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13 Nov 2022

Re: State Significant Development SSD-6612 at Martins Creek Quarry

Dear Sir/Madam,

My name is Carmel Northwood and I gave a brief speech as Convenor of Koala Koalition EcoNetwork Port Stephens (**KKEPS**) to the IPC Public Meeting, Tocal Agricultural Centre, 7th November 2022, in order to raise concerns about the environmental impact of the recommended State Significant Development SSD-6612 at Martins Creek Quarry in Dungog Shire. This is the more detailed written submission I promised to deliver.

Cumulative impacts - quarry site locations

Firstly, KKEPS would like to emphasise that the cumulative impact of this quarry should not be considered only in relation to the Brandy Hill Quarry. Port Stephens and neighbouring areas in Dungog and Mid Coast LGAs have four established hard rock quarries apart from Martins Creek: Hanson's at Brandy Hill, Boral's Seaham (at Balickera) and two Hunter Quarries at Karuah and East Karuah, with four more proposed at Eagleton, Deep Creek, Wedgerock's at Karuah South and Stone Ridge in Wallaroo State Forest. To put these sites into perspective, as the crow flies, four of these quarries are either just under or just over 10 km from Raymond Terrace. The remaining five are just over 25 km from Raymond Terrace.

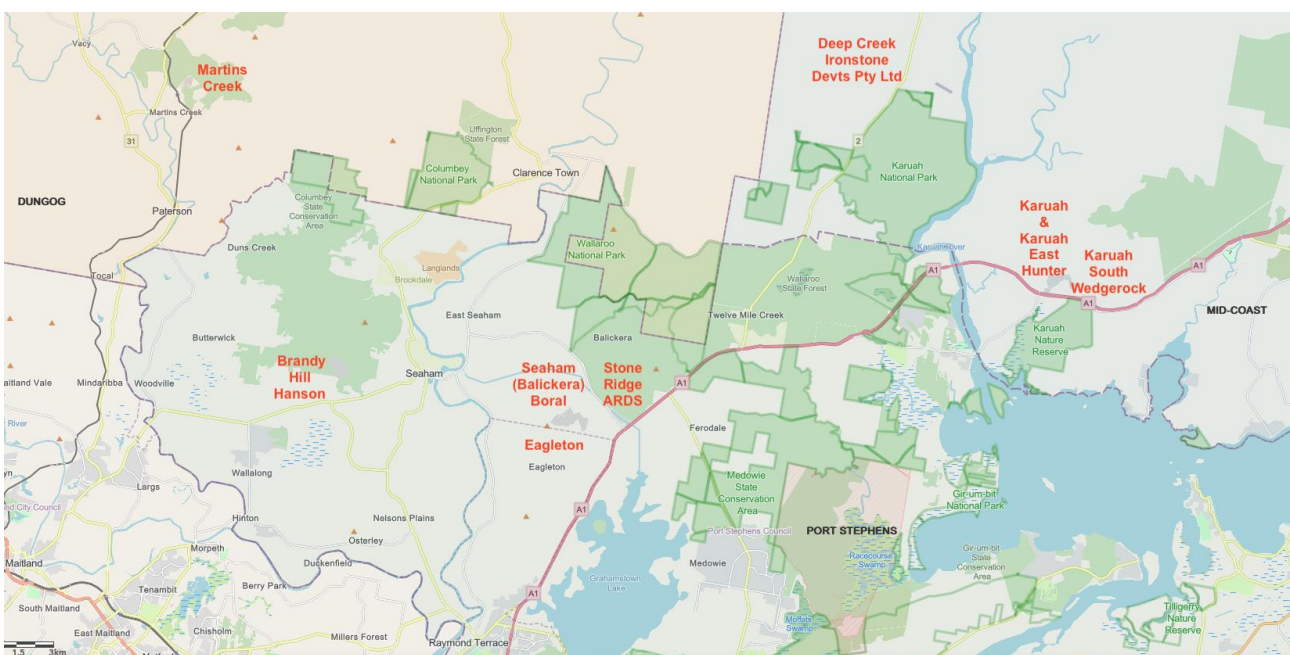


Figure 1. Established and proposed rock quarries in or near Port Stephens LGA ¹

There are two more quarries Allandale and Teralba to the south mentioned in the NSW Dept of Planning and Environment's (DPE) 2022 assessment report for Martins Creek ² and there may be more in that area; there are definitely more, further away. Even without mentioning sand quarries in the area, there are too many quarries in the Hunter Region to research and list.

While KKEPS recognises that Martins Creek Quarry is a State Significant Development (SSD) in relation to the sheer size of its resources, we do not accept that it is needed. There is no justification given for the need for this additional quarry to provide for the NSW infrastructure projects planned and mentioned as the main reason for it being recommended. KKEPS submit that this is a shortcoming in the standard planning assessment processes that the IPC must consider.

