New South Wales Government
Independent Planning Commission

CARMEL NORTHWOOD		**OBJECT**	Submission ID: 216782
Organisation:	*Koala Koalition EcoNetwork Port Stephens (KKEPS)*	Key issues:	*Biodiversity,Traffic*
Location:	*New South Wales*		
Attachment:	*Attached overleaf*		

Submission date: 11/21/2024 4:30:32 PM

the biodiversity concerns were inadequately assessed and responded to in the DPHI assessment report

KOALA KOALITION
ECONETWORK PORT STEPHENS INC.

PO Box 97 Nelson Bay NSW 2315
koalakoalition@econetworkps.org

21 November 2024

NSW Independent Planning Commission
Level 15, 135 King Street
SYDNEY NSW 2000

Re: Proposed Stone Ridge Quarry project in Wallaroo State Forest (SSD-10432)

Dear Independent Planning Commissioners,

The Koala Koalition EcoNetwork Port Stephens (KKEPS) welcomes the opportunity to provide additional comments on the State Significant Development (SSD) application for the Stone Ridge Quarry Project, with a particular focus on the DPHI assessment, the public meeting and on recently amended documents.

KKEPS is not satisfied that the biodiversity concerns were adequately assessed and responded to in the DPHI assessment report.

The DPHI assessment document only addresses a few key topics in any detail. The response to biodiversity concerns, an issue included in most if not all objections, is covered in three short paragraphs with the conclusion that the project has been "designed to avoid, mitigate and manage biodiversity impacts where practicable". [1] There is also mention that the final development footprint has been reduced by 11 hectares. While both comments may be seen as positive outcomes, they do not negate the fact that 18 threatened fauna species will be impacted by the removal of 68.2 hectares of native vegetation. [2]

Many fauna species will have a home range bigger than the project site and will not only be impacted by the Stone Ridge mining operations (if approved) but also by mining operations at Boral Seaham and Eagleton, as well as by the road haulage vehicles using Italia Road to get to and from other hard rock quarries. Add to the mix the proposed developments at Kings Hill, and a more accurate picture of the potential impacts to fauna in this area should be apparent. **It is not adequate to assess this application in isolation.**

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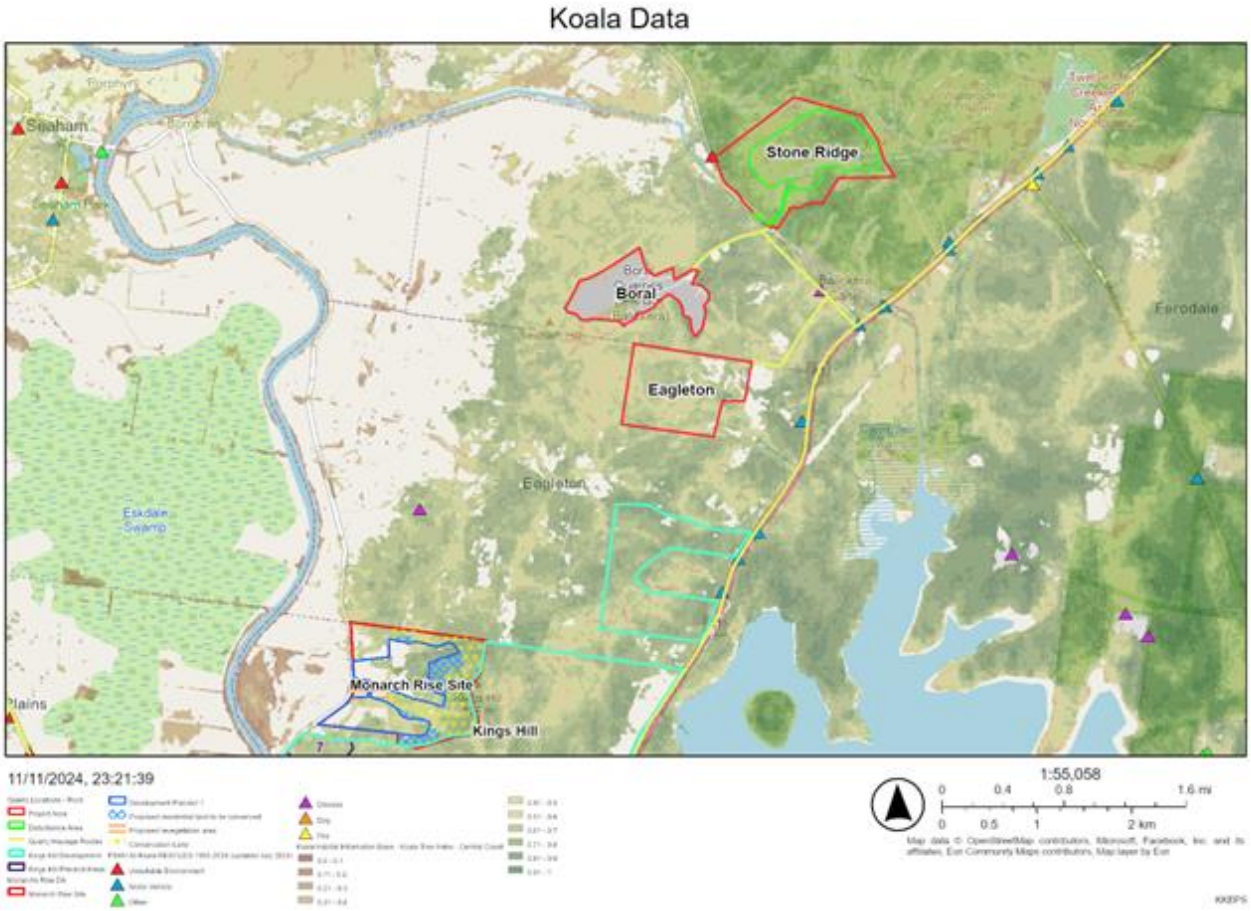
[1] DPHI assessment - designed to avoid, mitigate and manage biodiversity impacts where practicable

[2] DPHI Assessment Report, October 2024, sec 6.1.3, pp. 19-20 – habitat clearing to impact Squirrel Glider (*Petaurus norfolcensis*), Brush-tailed Phascogale (*Phascogale tapoatafa*), Koala (*Phascolarctos cinereus*), South-eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami lathami*), Varied Sitella (*Daphoenositta chrysoptera*), Little Lorikeet (*Glossopsitta pusilla*), White-bellied Sea-Eagle (*Haliaeetus leucogaster*), Little Bent-winged Bat (*Miniopterus australis*), Large Bent-winged Bat (*Miniopterus orianae oceanensis*), Greater Broad-nosed Bat (*Scoteanax rueppellii*), Spotted- tailed Quoll (*Dasyurus maculatus*), White-throated Needletail (*Hirundapus caudacutus*), Swift Parrot (*Lathamus discolor*), Yellow-bellied Glider (south-eastern) (*Petaurus australis australis*), New Holland Mouse (*Pseudomys novaehollandiae*), Grey-headed Flying-fox (*Pteropus poliocephalus*), Rufous Fantail (*Rhipidura rufifrons*), and Black-faced Monarch (*Monarcha melanopsis*). Eastern Cave Bat (*Vespadeuls troughtoni*) was assumed present but is still subject to further surveys by ARDG.

