

25 February 2022

Branch Manager
Water Allocation Planning
Department of Water and Environmental Regulation

Re: Gnangara groundwater allocation plan: draft for public comment

The Wildflower Society of WA (the Society) is pleased to have the opportunity to provide comment to the Department of Water and Environmental Regulation (DWER) on the draft Gnangara groundwater allocation plan (the Plan). While we agree with the overall aims of the Plan and appreciate the extensive and complex modelling involved, we do not believe the Plan is ambitious or transparent enough to ensure the ongoing healthy functioning and persistence of groundwater dependent wetlands and vegetation.

DWER states on page 1 of the Plan:

"Reducing abstraction will have long-term benefits for water users and help protect important wetlands and native bushland, making them more resilient to climate change" and

"Our overall goal is to rebalance the water being taken out of the groundwater system with the recharge to groundwater from rainfall. This is to make sure the water quality remains suitable for irrigation and other uses and the water quantity maintains water levels to support groundwater dependent wetlands and vegetation".

To achieve these goals, DWER proposes a 10% reduction in abstraction, in combination with changes in land use, license trading, increased water efficiencies, penalties and education. We maintain that this in no way guarantees the ongoing and improved health of already impacted wetlands and vegetation since the uptake of such measures, other than abstraction and penalties, cannot be guaranteed as they depend on agencies external to DWER. The Society considers that a 50% reduction is required to rebalance the Gnangara groundwater system as the variability of assumptions in the modelling carried out and the unknown requirements of the wetland systems and groundwater dependent vegetation warrant a more conservative approach to conservation of the groundwater system.

This uncertainty is further compounded by the reduction in abstraction not coming into effect until 1st July 2028. This allows for six more years of unsustainable water allocation before the efficacy of the Plan (should all measures be implemented and assumptions be correct) can even begin to be assessed. Figure 17, the last in the Plan, highlights the HUGE lag in the actual implementation of water abstraction and use reductions, and indeed DWER acknowledge and states (p74) that "The total effect of these changes on the watertable may not be fully realised at some sites until the mid-2030s". We appreciate that licence holders need some time to adjust their operations but 6 years seems an unreasonable amount of time given their capacity to constantly adjust to other costs. For example, should agriculturists be given notice of a 50% increase in fertiliser costs, suppliers would not give a 6 year adjustment period, as is currently the case with the differential between fertiliser costs from 2021 to 2022. The Society believes the reduction in abstraction should commence on 1 January 2024 and



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licence holders have the capacity to adjust to the changes, just as they do with other inputs to their operations.

The Plan, should all assumptions be met, does not guarantee the improved health or even a stabilisation of all groundwater dependent wetlands and vegetation. Indeed, DWER admits this as well as further declines: "We should see water levels and ecological condition stabilise or improve across 41 per cent of the area covered by significant groundwater-dependent ecosystems" and "Reductions to abstraction across the Gnangara groundwater system will contribute to slowing the rate of decline in this area and help to limit the risk of significant impacts to ecological values. While positive, these improvements are generally far smaller than the water-level falls that have occurred during the past few decades" (p 63). We find it disingenuous to the goals of the Plan highlighted above, that declines are deemed acceptable and that details regarding outcomes for wetlands and vegetation be largely placed at the end of the document (Section 6 The benefits of taking less from the Gnangara groundwater system). As with its management of other natural resources, DWER has adopted a stance where loss of natural resources is considered acceptable, instead of considering the conservation of these natural resources as paramount and any actions which reduce their size or quality unacceptable.

We find it incongruous that, admitting the continuing decline of water levels, DWER will be asking the Environmental Protection Authority (EPA) amend "minimum water level thresholds at some of the representative wetland and bushland sites that have criteria set in Ministerial Statement no. 819 (Section 7.1 and Appendix G)" (p63). Surely this suggests that a 10% abstraction reduction is not sufficient and justifies the Society's call for a 50% reduction. Indeed, it appears that the considerations of licence holders have been placed ahead of those of wetlands and vegetation with little explanation. DWER states (p22) "Higher reductions than proposed here, while improving environmental outcomes, would likely be too costly for the additional benefits gained and be impractical for licensees to implement". Details of these costs and impracticalities should be outlined at the least. The Society maintains that alternative reduction scenarios should be presented for public consultation, including the use of treated and recycled wastewater which is currently disposed of through ocean outfalls.

We also would like to make comment on more specific points below.

- All water users should pay for water use, including users of unlicensed stock, and domestic and garden bores. This would incentivise using water more efficiently.
- New domestic bores should not be allowed and current ones removed when a property is sold unless connection to scheme water is not possible.
- There should be no exceptions to reductions (p76). Again, this would incentivise efficient water use.
- All licensees should be metered and required to submit their water use, not just those above 10,000 kL/year. Fines relating to metering should be commensurate with the annual turnover of the licensee so as to make fines a true deterrent.

The Society understands that DWER is removing monitoring bores that are considered 'dry'. The Society is aware DWER requires private proponents to replace such bores with bores that are deepened to intercept the groundwater. DWER should apply the same criteria to their monitoring systems as it places on licence holders required to monitor groundwater levels and quality and replace 'dry' monitoring bores with 'wet' bores in the same location.



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DWER has a substantial database of groundwater levels on and around the Gnangara groundwater system. All of this and future data collected should be placed in the groundwater models developed on an annual basis to measure the repeatability of results obtained for this approach to the EPA and to modify the conclusions reached and its approach to groundwater allocation associated with the Gnangara system. ALL groundwater bores should be required to have adjacent monitoring bores which are measured monthly and reported by licensees (including household bores) annually.

DWER should be required to monitor and report on the health of all wetlands affected by the Gnangara system on an annual basis. The findings should be reported as an annual public report on the health of the Gnangara system and independently audited on a triennial cycle.

In summary, the Society believes:

- 1) the Plan is not sufficiently ambitious or transparent enough to ensure the ongoing healthy functioning and persistence of groundwater dependent wetlands and vegetation.
- 2) a 50% reduction is required to rebalance the Gnangara groundwater system.
- 3) the reduction in abstraction should commence on 1 January 2024 and licence holders have the capacity to adjust to the changes, just as they do with other inputs to their operations.
- 4) DWER has adopted a stance where loss of natural resources is considered acceptable, instead of considering the conservation of these natural resources as paramount and any actions which reduce their size or quality unacceptable.
- 5) DWER should replace 'dry' monitoring bores with 'wet' bores in the same location.
- 6) future data collected should be placed in the groundwater models on an annual basis to measure the repeatability of results obtained for this approach to the EPA and to modify the conclusions reached and its approach to groundwater allocation, associated with the Gnangara system.
- 7) DWER should be required to monitor and publicly report on the health of all wetlands affected by the Gnangara system on an annual basis.

Thank you once again for the opportunity to comment on such an important document. The WSWA is happy to discuss further any of the issues raised.



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