

IN THE MATTER OF THE REFERRAL OF THE REVIEW OF
A WATER EXTRACTION LICENCE DECISION
TO THE WATER RESOURCES REVIEW PANEL
UNDER SECTION 30 OF THE *WATER ACT 1992*

ARID LANDS ENVIRONMENT CENTRE

Review applicant

ENVIRONMENT CENTRE NT

Review applicant

**FORTUNE AGRIBUSINESS FUNDS
MANAGEMENT PTY LTD**

Licence applicant

CONTROLLER OF WATER RESOURCES

Decision maker

OUTLINE OF SUBMISSIONS

Prepared by lawyers for the review applicants (Environmental Defenders Office)

Introduction

1. My name is Dr Emma Carmody and I am the Managing Lawyer of the Freshwater Program at the Environmental Defenders Office (**EDO**). The EDO is appearing before the Water Resources Review Panel on behalf of two client organisations, namely the Arid Lands Environment Centre (**ALEC**) and the Environment Centre NT (**ECNT**).
2. Both of our clients vigorously oppose the approval by the Controller of Water Resources (**Water Controller**) of licence number WDPCC10000 (**Singleton Licence**). We note that the Singleton Licence confers upon the proponent, Fortune Agribusiness Management Fund Pty Ltd (**Fortune Agribusiness**), the right to extract a minimum of 36GL and a maximum of 40 GL of water per annum from the Central Plains Management Zone on a staged basis. The Central Plains Management Zone is one of three groundwater management zones provided for in the Western Davenport Water Allocation Plan 2018-21 (**Western Davenport WAP**).
3. Our clients accordingly request that the Review Panel advise the Minister that:
 - (1) Minister Lawler should excuse herself from the ultimate decision under s. 30(4) of the *Water Act 1992* (NT) (**Water Act**) on the ground of apprehended bias; and
 - (2) the relevant Minister acting as Minister Lawler's delegate should then exercise their discretion under s. 30(3)(a)(ii) of the Water Act to overturn the Water Controller's approval and to substitute it with a refusal of the Singleton Licence.
4. Our clients' reasons for opposing the Singleton Licence were set out in their respective review applications. These applications were made pursuant to s.30(1) of the Water Act and Regulation 4 of the Water Regulations 1992 (**Water Regulations**) and submitted to the Minister in writing on 10 May 2021. Copies of each of these review applications are attached at **Annex A** and **Annex B** respectively.
5. Our purpose in appearing on behalf of ALEC and ECNT today is to present additional information to the Review Panel in support of their request that the Minister refuse the Singleton Licence.
6. Our clients note that the Supreme Court of the Northern Territory has held that the ministerial review function provided for under s.30 of the Water Act requires the Minister to consider the merits of the Water Controller's decision.¹ Put differently, the Minister is required to determine whether or not the decision to approve the Singleton Licence was *a good decision in the circumstances*.
7. On behalf of our clients, we will argue that the Water Controller's decision with respect to the Singleton Licence was, all things considered, unsound and lacking in merit. However, we will also argue that the decision was unlawful on a number of grounds. Specifically, it is our view that the Water Controller's decision was unlawful for the following reasons:

¹ *The Environment Centre Northern Territory (NT) Incorporated v The Minister for Land Resource Management* [2015] NTSC 30.

- First, the decision failed to comply with binding provisions in the Western Davenport WAP regarding limits of acceptable change to groundwater levels² and as such was granted in breach of s. 22B(4) of the Water Act.
 - Second, the conditions attached to the Singleton Licence give rise to an unacceptable level of uncertainty regarding environmental impacts and the nature of the project itself.
 - Third, it was a decision that lacks evident and intelligible justification and was so unreasonable that no reasonable decision-maker could have possibly arrived at the same conclusion.³
8. It is important to note that unreasonableness is a ground of review that is reserved for the most egregious of administrative decisions. It is accordingly rare for any lawyer to proclaim that a decision is so unreasonable so as to render it unlawful. However, having considered the facts and all relevant documentation pertaining to the Singleton Licence, it is difficult to conclude otherwise.
 9. These facts include the sheer magnitude of the irrigation development associated with the Singleton Licence which is, in our experience, unparalleled. Specifically, the Singleton Licence authorises the extraction of 40,000ML or 40GL/year from 144 bores.
 10. By way of comparison, the ten largest groundwater licences in the state of NSW range from approximately 7GL to 15GL with these licences being spread across three different catchments. The number of bores associated with these individual licences ranges from 3 to 11.⁴ It's important to note that these statistics exist within the context of a state that supports significant agricultural and mining development, and which is now grappling with the impacts of overextraction of its water resources.
 11. The unusual scale of the project invites comparisons with large mining developments. However, even mining developments which involve excavating large pits that cut through aquifers only divert a fraction of the water that has been authorised for extraction under the Singleton Licence. To cite but one example from our current work at the EDO: the proposed McPhillamys Gold Mine in the Lachlan Catchment in south-western NSW, which will comprise a pit of some 450 metres in depth, is projected to divert a maximum of 580ML/year or 0.58GL/year from the aquifers through which it will be cut.⁵ This is 0.0145% of the Singleton Licence.
 12. The proponents of McPhillamy's Gold Mine, like most mining proponents, are required to undertake environmental impact assessment in accordance with the relevant statutory framework. However, no environmental impact assessment was required or undertaken prior to the granting of the Singleton Licence. Further, no studies into the possible presence of

² Western Davenport WAP, p. 42.

