SEAHAM QUARRY PROJECT SSD-59254474
139 Italia Road, Balickera 2324
14 May 2024

GLOUCESTER ENVIRONMENT GROUP SUBMISSION OF OBJECTION

INTRODUCTION

This submission is written on the Traditional Lands of the Gathang speaking people, Biripi and Worimi Country.

Gloucester Environment Group (GEG) is an incorporated volunteer organisation with over 120 members who reside in or near the Gloucester township in the MidCoast Council region. GEG members provide, assist and plan for environmental enhancement projects in our region and take a keen interest in the state of our natural environment and natural resource management.

GEG members are concerned that MidCoast Council's call for Strategic Planning for Quarry development in our region has fallen on deaf ears. The cumulative and combined impacts of the ten either operational or proposed hard rock quarries in our region (Port Stephens, Dungog and MidCoast) undermine local planning priorities to protect our environment, lifestyles and livelihoods.

Functioning ecosystems and viable wildlife corridors for a number of threatened wildlife species, including the Koala, will be lost in our region as a result of the cumulative impacts of combined quarry forest clearing on both private and proposed State managed conservation lands.

The wildlife and landscape corridors that link the Port Stephens Hinterland to the MidCoast Hinterland and that are part of a network of landscape scale Climate Corridors and climate refugia for wildlife, including threatened species, are progressively compromised with each new regional quarry development.

GEG objects to the Seaham Quarry Project (the Project) on the following grounds:

DEFICIENT PROJECT JUSTIFICATION

The Proponent states the potential exhaustion of reserve at the present Quarry coincides with the encroaching closure of other quarries in the region exacerbating supply-side pressures. No mention is made that the nearby Brandy Hill and the Karuah East Quarries having both received approval for expanded production, Deep Creek Quarry (Limeburners Creek) approval in 2023 nor the fact that a number of regional large quarry proposals are in the planning pipeline.

Evidence should be provided that other quarries are incapable of taking up the slack if the Seaham Project does not go ahead. The "closing quarries", used as justification for the Project, are unidentified by the Proponent.

We accept the Project reflects the Proponent's capacity to capitalise on a known resource and that offers Boral the opportunity for expansion and continued operation.

On the other hand, the costs of the Project to the community are far reaching, permanent and unquantifiable. These impacts include loss of amenity, loss of real estate value, likelihood of leaving a contaminated and degraded landscape, environmental degradation and loss of

threatened species, ongoing threats to the water catchment, considerable and unacceptable traffic and road network impacts that extend far beyond the Project's operational footprint.

There is limited publicly available information about the projected demand for quarry materials from our region (i.e. Port Stephens, MidCoast and Dungog Council areas). The most recent 2023 Infrastructure Australia Reports[1]

In the spotlight: Quarry products

Capacity risk: High Key insights

• Due to high transportation costs relative to materials value, quarry products must be sourced locally.

• In South East Queensland, increased infrastructure demand fuelled by population growth and the Brisbane 2032 Olympics will exert pressure on local quarry reserves for the next decade.

• Elsewhere, quarry capacity in Mid North Coast NSW is a growing risk to Coffs Harbour Bypass investments, *as are quarries that serve regional and remote areas due to a lack of logistics and capacity approvals.*

• Labour access remains the biggest issue for the quarry industry: truck drivers and quarry operators are in particularly short supply.

• It is difficult to predict the availability of raw quarry products without data. Victoria and Queensland publish quarry production statistics, but no jurisdiction publishes supply data or latent capacity analysis.

In the absence of any long term strategic planning or verifiable data for quarry material supplies, it is unacceptable for the consent authority to only rely on the opaque, anecdotal evidence provided by the quarry industry that the potential exhaustion of material reserve is "exacerbating supply side pressures in the region".[2]

ES6 Justification and conclusion of the Executive Summary notes the ***temporary impacts*** resulting from the development and operation of the Project are far outweighed by the environmental, social, and economic benefits for local, regional and NSW communities from their proposal.

