



International Association of Hydrogeologists

By email: eia.consult@nt.gov.au

13 February 2023

Submission regarding Singleton Horticulture Project EIS Submission by International Association of Hydrogeologists (Australian National Chapter)

Submission contents:

IAH Australia makes this submission on behalf of its members throughout Australia. IAH Australia is concerned at the possible groundwater effects of the proposed Singleton Horticultural development primarily as it appears that there have not been sufficient groundwater investigations to support the granting of a permit for extraction (even a staged permit) of this scale. IAH Australia recommends that site specific analysis and assessment of groundwater conditions should be undertaken before such a decision is made. Accordingly, IAH Australia strongly suggests that an Environment Impact Assessment is required prior to any approval to take and use groundwater in the manner proposed.

IAH Australia promotes and supports the thoughtful and sustainable development of groundwater. On behalf of our membership, we consider that the information presented on the proposed development is inadequate in light of the scale of extraction when considering the climate and likely recharge of the aquifers.

IAH Australia has the following specific concerns.

Inadequate knowledge of aquifers and likely behavior:

The supporting groundwater information appears to be inadequate for the scale of development as proposed. Appendix G to the application states that "The hydrogeology of the SHP has been inferred from drilling undertaken in the broader region". This is an insufficient basis for assessing the effects of such a large volume of water.

Potential for unsustainable extraction:

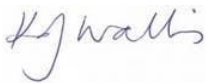
The recharge rates and overall sustainability of the aquifer have not been addressed in the reports and are not supported by relevant site-oriented data. Adhering to sustainability principles is an important aspect that should be considered in any approval. An environmental effects assessment would be the appropriate mechanism to consider the sustainability aspect of the proposal.

Potential for degradation of groundwater quality by irrigation return recharge to aquifers:

The groundwater modelling that has been done for the application so far identifies potential adverse effects of salinity resulting from root zone drainage beneath irrigated areas. This is an important risk and should be considered in more detail.

We therefore ask that the project be referred for a full Environment Impact Assessment during which assessment the concerns outlined above can be investigated and fully addressed.

Yours sincerely,



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About IAHAustralia

The International Association of Hydrogeologists (IAH) is a scientific and educational charitable organisation for scientists, engineers, water managers and other professionals working in the fields of groundwater resource planning, management and protection. Founded in 1956, it has grown to a world-wide membership of more than 4000 individuals. IAH is truly a world-wide association, its efforts being made through its many National Chapters, Scientific/Topic based Commissions and Networks; its international team of Council members, and its UK based Secretariat.

Our mission is to further the understanding, wise use and protection of groundwater resources throughout the world.

IAH aims to be a leading international society for the science and practice of hydrogeology and to be a globally recognised information source and facilitator for the transfer of groundwater knowledge. We endeavour to raise awareness of groundwater issues and work with national and international agencies to promote the use of groundwater to ensure ready access to safe drinking water. IAH also promotes the protection of aquifers against pollution, the improvement of aquifer storage and the management of groundwater resources to assure the sustainability of groundwater-dependent ecosystems.