The ARDG focus on high quality habitat versus marginal habitat ignores the importance of habitat and CKPOM mapping limitations. Justin Meleo in the IPC public meeting stated that the koala was a critical consideration for the project at the very beginning of the project and referred to using the CKPoM mapping to check for high quality koala habitat. He also went on to say that the CKPoM mapping is a reliable indicator of koala habitat quality. He claimed that 96% of the proposed disturbance area is mapped as being marginal for the koala with 1% being mapped as preferred habitat; the remaining 3% being buffers around those areas. His conclusion was that the impact would be limited. [3]

Numerous community submissions raised the importance and value of the biodiversity corridor running through the Wallaroo State Forest and specifically highlighted recent surveys that confirmed the presence of breeding koala in the Kings Hill area. Port Stephens Council in its EIS agency advice raised 'particular concern' about the 'potential impacts on … the local Kings Hill Koala Hub population – **habitat connectivity loss and cumulative removal of foraging habitat**."[4]

In addition, the state's mapping from the NSW Koala Habitat Information Base shows a high probability of finding koala food and shelter trees in the Stone Ridge section of the Wallaroo State Forest. The darker shaded sections in the map below indicate a higher probability of koala food and shelter trees being present.[5]



[3] Stone Ridge Quarry Project SSD 10432 Public Meeting https://www.youtube.com/watch?v=XhwXC3Ex7-4 November 2024

[4] Port Stephens Council, EIS Agency Advice, 2 August 2023

[5] Koala Tree Index 5m v1.1, https://datasets.seed.nsw.gov.au/dataset/koala-tree-indices ; dataset indicates the source data was from 2019

The BDAR surveys for the project confirmed this information and found the following koala food and shelter trees on the site itself – food trees: Eucalyptus tereticornis (preferred by local koala per the Port Stephens CKPoM), E. caniculata, E. fibrosa, E. globoidea, E. piperita and Corymbia maculata and shelter trees – E. resinifera, E. siderophloia, E. umbra, Angophora costata, C. gummifera and Allocasuarina littoralis. [6]

Notwithstanding community submissions, available state data and advice, and its own surveys, ARDG continued to assess the quarry's impact on the corridor as low[7] and the DPHI did not challenge this assessment; neither ARDG nor DPHI included the Kings Hill developments in the study area for cumulative impacts even though the Kings Hill koala population was called out as being within the range and distribution of the listed threatened species in the bioregion.

The DPHI instead relied on a 2002 Port Stephens CKPoM characterisation of the koala habitat as 'marginal', rather than using its own more recent and relevant information. The Port Stephens CKPoM relies on data from 1998 to inform the Koala Habitat Planning Map approved in 2002. Revision of the Koala Habitat Planning Map of CKPoMs, and indeed the approval of any new CKPoMs in NSW, has been at a standstill since interim measures were introduced to end the National and Liberal party 'koala wars' in 2020. **Without updates to the existing Chapters 3 and 4 of the State Environmental Planning Policy (SEPP) (Biodiversity Conservation) 2021 (Koala Habitat Protection SEPP's 2020 and 2021), any new habitat maps that are prepared are legislatively unable to be relied upon by Councils that have existing CKPoMs, such as Port Stephens Council.**

Port Stephens Council and the CKPoM steering committee are well aware of the need to update koala habitat mapping to allow critical corridors to be identified to help to conserve the koala, and to more clearly inform developers. However, Department of Planning and Environment (now DPHI) advised that no new CKPoMs or updates to current CKPoMs will be approved in the near future and no timeframe has been able to be provided. This has been extremely problematic for Port Stephens (and other LGAs) where rural and non-rural land zonings are often in close proximity, and different SEPPs include different koala tree lists. This is hampering Council's ability to support, manage and protect the Port Stephens Koala population.

The Port Stephens CKPoM requires site-specific koala habitat mapping to accompany development applications. The CKPoM Appendix 6 Guidelines for Koala Habitat Assessments states "it should be determined if the site contains Preferred or Supplementary Koala Habitat, any Habitat Buffers, or Habitat Linking Areas (other than those that overlap with Mainly Cleared Land) according to the LGA-wide Koala Habitat Planning Map and/or if it contains preferred koala food trees. If the site contains any of the above, it will be necessary to proceed to Step 2 Vegetation Mapping."[8] This reinforces the underlying principle that **site-specific mapping has greater weight in next step decision-making than the labels on the Koala Habitat Planning Map.**

For ARDG to continue characterising habitat on the site as marginal is not consistent with the CKPoM assessment guidelines and this should have been challenged by the DPHI in its assessment. In addition, if cumulative impacts had been assessed with rigour, it would have raised the question as to why the Boral Seaham Quarry EIS[9] characterises the Stone Ridge section of the Wallaroo State Forest habitat as 'Key fauna habitat' whereas ARDG characterises it as 'marginal'.

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[6] The importance of these trees to local koala populations was flagged in multiple community EIS submissions.

