Letters for the Environment Central Australia

Case Card

FORTUNE AGRIBUSINESS GROUNDWATER LICENCE

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THE ISSUE

Fortune Agribusiness Funds Management Pty Ltd (FAFM) water licence application will result in unacceptable environmental damage.

BACKGROUND INFORMATION

FAFM has acquired Singleton Station, a 294,900 Ha property located in the Western Davenport region of the NT.

FAFM plans to develop approximately 3,500 Ha of intensive irrigated horticulture on the Station. To support this project they have applied for a groundwater extraction licence to take and use **40 Billion Litres (40 GL) o groundwater water per year for 30 years**[1].

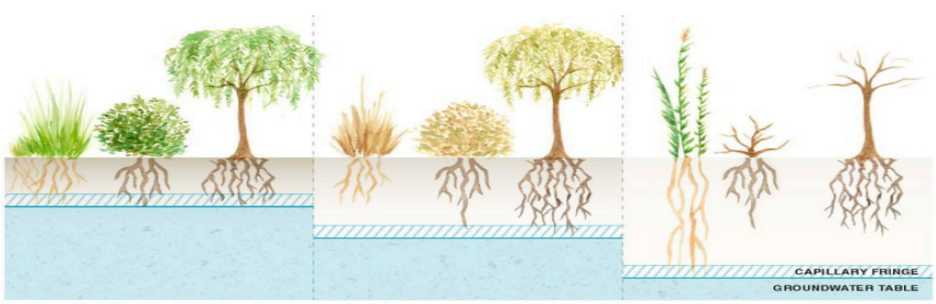
The Controller of Water Resources is deciding on this application now. Th public comment period has closed but **it is not too late** to influence her decision.

40GL/year is the largest water extraction licence in the NT. his de lopment would increase in water use in the Davenport region from 3 illion t over 43 billion litres per year![2].

If aquifers are emptied faster than they are recharged pr ious Groundwater Dependant Ecosystems (GDEs) are irreversibly damaged or destroyed[3]. This is a major problem in dry areas where there is little ra to replenish the aquifers. The groundwater systems of the Western Dav n have some of the slowest rates of recharge in Australia - only 4 sig ant recharge events have occurred in the last 100 years[2].

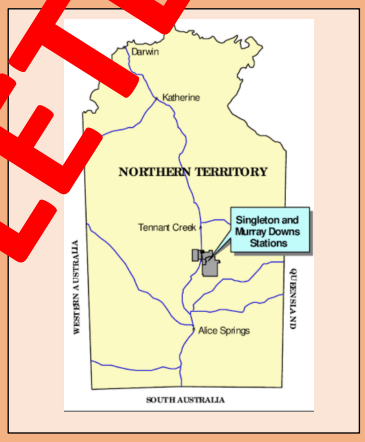
NT water allocation policies and extraction gul ons are meant to minimize adverse impacts on GDEs. The *Weste enport Water Allocation Plan* (WDWAP) is framed, amongst othe actors, a ound GDE protection[2]. The Department of Environment, Par s an Water Security (DEPWS) has taken the extraordinary step of permittin FAFM to 'negatively impact' up to 30% of GDEs in the Western Davenpo Region[1,9].

Key to the effective prote of GDEs is their identification, characterisation and value assessment. The de ification, characterisation and assessment of GDEs on Singleton Station ha ot been completed.

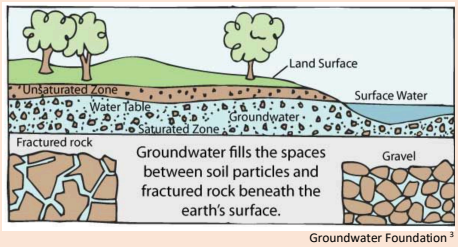


Ecological Responses to Groundwater Depletion [6]

ACTION COMPLETE



Groundwater is stored in aquifers. These aquifers are recharged as rainwater moves slowly through geologic formations of soil, sand and rocks.



Groundwater Foundation [3]

Groundwater Dependant Ecosystems rely on aquifers for some or all of their water requirements. GDEs include:

- *Vegetation that always relies on the availability of shallow groundwater e.g. ghost gums, melaleuca shrublands*
- *Vegetation that relies on groundwater in times of drought e.g. Coolibah woodlands*
- *River baseflow systems where groundwater discharge provides a significant baseflow component to the river*
- *Aquifer and cave ecosystems where life exists independent of sunlight e.g. stygofauna*
- *Fauna that rely on groundwater as a source of drinking water* [4]

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WHY THIS ISSUE IS A CONCERN

Heavy use of groundwater causes the water table to fall and brings salt to the surface. This damages or destroys GDEs.

Taking 40 GL water will **lower the water table** within the centre of the proposed farm by **40 to 50 metres** over the 30-year period[5]. Any vegetation or fauna that relies on shallow groundwater will die.

As 40GL of irrigated water evaporates about 40 000 tonnes of salt will be left on or near the surface each year. This amounts to **1 200 000 tonnes of salt** in 30 years. This salt will pollute the soil and may pollute the aquifer and any caves (for information regarding the amount of salt please refer to notes)

The project will **damage and destroy GDEs** for a projected **50km**. The area of impact will continue to expand, even after pumping ceases[1].

Loss of GDEs has irreparable consequences across the whole environment. GDEs provide a last **refuge in drought** times and a **buffer to climate change.**

DEPWS decision to allow 30% of GDEs to be negatively impacted is not strongly supported by science or policy and was not communicated during the WDWAP public submission period.

FAFM has clearly stated the **proposal depends on the full 40GL**. Once this allocation is approved there is little to stop the project moving ahead. Assessing the application before the identification, characterisation and assessment of GDEs is complete means that if specialised habitats, such as the stygofauna found in Yeelirrie WA[8], are discovered at a later date it will be **politically very difficult to retrospectively reduce the water allocation**. Locking in decisions without adequate information sets a dangerous precedent.

