

Submission to the Senate Select Committee on the status of water trading in New South Wales

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Committee Chair

Senate Select Committee on the status of water trading in New South Wales

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The NSW Young Lawyers Environment and Planning sub-committee (**Committee**) make the following submission in response to the inquiry into the status of water trading in New South Wales.

NSW Young Lawyers

NSW Young Lawyers is a division of The Law Society of New South Wales. NSW Young Lawyers supports practitioners in their professional and career development in numerous ways, including by encouraging active participation in its 15 separate sub-committees, each dedicated to particular areas of practice. Membership is automatic for all NSW lawyers (solicitors and barristers) under 36 years and/or in their first five years of practice, as well as law students. NSW Young Lawyers currently has over 15,000 members.

NSW Young Lawyers accepts the science and wide-ranging effects of climate change, including as outlined by the United Nations Intergovernmental Panel on Climate Change in its leading expert reports. NSW Young Lawyers considers that Australia has the ability and a responsibility to rapidly reduce emissions and actively help to keep the world's emissions within its remaining 'carbon budget'.

NSW Young Lawyers recognises that there is a climate emergency, posing an unprecedented challenge for human rights and the rule of law. In order for there to be intergenerational equity and climate justice, as well as interspecies equity and ecological sustainability, the law needs to enable and require Australia to rapidly decrease CO₂ (and other greenhouse gas) emissions and to be legally accountable for their adverse contributions to the impacts of climate change.

The NSW Young Lawyers Environment and Planning sub-committee comprises of a group of approximately 250 members interested in our natural and built environment. The Committee focuses on environmental and planning law issues, raising awareness in the profession and the community about developments in legislation, case law and policy. The Committee also concentrates on international environment and climate change laws and their impact within Australia.

Introduction

1. The Committee welcomes the opportunity to comment on the inquiry into the status of water trading in New South Wales. This submission responds to the following terms of reference:
 - A. *the origin of the water trading market, its purpose, regulation and abuse*
 - E. *other related matters.*

A. The origin of the water trading market, its purpose, regulation and abuse

2. Water trading is the process of buying and selling water. In Australia, water trades can be “permanent” (where the ongoing statutory right to a particular share of water is traded), or “temporary” (where the right to a particular share of water is traded for a particular water accounting period).
3. In considering the origins of water trading in New South Wales, it is relevant to look further afield and consider the history of water trading in Australia more generally. The reasons for this are two-fold. First, water as a resource is not confined to jurisdictional boundaries. Second, and as aptly stated by Horne and Grafton, “The Australian water markets story is essentially a story of the Murray-Darling Basin...”¹.
4. Water trading began in Australia informally during World War II.² These informal arrangements were a way for farmers with surplus water to transfer water to their neighbours. In economic terms, the arrangements were intended to efficiently allocate a resource to where it was most needed.
5. Formal arrangements for water trading were first introduced in New South Wales in 1983 and involved having an annual transferability of water. Permanent transferability of water rights was then introduced in 1989.³
6. The need to further regulate water trading arrangements arose in the 1990s, as a result of a number of environmental issues and a growing awareness of the need for allocations to be controlled (particularly in the Murray-Darling Basin).
7. The impacts of drought, environmental degradation (such as algal blooms) and inefficiencies in how water resources (especially in the Murray-Darling Basin) were being allocated became apparent.⁴
8. These factors contributed to the development of a number of fundamental initiatives being introduced (particularly at the Commonwealth level). These included the:

¹ James Horne and R Quentin Grafton, ‘The Australian water markets story: Incremental transformation’ in Joannah Luetjens et al. (ed), *Successful Public Policy: Lessons from Australia and New Zealand* (Australian National University Press, 2019) 165, 165.

² Sarah Ann Wheeler et al. *Water market literature review and empirical analysis* (Final Report, 29 May 2020) 14.

³ Lin Crae, Leo O’Reilly and Brian Dollery, ‘Water markets as a vehicle for water reform: the case of New South Wales’ (2004) 44:2 *The Australian Journal of Agricultural Resource Economics* 299, 306.

⁴ Sarah Ann Wheeler et al. *Water market literature review and empirical analysis* (Final Report, 29 May 2020) 16; Department of Agriculture, Water and Environment, *History of Australian water markets* (Web Page) <<https://www.awe.gov.au/water/policy/markets/history>>.