³ *Minister for Immigration and Citizenship v Li* (2013) 249 CLR 332.

⁴ Data from NSW Water Register.

⁵ McPhillamys Gold Project, Amendment Report – Groundwater Assessment Addendum (August 2020), Prepared by EMM Consulting for LFB Resources NL (available [here](#)) p ES.3.

stygo fauna in the aquifer were commissioned;⁶ knowledge about the groundwater sources from which the water will be extracted is extremely limited and based mostly on conjecture;⁷ the hydrological modelling underpinning the Western Davenport WAP and the Singleton Licence is unfit for the purpose for which it is being applied;⁸ and studies of GDEs in the Western Davenport District are far from complete.⁹ The staged nature of the Singleton Licence and the purported reliance on ‘adaptive management’ in the conditions of consent will not mitigate against these uncertainties and risks. Rather, they merely give rise to further uncertainty which in our view is in-and-of itself unlawful.

13. It is worth taking a moment to reflect on the notion of adaptive management. Adaptive management, properly conceived, requires extractions to be reduced in response to environmental and/or cultural impacts that exceed certain thresholds.¹⁰ We note that the Singleton Licence involves fruit trees and vines, which are perennial crops. Perennial crops, unlike annuals such as cotton and rice, require water on an ongoing basis if they are to survive.¹¹ They cannot be ‘adaptively managed’ without at least some of the trees or vines being destroyed.
14. We note that the proponent has claimed that the development will require an investment of some \$150 million.¹² While the economic modelling for the project has not been made publicly available to allow for proper scrutiny of claims regarding its cost and presumed profitability,¹³ we are advised that drilling and constructing 144 bores in the middle of the desert could alone cost upwards of \$10 million.
15. We further note that the decision to approve the Singleton Licence was made despite significant knowledge gaps and in the absence of proper environmental impact assessment. A decision was further made to grant a thirty year licence – rather than a licence for the ordinary period of ten years – due to (*inter alia*) its size and the level of investment required by the

⁶ Groundwater extraction licence resource assessment: AG06221 (Singleton Station), Department of Environment, Parks and Water Security, Water Resources division Technical Report 5/2021 (**Technical Report**) states at p. 7 that “There has been no work undertaken to determine the existence of stygo fauna in this aquifer.”

⁷ Western Davenport WAP, pp 10, 23, 35-38, and 55-59. Technical Report, pp 29-30, 32.

⁸ Western Davenport WAP, p 55.

⁹ Singleton Horticulture Project Groundwater Dependent Ecosystem Mapping and Borefield Design (July 2020) prepared by GHD for Fortune Agribusiness Funds Management Pty Ltd (**Fortune Report**), pp 1 and 69.

¹⁰ See: J Thomann et al. “Adaptive management in groundwater planning and development: A review of theory and applications”, *Journal of Hydrology* 586 (2020) 124871.

¹¹ Singleton Horticulture Project, Fact Sheet, April 2020, p 2: “Permanent crops to comprise at least 75% of produce”; Professor Jamie Pittock, *Cotton and rice have an important place in the Murray Darling Basin* (available [here](#)): “[P]erennial crops like orchards or vineyards need a very secure water supply, every year without fail. The trees and vines take years to mature, so a bad drought can be devastating: if they die, a farm could be set back a decade waiting for them to regrow.”

¹² ABC Rural, *Fortune Agribusiness unveils \$150 million irrigation plans for Northern Territory cattle station* (14 September 2020), available [here](#).

