31st July 2023

To Whom it May Concern

I am writing to object to the Stone Ridge quarry proposal. It presents unacceptable impacts to biodiversity protected under the EPBC Act and the NSW Biodiversity Conservation Act amongst others.

This location is critical habitat for a range of endemic and migratory species as reported in the EIS and is likely to lead to population decline in many of these species.

I write in particular regarding the impact on the Grey-headed flying-fox (GHFF) Pteropus poliocephalus (Vulnerable under the PBC Act and BC Act). This species is a critical keystone species and is subject of a National Recovery Plan. Habitat loss is **the key** threatening processes leading to the decline of this species and must be prevented wherever possible. The following extracts from the Plan are relevant, amongst many others.

> *"The purpose of this plan is to set out the management and research actions necessary to stop the decline of, and support the recovery of the Grey-headed Flying-fox over the next 10 years. Actions under this plan aim to improve the national population trend;* ***identify, protect and increase key foraging and roosting habitat;*** *improve the community's capacity to coexist with flying-foxes; and increase awareness about flying-foxes, the threats they face and* ***the important ecosystem services they provide as seed dispersers and pollinators****."*
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> ***The primary known threat to the survival of the Grey-headed Flying-fox is loss and degradation of foraging and roosting habitat.*** *(Page 1 National Recovery Plan).*
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> *The Grey-headed Flying-fox requires a continuous temporal sequence of productive foraging habitats and suitable roosting habitat. Loss of foraging habitat is considered the primary threat to the Grey-headed Flying-fox (Tidemann et al. 1999, Dickman and Fleming 2002, Eby and Lunney 2002). The species has complex habitat requirements and requires multiple populations of food trees dispersed over a large area. This makes it difficult to protect foraging habitats solely within conservation reserves, such as national parks, and leaves the species vulnerable to land-uses that may clear native vegetation or degrade habitat (Parry-Jones 1993, Pressey 1994, Eby 1996, Tidemann and Vardon 1997).*
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> ### *Habitat loss (page 18 National Recovery Plan)*
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> *For example, in New South Wales, less than 15 % of potentially suitable habitat for the Grey-headed Flying-fox occurs in conservation reserves (Murphy et al. 2008) and only 5 % of roost sites are protected by some form of conservation status (Murphy et al. 2008).*
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> *Clearing of winter forage is a particular threat for the species. Few diet plants flower in winter and those that do flower reliably occur on coastal lowlands in northern New South Wales and southern Queensland (Eby et al. 1999, Eby and Lunney 2002, Eby and Law 2008). There is evidence that spring forage in remaining habitat is inadequate to provide reliable resources during critical periods in the reproductive cycle of Grey- headed Flying-foxes. The species is subject to recurring food shortages during late*

gestation, birth and early lactation. These shortages are associated with rapid weight loss in adults, poor reproductive success and death (Collins 2000, Eby 2000, Parry-Jones and Augee 2001).

Evidence of repeated food shortages during winter and spring indicates that inadequate productive foraging habitat exists in these seasons to sustain the current Grey-headed Flying-fox population. Actions under this recovery plan seek to build on the work undertaken by Eby and Law (2008) by further identifying, verifying, mapping and protecting habitat that is critical to the survival of the Grey-headed Flying-fox.

Degrading or removing foraging habitats may also result in increased impacts on commercial orchards when critical native food resources are further reduced, increasing conflict and exposing individual flying-foxes to increased threat from persecution by orchardists.

Loss of roosting habitat has also been identified as a threat to Grey-headed Flying-foxes (Tidemann et al. 1999, NSW Scientific Committee 2001). Camp vegetation has been exposed to the same historical patterns of clearing and degradation as foraging habitat (Lunney and Moon 1997, Hall 2002). The roosting requirements of Grey-headed Flying-foxes are however not well understood, nor are the impacts to the species from the loss of long-term sites or loss and fragmentation of urban camps. ...

This species is responsible for pollinating and contributing to the health of many of our Eucalypt forests. Without this species, many of our forests are likely to decline, affecting not only the many species that rely on them and our overall biodiversity, but also the many industries that rely on our native forests.

This proposal directly undermines the recovery objectifies and actions in this National Recovery Plan.

The EIS states

"Grey-headed Flying-fox Observation Details
This species was observed foraging within the subject land during surveys. The National Flying Fox Monitoring Viewer (DCCEEW 2023) identifies that there is a historical camp site within the Wallaroo State Forest within the vicinity of the subject land, however no Flying-foxes have been observed there for >10 years. The nearest active camp sites are at Moffatts Swamp and Tocal. No species credits are proposed as no active roost or breeding habitat is present....

The DCCEEW have identified that the Project is likely to have a significant impact on this threatened species."

There is no discussion in the EIS regarding the foraging needs and range of the GHFF. The GHFF is a very complex species, with complex foraging needs and habits. Its foraging and roosting behavior will vary over the years depending on the availability and abundance of foraging resources. Much more detailed analysis of the impact of the proposed loss of foraging habitat is required to inform decision makers on the wide range of impacts of the proposal on this important species. The information and more importantly the analysis in

the EIS is simplistic in this regard. Roosting and breeding habitat must be supported by accessible foraging habitat, particularly in winter and spring seasons where foraging resources are more limited. Any loss of foraging habitat will contribute to the species decline and its vulnerability to starvation, heat stress and infant mortality.

In conclusion, I urge you to **reject this proposal due to** its significant and irreversible impact on a wide range of species and in particular its impact on the Grey-headed Flying-fox *(*GHFF).