[7] Amendment Report, BDAR, Appendix I, Table 8.3, p 166

[8] Port Stephens Comprehensive Koala Plan of Management, Appendix 6, p 77

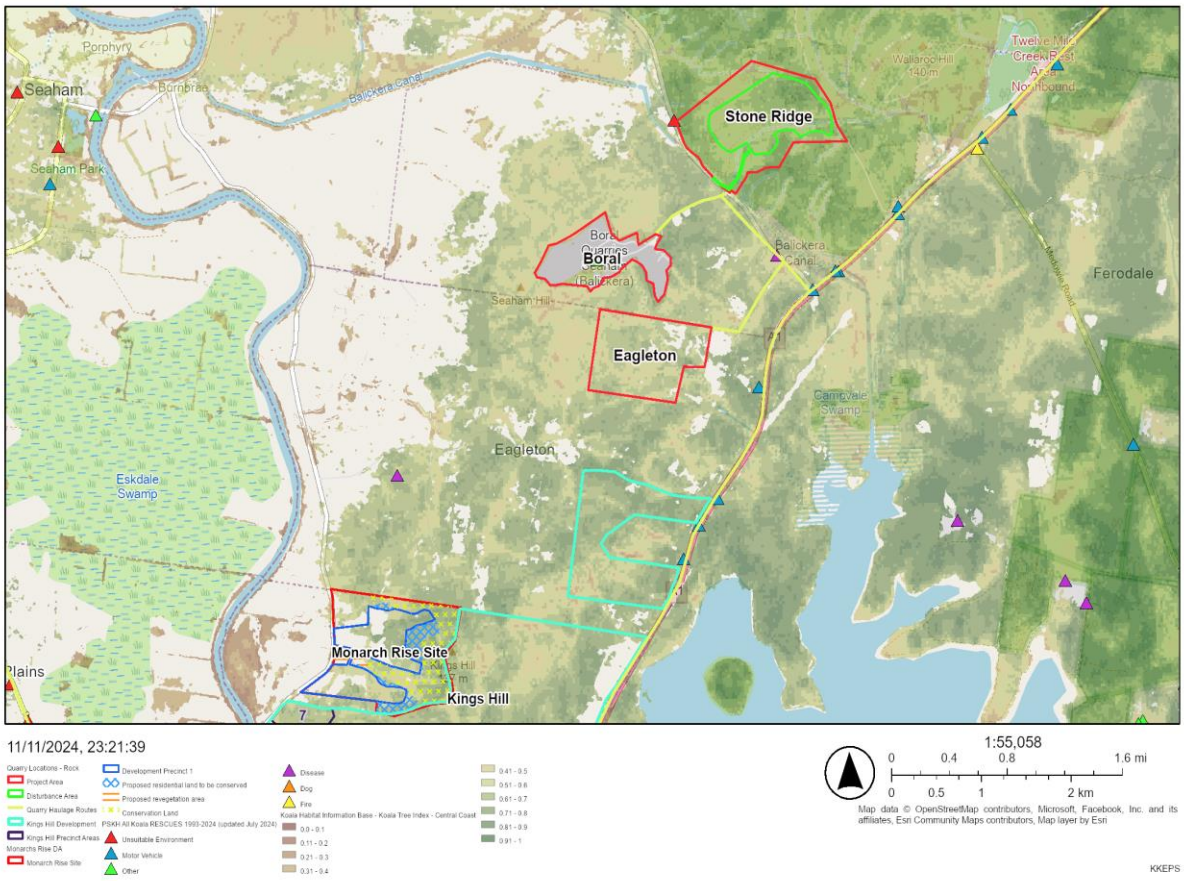
[9] Boral Seaham Quarry was one of the nearby quarries noted by ARDG and DPHI; the Boral Seaham Quarry expansion is currently before the DPHI for assessment, SSD-59254474, and relevant documents are posted to the DPHI Major Project website.

Port Stephens Council in its EIS agency advice raised 'particular concern' about the 'potential impacts on … the local Kings Hill Koala Hub population – **habitat connectivity loss** and **cumulative removal** of foraging habitat."[10] The state's own advice about koala habitat assessment reinforces the significance of the koala observations at the Stone Ridge site: "Any activity in areas occupied by naturally occurring, low density populations should be regarded as ecologically meaningful for conservation and management purposes unless proven otherwise."[11]

While there were mixed opinions to koala references in the meeting, it is a species that is both iconic and used as an indicator species. Studies on the koala have shown how limited surveys in limited places can give a very false understanding of species on or near a project site; the neighbouring Kings Hill Urban Release Area is a very good example of how additional surveys using different survey techniques can give a clearer picture of the size, health and distribution of a population.

Contrary to initial sparse findings, further studies found Kings Hill to have an active breeding koala population at Kings Hill south of the proposed Stone Ridge Quarry. Koalas have been observed on the Stone Ridge Quarry site, in the Wallaroo National Park, in Balickera and points north. Further scat detection and genetic studies may help understand the relationships of koalas and their likely movement for breeding purposes and the dispersal of young between these sites and beyond.

Koala Data



The location of the Stone Ridge Quarry would materially reduce the effectiveness of the existing fauna corridor between the forests north and south of Italia Road, posing a serious and irreversible risk to breeding populations of local koala south of Italia Road.

[10] Port Stephens Council, EIS Agency Advice, 2 August 2023

[11] Youngentob, K.N, Marsh, K.F., Skewes, J., 2021, A review of koala habitat assessment criteria and methods, report prepared for the Department of Agriculture, Water and the Environment, Canberra, November..

As a baseline, current cleared areas in the fauna corridor should have been taken into consideration along with the combined effects of other approved developments such as the Eagleton Quarry (both the extent and location of proposed clearing). Potential future developments are also relevant and at a minimum, the proposed Kings Hill housing development (concept plan under appeal with the Land & Environment Court) should have been considered, together with the Boral Seaham Quarry expansion and the new Stone Ridge Quarry.

There is a breeding population of koala at Kings Hill south of the proposed Stone Ridge Quarry, koala have been observed on the Stone Ridge Quarry site, in the Wallaroo National Park, in Balickera and points north. The forest at Kings Hill, Wallaroo (state and national), and Karuah (state and national) provide essential habitat to koala and is part of a recognised regional fauna corridor identified in Fauna Corridors for North East NSW dataset (DPE 2010).

The Stone Ridge Quarry, proposed for the Wallaroo State Forest, is in direct conflict with Objective 6 of the *Hunter Regional Plan 2041*, to "conserve heritage, landscapes, environmentally sensitive areas, waterways and drinking water catchments." The objective describes biodiversity networks as "patches – areas of remnant vegetation such as national parks, **state forests** and other core habitat – and corridors that wildlife use to move around." The objective also states: "Large areas of remnant vegetation in the Hunter, such as national parks, **state forests**, council reserves, floodplains, foreshores and riparian vegetation, can be connected to secure biodiversity corridors." Strategy 6.4 in support of the objective states: "Planning proposals should promote enterprises, housing and other uses **that complement the biodiversity, scenic and water quality outcomes of biodiversity corridors**."[12]

The forest at Kings Hill, Wallaroo (state and national), and Karuah (state and national) provide essential habitat to koala and is part of a recognised regional fauna corridor identified in Fauna Corridors for North East NSW dataset (DPE 2010).[13]

In Australia and globally, it has long been recognised, for decades, that our protected areas alone are not sufficient to prevent extinction and ecological degradation, and that landscape connections between core habitat areas are necessary to enable ecological processes to sustain natural systems, and allow for evolutionary adaptation to environmental change.[14] The regional fauna corridor through the Wallaroo State Forest is one such corridor and recognised as such by the Hunter Regional Plan 2041.[15]

Instead, the location of the Stone Ridge Quarry will make this section of the fauna corridor uninhabitable by native fauna with 30 years of blasting, rock-crushing on site, and heavy vehicle transport.