We question the legitimacy of this statement when the number of permanent and unavoidable impacts that the Project has generated from prior operation and will generate during Project expansion and operation will, along with neighbouring operations, cumulatively compromise both the future use of the land and the future of Balickera in particular.

We reference Standard Instrument—Principal Local Environmental Plan (2006 EPI 155a)[3] which includes:

2.8 Temporary use of land [optional]

[1] https://www.infrastructureaustralia.gov.au/sites/default/files/2023-12/IA23_Market%20Capacity%20Report.pdf
[2] ES2.1 Justification for the Project
[3] Current version for 10 November 2023 to date (accessed 25 April 2024 at 19:54) https://legislation.nsw.gov.au/view/whole/html/inforce/current/epi-2006-155a#statusinformation

(1) *The objective of this clause is to provide for the temporary use of land if the use does not compromise future development of the land, or have detrimental economic, social, amenity or environmental effects on the land.*

(2) Despite any other provision of this Plan, development consent may be granted for development on land in any zone for a temporary use for a maximum period of 52 [or another number] days (whether or not consecutive days) in any period of 12 months.

(3) Development consent must not be granted unless the consent authority is satisfied that—

(a) the temporary use will not prejudice the subsequent carrying out of development on the land in accordance with this Plan and any other applicable environmental planning instrument, and

(b) the temporary use will not adversely impact on any adjoining land or the amenity of the neighbourhood, and

(c) the temporary use and location of any structures related to the use will not adversely impact on environmental attributes or features of the land, or increase the risk of natural hazards that may affect the land, and

(d) at the end of the temporary use period the land will, as far as is practicable, be restored to the condition in which it was before the commencement of the use.

Restoration of quarry areas, that sever and compromise landscapes for 30 and more years, is unachievable. To state that the Seaham Quarry Project will only incur temporary impacts belies the reality that no subsequent use of the subject land after quarrying is guaranteed.

SOCIAL IMPACTS NOT REALISTICALLY ASSESSED

Contentiously, the Proponent did not find any potential impacts identified to have a residual social impact significance of 'high' to the local Balickera community, despite the fact that an expanded Project, including the proposed 24 hour operations and approximate doubling of haulage vehicle movements will increase noise and vibration, traffic noise, change the visual landscape, destroy ecological values, potentially threaten personal safety and wellbeing, increase airborne emissions, potentially structurally damage homes, impact groundwater flows, and impact Aboriginal Cultural Heritage.

The cumulative extent of the increase in air particulates both for those living close to the quarry and for road users following behind haulage vehicles will inevitably lead to increased health impacts[4] from both diesel fumes and increased carbon emissions.

Noise causes daytime stress and nighttime sleep loss and its impacts are again cumulative. Vibration damages houses and structures in a cumulative manner.

Cumulatively, these expected and perceived impacts will negatively affect local real estate values and the community's social cohesion and amenity. The Balickera area is currently rich in natural capital. Port Stephens Council advised the Proponent to expect community interest and objection given prior consultation and media coverage[5]. The Port Stephens Hinterland Plan[6]

[4] https://grattan.edu.au/report/grattan-truck-plan/

[5] SEARS comment 5 July 2023 Ref 25-2023-11-1 Port Stephens Council

[6] https://www.portstephens.nsw.gov.au/development/place-plans/hinterland-place-plan

notes *Overdevelopment and clearing is a concern for residents, specifically the disposal of waste from housing fill, destruction of koala habitat, quarry activities, air quality and flooding*.

The Hunter Regional Plan 2041[7] states that *Development proposals for aggregate extraction will be promoted if they are in accordance with the district planning principles and local strategic planning*. Further, development proposals should balance economic benefits with the protection of the environment and local communities.

It is confounding and unrealistic to see the Proponent's list of potential impacts deemed to have a rating of either "low or medium."

The traffic impacts from this proposal and the other two Italia Road quarry proposals will impact not just the local community, but the wider community who rely on the Pacific Highway which extends into the MidCoast Council region.