- Murray-Darling Basin Agreement 1992;
 - Council of Australia Government Water Reform Framework 1994; and
 - National Water Initiative 2004.
9. According to the Department of Agriculture, Water and Environment, these initiatives led to:
- interstate entitlement trading;
 - a Murray-Darling Basin wide cap on water transactions;
 - further reforms of entitlements; and
 - efforts to address over-allocation in the Murray-Darling Basin.⁵
10. Legislative changes were made to the New South Wales water trading system throughout the 2000s with the introduction of the:
- *Water Management Act 2000* (NSW), which led to the development of water sharing plans and water access licences, in addition to formalised monitoring and enforcement; and
 - *Water Management Act 2018* (NSW), which established individual and total daily extraction limits.
11. The purpose of water markets has evolved from its origins of efficiently allocating water resources (although this purpose still holds true to today). In the current day, water markets must also ensure that water is allocated in a way that is sustainable for both environmental and agricultural purposes.
12. In order to achieve this, water markets must be informed. There must be transparency of information and appropriate accountability and enforcement.
13. Water markets operate in an increasingly complex environment, with increasing avenues for abuse of the water trading system. Contributing factors include:
- the conduct of market intermediaries and non-land holding licence holders and speculators;
 - inconsistent application of regulatory requirements (for instance, requirements applied to real estate agents, stock brokers and stock/station agents do not apply to water market intermediaries, such as exchange platforms, water information service providers and state-owned trade approval authorities such as WaterNSW);
 - the potential for market manipulation, particularly by large water holders;
 - increasing water prices (especially in the southern Murray-Darling Basin);
 - extreme weather conditions (warm and dry), resulting in lower water availability;
 - the increasing use of “secondary” water entitlements such as leases and forwards;
 - a lack of quality and accessible information for water market participants;
 - lack of quality and overarching governance frameworks for the water trading market; and
 - differing processes between jurisdictions (this is particularly an issue in the Murray-Darling Basin).⁶

⁵ Department of Agriculture, Water and Environment, *History of Australian water markets* (Web Page) <<https://www.awe.gov.au/water/policy/markets/history>>.

⁶ NSW Department of Planning, Industry and Environment, *Transparency in the NSW water market* (Discussion Paper, November 2020) 3; Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry* (Final Report, February 2021) 1-2 and 227.

E. Other matters

Interstate water trading and management

14. New South Wales water markets cannot be regulated in isolation. Water systems are hydraulically connected across state boundaries. While water markets initially operated within states for the most part, interstate trading has increased, particularly in the Murray-Darling Basin.⁷
15. Various intergovernmental agreements set out the 'high level' and 'long term' national goals for water trading, while giving States and Territories significant policy and legislative discretion to implement these goals: see e.g., the Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin 2013.⁸ Under this agreement between the Commonwealth Government and the Basin States, all governments agreed to give effect to the Murray Darling Basin Authority's Murray-Darling Basin Plan 2012. These intergovernmental agreements, in turn, set out differing water trading rules applicable to each catchment or jurisdictional area.
16. The diversity of state and territory systems for managing water has produced a 'composite of many separate markets' in Australia, 'each defined by water system boundaries and administrative arrangements'.⁹
17. This patchwork approach to water regulation has resulted in significant challenges. The differing degrees of progress towards tradeable water rights has limited the ability of certain states to participate in cross-jurisdictional water trading markets. For example, Western Australia and the Northern Territory do not presently have unbundled water rights, in contrast to New South Wales. This, in combination with the differing water trading rules (even in jurisdictions where water trading is effective), creates barriers to trade which undermines the economic efficiency and effectiveness of the water market, creating issues with ensuring that the value of water is adequately reflected by market pricing.¹⁰
18. The complexity of the regulatory environment and high number of stakeholders involved has obscured lines of responsibility. This in turn means that the water trading market is susceptible to mediated

⁷ A Gardner and RH Bartlett, *Water Resources Law* (Lexis Nexis, 2nd edition, 2017), 613

⁸ See also: Snowy Water Inquiry Outcomes Implementation Deed and Heads of Agreement 2002 - between Commonwealth, New South Wales, and Victorian governments to provide water recovery targets for the Snowy River catchment; Lake Eyre Basin Agreement: between SA, NSW, Queensland, NT, and the Commonwealth Government. This agreement establishes the Lake Eyre Basin Ministerial Forum to promote cooperation between the states in policy formulation for the management of the Lake Eyre Basin river systems, but each jurisdiction maintains responsibility for its own policy formulation and implementation.

⁹ Cameron Holley, 'Governing water markets - achievements, limitations and the need for regulatory reform' (2016) 7, (Web Page) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3159081.