The majority of the 68 ha being cleared falls within the fauna corridor. A large portion will be permanently destroyed and the remaining disturbed areas will take decades to recover.

The Amendment Report states that approval is being sought for 'an **initial** 30-year period,'[16] signalling that the disturbance may be greater or last longer than projected in this SSD due to ARDG-expected subsequent modifications.[17]

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[12] NSW DPE. (Dec 2022). *Hunter Regional Plan 2041*, p. 64. https://www.planning.nsw.gov.au/plans-for-your-area/regional-plans/hunter-regional-plan-2041

[13] Agency Advice to EIS, Biodiversity & Conservation Division, 23 Jul 2023, Ref: DOC23/528736-2; NSW DPE. (Dec 2022). *Hunter Regional Plan 2041*, Figure 11. https://www.planning.nsw.gov.au/plans-for-your-area/regional-plans/hunter-regional-plan-2041

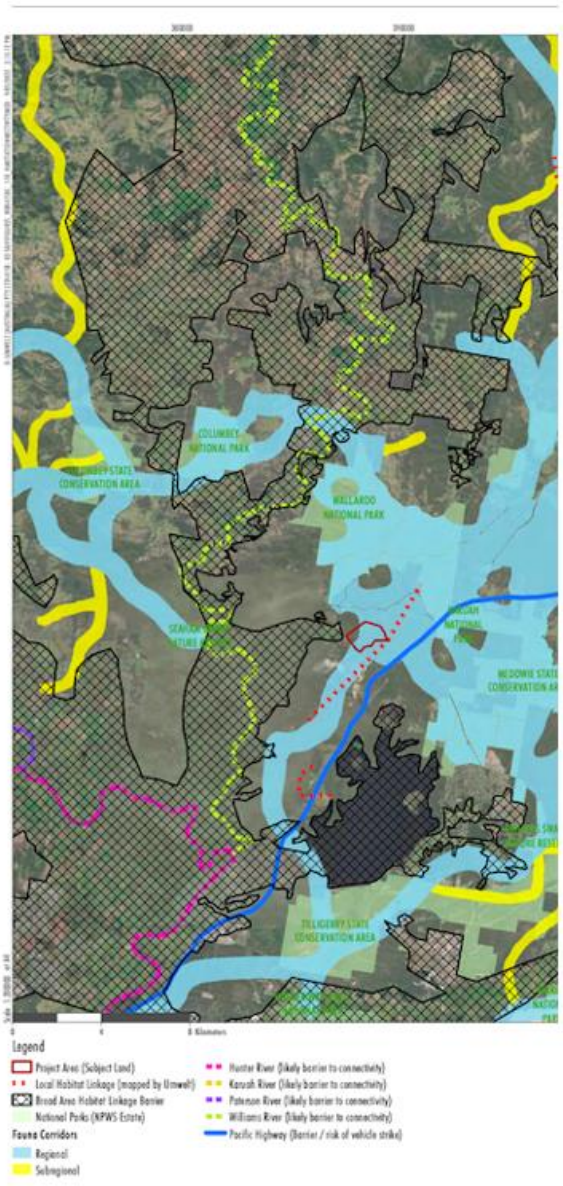
[14] Soule, M.E. et al. (2004). *The role of connectivity in Australian Conservation*. Pacific Conservation Biology, pp 266-79

[15] NSW DPE. (Dec 2022). Hunter Regional Plan 2041, p. 68. https://www.planning.nsw.gov.au/plans-for-your-area/regional-plans/hunter-regional-plan-2041

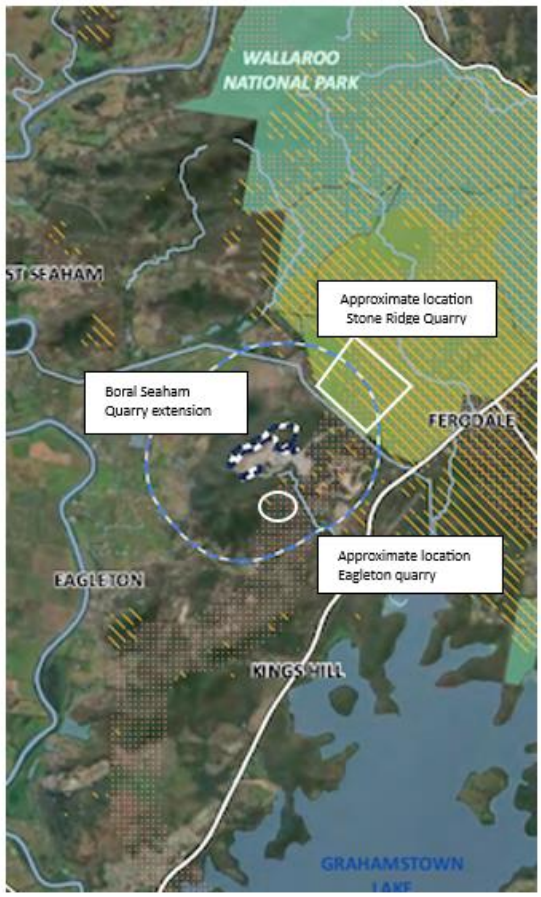
[16] Amendment Report, Executive Summary, p. i

[17] Table 3.1 of the Amendment Report mentions that additional processing **will continue** after a 30-year extraction period but does not indicate how many additional years. The same table mentions that rehabilitation will occur progressively where appropriate, but caveats this by indicating it may not occur if additional resource is identified within the 139 ha of Project Area. This suggests that the area and the timeframe for full rehabilitation of the site is currently uncertain.

