

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Ms Purick to the Minister for Environment and Natural Resources:

Research Aquifer Recharge

1. What funds were secured from the Commonwealth Government to research aquifer recharge?
2. What date were the funds secured?
3. What research projects have been undertaken, and by whom?
4. Which sites were selected for the research projects and how were they selected?
5. Has any research been concluded, and if so can the information be available for external scrutiny?

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1. In January 2016, the Northern Territory Government submitted an Expression of Interest under the National Water Infrastructure Development Fund – Feasibility Component for the Northern Territory Irrigation Feasibility Study (NTIFS), to carry out a feasibility study of groundwater only, managed aquifer recharge and conjunctive water use approaches to increase the available water, and level of water security for irrigated agriculture in selected sites across the Territory. The Northern Territory Government has secured \$985 000 to fund the NTIFS over the next two years. These funds will be supported through an in-kind contribution from the Northern Territory Government via technical input and drilling services provided by the Department of Environment and Natural Resources (DENR).
 2. The Commonwealth advised the Territory Government that it was successful in its bid in May 2016. In August 2016, the Commonwealth and the Northern Territory Government executed the Project Agreement for the National Water Infrastructure Development Fund – Feasibility Component which included the funding of \$985 000 for the NTIFS.
 3. DENR holds overall responsibility for oversight of the delivery of the NTIFS however DENR are partnering with Jacobs Group (Australia) Pty Ltd (Jacobs) to lead the planning and project delivery. The project is scheduled for completion by August 2018.

A key collaborator with Jacobs is Dr Rick Evans who is internationally recognised for his expertise in Managed Aquifer Recharge and water engineering.

Phase 1 of the Project which includes finalising a detailed work plan is to commence during November 2016. Investigative drilling is scheduled to take place during the dry season in 2017, with the final report scheduled to be delivered in August 2018.

4. The sites which have been selected for assessment include the Tindall Limestone Aquifer (near Katherine), Ooloo Northern Zone, Ooloo Southern Zone, Tindall Limestone Aquifer (near Mataranka), Wildman River and Ti Tree. These sites have been selected because they have the requisite hydrological characteristics for Managed Aquifer Recharge to be effective. The characteristics are specifically: high permeability aquifers; relatively shallow water table; close to a surface water source with low salinity and low turbidity; and are relatively close to suitable soils for irrigated agricultural development.
5. The NTIFS project commences in November 2016. The findings of the investigations and any technical reports and the final business case will be available publicly.
While the NTIFS is focussed on Managed Aquifer Recharge for irrigated agriculture, there are currently two other Managed Aquifer Recharge projects currently operating in the Territory, the Soil Aquifer Treatment in Alice Springs and the augmentation of the town water supply in Waruwi both for Power and Water Corporation. Use of Managed Aquifer Recharge for irrigated agriculture is also not a new innovation with similar irrigation projects established in Queensland and Western Australia.