The cumulative road and traffic impacts to the local and State road network cannot be comprehensively assessed as the proposal to Upgrade Italia Road is reliant upon approval of the three Balickera quarries. No alternate plan B is provided, should one or more of the quarry projects co-funding the Upgrade be refused or the Upgrade Proposal itself is refused.

UNACCEPTABLE TRAFFIC IMPACTS – INCLUDING THE ROAD NETWORK THAT RELIES ON PACIFIC HIGHWAY ACCESS BETWEEN RAYMOND TERRACE AND KARUAH

The Proponent states it is unlikely that cumulative impacts from other developments with the Project will occur primarily due to distance, and that the greatest potential for cumulative impacts are with the proposed Eagleton and Stone Ridge Quarries.

This statement should be considered incorrect and misleading.

Even though no independent studies have been carried out to predict the likely, cumulative number of all the quarry haulage trucks that will use the Pacific Highway between Raymond Terrace and Karuah to access their southern markets, the community have raised their concerns as each new quarry application enters the planning pipeline to their Councils, and now with TfNSW and State Government Ministers.

The RTS originally objected to Eagleton Quarry (2016) on the grounds the proposal would have an adverse impact on the safety and efficiency of the nearby (state) road network, specifically the intersection of Pacific Highway and Italia Road. Stone Ridge Quarry was advised in 2020 by TfNSW to consider grade separation of right turns at Italia Road to mitigate the impact of the development.

In 2023 the Port Stephens Council Mayor, explicitly stated there was a need to see commitment for State Government investment in major infrastructure projects like the Bucketts Way and Medowie Road M1 intersections to increase road safety, improve freight networks and reduce travel times.

MidCoast Council has advised GEG "*In 2023, the Federal Government commissioned a review of major project funding through Infrastructure Australia. This funding review confirmed support*

[7] 5.4 Key community issues

for $7.2M that had been allocated in the budget to progress the planning for a grade separation solution to improve safety, travel times, network efficiency and reliability along the Pacific Highway between Raymond Terrace and Karuah. The State Government has committed a further $1.8M to allow Transport for NSW to develop a final business case that will determine a preferred option to grade separate the three primary intersections (Italia Road, Medowie Road and Bucketts Way) to complete for delivery funding. ***Unfortunately, this is not anticipated to be completed before 2025"***[8]

The proposed Upgrade will exacerbate safety issues at the other current at-grade intersections (Bucketts Way and Medowie Road) to the Highway.

Diverting quarry haulage trucks from the three Italia Road quarries on a 22km detour along the Pacific Highway in order to make their south bound journeys is not cost effective, efficient or safe for other road users. The proposed upgrade ignores the impacts to the wider community.

Facilitating so many haulage vehicles onto the Pacific Highway that will cross intersections already deemed unsafe is a recipe for disaster.

The GHD Safety Audit report notes potential breaches of heavy vehicle operational protocols on the Highway may include

- Undertaking illegal right hand turns
- Illegal U-turn manoeuvres on the Highway and
- Elect an alternate route via Medowie Road
- Tail gaiting due to the frequency of heavy vehicle movements

with the potential consequences of accidents involving heavy vehicles particularly at intersections. The GHD report also notes, haulage trucks from Italia Road will have to enter and leave the Pacific Highway (merge and diverge) a total of five times, including the Twelve Mile Creek Heavy Vehicle Inspection Station in order to complete their southbound journey.

No consideration is given to include the quarry haulage trucks from the existing Karuah East Quarry or the proposed Karuah South Quarry, that will enter the traffic stream at the Tarean Road Interchange or the recently approved Deep Creek Quarry and proposed Hillview Quarry that will cross northbound haulage vehicles at Bucketts Way and join the fleet of quarry vehicles heading south at Twelve Mile. All of this combined quarry haulage traffic will cross the Medowie Road intersection to the Highway.