The fauna corridors can be seen in the Regional Habitat Connectivity (figure 3.2) in Umwelt's Biodiversity Assessment Report for Stone Ridge and the Boral Seaham Quarry EIS BDAR, that are shown beside each other below. Part of a regional fauna corridor quite clearly passes through the majority of the Stone Ridge project site as well as over part of the Eagleton and Boral Seaham sites. [18]



Map extracted from Stone Ridge Amendment Report BDAR.[6]

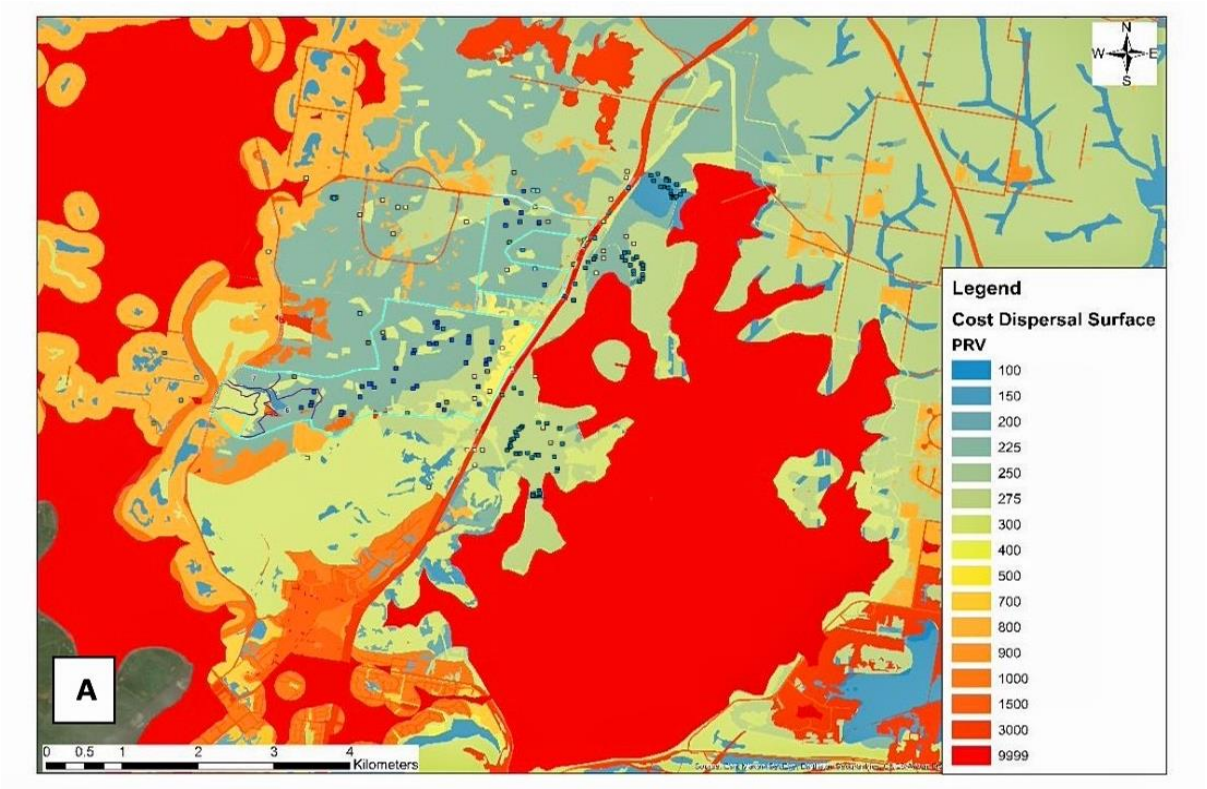


Map extracted from Boral Seaham Quarry EIS BDAR, SSD-59254474 with a closer representation of the corridor.

In the Boral Seaham EIS, the area of the proposed Stone Ridge quarry in the state forest section of the corridor is described as 'Key fauna habitat'.[7]

[18] Umwelt (2024) STONE RIDGE QUARRY, Biodiversity Development Assessment Report FINAL, figure 3.2

A cost dispersal study has not been undertaken as part of any cumulative impact assessments. A 2022 study of Koala Habitat Connectivity at Kings Hill by Dr Steve Phillips, Director of Biolink, identified the pre-development dispersal costs at Kings Hill. His findings are presented in this map:



As explained in the report, "[h]igh cost (increasing from yellow to orange to red) represents a land-use type that is difficult to traverse, lower costs (blues) are easier to traverse. Note that the area is costed for a range of land uses including vegetation type, agriculture, urban and commercial development, industry, transportation infrastructure and hydrology. The gap-crossing layer is shown in the darkest red, representing areas which exceed 200m from the nearest mapped vegetation. Parts of the M1 which are fenced with wildlife exclusion fencing are also considered impassable." [19]

Any habitat clearance or fragmentation, whether for development or resource extraction, may result in restricted width corridors, pinch points, obstacles and threats that affect the routes and distances koalas take. In red at the top of the map is the Boral Seaham site, the Circuit Italia/ Ringwood Park Motor Complex, Ranch MX, and areas cleared on Burleigh Ranch Way.

The approval for Eagleton to start operations, and any approval for Stone Ridge to fell trees and start mining operations, together with an increase in road haulage on Italia Road, will increase the amount of habitat that has high dispersal costs and will require koalas to move greater distances.

Given the cumulative impact of existing and proposed developments in the same area, **a dispersal cost study should be undertaken** for the wider area around the Wallaroo State Forest, the Balickera tunnel, the Italia Road junction and the area around Boral Seaham and Eagleton quarries. With potentially three operational quarries in the same area, any dispersal cost study will help identify where the increased costs will be for koalas who have Balickera as part of their home range, and support calls for greater avoidance and mitigation options.

[19] Biolink. (2022). Koala Habitat Connectivity: Kings Hill, Post Stephens, NSW. Report to Kings Hill Developments by Biolink Ecological Consultants, Pottsville, NSW) p. 6.

The negative effects of pinch points and obstacles in corridors have not been appropriately considered.

The historical, but still dangerous route of wildlife crossing over the Balickera Canal is already a pinch point between the forests north and south of Italia Road. There is currently a 1210m stretch of covered tunnel for fauna to find a safe place to cross road, but with increasing volumes of road haulage from quarries to the north of Balickera, it is likely becoming more precarious. See figure 3.3 overleaf.[20]

The quarry location would block access to the land bridge over the tunnel by more than half, requiring animals to go around the quarry to reach even smaller pinch points on either side. On the eastern side of the quarry, the amended BDAR gives the pinch point as 685 m, but in reality, the gap would be much smaller due to the quarry access road – the actual gap extends from the boundary of the quarry site to the edge of the canal (**black arrow on figure 3.3**).

There are already roughly 30 – 50 vehicles per hour on Italia Road between 4am – 6pm, or one vehicle every 1 – 2 minutes.[21] With the Stone Ridge quarry and the Boral Seaham Quarry expansion, the heavy vehicle traffic would significantly **increase to as many as 1000 truck movements per day**. This would make the eastern end of the Italia Road land bridge impassable to wildlife for much of the day, including early morning and dusk when animals are more active. Any males eager to cross Italia Road during breeding season may become vehicle strike fatalities.

If this access point is effectively closed, the fauna corridor to the south, between the Boral Seaham Quarry and the Eagleton Quarry, is also effectively closed.

This leaves a recorded gap of only 390 m on the western side of the quarry for animals to cross the road from north to south. In reality the gap would be smaller as no buffer to the quarry operations was included in this ARDG measurement. Animals moving from south to north would have a slightly larger movement area around the existing or expanded Boral Seaham Quarry but would reach a narrower stretch of road; and rather than crossing into forest, they would be funneled through a gap of less than 390 m around the Stone Ridge quarry.