¹³ Limited information regarding the “economic benefits” of the development are provided on page 37 of the Singleton Horticulture Project Summary Report (August 2020) which was submitted with the licence application.

proponent. These factors arguably reflect the NT Government’s unwavering – and we would argue unreasonable – support for the project.¹⁴

16. Against this backdrop, there is little to no reason to believe that either the proponent or the Water Controller would be inclined to ‘adaptively manage’ the development and in so doing, destroy a percentage of the crops on the property and reduce the profitability of the operation.
17. More generally, the publicly available documentation regarding the Singleton Licence is underwhelming and scant, and in no way proportionate to the scale and environmental and cultural impacts of the project.¹⁵ In making this statement, I draw on more than 15 years of experience advising on large-scale developments across multiple jurisdictions and reviewing the documentation that normally accompanies such projects.
18. On a personal note, as someone who grew up in a farming community and who advises farmers and Traditional Owners across multiple Australian jurisdictions about water law and policy, I can attest to the fact that there are sensible, sustainable and culturally appropriate ways to encourage agricultural development. The Singleton Licence is none of these things; rather, it is, in our view, unlawful and highly experimental.
19. The following part of our submissions expand upon and provide information additional to those matters addressed in our clients’ respective written review applications. They are divided into **5** areas:
 1. Failure to comply with the Western Davenport WAP
 2. Uncertainty
 3. Adaptive management and environmental impact assessment
 4. Unreasonableness
 5. Procedural fairness

Part 1: Failure to comply with the WAP

20. On behalf of our clients, we have examined not only the Western Davenport WAP but several WAPs from across the NT. Relative to water sharing instruments in other Australian jurisdictions, WAPs are largely descriptive. However, the rules pertaining to GDEs in the Western Davenport WAP, namely the ‘Limits to change in groundwater levels within the GDE protection area’ are very specific and legally binding. They notably include a requirement that ‘Modelled extraction does not cause the maximum depth to water table to exceed 15 metres below ground level.’¹⁶

¹⁴ The Singleton Horticulture Project – Approvals Mapping document prepared by the Department of Environment, Parks and Water Security (available [here](#)) indicates referral to the NT EPA is the final stage of the approval process.

¹⁵ For example, the Fortune Report prepared by the applicant to determine the impact of the project on GDEs was a “desktop assessment” that “does not include any field validation of the inputs”. Fortune Report, pp 1 and 69.

¹⁶ Western Davenport WAP, p 42.

21. We must assume that there was a very particular reason that the water planners responsible for the WAP deviated from the ‘descriptive norm’ and included such clear, direct and mandatory provisions. That they would do so reinforces the crucial nature of these rules and the need to ensure that they are implemented so as to protect GDEs in the plan area.
22. Further to this point, there are a number of common law presumptions that a court will apply when interpreting a text such as the Western Davenport WAP. One of these presumptions, which has been affirmed by the Federal Court of Australia and which is binding on decisions in the NT, is that the particular will always override the general.¹⁷ The particular nature of the ‘limits of change rules’ – against the more general nature of other parts of the WAP – only serves to reinforce their binding nature and the vital importance of ensuring that they are properly enforced.
23. Indeed, it is well established in the literature that GDEs are incapable of accessing groundwater below certain depths. Relevantly, many GDEs cannot access groundwater below 10 to 15 metres as their roots are unable to extend beyond this point.¹⁸ It is also established in the literature that certain GDEs may not show signs of incremental distress. Rather, some GDEs only manifest symptoms of decline after ecological tipping points have been reached, by which time the impact is irreversible.¹⁹ This in turn makes so-called ‘adaptive management’ entirely futile. It is clear that the ‘limits of change’ rules in the WAP quite sensibly reflect this evidence. It is also clear that the Water Controller was legally bound to enforce these rules and failed to do so.

Part 2: Uncertainty

a) Legal uncertainty and the Singleton Licence

24. The Water Controller, in her capacity as CEO of what was then the Department of Environment and Natural Resources,²⁰ approved a document entitled ‘Guideline: limits of acceptable change to groundwater-dependent vegetation in the Western Davenport Water Control District’ (**Guideline**).²¹ The Guideline, which was approved in early 2020, set aside the evidence-based ‘limits of change rules’ in the WAP and replaced them with a new and entirely arbitrary objective, namely that ‘70% of the current extent of GDEs in the Western Davenport Water Control District should be protected from negative impact.’
25. In her capacity as the Water Controller, she then disregarded the binding provisions in the WAP and instead applied the Guideline for the purposes of determining the application for the

¹⁷ *Refrigerated Express Lines (A/Asia) Pty Ltd v Australian Meat and Live-stock Corporation And Others* (1980) 29 ALR 333.

¹⁸ D Eamus et al., “A functional methodology for determining the groundwater regime needed to maintain the health of groundwater-dependent vegetation”, *Australian Journal of Botany* 2006, 54, 97-114, p 104.

¹⁹ Harrington N and Cook P, 2014, *Groundwater in Australia*, National Centre for Groundwater Research and Training, Australia, p. 18.

²⁰ Now the Department of Environment, Parks and Water Security, of which she remains the CEO.

²¹ Guideline: Limits of acceptable change to groundwater dependent vegetation in the Western Davenport Water Control District, Department of Environment and Natural Resources Water Resources Division (February 2020) (available [here](#)).

Singleton Licence. The application was of course approved. However, had the Water Controller applied the ‘limits of change rules’ in the WAP, she would have had to refuse the application for the Singleton Licence due to, *inter alia*, the projected 50 metre drawdown in certain parts of the aquifer.