The proposed Italia Road Upgrade is yet to be approved. It is a 'medium term' solution proposed to be financed by the three Italia Road neighbouring quarry proponents and formulated in consultation with the three Quarry Proponents and TfNSW.

The increased pollution (including greenhouse gas emissions), noise, dust and spillage, and traffic impacts from haulage vehicles having to complete a longer journey is not operationally efficient and increases safety risks along this stretch of the Pacific Highway[9].

[8] Email correspondence to GEG from MidCoast Council 4 April 2024 Ref ECM 16833768
[9] https://www.future.transport.nsw.gov.au/sites/default/files/2022-09/Future_Transport_Strategy_lowres_0.pdf E1.1

The unacceptable impacts from the proposed Upgrade will trigger the need for immediate traffic solutions at the Bucketts Way and Medowie Road intersections to the Highway and possibly the Tarean Road Interchange.

The quarry proponents and TfNSW need to produce a transparent and equitable solution to the traffic impacts resulting from the concentration of hard rock quarry industrial expansion at Balickera before Seaham Quarry Project approval.

ENVIRONMENTAL IMPACTS

Potential Environmental Impacts include –

- Reduction of breeding and foraging habitat for forest dependent species.
- Expansion of ecological edge effects as the quarry expands, including weed invasion and tree decline, and areas required for foraging, shelter and thermo regulation.
- Clearing of hollow bearing trees.
- Loss of forest carbon sink.
- Increased levels of airborne particulate matter from an expanded quarry and extended operating hours.
- Increased frequency of blasting and additional truck movements may reduce habitat quality and compromise the foraging behaviour of sensitive species.
- Increased noise from 24-hour operations may impact on sensitive species and lead to higher levels of stress hormones, potentially leading to reduced breeding success or weakened immune systems.
- Increased impacts of artificial lighting are likely to result from proposed extended operating hours. Artificial lighting can result in increased risk of predation and lead to increased road mortality. It may also cause habitat avoidance by some species.
- Increased truck and other vehicular movements likely to accompany the expansion of the quarry, may result in increased potential for vehicle strike and interfere with regular and seasonal terrestrial fauna movement through and between habitat areas.
- Uncertainty regarding groundwater flow and surface water interaction, including vertical connectivity and baseflow contribution to watercourses and changes to runoff yields and pollutant loads in the catchment.

The at-risk Koala population within Port Stephens Local Government Area is identified in the Hunter Regional Plan 2041. A key planning priority of that Plan is to support the NSW Koala Strategy to double the number of Koalas in the wild by 2050. Protection of Koala Habitat is a key community value identified in the Port Stephens 2022 Community Strategic Plan[10].

ES5 Threatened species
Three threatened species were recorded within the subject land:
• Koala (Phascolarctos cinereus) Significant impact assessments conclude that the Project has potential to cause significant impacts to Koala.
• Brush-tailed Phascogale (Phascogale tapoatafa)
• Squirrel Glider (Petaurus norfolcensis).

[10] https://www.ipart.nsw.gov.au/sites/default/files/cm9_documents/Port-Stephens-Council-Additional-Attachment-Community-Strategic-Plan-2022-2032.PDF

Presence in the subject land has been assumed for two threatened microbat species:
• Southern Myotis (Myotis macropus)
• Eastern Cave Bat (Vespadelus troughtoni).
South-eastern Glossy Black-Cockatoo (Calyptorhynchus lathami lathami) and Powerful Owl (Ninox strenua) were both recorded near the subject land during surveys, however targeted surveys confirmed these species are not breeding in the subject land.

ES7 Groundwater dependent ecosystems
Drawdown impacts were predicted at some locations of PCTs 3074, 3436 and 4042. At these locations, accessible groundwater in the soil profile is predicted to recede into the rock profile, preventing the root systems of the vegetation communities from further accessing groundwater.

