarry Expansion project on the following grounds:

1. Vegetation clearance and fragmentation

-According to the EIS, the project will result in the:

- *clearing of 43.1 ha of native forest vegetation, which includes 0.55 ha of the Subtropical coastal floodplain forest Threatened Ecological Community;*

- *loss of hollow-bearing trees, some of which may provide potential roost sites and breeding habitat for a selection of bird, arboreal mammal, reptile and microchiropteran bat species; and*

- *removal of foraging habitat for locally occurring native fauna, in particular for threatened microchiropteran bats species, ground mammals, arboreal mammals and a range of bird species.*

-The project will result in loss of koala habitat and corridors at a time when the local population is threatened with extinction. Extra truck movements and road building will further alienate koalas from their corridors and cause roadkill.

-Grossly inadequate and unsuitable biodiversity offsets are suggested, particularly relating to koala habitat. **Offset plantings are not acceptable as compensation for koala habitat clearing.** “Like for like” offset – i.e. mature trees of the same vegetation species composition, capable of sustaining live adult koalas today, must be achieved before the project is approved.

1. Carbon dioxide emissions

-the project ‘over its entire life cycle is estimated to release approximately 48.4 million tonnes of CO₂-e into the atmosphere’ – 2.5 million tonnes less than Sweden’s total emissions in 2017₁.

2. Local Economic Impacts due to threatening processes to Koalas

Vegetation clearance and fragmentation:

According to the Biodiversity report:

‘Approximately 44ha (44%) native vegetation will remain within the inner assessment circle after clearing for the proposed development and around 411ha (41%) of native vegetation will remain in the outer assessment circle after development’

One can therefore conclude that 56% of native vegetation within a 100ha buffer of the centroid of the project area and 59% of vegetation within a 1000ha buffer of the centroid of the project area will be cleared. The Biodiversity Report has not considered the cumulative impact of vegetation clearance within a regional context and the continued fragmentation of remaining vegetation across the landscape. This project exemplifies how biodiversity in the region is suffering ‘death by 1000 cuts’. The loss of 59% of native vegetation within 1000ha of the project area is not acceptable, particularly when the vegetation to be cleared is intact bushland. The

PMHC Draft Koala Recovery Strategy 2017 notes that the **primary cause of koala population decline in the area is habitat loss and fragmentation.**

Furthermore, the project area falls directly within a sub-regional biodiversity corridor. It is absurd to suggest that the loss of vegetation in the project area will not result in habitat fragmentation or the loss of connectivity between the proposed offset area and the remaining vegetation south of the project area. The figures in Appendix E of the Biodiversity Assessment are incomplete – widths are missing, and they seem to suggest that Connecting Link 2 will persist despite the clearance of all vegetation and the presence of machinery. The removal of the vegetation in the project area will effectively isolate fauna that remain in the proposed offset area and the disconnection from the offset area will greatly reduce its ecological viability.

Offsets:

The proposed offset site is a mere 49 hectares - not even a 2:1 offset, as required by most projects, particularly those that involve tree planting. Furthermore, of the vegetation associations identified in the project area, two are not included in the proposed offset area and an inadequate amount is provided for a third association (Tallowood - Small-fruited Grey Gum dry grassy open forest).

Of great concern is that the offset will involve planting of trees that will take at least 15-20 years (minimum) to provide koala feed.

Food and Tree Hollows

The loss of hollow-bearing trees is another concern – it takes 75-100 years for a eucalypt to form a hollow. Most of the hollow bearing trees recorded in the Biodiversity Assessment Report occur in the Spotted Gum - Grey Ironbark open forest – however this association does not occur in the proposed offset area. Furthermore, I note that no hollow-bearing trees were recorded in the proposed offset area and there is no mention of the provision of nest boxes as part of the proposed offset strategy. How does the proponent plan to address the loss of habitat for hollow-dependent species recorded in the project area?

The removal of Spotted Gum (winter flowering), Grey Ironbark (winter, spring and summer flowering), Blackbutt (spring - summer flowering) and Pink Bloodwood (summer - autumn flowering) species from the local area will result in the loss of crucial winter and autumn flowering species. Paying into a fund will not compensate the fauna of the local area for the loss of valuable feed species.

Koala Impacts

Koalas are one of the most recognised animals around the world. In a survey conducted by National Geographic the Koala featured in the top five iconic animals along with Elephant, Lion, Whale and Panda. (Source: <https://www.koalarecovery.org.au/an-iconic-species/>)

However, Koalas have been listed as a threatened species in NSW under the NSW Biodiversity Conservation Act. Scientific studies have backed this listing with research by the NSW Government finding that koalas have undergone a 26% decline over three generations (15-21 years). Such declines are not sustainable - **Population modelling undertaken for the Hastings-Macleay Region suggests the next five years will be critical to koala conservation.** (Source: <https://www.koalarecovery.org.au/going-going/>). Whilst threats to koalas include car strike and dog attack, habitat loss and fragmentation is considered the principle cause of decline in koala populations (<https://www.pmhc.nsw.gov.au/Services/Environment/Environmental-Strategies/Koala-Recovery-Strategy> – Chr 6). Extra truck movements and road building will further alienate koalas from their corridors. I have personally witnessed koalas killed by road strike at this Sancro location on the Pacific Highway.