ACTION COMPLETE

ACTION REQUEST (WHAT WE WOULD LIKE DONE / POSSIBLE SOLUTIONS)

1. For the current FAFM application to be refused DENIED

2. For a comprehensive environmental impact assessment to be available before public consultation on future groundwater extraction licence applications LICENCE REFERRED FOR TIER 3 EIA

3. For the departmental guidance that 30% of groundwater dependent vegetation may be destroyed to be dismissed DENIED

WRITE TO

The CEO Controller of Water Resources

Ask her to refuse Fortune Agribusiness Funds Management PTY LTD water extraction licence application.

Jo Townsend
CEO Controller of Water Resources
PO Box 496
Palmerston NT 0831
water.licensing@nt.gov.au
08 8999 4455

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REFERENCES

1. Singleton Horticulture Project - Summary Report August 2020 in AGO6221 NOI, NOD, SOD.pdf https://waterresources.nt.gov.au/WaterLicensingPortal/Licences.htm

2. NT Government, Department of Environment, Parks and Water Security, Western Dave[illegible]por[illegible] Water Allocation Plan 2018-2021 https://denr.nt.gov.au/__data/assets/pdf_file/0011/624863/Western-Davenport-W[illegible]-04[illegible]12019.pdf

3. Groundwater Foundation https://www.groundwater.org/get-informed/basics/groundwater.html#:~:text=Groundwater%20is%20the%20wat[illegible]%20found,Read%20More

4. Australian Government Geoscience Australia Groundwater Dependant Ecosystem[illegible]tt[illegible]//www.ga.gov.au/scientific-topics/water/groundwater/understanding-groundwater-resources/groun[illegible]ater-dependant-ecosystems#:~:text=Ecosystems%20that%20rely%20on%20groundwater,are%[illegible]ely%20reliant%20on%20groundwater.

5. ABC Rural, Fortune Agribusiness unveils $150 million irrigation plans fo[illegible]thern Territory cattle station https://www.abc.net.au/news/rural/2020-09-14/outback-cattle-s[illegible]n-un[illegible]ds-$150-million-horticulture-plans/12650616

6. Ecological Responses to Groundwater Depletion https://www.researchgate.net/figure/Ecological-responses-to-decreases-in-groundwater-availability-within-Terrestrial_fig3_316182917

7. Arid Lands Environment Centre https://www.alec.org.au/fortune_agribusiness_policy_submission

8. ABC News 'Emails show Yeelirrie uranium mine appr[illegible]ed a[illegible]n before 2019 election after pressure from Cameco https://www.abc.net.au/news/2021-01-14/emails-show-yeelirrie-uranium-project-approval-before-election/12863536

9. See page 8 of the *Guideline: Limits of acceptable change to groundwater dependent vegetation in the Western Davenport Water Control District* available on the depart[illegible]t's website : https://denr.nt.gov.au/__data/assets/pdf_file/00[illegible]04758/GDE-Guidance-document-Western-Davenport-2.pdf

Notes - Amount of salt brought to the surface

The amount of salt brought to the surface by pumping is the concentration of salt in each unit of water pumped times the number of units of water pumped.

Smith and Hill (2011, p20 section 6.2) indicate salt concentrations (total dissolved solids) up to 1000 mg/L are highly suitable for irrigation and 1,500 mg/L suitable for tolerant crops. In the absence of data on water quality an average salt concentration of 1000 mg/L (i.e. 1 gram/litre or **1 tonne per ML**) is therefore assumed as an approximation. https://[illegible]y.nt.gov.au/__data/assets/pdf_file/0005/233258/tb340.pdf

The total amount (volume) pumped based on full pumping of 40,000 ML/year for 30 years = **1,200,000 ML**

The total amount of salt pumped to the surface is therefore **approximately 1,200,000 tonnes in 30 years.**

Citation: Smith, S. and Hill, J. (2011). Supporting Sustainable Development – Risks and Impacts of Plant Industries on Soil Condition. Northern Territory Government, Australia. Technical Bulletin No. 340.

ACTION COMPLETE

SAMPLE LETTER

FORTUNE AGRIBUSINESS GROUNDWATER LICENCE

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Jo Townsend
CEO Controller of Water Resources
PO Box 496
Palmerston NT 0831

Your name
Address

Date

Dear Jo Townsend,

Briefly introduce yourself e.g. I am a resident of Alice Springs

I strongly oppose the Fortune Agribusiness Funds Management (FAFM) groundwater extraction licence application for Singleton Station (NT Portion 653). I oppose the current application amount (80 GL/year), or any amount that results in the significant loss of groundwater dependent ecosystems (GDEs) due to aquifer drawdown.

At a minimum the application should not be assessed or approved prior to completion of an environmental impact assessment.

GDEs provide a refuge in times of drought and a buffer to climate change. They must be protected. It is unacceptable that the FAFM proposal is permitted to 'negatively impact' 30% of GDEs.

Developments must be respectful and sustainable. The information FAFM presents shows the project planned cannot be sustained beyond 30 years. In taking this amount of water, FAFM will drastically limit the options for future water use by surrounding properties, mostly held by Native Title Owners.

I respectfully request you:

- Refuse the current FAFM application.
- Ensure a comprehensive environmental impact assessment is available for public consultation prior to assessment of future groundwater extraction licence applications.
- Dismiss the department guidance that 30% of groundwater dependent vegetation may be 'negatively impacted' by FAFM or any future groundwater extraction licensees.

Thank you for taking the time to consider this letter. I look forward to your response.

Yours Sincerely,
Your Name

ACTION COMPLETE