¹⁰ Cameron Holley, 'Governing water markets - achievements, limitations and the need for regulatory reform' (2016) 26-27, (Web Page) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3159081.

corruption by decision makers and rent-seeking behaviour and regulatory capture by irrigation companies and industry.¹¹

19. In response to governance challenges in the Murray-Darling Basin, the Australian Competition and Consumer Commission (**ACCC**) has recommended establishing a Water Market Agency, to operate as a cooperative legislative scheme between the Commonwealth and the Basin States. Such an agency would have market regulation, information, evaluation and advisory functions, with a focus on achieving greater cross-jurisdictional coordination and harmonisation.¹²

Environmental challenges

20. Generally, the advantages of water trading within a cap and trade scheme have been seen in the ability to respond more flexibly to drought and generate efficiencies that contribute to economic and environmental benefits.¹³ However, there are some challenges that limit the effectiveness of water markets as a policy tool for sustainable water management. Some of these challenges relate to market design and water trading rules – yet, other challenges cannot be addressed through market mechanisms alone.

21. The ACCC identified a number of ways in which the rules for water allocation and trading in the Murray-Darling Basin fail to reflect the physical characteristics of the river system and account for environmental impacts.

- *Firstly*, on-river delivery capacity is not accounted for in the cost of water use. Where demand for delivery capacity exceeds the amount of water that can be delivered at a specific location, this creates a water delivery shortfall. Under the existing framework, the right to have water delivered to an on-river extraction point remains accounted for in the overall calculation of water entitlements, rather than individually. Further, it is generally assumed that there are no restrictions on the time of water delivery within a water year.¹⁴ Many water users assume that delivery will continue to be guaranteed, and there is no direct price signal to encourage water users to adjust their water use patterns away from times and locations where delivery capacity is scarce.¹⁵ However, the disadvantages to introducing price signals during scarce water supply periods, or particular times or locations, must be properly weighed against the benefits of the current pricing system and the State's interest in ensuring food security. For instance, the increased costs to farmers of using scarce water resources during periods of poor rainfall would exacerbate food production costs.
- *Secondly*, the cost of 'conveyancing losses' are not worn by individual water users. Conveyancing losses are the volume of water lost while flowing through the river system, due to evaporation and

¹¹ R. Quentin Grafton & John Williams (2020) Rent-seeking behaviour and regulatory capture in the Murray-Darling Basin, Australia, *International Journal of Water Resources Development*, 36:2-3, 484-504.

¹² Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry*, Final report (February 2021), 14.

¹³ Cameron Holley, 'Governing water markets - achievements, limitations and the need for regulatory reform' (2016) 26-5, (Web Page) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3159081.

¹⁴ Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry*, Final report (February 2021), 422.

¹⁵ *Ibid.*

seepage. Under the current system, individual water users face no incentive to avoid seeking water deliveries over longer distances or outside of peak periods (for example, periods of high temperatures and uncertain climactic conditions). Rather, the cost of conveyancing losses is socialised across all water entitlement holders.¹⁶ Again, a cost-benefit analysis of that considers the costs and complexity to stakeholders (in particular, water users) of altering the current scheme should be undertaken.

- *Thirdly*, adverse environmental impacts are external factors that are not reflected in the costs to water users when making their use and delivery decisions. Such impacts include erosion and bank instability from large and frequent water deliveries. The current system bundles the rights for delivery largely with water entitlements and generally, water users do not face the costs incurred as a result of the environmental damage.¹⁷ However, it should be noted that water users have a vested interest to minimise erosion and bank instability, since those environmental concerns reduce the land available for agricultural use. Rather than increasing costs to water users, solutions such as better education on strengthening embankments and minimising erosion in affected areas should be considered.
- *Fourthly*, particularly in New South Wales, water allocation policies are based on out-dated assumptions about minimum inflows, which determine the availability of water. Where actual inflows do not match assumptions, there is a risk of creating uncertainty in allocations, particularly where hotter and drier conditions contribute to the trend of declining inflows.¹⁸

22. Water markets can and should be reformed so as to avoid and mitigate environmental impacts, and if these impacts cannot be avoided, their costs should be reflected in trading. However, it is also important to note that water markets are not, by themselves, sufficient to ensure that water in New South Wales is sustainably managed. Cap and trade market approaches work best where there is universality of impact and source, such that units can be freely traded – e.g., carbon emission markets.¹⁹ This is not the case for water, where different regions and catchments have different ecologies and water requirements. Taking water from one region and using it in another may produce adverse environmental impacts, such as increased salinity.²⁰

23. Complementary policy and governance approaches may need to be considered alongside market approaches in relation to complex areas such as groundwater use.²¹

¹⁶ Ibid 452-453.

¹⁷ Ibid 445-446.

¹⁸ Ibid 483-484.

¹⁹ Cameron Holley, 'Governing water markets – achievements, limitations and the need for regulatory reform' (2016) 21, (Web Page) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3159081>.

²⁰ Ibid.

²¹ Emma Carmody et al, 'The future of water reform in Australia – starting a conversation' (2016) *Australian Environment Review* 132 133.

Concluding Comments

NSW Young Lawyers thank you for the opportunity to make this submission. If you have any queries or require further submissions please contact the undersigned at your convenience.

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