The Greater Sancroix Structure Plan (Port Macquarie Hastings Council, 2014), identifies a portion of the land to be cleared as “medium to high activity” koala habitat. The Draft Coastal Koala Plan of Management 2018 (CKPOM) produced by PMHC identifies the area as core koala habitat. The clearing also destroys an identified critical link needed to maintain vegetation connectivity for animal movement.

In 2011 two small areas of high koala activity were located within the development site. In 2013 Koala scats and scratches on tree bark were recorded in the development site. As koala scats decompose over a short period of time, the presence of scats is indicative of recent Koala activity and has been incorrectly described as ‘not recent’ within the Biodiversity Assessment.

Offset Strategy and Suitability of Proposed Offset

Koalas are already at risk of functional extinction (PMHC Draft Koala Recovery Strategy 2017). Offsetting does not increase populations. The offset will be secured either through purchasing and retirement of 2,449 ecosystem credits from the credit market (with some ecosystem credits to be generated by potential offset lands within the study area) or payment of an equivalent monetary value into the recently established Biodiversity Conservation Fund. Offsetting at a State level via payment into a fund has several issues:

- 1.Genetic diversity: the importance of different genomes for koalas is widely understood for disease resistance. Removal of koala habitat, and therefore likely destruction of local populations, results in a failure to protect genomes in areas of high development pressure.
- 2.Resistance to Climate Change: research has predicted that koalas on the coastal floodplain will be much more resistant to climate change than koalas in other areas (eg western NSW). The viability of coastal populations is much higher than western populations.
- 3.Community Value: Our community greatly value their koalas and do not want to see them offset away from the Port-Macquarie Hastings region.

Carbon dioxide emissions

The project *‘over its entire life cycle is estimated to release approximately 48.4 million tonnes of CO₂-e into the atmosphere’* – 2.5 million tonnes less than Sweden’s total emissions in 2017¹. The proponent seeks to contribute greenhouse gas emissions to the atmosphere equivalent to those of an entire country at a time when the planet is warming, and the effects of climate change are affecting all life on earth. Around the world people are racing against time to reduce greenhouse gas emissions before positive feedback loops set in place unstoppable warming, yet this project will counteract the efforts of others. Does the proponent intend to purchase certified carbon offsets to mitigate its emissions? I couldn’t find any reference as such in the EIS. The planet cannot afford for us to continue ‘business as usual’ and as such, the Sancroix Quarry Expansion should be refused approval based on its significant contribution to global warming.

Local Economic Impacts due to threatening processes to Koalas

Loss of the PM koala population will have detrimental flow-on economic effects – koalas are worth around \$50 million to the local economy annually (PMHC Draft Koala Recovery Strategy 2017).

Viable Alternatives to the Quarry

Rather than quarry road base materials, a better option is to utilise plastic bags, recycled glass and printer toner in the construction of new roads. Following China's ban on foreign waste imports in 2018, Australia now has a glut of recyclables of which only a small fraction is repurposed. Through crushing glass back into sand, it is possible repurpose not only glass bottles and jars, but also plate glass, drinking ware, crockery and Pyrex into road base. As well as ensuring more glass can be recycled, transforming glass back into sand reduces the need to mine virgin material for road base and asphalt, decreasing road resealing costs and limiting truck movements on the road. Making road base and fill material from recycled products, rather than mining virgin materials, uses considerably less energy and water, and creates less air pollution.

Some examples include:

- Downer's \$5million asphalt plant in Teralba, NSW - produces thousands of tonnes each year of sustainable road and pavement materials for the Hunter Region and Central Coast (<https://www.lakemac.com.au/news/2019/06/05/green-means-go-for-5m-plant>)
- Northern Rivers Waste - the first road containing glass sand was constructed in June 2015 at Numulgi and they now use glass sand in much of their road base (https://www.northernriverswaste.com.au/cp_themes/default/page.asp?p=DOC-IVQ-12-05-77)
- Hume City Council (Victoria) - in 2018 soft plastics from approximately 200,000 plastic bags and packaging, and 63,000 glass bottle equivalents were diverted from landfill to construct a Victorian road in an Australian-first trial (https://www.hume.vic.gov.au/About_Us>Contact_Details/Your_Council/Media_Publications_amp_Forms/Media_Releases/Media_Releases_2018/Road_built_with_plastic_bags_and_glass_in_Australian-first)
- Tasmania – in 2018 a Tasmanian council used thousands of recycled glass bottles and plastic bags to build a road south of Hobart (<https://mobile.abc.net.au/news/2018-12-11/new-plastic-composite-road-surface-trialled-in-tasmania/10602294>)
- Sutherland Shire Council NSW - in 2018 a 250-metre long section was the first in NSW to be made out of plastic bags and glass in a trial of a cutting edge technology that could help tackle Australia's waste crisis (<https://www.smh.com.au/environment/sustainability/plastic-and-glass-road-that-could-help-solve-australia-s-waste-crisis-20180802-p4zv10.html>)

¹ https://en.wikipedia.org/wiki/List_of_countries_by_carbon_dioxide_emissions