The Kings Hill Concept Urban Release Area (3221 Pacific Highway Kings Hill and 35 Six Mile Road Kings Hill (Lot 41 DP 1037411 and Lot 4821 DP 852073), was refused in February 2022 by the Hunter and Central Coast Joint Regional Planning Panel on 17 grounds, mainly environmental. ³ This development was proposed for only a few kilometres north of Raymond Terrace. Their reports clearly identify that koalas live in the area, along with other threatened species.

Martins Creek biodiversity

In the Martins Creek assessment report, the NSW DPE states that Daracon's revised project reduces the quarry disturbance footprint by 16.2 ha, which includes 15.3 ha of native vegetation being retained at the East Pit. ⁴ This is later said to be koala habitat. ⁵

The 2021 Biodiversity Assessment Report – Revised Martins Creek Quarry Extension Project prepared by Conacher Consulting indicated that surveys used were spotlighting, infrared cameras and SAT. These surveys were carried out in 2014, 2015 and 2020. No koala scats were found. ⁶ While these surveys seemingly meet the requirements of the NSW DPE koala assessment guidelines ⁷, other sites such as nearby Kings Hill show the importance of surveying over a longer period and at different times of the year. We also recommend the use of drone surveys and scat detection dogs as they often identify koalas and koala activity where other survey types fail. The report also indicates that koala observation locations were limited and widely spaced apart. ⁸

According to NSW SEED portal (Sharing and Enabling Environmental Data), much of the area the quarry is located in is highly suitable as koala habitat, with cleared areas showing as less suitable. The BioNet species sightings suggest numerous threatened species are, or have been, present at the site. Koala sightings are mainly from 2019 to 2022 south and east of the existing works. ⁹⁻¹⁰

With koala habitat being cleared as part of this project and the Biodiversity Assessment Report suggesting limited knowledge as to where koalas are on site, a more detailed survey is necessary. Koalas get very stressed by habitat clearance which can have serious implications. Koalas do not readily move to other areas unless it is part of their established home range so offsets away from the site do nothing to help resident koalas. More thorough investigation is needed.

Cumulative impacts - Biodiversity

Every application to start or extend an extractive operation, includes land to be cleared at a greater or lesser scale. Aerial mapping clearly shows that there is already a significantly fragmented landscape in Port Stephens and surrounding area; these applications collectively decrease native habitat even further and will impact resident wildlife populations and species movement across the landscape. While we note that for Martins Creek Quarry SSD Daracon "has identified several potential land-based offset sites near the quarry

site with similar habitat values to the impact areas”¹², biodiversity offsetting has been found to be a highly controversial conservation practice¹³ and was the subject of a recent NSW audit.

The resulting NSW audit report ‘Effectiveness of the Biodiversity Offsets Scheme’, published in August 2022, found that “there is a risk that biodiversity gains made through the Scheme will not be sufficient to offset losses resulting from the impacts of development”¹⁴. The audit also found that “90% of demand cannot be matched to credit supply”.¹⁵

Recent research also suggests that the effectiveness of ‘biodiversity offsetting’ and ‘no net loss’ schemes varies between habitats with forested areas being least likely to achieve set targets.¹⁶

Recognition of the near extinction of koalas by the recent listing of koalas as Endangered, and the NSW Government’s strategy to double koala numbers, should supersede the requirement to obtain rocks in an area that unarguably supports koalas’ survival.

The Port Stephens Comprehensive Koala Plan of Management (CKPoM) mapping of koala habitat is 20 years out of date. As yet, there has been no identification of where critical wildlife corridors should be preserved, although funding for mapping has been very recently announced as part of the NSW Koala Strategy. There has been no-one looking at the bigger picture to enable koalas to link through to the cooler forests that will protect the species with global warming already upon us. There has been no broad assessment of how wildlife is to navigate their way around quarries in the Hunter, even though it is well known that their successful breeding requires dispersal of young.

Mapping the corridors to ensure koalas breeding and genetic diversity must be completed prior to any more habitat being cleared, if koalas are to have any chance of survival. Corridors must be mapped and protected as a priority.

Each quarry is being assessed separately using methods that look only at the separate parcels of land under question. Together they all affect our threatened wildlife and human communities on a very large scale through their cumulative impact.

There are no recommendations regarding fauna fencing corridor considerations or road safety mitigation efforts for fauna in the Martins Creek Quarry reports, apart from keeping them out of the pit. This needs to be addressed before approval is given.

Volunteer burden

Much more attention needs to be paid to road mitigation efforts, and observation intentions, to ensure the safety of wildlife which will be displaced through habitat clearance. The otherwise resulting injuries and disease will simply place more pressure on local volunteer wildlife carers and rehabilitation facilities.

