

Kate Lyons-Dawson

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Northern Territory Environment Protection Authority
GPO Box 3675
Darwin NT 0801

Dear sir/madam

I am a current resident of Mparntwe/Alice Springs who has been an active member of the community employed in tourism and cultural sectors and volunteering in a range of capacities. I spent the last six years seasonally with scientists and ecologists in the Northern Territory, Queensland and South Australian arid landscapes in and around the Simpson Desert. Over that time I have been privileged to learn and understand much about this special area of Australia, which is spoken in general terms and wide brushstrokes. On the contrary, here is amazing diversity and variety; life that is on the edge, extremely dependent on a range of factors, essential requirements and the whole interconnecting environment to survive, and in good seasons, thrive.

The custodians have shared their knowledge and understanding of each of these areas and arid zone landscapes and I am now very aware that their advice regarding what is best for the health and welfare of all that live and grow here, must be taken seriously, listened to, and become the bones on which to build any plans for sustainable land management. The most valuable resource in such a place, and ultimately everywhere, is water.

The Singleton horticulture proposal poses a significant and unacceptable impact to this fragile environment.

In the time I have had to research this proposal it has become clear that it poses the risk of serious or irreversible environmental harm including to groundwater dependent ecosystems (GDEs), sacred sites, and habitat for threatened species. This is due to the huge size and scale of the development, and subsequently the intensity of its impacts on significant ecological and cultural values over many decades. Whether it is related to salinity, cultural values, groundwater dependent ecosystems or the groundwater resource, there is outstanding uncertainty and significant risk.

Further, I have concerns regarding transparency and conflicts of interest within the structure of the decision-making process and the departments involved. The order of steps taken has not been logical and I believe no action should be taken while awaiting Supreme Court decisions. It has resulted in a loss of faith in current legislation, which lacks rigour and accountability.

It appears that the public was not effectively consulted about the impacts on GDEs during the assessment of the groundwater extraction licence process as:

- minimal information was publicly available on the risks to GDEs
- the NT Water Act 1992 does not provide the same level of public involvement as the NTEPA Act.

Specific concerns related to the NTEPA environmental factors include:

- Land/the earth/habitat

Large areas of habitat within the groundwater 40km+ diameter drawdown area 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 non-statutory DEPWS guideline, which has not been open to public consultation and was in conflict with the relevant water allocation plan. This is not enforceable and should not dictate what constitutes a significant impact.

It is unacceptable that the proponent has not undertaken any meaningful fieldwork on the ground and the GDEs occurring within the impacted area or to 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 close to the site, including bilby (a disused bilby burrow was identified 4 km of the site) and grey 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, like 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 aquifers, only a Desktop review which found the presence of stygofauna in some bores within and surrounding the project to be likely.

- Water and quality drinking water

Fortune's modelling indicates that the water table would be lowered by up to 50 metres in parts of the aquifer, threatening 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.

The authors of the report, 'The Risk of Salinity due to Irrigation Developments in the Western Davenport Basin, Northern Territory' 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 and community

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

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

- Air

This is just as important as water for healthy life. Clearing the land for horticulture and destruction of GDEs would 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.

The most rigorous level of environmental impact assessment - tier 3 - needs to be applied in a proposal of this size and importance.

I appreciate you taking the time to consider this letter and look forward to your response.

Yours sincerely,
Kate Lyons-Dawson