

10 February 2023

Submission to the Northern Territory Government

-Referral of the Singleton Horticulture Project to the Northern Territory Environment Protection Authority-

XXXX have significant concerns over the potential environmental impacts of the Singleton Horticulture Project. **We believe the Singleton Horticulture Project requires a Tier 3 Assessment (assessment by EIS)** to ensure that all the impacts and risks of the Project are fully known and understood.

We are particularly concerned with:

- the significance of the potential impact of 40,000 ML/year of groundwater extraction;
- the level of confidence in predicting the potential impacts this may cause;
- the potential impact of the project on Groundwater Dependent Ecosystems (GDEs);
- the substantial knowledge gaps in the data and lack of adequate baseline studies;
- the proponent's, or the administration's, ability to adequately monitor, measure, mitigate, manage and avoid potential significant impacts, particularly with such a short time period until peak capacity;
- the local and regional opposition to the unprecedented size of the groundwater extraction licence that is 24,600 ML/year greater than the largest groundwater licence in the NT.

See details below outlining our reasoning as to why the project requires a Tier 3 Assessment.

1. Groundwater modelling, knowledge gaps and the significance of the potential impacts on GDEs

- There are substantial unknowns regarding the impacts of extracting 40,000 ML/year of groundwater from this aquifer. Sustainable yield, recharge potential, salinity levels and aquifer storage cannot be accurately estimated or modelled until water extraction begins. Thus, an incremental approach to groundwater extraction via 'staged increases in groundwater entitlements' is essential in this region (as recommended in the *Western Davenport Water Allocation Plan* [WDWAP] 2021-2022)
- The plan to reach the enormous peak capacity of 40,000 ML/year after just 7 years of extraction does not allow enough time to effectively monitor the groundwater, surface water, vegetation, and their linkages
- From a Precautionary Principle approach, staged extraction over a longer time period is essential and will 'reduce the likelihood of undesirable impacts on the aquifer, environmental and cultural values and other users' (WDWAP 2021-2022)
- In addition, the Singleton Project follows a non-statutory DEPWS guideline, in which the destruction of up to 30% of GDEs on Singleton Station is an acceptable environmental risk. This guideline was not open to public consultation and is in conflict with the water allocation plan. A Tier 3 Assessment is essential to monitor and mitigate potential environmental risks of this scale.

2. Baseline data and monitoring

- The project's hydrogeological, flora and fauna studies are insufficient and lack field validation to provide an accurate baseline to monitor against
- For example, the *Biodiversity Assessment* relies heavily on a limited ground survey conducted in 2019 during one of the driest periods on record, which would significantly reduce species detectability. This survey had no sites in the proposed land clearing area and, along with the desktop survey, does not constitute an accurate baseline study for a project of this size and potential impact
- XXXX agree with Dr Ryan Vogwill who found the Fortune Agribusiness water resource and impact assessment 'simplistic, based on inadequate investigations and very little site-specific data' (Hydro Geo Enviro Pty Ltd, 2021)
- The low resolution data results in significant uncertainties and risks that do not validate the 'low'/'medium' residual risk rating given to every single risk in the project's Environmental Risk Register
- A well designed approach to monitoring is essential for a project of this scale in a boom and bust semi-arid environment
- XXXX also have concerns over the proponent's, or administration's, capacity to effectively monitor the surface water, groundwater, and vegetation in the large impact zone.

3. Impacts on regional development

- XXXX believe the Project needs to be considered from a regional planning perspective
- There is a risk of over allocation due to modelling inaccuracy, as happened in the Ti Tree Water Control District, which would exclude future developments such as those planned by Aboriginal landholders wishing to utilise the Strategic Aboriginal Water Reserve (SAWR)
- Impacts on regional GDEs may hinder neighbouring Aboriginal Land Trusts ability to successfully apply for smaller water licences due to the cumulative drawdown, which may render the SAWR unusable and ineffectual in these areas.

4. Impacts on cultural sites

- The Central Land Council found 40 sacred sites within the drawdown area
- These need to be adequately assessed, protected and monitored
- As discussed, reaching peak capacity after 7 years does not allow for effective monitoring.

5. Social impact assessment

- There has been significant opposition to the project in the Barkly Region and Alice Springs due to the size of the 40,000 ML/year water licence, giving the project no social licence to operate (The NT's biggest water licence challenged by Indigenous and environmental groups - ABC Radio National; Traditional owners take fight against Australia's largest water licence on Singleton Station to Supreme Court - ABC News; Traditional owners launch legal challenge against NT's largest groundwater extraction licence | Northern Territory | The Guardian)
- The number of full-time equivalent jobs for Aboriginal people is limited and there is not yet an Indigenous employment plan with clear employment pathways
- The limited regional economic and employment benefits are highlighted in The University of South Australia's report commissioned by the Central Land Council- Connor, J.D., Hill, D., Gregg, D., Sangha, K.K., 2022. *Review of the Singleton Horticulture Project's water entitlement provision costs, benefits and employment impacts*.