ES9 Biodiversity impacts and offsets
Prescribed and uncertain impacts have been assessed and are expected to be associated primarily with:
• human made structures: potential for increase in vibration impacts from quarry blasting to impact the threatened microbats that are known to roost in the Balickera Tunnel
• habitat connectivity and vehicle strike impacts for the Koala
• hydrological processes: uncertain impacts on GDEs that are located outside of the subject land, from potential groundwater drawdown associated with the Project.

7.5 Serious and irreversible impacts
Potential candidate SAII entities for the Project:
An impact is to be regarded as serious and irreversible (SAII) if it is likely to contribute significantly to the risk of a threatened species (including endangered populations) or an ecological community becoming extinct based on the following 4 principles set out in clause 6.7 of the BC Regulation:
*• **Principle 1**: The impact will cause a further decline of a species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to be in a rapid rate of decline.*
*• **Principle 2**: The impact will further reduce the population size of the species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to have a very small population size.*
*• **Principle 3**: The impact is made on the habitat of the species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to have a very limited geographic distribution.*
*• **Principle 4**: The impacted species or ecological community is unlikely to respond to measures to improve its habitat and vegetation integrity, and therefore its members are not replaceable.*
Principle 4 applies to –
Miniopterus australis Little Bent-winged Bat (breeding)
Miniopterus orianae oceanensis Large Bent-winged Bat (breeding)
Vespadelus troughtoni Eastern Cave Bat (breeding)

7.6 Cumulative impacts
The cumulative impact assessment has considered other future projects (on the NSW Government Major Projects website) that have the potential to interact with the Project, west of the M1 Pacific Motorway and in proximity to the Project:

• Stone Ridge Quarry Project (SSD-10432 – response to submissions stage): 1 km north-east of the Project
• Eagleton Quarry Project (SSD-7332 – response to submissions stage): 500 m south-east of the Project.
In addition, the Kings Hill Development occurs 2 km south of the Project, also west of the M1 Pacific Motorway.

The cumulative clearing of 349.67 ha of native vegetation is cumulatively accounted for, of which the Project and the other proposed quarries cumulatively may clear 137.53 ha at Balickera, including the largest area of proposed clearing in the Wallaroo State Forest - an area nominated by the Proponent as containing significant terrain features.

ii Cumulative impacts - indirect
Potential indirect cumulative impacts of the Project and the other identified projects are:
• impacts to fauna habitat corridors and connectivity west of the M1 Pacific Highway through the removal of native vegetation
• potential vibration impacts to the Balickera Tunnel and the microbats roosting there from the Project, the Stone Ridge Quarry Project, and the Eagleton Quarry Project
• increase in traffic along the local roads, including Italia Road, from all projects and therefore a cumulative increase in potential for fauna strike by vehicles travelling along the roads.

No information is provided on the capacity of the rural and natural environment of Balickera to withstand the cumulative impacts from three operational quarries, including the likely consequences of disrupting and severing the existing network of landscape scale forest corridors (Dry, Moist and Coastal) that overlap and provide climate refugia to wildlife at Balickera[11]. Suitable habitat for almost 60 percent of threatened fauna species of the NSW North Coast and Tablelands are projected to decline in response to climate change, and some of the most important climate refugia that needs protection occurs in the southern MidCoast Local Government Area and the adjoining Port Stephens and Dungog Local Government Areas.

The cumulative ecological edge effect from the three proposed quarry operations is not established, nor the intensification of environmental impacts from three quarries operating concurrently (including blasting regimes).

It is not acceptable to approve individual quarry projects at Balickera without identifying, evaluating and addressing the cumulative risks to the community and environment caused by the concentration of quarry operations in such close proximity to each other.

The Hunter Regional Plan 2041[12] states that aggregate extraction areas must contribute to *the longer-term formation of a green corridor, both during extraction (e.g. by maintaining existing vegetation links and/or restoration on areas not being quarried or mined) and on completion of resource extraction.*

[11] https://static1.squarespace.com/static/5e22ffdfa732e601799afba2/t/6389d9ccfb2d872f068014c4/1669978709533/FULL+REPORT+Barrington+to+Hawkesbury+Climate+Corridors+-+Connecting+regional+climate+change+refugia+for+native+species+persistence+in+a+warming+world%2C+DEC+2022.pdf

[12] 5.4 Key community issues

For this reason, the consent authority should insist that conditions of consent require the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated[13].