26. While we maintain that the Guideline was applied in legal error, it is highly uncertain as to whether the Singleton Licence is even capable of complying with its provisions. Specifically, the scale of the irrigation project, the paucity of data regarding the characteristics of relevant aquifers, modelling deficiencies and the limited nature of the studies undertaken with respect to GDEs in the vicinity of Singleton Station make it entirely impossible to determine whether the project is capable of having a negative impact on a maximum of 30 percent of GDEs.
27. That these uncertainties exist is not in dispute – this fact was acknowledged by the Water Controller in her reasons for granting the Singleton licence. In fact, the Water Controller seems to place the onus of resolving uncertainties regarding the WAP, hydrological modelling and the nature and extent of GDEs *onto the applicant*, stating:

‘Recognising the uncertainties in the Plan and the reliance on modelled data to determine the location and extent of GDEs and baseline and future groundwater levels, licence conditions can address these uncertainties by requiring the following prior to the take of water under the licence...’²²

28. In justifying the conditions imposed on the Singleton Licence, the Water Controller also states:

‘The conditions precedent provide an opportunity for the applicant to resolve uncertainties associated with the location and types of GDEs and uncertainties relating to salinity and groundwater quality.’²³

29. The type and location of GDEs (as well as salinity and groundwater quality issues) are not marginal environmental concerns capable of being resolved via conditions attached to an approval. They are fundamental matters that must be thoroughly investigated *prior to the grant of the approval*. Indeed, deferring their investigation and the resolution of associated uncertainties to conditions attached to the Singleton Approval is arguably unlawful.
30. Specifically, the courts have held that a condition of consent cannot defer the determination of a matter to a later date where, at the time the consent is issued, the outcome in relation to that matter is uncertain.²⁴ The Singleton Approval is almost entirely structured around the deferral of certain matters to later investigation and hypothetical resolution. Indeed, the Water Controller has deferred a range of significant matters that ought to have been subject to rigorous environmental impact assessment to conditions. In particular:
- Condition CP 5 requires the proponent to undertake further studies into GDEs and to model predicted impacts of drawdown on GDEs. If modelled predictions exceed the limits set out in the Guideline, the proponent is to submit a new bore field design or a new pumping regime for the existing bore field design. However, there is absolutely no

²² Decision Reasons, p 8.

²³ Decision Reasons, p 20.

²⁴ *Mison v Randwick Municipal Council* (1991) 23 NSWLR 734.

certainty that it is possible to design a bore field and pumping regime capable of protecting 70% of all GDEs, in part because many GDEs have not yet been identified.

- Condition CP 6 requires the proponent to undertake an assessment of the potential salinity impacts and to submit a report to the Water Controller. The report is to include, among other things, an explanation of how salinity impacts will be managed to maintain groundwater quality in accordance with the water quality objectives declared under section 73 of the Act. However, so little appears to be known about the potential salinity impacts, that it is unclear if it is even possible to meet the water quality objectives with the current scope of the project. The Water Controller cannot be said to have complied with section 90(1)(h) of the Water Act to take into account adverse effects on water quality resulting from activities under the licence, when all she has done is deferred this issue to be dealt with under the licence conditions.
- Condition CP 7 requires the proponent to prepare an adaptive management plan. However, in the absence of further GDE and salinity studies, it is unknown whether adaptive management is a suitable approach in relation to this project. For example, it may be the case that further studies indicate salinity issues cannot be adequately managed through an adaptive management framework. It is also possible that in order to meet the necessary water quality and GDE requirements, the final project ends up being fundamentally different from that which was approved.

31. To reiterate, the uncertainty surrounding these issues arguably renders the Singleton Approval unlawful.

32. In addition to the uncertainty surrounding GDEs and salinity, no studies have been undertaken to determine the presence of stygofauna in the impacted aquifer. The Technical Report prepared by the Department of Parks, Environment and Water Security in response to the application for the Singleton Licence states that:

‘There has been no work undertaken to determine the existence of stygofauna in this aquifer. Hose et al (2015) suggest there is a low likelihood of the presence of stygofauna in fine grained sandstones that host aquifers such as the Lake Surprise Sandstone Formation because of the limited movement that is possible through the interstices.’²⁵

33. However, having sourced and read the report by Hose et al, we note that the authors in fact state that stygofauna, whilst being more abundant in porous rock formations, can and do exist in fine sediment habitats. This conclusion is supported by other studies²⁶ - which also highlight the myriad of ecosystem services performed by stygofauna. For example, stygofauna graze on fine sediments which facilitates the flow of water through fine pore spaces. This in turn creates an aerobic environment within these finer sediments and removes potentially harmful microbes, thereby maintaining good water quality.²⁷

²⁵ Technical Report, p. 7. Citing Hose GC, J Sreekanth, Barron O, Pollino C (2015) Stygofauna in Australian Groundwater Systems: Extent of knowledge. CSIRO, Australia.

