



LEGISLATIVE COUNCIL

SELECT COMMITTEE ON THE STATUS OF WATER TRADING IN NEW SOUTH WALES

# Status of water trading in New South Wales

December 2022



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

# **Status of water trading in New South Wales**

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Status of water trading in New South Wales

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Chair: Hon. Robert Borsak, MLC.



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## Terms of reference

1. That a select committee be established to inquire into and report on the status of water trading in New South Wales, and in particular:
  - (a) the origins of the water trading market, its purpose, regulation and abuse,
  - (b) market practices and effects, including playing the market, cornering the market and fixing the market,
  - (c) the effectiveness of water registration and disclosure in New South Wales,
  - (d) the effects of water trading on the economy, communities and the environment, and
  - (e) any other related matter.
2. That the committee report by 20 December 2022.<sup>1</sup>

The terms of reference were referred to the committee by the Legislative Council on 29 March 2022.<sup>2</sup>

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<sup>1</sup> The original reporting date was 30 November 2022 (*Minutes*, NSW Legislative Council, 29 March 2022, pp 3119-3120). The reporting date was later extended to 20 December 2022 (*Minutes*, NSW Legislative Council, 10 November 2022, p 3863).

<sup>2</sup> *Minutes*, NSW Legislative Council, 29 March 2022, pp 3119-3120

## Committee details

### Committee members

<b>The Hon Robert Borsak MLC</b>	Shooters, Fishers, Farmers Party	<i>Chair</i>
<b>Ms Cate Faehrmann MLC</b>	The Greens	<i>Deputy Chair</i>
<b>The Hon Lou Amato MLC</b>	Liberal Party	
<b>The Hon Mark Buttigieg MLC</b>	Australian Labor Party	
<b>The Hon Wes Fang MLC</b>	The Nationals	
<b>The Hon Rose Jackson MLC</b>	Australian Labor Party	
<b>The Hon Peter Poulos MLC</b>	Liberal Party	
<b>The Hon Mick Veitch MLC</b>	Australian Labor Party	

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Madolyn Hollins, Administration Officer

Stewart Smith, Director



## Chair's foreword

This inquiry considered whether the current system of water trading in New South Wales is operating effectively to meet the needs of our state's economy, communities and environment. In short, it is not. The committee heard of serious and pervasive problems within water trading markets, and in response we have developed recommendations that attempt to address some of the most pressing issues. While these are important first steps, a more wholesale reform of the system may be required in the future.

Water trading was first formalised in New South Wales in 1983. The ensuing four decades has seen the market expand dramatically in size, from a small system of informal trades to a sophisticated financial market in which billions of dollars' worth of trades are conducted annually.

With this expansion has come the entrance of external traders into the market seeking to profit off the state's water resources. The evidence before the committee was clear that this has led to poor outcomes. Traders use sophisticated methods to exploit and manipulate markets, making sizeable profits which flow away from regional areas and towards capital cities and even overseas. Meanwhile, water prices are driven up for those who need it to grow our state's food and fibre.

These issues are compounded by a weak regime of governance and regulation. Virtually all participants to this inquiry agreed there needs to be changes to the way governments and regulatory agencies oversee water trading. The present system involves a convoluted landscape in which regulatory functions are spread across several different entities, resulting in a lack of understanding among market participants about who is responsible for what. The committee therefore recommends that a Water Markets Agency should be created to consolidate governance and regulatory functions.

Another key problem is the lack of rules governing market participants and market conduct. This permits behaviours such as insider trading and market manipulation to occur. There is clearly a need for much tighter market regulation and the committee makes recommendations to this effect.

Water trading markets in this state are remarkably opaque; there is little information available about who owns water or when and for how much it is traded. The committee recommends that the New South Wales Government establish a public water market register containing accurate and up-to-date information on water entitlement ownership and trades. The public has a right to know who is trading one of our most valuable commodities.

Water trading markets are remarkably difficult to access compared to other commodities markets. The committee heard that trading platforms are fragmented, decisions are made slowly, policies are based on outdated assumptions, and key information is not provided to participants. This is simply not good enough. To simplify and improve access to water trading markets, we recommend there should be a single digital platform for water market data and trade approval and exchange. We also make other recommendations relating to improvements to service standards, data collection, modelling, and transmission of water market information.

Over this inquiry, the committee heard a variety of perspectives about how water trading has affected the economies, communities and environment of the Murray Darling Basin. Many participants were concerned about the rapid growth in nut and cotton crops at the expense of staples such as rice, dairy and oranges. The impact of this on Australia's food security – and the continuing prosperity of the towns and communities in the region – is something that the Government must take very seriously.

I would like to sincerely thank all of the stakeholders who participated in this inquiry, especially those who attended the hearing and public forum in Griffith. I also extend my gratitude to my fellow committee members, who engaged keenly with the complex issues before us, and to the secretariat staff for their

capable assistance. It is our hope that the evidence documented in this report will inform the New South Wales Government's consideration of these matters, as well as facilitating discussions and collaboration at the national level.

A handwritten signature in black ink, appearing to read 'Borsak', is centered on a light gray rectangular background.

