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Neutral Junction Water Licence Application

The Arid Lands Environment Centre (ALEC) is Central Australia's peak environment organisation that has been advocating for the protection of nature and growing sustainable communities in the arid lands since 1980. ALEC actively contributes to the development of water policy and planning through written submissions and active participation in water advisory committees. Our advocacy around water resources is focused on ensuring the equitable and sustainable use of water resources to maintain full ecological function.

ALEC welcomes the opportunity to provide comments on Charles Firth's water licence application at Neutral Junction (the Application). Due to capacity constraints and time of year, this submission is brief and high-level. Please see attachments A and B for more detailed commentary. Attachment A is ALEC's submission to the Water Resources Review Panel regarding the Singleton water licence application. Attachment B is ALEC's submission on the Western Davenport Water Allocation Plan 2018-2021 review. We consider both of these documents to be relevant due to Neutral Junction operating within the Western Davenport Water Allocation Plan and as it is the neighbouring property to Singleton Station.

There is widespread opposition to the way the Northern Territory Government is conducting water management in the Western Davenport's. This has been echoed by NT Farmers who have called for the consumptive pool to be significantly reduced, going on to state that "History teaches us that a precautionary approach to water allocation offers the best environmental outcomes, but also the best economic outcomes. In locations with limited agricultural development, such as Western Davenport, a cautious approach ensures that we don't have unexpected impacts on groundwater, nor on the native vegetation that depends on that water".¹ ALEC emphasises that caution needs to be taken. ALEC opposes the Application at Neutral Junction due to the cumulative impacts and the high-levels of uncertainty. The impacts at Neutral Junction are amplified by the extraordinary impacts proposed at the neighbouring property, Singleton Station.

1. Background information

Charles Firth has applied for a 6415ML water licence for irrigated horticulture at Neutral Junction PPL 696, NT Portion 3375. 27 bores will be used to grow peanuts, mung beans and cover crops across six centre pivot irrigation units (12 circles). It will result in a maximum area of 370ha to be irrigated, with 900ha of native vegetation to be cleared.

¹ Northern Territory Farmers Press Release: A fine balance.

This application is located within the Central Plains Management Zone, within the Western Davenport Water Control District and covered by the Western Davenport Water Allocation Plan 2021-2022. .

The groundwater depletion will be greater than 15 metres after the 20-year pumping schedule. Seven monitoring sites will be used.

2. Cumulative impacts

The approval of the largest water licence in the Northern Territory's history at the neighbouring property Singleton Station for 40,000ML has significant implications for the water licence application at Neutral Junction. Groundwater depletion from groundwater extraction at Singleton Station lowers groundwater levels at Neutral Junction by 7 metres after 10 years, and 24 metres after 30 years of pumping. The massive size of the Singleton licence puts Neutral Junction at a considerable disadvantage. The operations at Neutral Junction will drop the groundwater table by 10 metres after 10 years and 15 metres after 20 years.²

Further pumping on what ALEC considers to be an already unsustainable pumping regime adds further stress to the Western Davenport region - this is evidenced by Figure 9 in the proponents Irrigation Development Plan.³

3. Uncertainty

Like the governing WAP, the Application is filled with uncertainty. In relation to the groundwater system, the Application states clearly that "groundwater data [is] limited but is assumed by DEPWS to be greater than 15 metres below ground level".⁴ Despite this, it is presumed that impacts will be negligible on GDEs. This limited data is then used as the justification. A comprehensive understanding of the groundwater system ought to be central to identifying potential impacts and managing them accordingly. Quality and comprehensive data should govern water extraction in the Northern Territory.

Furthermore, there is significant uncertainty surrounding the Singleton Station water licence. This has been noted by the Minister in granting the licence with the large number of conditions that have been put in place, due to a lack of understanding and issues relating to: the groundwater system, salinity impacts, adaptive management, location of GDEs, monitoring, and impacts upon cultural sites. This uncertainty extends to this application at Neutral Junction where there is significant groundwater depletion occurring. At a minimum it is important that the proponent also be required to meet these relevant conditions.

It also remains unclear who will be monitoring GDEs with the area proposed to be most severely impacted to be located upon an adjacent property.⁵

Please see Attachments A and B for further commentary on uncertainty and problems with the governing water allocation plan.

² Neutral Junction Station: Irrigation Development Plan, p.25

³ Ibid, p.20.

⁴ Ibid, p.17.

⁵ Neutral Junction Station Groundwater Impact Assessment, p.iii.

4. Groundwater dependent ecosystems

The proponent states that a total area of 0m² of GDEs lay within the property boundary. This is based on p70 remote sensing models. ALEC holds concerns that data from the p50 models were not included in the Application.

ALEC also holds concerns that no on the ground surveys have been completed by the Applicant in determining the presence and absence of GDEs. ALEC strongly recommends that on the ground surveys are completed prior to a decision being made by the Water Controller.

Combined pumping from Singleton and Neutral Junction does have a potentially significant impact upon GDEs, with peak impacts occurring at Year 37, with 2370Ha of GDEs to be affected.⁶ ALEC strongly opposes this extent of damage to GDEs.

5. Conclusion

ALEC stresses that a precautionary approach be taken by the Department. The Western Davenport's are being targeted for significant groundwater extraction when there are significant and vital knowledge gaps that exist. Haste in supporting large-scale extraction is likely to yield adverse environmental impacts.

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⁶ Neutral Junction Station: Irrigation Development Plan, p.22.