²⁶ See for example: T.A. Bold, P. Serov, C.P. Iverach and M. Hocking. *Regional baseline stygofauna survey: Onshore Gippsland Basin*. (2020) Victorian Gas Program, Geological Survey of Victoria.

²⁷ See for example: A. J. Boulton, G.D. Fenwick, P.J. Hancock, and M. S. Harvey. (2008) “Biodiversity, Functional Roles and Ecosystem Services Of Groundwater Invertebrates.” *Invertebrate Systematics* vol.22, 103-116, 105.

34. Experts more generally concur that very little is known about stygofauna relative to other species, which means that assumptions cannot be made about their presence in any given aquifer.²⁸ Against this backdrop, and given the vital role that stygofauna play in maintaining groundwater quality, we believe that further studies must be undertaken to determine whether stygofauna are present in the aquifer and if they are, the likely impacts on them of an irrigation project of this scale.
35. In summary, a significant degree of uncertainty surrounds the Singleton Licence. This uncertainty must be further considered within the broader context of a WAP that is itself typified by large knowledge gaps. This is the subject of the following part of these submissions.

b) Uncertainty and the Western Davenport WAP

36. The Western Davenport WAP is principally based on the groundwater model prepared by Anthony Knapton. However, the WAP expresses a number of reservations regarding the model and the certainty of the conclusions that can be drawn from it. These are outlined in section 7 of the WAP, titled ‘Risk and uncertainty’ and include:²⁹

- (1) Uncertainties arising from climate variability and climate change.
- (2) Uncertainty regarding the distribution of GDEs. In particular, the WAP states that ‘further work is required to refine the location of GDEs’ and that ‘there are risks associated with assumptions about GDE requirements and their vulnerabilities to change in access to groundwater’.
- (3) Uncertainty in the calculation of the Environmentally Sustainable Yield (**ESY**) from the regolith. In particular, the WAP states that ‘water storage in the regolith is not defined with the same precision as the modelled aquifer recharge.’ It suggests that further studies may ‘lead to a change in the estimation of the volume of the regolith resources in the ESY or even the exclusion of this resource from the ESY allocation for consumptive and beneficial uses.’

- 33 Table 15 of the WAP identifies that there is a risk that the ESY has been incorrectly inferred from the model. The likelihood of this risk eventuating is described as “**likely**” and the consequence as “**major**”, resulting in a risk rating of “**extreme**”.³⁰

- 34 These uncertainties are summed up in the WAP’s observation that:

*‘It is noted that the WAP is based on limited information. Further research, particularly in regard to accessibility of groundwater stored in the regolith and the location and individual requirements of GDEs is recommended to occur within the term of the WAP. Due to these data limitations, **there is a significant risk that the consumptive pool could be reduced in future WAPs.***³¹

- 35 In order to account for, and mitigate these uncertainties over time, the WAP provides for an adaptive management framework that aims ‘to reduce uncertainty by monitoring resources

²⁸ Ibid.

²⁹ Western Davenport WAP, pp. 36-38.

³⁰ Western Davenport WAP, pp. 55-59.

³¹ Western Davenport WAP, p. 10.

*and responses to management actions and using this information to improve future management actions to meet the objectives of the WAP.*³²

36 The WAP explains that in order to monitor and evaluate the WAP, ‘an **integrated annual report** of monitoring and compliance outcomes will report allocations, water use, water development, condition of water dependent ecosystems and cultural values, changes in water quality, changes in depth to groundwater and recent climatic conditions’.³³ The WAP also explains that the integrated annual report is the means by which the Department will report on its network of monitoring bores, investigation studies and water resource modelling.³⁴

37 However, no ‘*integrated annual report of monitoring and compliance*’ appears to have been completed. If such a report *has* been completed, it does not appear to have been made publicly available.

38 Further, under the heading ‘implementation’, the WAP states that ‘*consistent with section 23(1B)(a) of the Act, a Water Advisory Committee is recommended to advise the Controller on the effectiveness of the WDWAP in maximising economic and social benefits within ecological restraints and meeting its objectives.*’³⁵ The WAP states that the Advisory Committee ‘*should meet twice a year to provide external oversight of implementation*’.³⁶ However, the Department’s website states “The Western Davenport Water Advisory Committee was established in 2017 and closed in December 2018. Three meetings were held.”³⁷

39 In sum, it appears that the key mechanisms provided in the WAP to mitigate uncertainty regarding groundwater resources and their dependent ecosystems have not been followed. Instead of:

- (1) Preparing integrated annual reports of monitoring and compliance; and
- (2) Holding twice yearly meetings of the advisory committee to provide independent oversight of the implementation of the WAP,

the Department only appears to have produced the Guideline document discussed earlier.