The consequence of closing off access to animal movement is a de facto state of habitat fragmentation. When animals become trapped, they lose the ability to find higher quality food resources, including after drought or fire; they suffer genetic decline, leading to lower breeding success and weaker offspring; and they face increased competition for scarce resources.

If the critically endangered koala breeding population at Kings Hill become isolated, they can no longer disperse and breed with other populations, and risk losing genetic diversity, which leads to lower resilience and sustainability. The habitat fragmentation and loss of connectivity in the fauna corridor by roughly two-thirds at Italia Road creates a real risk of serious and irreversible impact to the local koala population. The same holds true for other threatened terrestrial species in this area.

Quarry site preparations and ongoing operations causing noise, vibration, traffic, dust and light impacts on wildlife will cause koalas stress and result in deadly chlamydia symptoms emerging from latent infection. The Draft Consent Condition B60 mentions the visual effect of light for humans, but light also affects fauna so there should likewise be recommended adherence to the national-light-pollution-guidelines-for-wildlife.[22]

With a project of this size, and a project based in a state forest, IPC should expect to see plans for mitigation efforts for terrestrial fauna to cross Italia Road and suitably wide, suitably planted fauna corridors that divert fauna away from the quarry footprint to suitable habitat linkages.

[20] Umwelt (2024) STONE RIDGE QUARRY, Biodiversity Development Assessment Report FINAL, figure 3.3

[21] Submissions Report, Traffic Impact Assessment, Appendix 3, Figure 3.5, p. 9

[22] https://www.dcceew.gov.au/environment/biodiversity/publications/national-light-pollution-guidelines-wildlife

The Stone Ridge BDAR shows a diagonal width of 685 m but the actual Italia Rd crossing is much smaller, between the site boundary and the canal **(black arrow)**

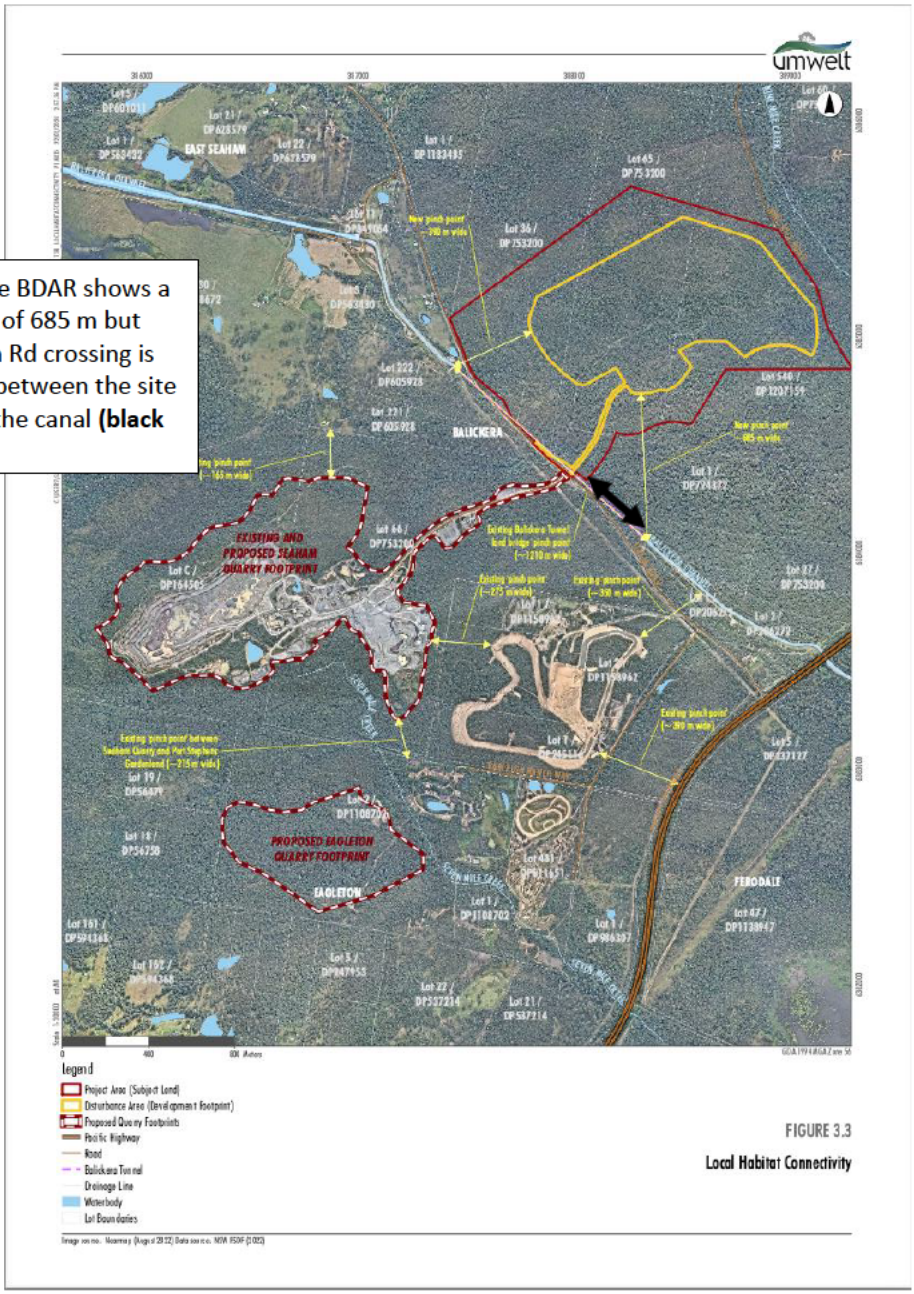


FIGURE 3.3

Local Habitat Connectivity

It is clear that the negative impacts to the fauna corridor have not been avoided as claimed in the amended BDAR but will instead be directly exacerbated. An offset of 68 ha does not compensate for this ecological loss and the **full biodiversity impact therefore has not been costed into the outcomes of this SSD.**

The amended BDAR also states that the "width of the remaining native vegetation between the development footprint and Italia Road will be reduced to a width of approximately 320 m and the retention of a wildlife corridor along Italia Road has been a key design consideration for the Project". [23]

According to current thinking on wildlife corridors, 320m is not wide enough to be an effective wildlife corridor. WIRES state that "[w]ildlife corridors serve as contiguous pathways within natural habitats, facilitating movement for koalas to seek mates during breeding seasons and for young koalas to disperse when mature. These corridors, essential habitats themselves, require a minimum width of 450 metres to be effective." [24]

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[23] Umwelt (2024) STONE RIDGE QUARRY, Biodiversity Development Assessment Report FINAL p. 46

[24] WIRES (2024) NSW Koala Strategy Under Review Amidst Threat of Extinction, https://www.wires.org.au/blog/nsw-koala-strategy-under-review-amidst-threat-of-extinction

The amended BDAR also states the Project "will initially remove suitable habitat for threatened fauna entities, however ongoing interactions with threatened fauna entities are likely to be minimal within the cleared parts of the development footprint and will be managed through a Biodiversity Management Plan which is proposed to be prepared following approval of the Project". [25]

The BDAR conclusion is not valid. It is known that koalas try to return to favoured individual feed trees within their home range for years after their removal. The expected "minimal ongoing interactions with fauna entities" once the habitat is cleared, may directly result from potential casualties of habitat clearance, vehicle strikes or as a result of increased dispersal costs. This outcome must be avoided.