No mention is made of the danger to wildlife rescuers trying to pick up fauna struck by vehicles from the roadway. It is obviously dangerous and another quarry’s traffic will directly increase those risks, and the emotional trauma suffered by volunteers collecting the mutilated bodies.

The toll of spending hours upon hours by individuals and groups of volunteers such as my own, formulating these submissions that are in the best interests of the environment and community, is never mentioned.

There is nothing in the Assessment report that speaks of this volunteer burden and what can be done to ameliorate the effects on our wildlife or volunteers trying to save them, except to say that it is deemed to be “acceptable”. Well, it is not acceptable to many of us.

Cumulative impacts - road haulage

Even without the proposed truck movements for Stone Ridge and the current truck movements for Seaham (Balickera), there are over 2,100 truck movements a day in a relatively small area to and from these quarries.¹⁷⁻²¹ This might not sound excessive but not all the quarries operate 24/7 and this figure **does not** include truck movements to and from sand quarries in the same area. The modified consent for Karuah East quarry, for example, will result in 432 traffic movements in a 14 or 15 hour period which is up to 31 truck movements an hour.²²

Where quarries are located close to each other they often share the same or similar haulage routes which include roads that are of poor quality or at risk of flooding. In recent floods, for example, all traffic near Balickera, including the haulage trucks, had to use Italia Road. In addition, some of the quarries don't have direct access to the main roads resulting in trucks doing u-turns and turning at awkward junctions.²³

In September 2020, Port Stephens Council made their concerns on the impacts on additional road haulage clear by refusing Boral's application to deepen their quarry's pit floor.²⁴ The reasons given were:

- “The proposed development would cause unacceptable impacts to road safety, resulting in adverse social and economic impacts.
- The proposed development would cause unacceptable impacts to road safety and its approval would be contrary to the public interest.”

Martins Creek quarry should be refused for the same reasons.

Martins Creek road haulage and other road users

In regard to Martins Creek Quarry, the NSW DPE assessment report states that “The Department is satisfied that the Project would pose an acceptable level of risk to road users, including cyclists and pedestrians”.²⁵ The assessment fails to mention that the Hunter region, including Vacy to Paterson, is a popular area for motorcycle leisure trips by organised and informal groups; groups who often stop at local business such as Vacy General Store and Paterson Lodge for refreshments. Paterson has also hosted bike shows so it seems odd that motorbike riders have not been taken into consideration in this assessment.

The popularity of the Hunter as a destination for motorcycle travellers led to a collaboration between Cessnock City, Maitland City, MidCoast, Muswellbrook, Port Stephens, Singleton and Upper Hunter Councils, and resulted in the publication of a guide showcasing places to ride. The booklet also includes a circular route that suggests motorbike riders use Tocal and Gresford Roads.²⁶ Truck blind spots and truck debris increase the hazards for motorcyclists.²⁷

Cumulative impacts - climate change and the need for rail

At a time when Climate Change is becoming more recognised as an issue in Australia, threatening the survival of native species such as the koala,²⁸ and increasing the frequency and severity of flood events²⁹, and

Councils struggle to maintain local roads, additional road haulage truck movements to and from mine sites should be discouraged.

The following table shows a comparison of emissions of road and rail freight.

Mode	PM10	CO ₂	CO	NOx	SO ₂	VOC
Rail	0.004	15	0.032	0.31	0.016	0.021
Road	0.048	180	0.33	1.74	0.005	0.15

Source: SRA February 2005

Key: PM10 particulate matter of less than 10 microns; CO₂ carbon dioxide; CO carbon monoxide; NOx oxides of nitrogen; SO₂ sulphur dioxide; VOC volatile organic compounds

Table 5.2: Comparison of Emissions of Road and Rail Freight (emissions in g per tonne-km)

With the exception of Sulphur Dioxide and Nitrogen oxides, emissions from road haulage were found to be at least 10 times greater than by rail.³⁰ Modern fuels may have reduced road haulage emissions, but with freight trains implementing new technology rail freight is still the cleaner option.

Australia has seen a number of greener train initiatives since 2021. In September 2021, Roy Hill purchased the world's first fully battery-powered, heavy-haul locomotive to haul iron ore through the heat of the Pilbara region. BHP and Rio Tinto have also ordered four battery-electric locomotives each to reduce carbon emissions. Fortescue Metals Group also has two new locomotives and is testing a new fuel system to decarbonise its rail freight.³¹ Fortescue Williams has a locomotive that harnesses enough energy using regenerative braking that they will never need to charge it.³²

Australia's largest rail freight company, Aurizon, is investigating hydrogen-powered bulk freight trains in partnership with Anglo American.³³

Perhaps it is time for rail freight to become a condition of extractive industry operations unless the terrain makes a rail network impossible to build or extend.

