Submission National Water Initiative -Productivity Commission Draft Report

INFORMATION REQUEST 6.1
The Commission seeks feedback on suitable triggers for rebalancing environmental and consumptive shares in the context of climate change. *What are the advantages and disadvantages of the different approaches?* *How could continuous adjustment be implemented in practice?* *Are there any other potential triggers that could be used?*

Comment on chapter 6 with relevance to chapter 8, 10, 11, 14 & 15

Firstly, all states need to have effective water resource systems to holistically manage waterway and catchment management activities for all users as this draft recommends. This would prevent one authority holding trumps over other water managers. Only then can a comprehensive **'state of knowledge'** of their respective water catchments be achieved.

It is extremely important to consider existing sectors adding to the degradation in waterway health with wastewater discharges and/or use of recycled wastewater leaching into waterways as this is not acknowledged in the NWI. A greater dependence on recycled wastewater as another source of water in a drying climate is flawed given water authorities are currently not removing emerging contaminants of PFAS, nano particles, micro plastics, pesticides and pharmaceuticals. PFAS National Environmental Management Plan 2 Feedback submissions by water authorities and VicWater[1], peak industry association for water business in Victoria, articulates the concern with recycled water and use of biosolids.

> ***5. Beneficial reuse of biosolids and recycled water*** *will require a holistic and health-centric approach, which will need to be articulated more clearly. There is a current dichotomy between the current mandate to encourage beneficial reuse of biosolids and recycled water, versus the (as yet unknown) risk of PFAS potentially impacting human health. Biosolids applications on land could potentially lead to future health impacts and landfilling causes potential detrimental leachate.* ***Clear expectations relating to the disposal and/or treatment of PFAS are needed.***
>
> *It is suggested that federal and state governments:*
>
> - *Support further research to understand the environmental and human health risks from the use of PFAS contaminated biosolids and recycled water.*
> - *Articulate a holistic and health-centric approach and incentivise and appropriately resource solutions to develop new innovative solutions to treating and disposing of PFAS.*
>
> ***6. Guidance:*** *There appears to be confusion over whether the NEMP2 is a legally binding document or a guidance document (a standard).* ***Questions were raised as to whether there are transition plans in place to support water corporations towards reducing PFAS levels.***

[1] https://www.environment.gov.au/system/files/resources/2fab5865-66d5-44cc-88f0-1990ce7c3c02/files/pfas-nemp2-submissions.pdf

Further, the document states that "further work, in collaboration with the water industry, will be undertaken to establish criteria and guidance for water authorities and environmental regulators based on current science" (Section 15, Wastewater Treatment, p.61), without stating a timeframe…

It is recommended that:

- *Clearer water industry specific guidance and information (**State of Knowledge** - SoK) relating to the application of NEMP2 is produced, including sampling regimes, treatment of influent, effluent and reuse points.*
- *NEMP2 transition arrangements are spelt out and **a transition plan developed** to support industries towards reducing PFAS levels; including the application of the precautionary principle.*
- *A suitable government body or association is identified to disseminate national and international best practice and scientific knowledge (SoK) for distribution to the Australian water industry, including national and international case studies.*
- *Water-industry specific working groups are established (nationally and state-wide) – convened by the suitable industry bodies and/or associations to contribute to the SoK and collaborate with state EPAs to develop industry specific proposals and submissions relating to risk reduction/minimisation.*
- *A timeframe is communicated for providing criteria and guidance to the water industry.*

***7. Customer willingness to pay**: the Victorian Essential Services Commission's (ESC) PREMO approach stipulates extensive customer consultation to determine a water corporation's future expenditure. In light of PFAS sampling and treatment resource intensity, uncertainty around surrounding research findings and potential health impacts, this approach could prove challenging. If water corporations were to reduce PFAS during its treatment processes, the cost of upgrading and/or changing infrastructure would be substantial. Consultation relating to PFAS has been undertaken with industry; not with the broader community (yet), which will be of a sensitive nature.*

It is suggested that:

- *EPA Victoria consult with the ESC as to next steps relating to willingness-to-pay consultation and/or potential incorporation into the Statement of Obligations (SoO).*
- *A concise community message plan be developed, including watching briefs.*

8. Other comments:

- ***EPA Victoria needs to play a crucial role in reducing PFAS at the source, where a reduction of PFAS entering the catchment can be achieved through education and enforcement** (rather than regulating the waste treatment plant operator). An EPA education-heavy approach will likely not result in large-scale PFAS reductions; it is recommended that EPA Victoria map polluters and focus on point-source pollution prevention efforts to stop PFAS entering the catchments in the first place (through regulation and fines). It is also recommended that EPA Victoria conduct more regular auditing of trade waste customers who may be discharging PFAS.*

Further, the document states that "further work, in collaboration with the water industry, will be undertaken to establish criteria and guidance for water authorities and environmental regulators.

Better management, monitoring and enforcing compliance by the 'other' regulatory departments **WOULD** provide a positive effect on waterway health.

Complexities can also arise with integrated and augmented water supply outside of catchment area including the trading of Environmental Water Reserve. The following season could be drier resulting in all entitlement holders, including environmental flows equally receiving a proportional reduction in available water flows.

To prevent this scenario:

- ***An agreed sustainable baseflow to maintain the economic value of a healthy river system could be established for environmental water and all other entitlement holders sharing the remaining water balance.***

This is particularly relevant in Gippsland, Victoria where water managers, Southern Rural Water (SRW), are offering up new irrigation opportunities out of an extremely degraded river system impacted by Latrobe Valley power station operations.

See:

- Southern Victorian Irrigation Development Project[2]
- Irrigation development study - Central Gippsland[3]

With an agreed **'State of Knowledge'** and an effective water management system in place this should prevent those water managers from not acting in the best interest of all. This way it would avoid the complication of more entitlement holders extracting from an increasingly unreliable pool.

To ensure the water balance in a variable climate in compromised catchments are more accountable and transparent**:**

- ***All groundwater extractions in onshore and offshore petroleum tenements SHOULD be regulated and market priced accordingly to deter overextraction of a depleting oil and gas field.***
- ***Understanding that some catchments are so stressed that no new entitlements should be granted if NWI considers an entitlement to be perpetual or an open-ended share of the pool.***

For regulatory authorities to be more accountable and transparent with future project approval for polluting industry:

- ***Authorities to consider project's cumulative effect from water extraction and return discharges on water health and environment in consideration of other polluting industry and potential low flows.***

Whilst I disagree with the issue of co-existence between mining and farming due to the introduction of toxic contaminants into the environment, the trading of water as an economic driver for the entitlement holder can be to the detriment of the environment in the absence of sound regulatory assessments in Victoria and enforcement of water use compliance.

---

[2] http://www.srw.com.au/projects/svid-irrigation-study/
[3] http://www.srw.com.au/wp-content/uploads/2018/06/SVID-FAQs-updated-June-web-final.pdf

Ultimately, there has to be a greater focus and accountability on what human influences/drivers are leading to poor water quality and quantity and what the community value for each catchment area. One size will not fit all.

The issue of continuous adjustments is being played out right now with the closures and rehabilitation of Latrobe Valley coal mines as an example and it is a bun fight behind the scenes. No policies in place, water authorities and irrigators vying for water security and department drivers in conflict with each other.

Government haven't been able to show forethought and leadership so I would say other industry sectors will continue to lead the change on behalf of their members. Additionally, a monetary value needs to be applied to ecosystem services that a healthy water catchment provides for any strong regional economy.