The cumulative impacts assessment guidelines do not appear to have been followed. The NSW cumulative impact assessment (CIA) guidelines state that project documents such as the EIS or BDAR should include information on baseline environmental impacts of past developments and actions, as well as from currently operating projects. The proponent must identify the proposed approach to assessing the cumulative impacts having regard to the availability and quality of data, and whether further investigations are required. [26]

KKEPS requests the IPC ensures that cumulative and combined impacts are rigorously taken into account and for impacts to the area surrounding the proposed development footprint be well considered, as many species (including koalas) traverse the wider landscape. Further koala surveys could be undertaken before any habitat is cleared or modified and using a range of survey techniques (such as drones and scat sniffer dogs), to be conducted on a variety of days and seasons. Such in-depth studies on koala movement and koala genetics may identify areas where fragmentation is resulting in a decline (or the risk of a potential decline) in allelic richness which could indicate a population that is less likely to adapt to climate change and other environmental stressors. This information could inform more effective avoidance and mitigation techniques, reducing the need for offsets, but resulting in improved outcomes for connectivity and preventing local extinctions.

Mitigation measures for the cumulative increase in haulage vehicles on Italia Road are required. The CKPoM requires measures to mitigate the impact of motor vehicle strike on roads that run through the site or are next to koala habitat and subject to increased traffic volumes.[27] The BCS also recommended in its EIS and RTS advice that the BDAR should include "adequate measures to mitigate loss of habitat connectivity and increased vehicle strike for threatened species on site (i.e: koala). Mitigation measures may include, but not be limited to, installing artificial connectivity measures to establish connections between habitat and favoured movement corridors."

ARDG agreed to meet with BCS and Council about mitigation measures on Italia Rd, for example, to install signs with flashing lights to warn motorists to slow down. BCS supported the implementation of signage to warn motorists of crossing fauna on local roads but also recommended further actions to mitigate road strike risks be explored in consultation with Port Stephens Council.[28] The DPHI did not mention this in its summary of CKPoM performance measures and we could see nothing in the proposed conditions of consent that covered mitigation actions to avoid vehicle strike by animals crossing Italia Road.

The Traffic Management Plan in proposed Consent Condition B36 does not mention fauna.

If cumulative impacts from increased quarry traffic for existing and proposed developments on Italia Road had been assessed with rigour, the combined volume and timing of traffic would have been made obvious, along with the narrowing of fauna access points across the road from existing or new barriers.

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[25] Umwelt (2024) STONE RIDGE QUARRY, Biodiversity Development Assessment Report FINAL p. 151

[26] NSW DPE (2021) Cumulative Impact Assessment Guidelines for State Significant Projects pp. 17-18

[27] Port Stephens, Comprehensive Koala Plan of Management, Appendix 4, p. 70.

[28] BCD, EIS Agency Advice, 19 July 2023, Recommendation 6; BCS RTS Agency Advice, 24 Apr 2024; BCS Agency Advice, 1 July 2024

At a minimum, under/overpasses for fauna are needed to be implemented on Italia Road both east and west of the quarry entrances, and fencing should be given careful consideration. The mitigation methods must be agreed and put in place prior to approval for clearing, otherwise endangered and threatened species such as the koala will be hit and killed.

The Stone Ridge quarry is not a sustainable use of the state forest estate under the Forestry Act 2012 and related legislation. As part of the cumulative impacts assessment, the IPC has the authority to weigh competing policy aims for the use of public land on which this private quarry is being proposed. KKEPS maintains that the DPHI did not give sufficient weight to the strong state and regional environmental policies in favour of maintaining this section of state forest as a forest. These include the environmental objectives in the *Hunter Regional Plan 2041* mentioned above, and those implicit in the *Forestry Act 2012*, Integrated Forest Operation Approvals (IFOA) and Regional Forestry Agreements (RFA), which should be part of the strategic planning framework for the site.

We acknowledge that quarries have historically operated in state forests, but these have been at a much smaller scale than the one proposed for Stone Ridge. We also acknowledge that IFOA and RFA specifically pertain to 'forestry operations' (logging) rather than the taking of so-called 'forestry materials' (quarry products). However, the framework of the Act, the IFOA, the Agreements, and related policies and guidelines can be used to inform public interest considerations about what is legislatively considered to 'sustainable' environmental practice in a state forest and how state forest land is used for economic purposes.

The following factors are relevant to the public interest question:

- Under the *Forestry Act 2012*, Crown land can be classified and dedicated as State Forest provided the result is the "effective and economic control, utilisation and management of the land for timber production" or the marketing of timber and forest products (products of trees or other vegetation with an economic value).[29] Although language in the section covers both native forest and timber plantations, in the main, for public land to be set aside for management by the Forestry Corporation, the purpose of the land is to be 'a forest'.
- Forestry operations in native forests are underpinned by the principles of ecologically sustainable forest management (ESFM). In the Act this means, amongst other things: "maintaining forest values for future and present generations, including:
    - forest biological diversity, and
    - the productive capacity and sustainability of forest ecosystems, and
    - the health and vitality of native forest ecosystems, and
    - soil and water quality, and
    - the contribution of native forests to global geochemical cycles, and
    - the long term social and economic benefits of native forests, and
    - natural heritage values"[30]
- The Forestry Corporation can license others to take quarry products from state forests but historically these have been small-scale operations, and presumably authorised in the service of forestry – for access roads, fire trails etc. The most recent larger-scale quarry, the Bago Forest Quarry, is in a former hardwood plantation, not a native forest.[31]

[29] *Forestry Act 2012* (NSW), s. 13
[30] *Forestry Act 2012* (NSW), s. 69L (2)
[31] https://www.planningportal.nsw.gov.au/planning-panel/extractive-industry-quarry-and-associated-infrastructure ; DA2015 - 953.1 with approval to remove up to 200,000 tonnes of aggregate per annum