40 In summary, the Singleton Licence, which is itself shrouded in uncertainty, exists within the context of a WAP that is underpinned by significant knowledge gaps, including in relation to the ESY. As discussed in Part 3 of these submissions, so-called adaptive management mechanisms designed to mitigate the risks associated with uncertainty and knowledge gaps are (and I quote expert, Jessica Lee) nothing more than a “*comforting gesture*’ that *loosely promise some answer to future circumstances.*”³⁸

³² Western Davenport WAP, p. 60.

³³ Western Davenport WAP, p. 60.

³⁴ Western Davenport WAP, p. 65.

³⁵ Western Davenport WAP, p. 65.

³⁶ Western Davenport WAP, p. 65.

³⁷ See [here](#).

³⁸ Lee, Jessica. 2014. Theory to practice: Adaptive management of the groundwater impacts of Australian mining projects. *EPLJ* 31: 251 – 287.

Part 3: Environmental impact assessment and adaptive management

- 41 Proper environmental impact assessment requires far more exhaustive studies to be completed than those undertaken for the Singleton Licence. It is our clients' position that such environmental impact assessment should occur before, not after, any water licence is granted. Relevantly, two of the primary purposes of environmental impact assessment under the *Environment Protection Act 2019* (NT) are to ensure that there is no unacceptable impact on the environment and that all potentially significant impacts are assessed. Clearly this project has the potential to significantly impact the environment. In our clients' submission, those impacts are also unacceptable.
- 42 The Water Controller's decision to not refer the Singleton Licence to the NT EPA and to not encourage the proponent to self-refer on the basis that issuing the water licence will give the proponent 'greater certainty' is antithetical to the very purpose of environmental impact assessment, and is simply wrong.³⁹
- 43 The Chairperson of the NT EPA, Dr Paul Vogel, and Paul Purdon, Executive Director Environmental Assessment and Policy at the Department of Environment Parks and Water Security, have each informed us in written correspondence that the NT EPA 'expects to receive a referral' from the proponent. The purpose of that referral is to determine whether the proposal has the potential to have a significant impact on the environment.
- 44 Importantly, while the NT EPA considers the proponent's self-referral, the water licence granted to it by the Water Controller ceases to have effect.
- 45 Further, if the NT EPA determines that the biggest ever water licence in the NT does have the *potential* to have a significant impact on the environment, it must require that the project be subject to environmental impact assessment.⁴⁰ The water licence will cease to have effect while that assessment occurs.⁴¹
- 46 Finally, after what could be several months of assessment, the NT EPA may issue a statement of unacceptable impact or a draft environmental approval.⁴² Any inconsistencies in the statement of unacceptable impact or the draft approval will prevail over the water licence.⁴³ It is therefore nonsensical to assert that issuing a water licence before any environmental impact assessment will give the proponent certainty.⁴⁴ Rather, it reinforces the uncertainty surrounding the Singleton Licence, which we would again argue renders the Licence and its conditions unlawful.
- 47 Furthermore, it is widely acknowledged that adaptive management cannot occur in the absence proper environmental impact assessment. Relevantly, Jessica Lee, an expert on the use of adaptive management in the context of mining projects has written that:

³⁹ Water Extraction Licence Decision, 8 April 2021 (**Decision Reasons**), p 11-12 (paras [85]-[94]). As the Water Controller notes in her decision, she may refuse to consider the water licence application until the action is referred to the NT EPA and a decision is made on the referral: s 50 *Environment Protection Act 2019* (NT).

⁴⁰ Section 55(4) *Environment Protection Act 2019* (NT)

⁴¹ Section 59 *Environment Protection Act 2019* (NT)

⁴² [info3-flow-chart-eia-assessment-approval-process.pdf](#)

⁴³ Section 91 *Environment Protection Act 2019* (NT)

⁴⁴ The EDO has prepared a flowchart documenting the uncertainty created by issuing the water licence ahead of any environmental impact assessment: see **Annex C**

‘Upfront EIA is generally a legal requirement for large mining projects. It is also a fundamental requirement of good adaptive management. It is clear that adaptive management should not be used as an excuse to defer upfront EIA of mining projects to opaque post-approval processes...’⁴⁵

48 However, and as already noted, that is precisely what has happened. Specifically, the concept of adaptive management has been distorted to allow deferral of fundamental environmental and cultural matters to conditions of consent.