The cumulative and combined mitigation measures necessary to restore the environment must be identified, specified and outlined including confirmation that effective mitigation measures will occur whether or not all or other quarry operations go ahead. For example –

- Connectivity measures, including mapping, to establish and/or maintain corridor connections between habitat and favoured movement corridors that identifies appropriate methods and locations for enhancing opportunities for safe Koala and wildlife movement in the long term (especially across Italia Road "pinch point")
- Costing of appropriate measures and commitment to their establishment prior to quarry operations
- Identifying areas that are necessary for compensatory planting of Koala feed trees and other wildlife habitat including re placement of tree hollows, to mitigate loss of and sustain habitat connectivity
- Establish the protocols for the monitoring of threatened microbat populations in the Balickera Tunnel that each quarry development must adhere to prior to project approval.

PROPOSED OFFSETS

The recently released Biodiversity Indicator Program[14] notes past habitat loss and future climate change have significantly reduced the capacity of landscapes to retain biodiversity in 50 years. The NSW North Coast Bioregion is one of the most spatially resilient to climate change, because habitats are more intact and connected. However the Region's remaining ecosystem diversity has continued to decline with loss of habitat.

Given the extent of the cumulative environmental impacts from the three proposed quarry operations, consent for each application should ensure that all approved Proponents noted in the cumulative impact assessment agree to:

- Coordinating and retiring species credits and ecosystem credits (offsets) within the wider, but as close to the project locality as possible in order to advance the preservation and restoration of sub-regional biodiversity and connectivity
- The offsets should seek to preferentially expand the areas of conserved land around existing public or private conservation areas, and/or within lands of sub-regional or regional wildlife connectivity in consultation with Port Stephens, MidCoast and Dungog Councils
- Replacement habitat plantings are specifically planned in coordination with each quarry operation and re-planting locations identified to enable joint maintenance, replacement plantings if and when needed and reporting requirements.

[13] Mandatory considerations for the project E221021 RP10 v351

[14] https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/Biodiversity-Indicator-Program/nsw-biodiversity-outlook-report-2024-240126.pdf NSW biodiversity outlook report 2024 p29

- Offset lands should be not considered within the Quarry owned lands. The Seaham Quarry Project has already flagged the possibility of future quarry expansion in 30 years and other quarry operations in the region have expanded into lands previously designated as offset areas (e.g. Karuah East Quarry), thus negating original offset values.
- Securing offset lands in perpetuity under conservation agreements or the like, so that conservation outcomes can be actually delivered (e.g. Deep Creek Quarry at Limeburners Creek has set aside a Biodiversity Stewardship Area on their site, but has not secured that area under conservation agreement).

CONCLUSION

The Seaham Quarry Project presents substantial and unavoidable risks that will be exposed over time – to our shared environment, social amenity and safety. The potential concentration of quarry development at Balickera is unsustainable. Overdevelopment will jeopardise and threaten the possibility of alternate land use and tourism and recreational business opportunities in that locale into the future.

There is a real risk that unavoidable, unquantifiable costs to the community will occur as a result of ongoing, ad-hoc quarry development in our region.

GEG maintains the surrounding road infrastructure and road network necessary to accommodate the significant increase in quarry haulage vehicles facilitated by the proposed Italia Road Upgrade does not exist between Raymond Terrace and Karuah. Overdevelopment poses unmitigated safety risks to the general public.

In the absence of strategic and cumulative impact regional planning for hard rock quarry development, which may or may not justify Project approval, and which considers and reveals the potential economic repercussions on local communities and the natural environment from such development, the Project should be refused.

Megan Benson,
Committee Member,
Gloucester Environment Group.