- This is a screenshot from the latest Forestry Corporation Sustainability Report (2022-23) showing the annual volume of quarry products removed from state forests:[32]

Products and services provided	2018-19	2019-20	2020-21	2021-22	2022-23
Apiculture (sites)	4,493	4,318	5,020	4,968	3,400
Broombush (tonnes)	1,496	3,490	1,619	2,050	353
Charcoal (tonnes)	959	2,034	620	980	207
Fencing material (m3)	1,642	1,888	1,001	880	1,177
Firewood non commercial (tonnes)	10,910	10,929	10,582	9,505	8,844
Fossicking (permits)	2,773	3,245	5,424	3,561	4,307
Gravel/Sand/Rock (tonnes)	59,597	67,160	119,101	211,253	61,080
Grazing (hectares)	358,719	211,384	180,622	128,643	177,398
Licensed telecommunication sites	138	138	138	139	128

We could not find the number of current quarries on state forest estate from the Forestry Corporation website, but ARDG's original scoping statement indicates there are 20, which means average annual volume from the most recent reporting period would be ~3,000 tonnes per quarry.[33] From this, one could say the scale or location of historical state forest quarries has not, thus far, come into direct conflict with the principles of EFSM.

- The proposed Stone Ridge Quarry is entirely different. ARDG proposes to remove 1.5 million tonnes of quarry products per annum from the Wallaroo State Forest. This is 7.5x the size of the Bago Forest Quarry and **250x the average volume of other state forest quarries**.
- 68 ha of state forest will be cleared of all vegetation in a way that **conflicts with 6 of the 7 EFSM forest value principles**: the clearing and 30+ year quarry operation would reduce forest biodiversity in this section, reduce the productive capacity, health and vitality of this forest ecosystem, reduce its natural heritage values, interrupt several geochemical processes, and leave a large water-filled void instead of native vegetation and tree-covered soil.

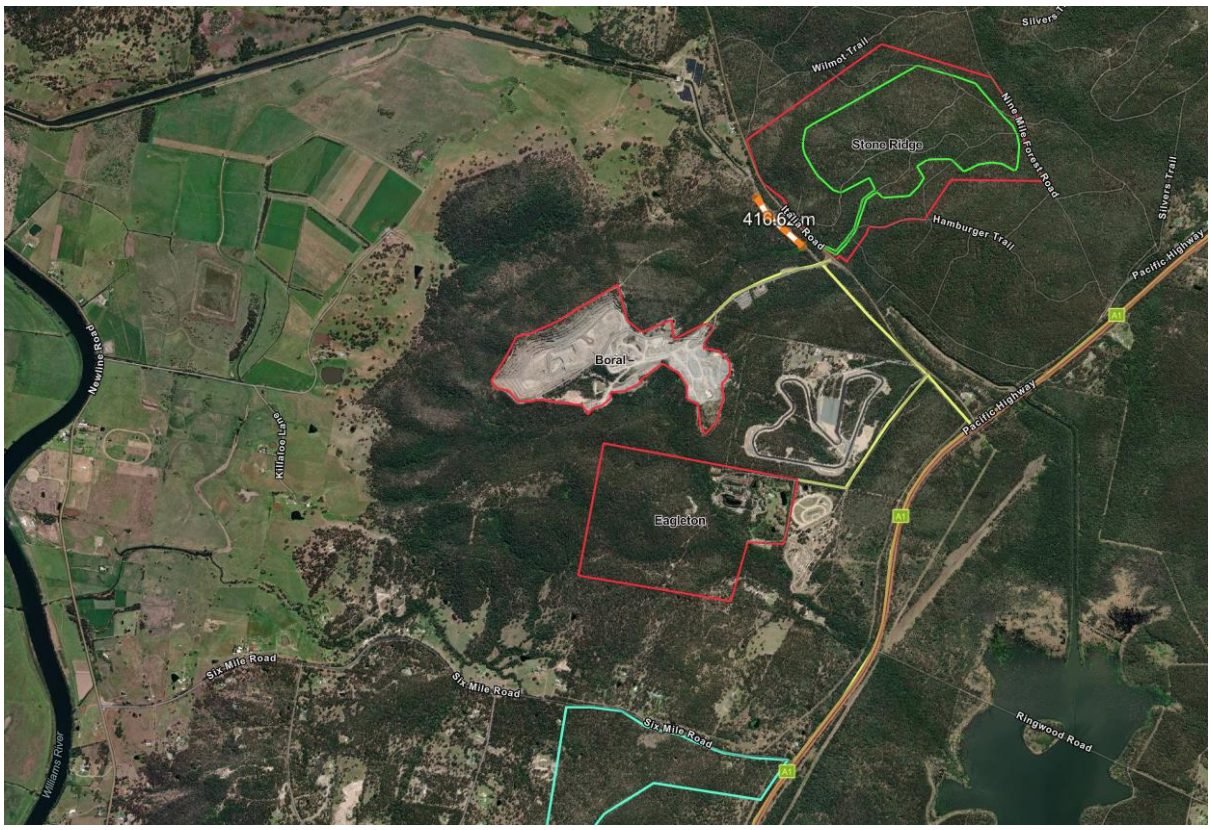
It would be a perverse outcome if the *Forestry Act 2012* could be applied in such a way that the Forestry Corporation could authorise a quarry operator to do large-scale clearing and permanent destruction of state forest in a way the Forestry Corporation is itself not authorised to do under relevant legislation.

While we are aware that hard rock may be a critical source for state infrastructure (and housing), the fact remains that koala conservation is also of critical importance to the people of NSW. There must be a balance that does not create local extinctions because corridors have not been adequately identified and protected, and the principles of avoid and mitigate appropriately applied, prior to offsets approval.

We respectfully request IPC insist on the proposal being more rigorously bound to the "OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT A1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent".[34]

KKEPS concludes that the Independent Planning Commission should reject the Stone Ridge Quarry proposal within Wallaroo State Forest, on Italia Road, Balickera.

[32] https://www.forestrycorporation.com.au/about/pubs/corporate/sustainability-reports
[33] ARDG Scoping Report, Proposed Stone Ridge Quarry Project, sec 1.3; Feb 2020
[34] DPHI development consent report Stone Ridge quarry, p1


Wilmot Trail
Nine Mile Forest Road
Stone Ridge
416.62 m
Hamburger Trail
Silvers Trail
Pacific Highway
Boral
Newline Road
Killaloo Lane
Pacific Highway
Eagleton
A1
Six Mile Road
Six Mile Road
Six Mile Road
Ringwood Road
Williams River