49 This is particularly concerning from a hydrological perspective. Jason Thomann, publishing in the *Journal of Hydrology*, has stated:

‘It is important to note that not all management problems are appropriate for AM. Whether AM is appropriate (or not) for a management plan is in part governed by the reversibility and/or the timescale of potential impacts. These limitations are especially significant for groundwater management due to challenges presented by the time-lags and inertia of hydrogeological systems.’⁴⁶

50 In this case, we must reasonably assume that extractions in the order of 40,000ML/year over 18 years could have irreversible impacts not only on the groundwater resource itself, but on GDEs. We also must assume, in the absence of any evidence to the contrary and given the significant knowledge gaps regarding the characteristics of aquifers in the Central Plains Management Zone, that impacts may manifest many years down the track and could be significant in magnitude. This brings me to the fourth part of these oral submissions, which addresses the issues of legal unreasonableness.

Part 4: Unreasonableness

51 As noted in the introduction to these submissions, lawyers are cautious to allege that a decision-maker has exercised their power so ‘unreasonably’ that the decision is in fact unlawful. This is because the courts have set a particularly high bar for proving administrative unreasonableness. Nevertheless, in this instance, we consider this high threshold has been met.

52 The reasons for this assertion have been provided throughout these submissions. However, the most egregious examples of unreasonableness include:

- (1) The fact that the Water Controller was not able to adequately assess two of the most fundamental issues relating to the application (being the impacts on GDEs and the impact on water quality) due to a lack of relevant information. This was made clear in the Water Controller’s decision, which stated that: ‘recognizing the uncertainties in the Plan and the reliance on modelled data to determine the **location** and **extent** of GDEs and **baseline** for future groundwater levels, licence conditions can address these uncertainties’.⁴⁷

⁴⁵ Lee, Jessica. 2014. Theory to practice: Adaptive management of the groundwater impacts of Australian mining projects. *EPLJ* 31: 251 – 287.

⁴⁶ Thomann et al. Adaptive management in groundwater planning and development: A review of theory and applications, *Journal of Hydrology* 586 (2020) 125871.

⁴⁷ Decision Reasons, p 8.

These are not the sorts of uncertainties ordinarily left for adaptive management processes. To be clear, the decision granting the licence clearly asserts that there are uncertainties regarding the *location* and *extent* of GDEs and the *baseline* for future groundwater levels.

- (2) The Guideline document approved by the Water Controller and which enabled her to grant this licence purports to be based on ‘new scientific evidence’. However, the Guideline cites only three references. The first is a study from 2018 which is also referenced in the WAP and so cannot constitute ‘new’ scientific evidence. The second is the Northern Territory Government’s 2020 Land Clearing Guidelines which have nothing to do with groundwater dependent ecosystems in the Western Davenport plan area. The third and final reference is the WAP itself.
- (3) The Water Controller has granted the approval despite the final nature of the Project being entirely unknown. This is due to the fact that the bore field design and the pumping regime may be subject to change as a consequence of condition CP 5 of the Singleton Licence.

53 Ultimately, this is a situation in which the threat of serious, irreversible environmental damage is very real, with this being compounded by the significant degree of scientific uncertainty regarding the water source and the project’s impact. In such circumstances, it is reasonable for a decision-maker to adopt a *precautionary approach*.

54 Adopting such an approach would see the onus placed on the proponent to demonstrate, *prior* to the granting of the licence, that the threat of serious, irreversible environmental damage does not exist or is negligible. Put differently, the environment should not bear all of the risk in the face of scientific uncertainty. Instead, the decision granting the Singleton Licence *acknowledges* the scientific uncertainty and seeks to resolve this through an adaptive management regime which had not even been prepared at the time the Singleton Licence was granted. There is no clear or intelligible justification for the granting of the Singleton Licence in this manner, and on this basis, doing so was unreasonable.

Part 5: Procedural Fairness

55 Finally, we wish to note the procedural fairness issues which have frustrated both the ALEC and ECNT throughout the review process.

56 To clarify, there are two basic rules of procedural fairness. They are:

- (1) A party liable to be directly affected by a decision must be given the opportunity to be heard; and
- (2) Decision-makers neither be, nor appear to be, biased.

57 The common law duty of procedural fairness applies to administrative decisions which affect rights and interests, subject only to a clear contrary statutory intention.⁴⁸ Relevantly, the Water Act does not exclude or limit the application of the rules of procedural fairness.

⁴⁸ *Kioa v West* (1985) 159 CLR 550 at [31] (Mason J).

Similarly, the fact that the Review Panel can set its own procedures for meetings does not exclude or limit the application of the rules of procedural fairness.⁴⁹

58 We would argue that the Review Panel’s procedures have not afforded procedural fairness to our clients in the following two ways:

- (1) In allowing review applicants to be present only for their designated timeslot, and not for the entirety of the Review Panel meeting, our clients have been denied the opportunity to hear and respond to matters being put forward by the Department, the Licensee (or other review applicants), even though they have been accepted as ‘persons aggrieved’ for the purposes of the decision and the Water Act; and
- (2) In not disclosing the materials and relevant issues being considered by the Panel.