Martins Creek - reassess rail freight options

During the consultation, local residents have repeatedly and insistently called for quarry materials to be hauled by rail rather than by road. There is a history of using rail to transport freight from this site as the quarry is connected to the Main North Coast railway line.³⁴

A rail logistics study commissioned by Daracon found that the network capacity to increase rail freight was generally at night, rail distribution into Sydney would need to be on a 24/7 basis, the quarry would need to be able to accommodate longer trains and access would be needed to train paths and unloading facilities.³⁵

Given the number of extractive industries in NSW, there should be incentives or programmes to accommodate extra rail freight on passenger or freight specific networks. Many mining companies manage the available access to rail paths by having agreed off peak times and using a system of stockpiles and railheads. This way material could meet Sydney's 24/7 market without needing to be dispatched in peak hours. While we accept that rail networks can be expensive to set up or extend, they are relatively cheap to maintain compared to road repairs, cleaning and junction improvements.³⁶

We would hope that road haulage could be limited to local deliveries from the quarry or from the stockpiles but this is not clear from the DPE Assessment Report where Newcastle and Sydney are both listed as destinations for products to be either sent by rail or trucks. More clarification is needed on what “local” deliveries mean, i.e. how far away is still considered to be “local” by Daracon?

Economy vs wellbeing of residents and environment?

In the Martins Creek assessment report, NSW DPE states that “Demand for quarry products in NSW is driven by government spending on public infrastructure and private investment in commercial, industrial and residential development.... NSW Government has committed over \$108 billion in infrastructure spending over the four years to 2025.”³⁷ It later lists four regional policies that apply:

- Hunter Regional Plan 2036 (NSW Government, 2016)
- Future Transport 2056: Regional NSW Services and Infrastructure Plan (TfNSW, 2019)
- NSW State Infrastructure Strategy (NSW Government, 2014)
- Strategic Regional Land Use Plan: Upper Hunter Infrastructure (NSW Government, 2012)³⁸

Many of the 624 objections to this Martins Creek project commented on a history of extracting over and above agreed levels. In 2015, three years after Daracon took over the site, DSC lodged proceedings against Daracon in the NSW Land and Environment Court (LEC) for activities that were not consistent with the then existing 1991 consent. In October 2018, the LEC ruled that operations were not in accordance with the 1991 consent and made several declarations and orders.³⁹ Local residents are concerned that history may repeat yet NSW DPE’s response has been to issue a clearer consent and support the revised project as the Department believes it is justified from an “economic efficiency perspective” as the project will result in “significant economic benefits to the region and to the State of NSW through the supply of materials critical to the construction industry” .⁴⁰

To counter local concerns regarding possible reduced air quality, increased noise, traffic and vibrations resulting from this project, a number of ways to help the local community including haulage road upgrades, an annual contribution to the Council’s Community Benefits and Wellbeing Fund and money towards pedestrian paths, crossings, and bus shelters are proposed.⁴¹

But what about the objectives of the Hunter Regional Plan 2036? This plan is based on four key goals which include:

- provide for a biodiversity-rich natural environment; and
- foster development of thriving communities.

That plan also aims to “protect its diverse terrestrial and aquatic ecological systems, conserve its heritage values, and create thriving communities that enrich the quality of life and wellbeing of their residents”.⁴² This should be seen as the overarching and dominant plan for the area. Residents do not want to live near a continually expanding quarry area supporting State growth and development needs to acquire quarry materials.

The small community financial contributions offered, will not protect the environment and enrich the quality of life and the wellbeing of people at Martins Creek. The local people are continuing to point out strongly that they are against the quarry and the major problems it brings them, while the community benefits of the quarry are too few.

There is an appalling attitude stated in the NSW DPE Assessment Report by DPE that “The Department also recognises that the quarry has operated for over 100 years and it is evident that the community has been subject to noise and other amenity impacts for a very long time.”⁴³ That seems to infer that it’s acceptable

to continue that noise and amenity impact on the community. That 100 years of putting up with that quarry is more than enough, especially given the report admits that the local community is growing so even more people will be affected. It is obvious they are not choosing to live in the area to be near a quarry, but chose the area for the benefits of the local rural environment. The community has a right to depend on the expectation that the quarry will cease operations as agreed, and that approvals will not be renewed and modified and renewed forever to be a curse upon their existence.

Rocks surely must be able to be found and quarried in areas that are already cleared, or are less important to the survival of the iconic koala. If not, there needs to be a much greater and urgent emphasis placed on the repurposing and recycling of materials, possibly reclaiming or diverting them from landfill, to satisfy the need for concrete and road base.

In conclusion, the Martins Creek quarry proposal will significantly impact the biodiversity of the environment and the safety and health of the local communities.

KKEPS submits that the quarry should not gain approval.

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