Northern Territory Environment Protection Authority GPO Box 3675 Darwin NT 0801

9 Feb 2023

## Re: Singleton horticulture proposal

To the members of the NTEPA,

I am writing to you regarding the Singleton horticulture proposal. As a resident of Mparntwe with a background in environmental science, I am deeply concerned that this proposal poses an unacceptable impact to the environment, including 40 cultural sites in the surrounding landscape.

The volume of water extraction (40GL/year) that has been proposed would be the largest groundwater license in the NT, and is more than double the size of the current largest groundwater license in the NT (15.4GL/year), highlighting the unprecedented nature of this project. Fortune's own modelling indicates that the water table would be lowered by up to 50 metres in parts of the affected aquifer. This will threaten Groundwater Dependent Ecosystems (GDEs) and numerous groundwater dependent sacred sites in and around the drawdown area. These impacts are irreversible and plainly unacceptable in terms of their environmental and cultural consequences.

Arid and semi-arid environments in Australia are already undergoing ecosystem collapse. Impacts from agriculture and industry, including water extraction have been recognised as a contributor to this collapse. The groundwater extraction, land clearing and other environmental impacts of this project pose an unacceptable and irreversible risk to these already at-risk ecosystems.

This project falls within the Western Davenport region. Ground water recharge in this landscape occurs highly episodically, with only three significant recharge events occurring in the last 100 years. Given the variable nature of this groundwater resource over time, the ongoing enivronmental impact of such a large water extraction is highly speculative. Fortune are relying heavily on an assumption that they will be able to adaptively manage the impacts to the GDEs within this region, however the evidence suggests this project is very likely to have significant and irreversible effects on GDEs which cannot be mitigated by adaptive management strategies. For instance, many groundwater dependent trees within the GDEs are only about to reach groundwater 15 metres below the surface. A drawdown of 50 metres would result in the collapse of these ecosystems, which would represent irreversible environmental damage.

There is currently a dearth of existing environmental data pertaining to the region that will be affected by drawdown and clearing. There should be low confidence, therefore, in Fortune's ability to predict the potential consequences of this project and in their ability to mitigate them.

Based on the evidence available, this project does not represent a prudent or equitable use of resources and does not pose a significant benefit (in potential employment opportunities or otherwise) to the surrounding local communities or wider Northern Territory. For instance, it is only predicted to create a maximum of 8 employment opportunities for the local community.

I respectfully request that you ensure that the most rigorous level of environmental impact assessment (Tier 3) is applied.

Thank you for taking the time to consider this letter. I look forward to your response.

Yours sincerely,