59 We further argue that Minister Lawler should disqualify herself from the ultimate decision under s. 30(4) of the Water Act on the ground of apprehended bias. The relevant test in this regard is whether an informed and fair-minded lay observer might reasonably apprehend that the decision-maker might not bring an impartial mind to the decision to be made.⁵⁰

60 Section 60(4) of the Water Act, at the relevant time, provided that a groundwater extraction licence could be granted for a period exceeding 10 years where, ‘*in the opinion of the Minister, there are special circumstances that justify it under the Act*’.

61 As the Water Controller notes in her decision, at [119]-[120]:

During the processing of the application, the applicant requested that a 30-year licence term be applied to the Licence and therefore, the opinion of the Minister was sought to inform my decision.

The Minister for Environment has affirmed that in her opinion there are special circumstances that justify a 30-year term licence including:

- (1) *the scale of the Project*
- (2) *the level of investment in the Project*
- (3) *the time required to develop the Project*
- (4) *the potential economic benefits for the Northern Territory.*

62 The Minister’s express involvement in “inform[ing]” the Water Controller’s decision raises real concerns in circumstances where she is the ultimate decision-maker in the review process. Not only was the Minister involved in the underlying decision, but we submit that a fair-minded observer would perceive that the Minister had implicitly accepted that the circumstances were such that the licence should be granted *in the first place*, in concluding that the extended licence term was justified.

⁴⁹ Nor is it significant that the Review Panel has convened a “meeting” and not a “hearing”. For example, in *South Australia v O’Shea* [1987] HCA 39, it was a “meeting” of the Parole Board, which was a crucial part of the process and one which was found to have afforded procedural fairness to the offender.

⁵⁰ *Ebner v Official Trustee in Bankruptcy* (2000) 205 CLR 337.

63 We ask that the Review Panel recommend that another Minister determine what action should be taken in relation to the Water Controller’s decision. There is precedent for such a process being adopted, noting that Natasha Fyles, NT Minister for Health, made the ultimate decision in relation to the Larrimah water licence earlier this year due to Minister Lawler having a conflict of interest in relation to that matter.⁵¹

Concluding remarks

64 To conclude, our clients believe that these submissions, together with their review applications, make it abundantly clear why the Minister ought to exercise their discretion under the Water Act and overturn the approval issued by the Water Controller in respect of the Singleton Licence.

65 However, it is also worth reflecting on the state of water resources across the country and the opportunities that still exist in the Northern Territory to manage water both sustainably and consistently with the rights and interests of Traditional Owners.

66 Across much of eastern Australia, water resources have been over-extracted, climate change is reducing rainfall and increasing evapotranspiration, and many culturally significant ecosystems are in a state of collapse or near-collapse.

67 Attempts to reverse some of this decline have cost the Commonwealth Government billions of dollars. This has included some \$2.5 billion spent on buying water licences back from farmers⁵² in an effort to curb unsustainable levels of take and to save the rivers, wetlands and aquifers of the Murray-Darling Basin. Unfortunately, billions more will have to be spent if extractions are to be reduced to anything approximating a sustainable level.

68 This reform process in the Basin, while yielding some environmental benefits, has exacerbated conflict between water users and has left many stakeholders and Traditional Owners with the feeling that water management is a series of intractable, emotionally draining and exceptionally costly problems.

69 After more than 15 years of working across Australia and internationally, I’m afraid to say that this dynamic is more or less reflected in every over-extracted river basin in the world. In parts of some well-resourced countries, farmers are compensated in order to reduce extractions – or to cease extracting altogether. However, compensation is not an option in much of the world, with farmers and communities being left alone to deal with the consequences of over-extracted and degraded rivers and aquifers.

70 The Northern Territory is on the precipice of allowing large-scale, unsustainable development of its water resources. If this occurs, the patterns that we have seen emerge elsewhere in the world will be replicated in the NT. Over-extraction will lead to serious ecological decline, conflict and expense. As in the Murray-Darling Basin, the environment, Traditional Owners and smaller farmers will bear the brunt of this mismanagement.

⁵¹ ABC Rural, “NT government leaves Larrimah precinct high and dry, revoking 10,000-megalitre water licence”, 23 June 2021, available [here](#).

⁵² Wheeler, S. A., Carmody, E., Grafton, Q., Kingsford, R. T., & Zuo, A. (2020). The rebound effect on water extraction from subsidising irrigation infrastructure in Australia. *Resources, Conservation and Recycling*, 159, 1-17. <https://doi.org/10.1016/j.resconrec.2020.104755>.

71 However, these outcomes are far from inevitable. The NT Government is well positioned to learn from the mistakes of other Australian jurisdictions and countries and to chart a different path; to commit itself to the sustainable, culturally appropriate and intelligent management of its most precious resource. Our clients argue that this must start with the refusal of the Singleton Licence.

END