From: Hannah Ekin

Sent: Monday, 13 February 2023 7:58 AM

To: eia consult

Subject: Singleton Station Horticultural Development

Categories:

Northern Territory Environment Protection Authority GPO Box 3675 Darwin NT 0801

Hannah Ekin

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12/2/2023

Dear NT EPA and Lauren Moss

My name is Hannah and I am a resident of Mparntwe/Alice Springs. I moved here due to being in awe of the beautiful desert landscapes of this region, and the relatively healthy ecosystems of the Central Desert and Barkly. I think it's of key importance that we manage this environment that we are lucky to live on with care and don't put it at risk of irreversible damage for the sake of badly thought out development projects which only care about extracting private profit from out region. I have been following the Singleton horticultural proposal since it was first announced and believe it firmly fits in this category, and poses a significant and unacceptable impact to the environment. Beyond this, it is deeply disappointing to see the NT government's support of this proposal despite broad and vocal opposition from Traditional Owners of the affected area. Their concerns for their water and country are not being listened to and this is not acceptable. I cannot understand how this project stacks up against any kind of cost benefit analysis for the local region or the NT.

It is well understood that arid and semi-arid environments in Australia are already undergoing ecosystem collapse from the impacts of climate change, such as changes to temperature and precipitation, and regional factors such as land clearing and habitat loss, invasive species and impacts from agriculture and industry, including water extraction. The substantial groundwater extraction associated with this Project, as well as the land clearing it requires, will further threaten these at-risk ecosystems.

Specific concerns related to the NTEPA Environmental factors

Risk Assessment

It is unacceptable that the proponent has classified every residual risk rating as 'low' or 'medium'. There are zero residual risks that have been classified as 'high' or 'extreme'. There are significant and intense risks to diverse ecological, hydrological and cultural values over a period of many decades. This is unsurprising as this project is one of the largest fruit and vegetable developments in Australia and requires one of the nation's largest water licences.

This development is defined by significant risk and uncertainty. Whether it is related to salinity, cultural values, groundwater dependent ecosystems, the groundwater resource or many others, there is outstanding uncertainty and significant risk.

We discuss more about these risks below.

Land (landforms, terrestrial environmental quality)

Large areas of terrestrial habitat within the groundwater drawdown area (which is greater than 40km in diameter) depend on groundwater to maintain biodiversity, ecological integrity and ecological functioning.

It is unacceptable that the proponent does not consider the destruction of up to 30% of GDEs on Singleton Station to be an environmental risk, based on a DEPWS guideline, which has not been open to public consultation and was in conflict with the relevant water allocation plan. This is a non-statutory guideline which is not enforceable and should not dictate what constitutes a significant impact.

It is unacceptable that the proponent has not undertaken any meaningful fieldwork to comprehensively visit the GDEs occurring within the impacted area or identify threatened flora. This is despite acknowledging that GDEs are known for their ability to support higher biodiversity and productivity than surrounding landscapes and may be an important underpinning of persistence of resident flora and fauna species.

It is unacceptable that the proponent has not undertaken any meaningful fieldwork to investigate the occurrence of threatened fauna, despite occurrence of near threatened species near the site, including bilby (a disused bilby burrow was identified 4 km of the site) and grev falcon records within 3 km of the site.

The loss of large trees such as ghost gums which are associated with GDEs would be expected to reduce habitat for threatened species, the grey falcon.

The potential impacts to vegetation and GDEs of salinisation of groundwater have not been adequately addressed.

There have been no on the ground studies undertaken to determine the presence of stygofauna in the impacted aguifers, only a Desktop review which found the presence of stygofauna in some bores within and surrounding the Project to be likely.

Water (hydrological processes, inland water environmental quality, aquatic ecosystems)

Fortune's modelling indicates that the water table would be lowered by up to 50 metres in parts of the aquifer, threatening Groundwater Dependent Ecosystems (GDEs) and numerous groundwater dependent sacred sites in and around the drawdown area. These impacts are destructive, extremely significant, and unacceptable.

The Project is located in the Arid Zone of the NT, and specifically within the Western Davenport Water Control District. Groundwater recharge in the Western Davenport region is "highly episodic" and "rare, peak rainfall years contribute disproportionately to groundwater recharge while in an annual year, minimal, if any, groundwater recharge occurs". There have only been three significant recharge events in the last 100 years. It is simply irresponsible to grant a licence of this volume in these circumstances.

Cooke and Keane assessed the impacts of salinity to the area in their report, "The Risk of Salinity due to Irrigation Developments in the Western Davenport Basin, Northern Territory." The authors conclude Singleton Station and the surrounding area is at 'high risk' of increased salinity after 30 years of groundwater extraction which will have "very significant implications for long-term viability of irrigated horticulture." Key findings in this report were ignored by the proponent in their referral to the NT EPA.

People, (community and economy, culture and heritage, human health)

This report does not offer a great benefit for the region. The report estimates only 26-36 full time equivalent jobs will likely be filled by residents of the NT of which only 5-8 full-time equivalent jobs are expected to be from Aboriginal communities in the Barkly

The proposal threatens up to 40 sacred sites, within its drawdown area.

Air (air quality, atmospheric processes)

Clearing the land for horticulture and destruction of GDEs would be expected to result in atmospheric emissions but these have not been calculated and considered as an environmental risk. As these risks are avoidable they should not be offset.

my opinion this project should be rejected, I don't believe it can go ahead without causing significant environmental ar mage. However I understand that the current stage of the process is deciding at what level the project should be asse this effect I respectfully request that you ensure that the most rigorous level of environmental impact assessment (Tie olied.	essed and
anks for considering my letter.	
ours sincerely,	
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