Hon Robert Borsak MLC  
**Committee Chair**

## Findings

### **Finding 1**

**19**

The introduction of private and institutional investors in water trading markets has led to market destabilisation and manipulation at the expense of irrigation farmers, regional communities and the natural environment.

### **Finding 2**

**33**

The existing governance and regulatory framework for water trading in New South Wales is inadequate and facilitates unfair market practices.

## Recommendations

- Recommendation 1** **20**  
That the New South Wales Government establish a digital platform as a single repository for water market data and a single hub for trade approval and exchange, comprising:
- a secure digital repository for water market data and related information
  - digital connections between the platform and water market participants
  - a single portal for lodging trade applications in the Southern Connected Basin
  - a harmonised ‘trading rules engine’ for assessing trade application against trading rules in the Southern Connected Basin, and
  - a single exchange platform for water market trades.
- Recommendation 2** **20**  
That the New South Wales Government implement consistent mandatory service standards that apply to all trade approval authorities, including irrigation infrastructure operators.
- Recommendation 3** **20**  
That the NSW government collaborate with the Commonwealth Government and Basin States to ensure the single trading platform operates nationally, which is preferable to separate state-based platforms.
- Recommendation 4** **20**  
That the New South Wales Government advocate for the introduction of conveyance water loss factors in Murray-Darling water markets.
- Recommendation 5** **21**  
That the New South Wales Government investigate reports of 'parking' of carryover water and develop solutions that restrict this from occurring except where water users genuinely require it.
- Recommendation 6** **34**  
That the New South Wales Government advocate for:
- the establishment of an independent Basin-wide Water Markets Agency to consolidate and carry out new and existing trade-related roles and functions
  - implementing centralised, Basin-wide water market conduct and integrity legislation
  - incorporating key obligations as part of an enforceable mandatory code for water market intermediaries
  - removing existing price reporting obligations and insider trading prohibitions from the Basin Plan Water Trading Rules, broadening and strengthening them, and incorporating them into the new water market conduct and integrity legislation, and
  - requiring traders to include a unique common identifier on trade forms.
- Recommendation 7** **34**  
That the New South Wales Government establish a public water market register which contains accurate and up-to-date information on water entitlement ownership and trades.

**Recommendation 8**

35

That the New South Wales Government work collaboratively with the Australian and other Basin State governments to:

- improve existing information portal initiatives to improve information availability and prepare to transition towards new digital infrastructure for water markets
- establish mandatory Water Market Data Standards governing the collection, storage, transmission and publication of water market data and related information by trade service providers
- implement rules and processes for water announcements, which apply, at a minimum, to all governments or government agencies, and all trade service providers
- establish and implement a mandatory Digital Messaging Protocol for water trade and water market data
- improve the transparency of water market information, and implement a public-facing Water Market Information Platform
- implement lifetime traceability for water allocations
- increase the transparency of inputs, assumptions and administrative decision making involved in determining allocation announcements
- update carryover rules and policies to appropriately account for evaporation losses associated with storing water in a dam beyond the year in which that water was allocated
- strengthen existing commitments to better metering and measurement of water take across the Basin, and
- improve modelling of water use, delivery, and trade across the Basin, including through improving linkages between models.

**Recommendation 9**

45

That the New South Wales Government investigate ways to improve water access for First Nations people, such as through grants of water allocations.

**Recommendation 10**

45

That the New South Wales Government ensure that capacity limits at the Barmah Choke are not exceeded because of water trading.

## Conduct of inquiry

The terms of reference for the inquiry were referred to the committee by the Legislative Council on 29 March 2022.

The committee received 22 submissions and 2 supplementary submissions.

The committee held three public hearings: 1 in Griffith on 16 August 2022 and 2 at Parliament House, Sydney on 6 October 2022 and 21 November 2022. The committee also held a public forum in Griffith on 16 August 2022.

Inquiry related documents are available on the committee's website, including submissions, hearing transcripts, tabled documents, and answers to questions on notice.

### Procedural issues

There is one procedural matter to note in relation to the conduct of this inquiry. Mr Ron McCalman was issued a summons to give evidence at the public hearing on 21 November 2022. The decision to issue a summons is not taken lightly and witnesses are always invited to attend voluntarily as a first step. Should witnesses decline the first time, the committee issues a second invitation noting the committee's power to issue a summons in the event the witness declines a second time. Mr McCalman was summoned after he declined to attend the hearing three times on the grounds he had conflicting priorities.

# Chapter 1 History and overview of water trading in New South Wales

Since it was first regulated in 1983, water trading in New South Wales has gone from a small market with few players to a sophisticated global market worth billions of dollars. This chapter provides an overview of the history and development of water trading markets in New South Wales. It considers the purposes of water trading and outlines the characteristics of water trading markets in New South Wales, including their locations, financial size, and key participants. Finally, the chapter provides an overview of how water trading markets operate and how they are governed and regulated.

## History of water trading in New South Wales

**1.1** According to Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, water trading originated in 'informal arrangements between neighbouring farmers where one farmer's surplus water could be transferred to a neighbour'.<sup>3</sup> Since then, it has been formalised through successive legislative and regulatory developments.

**1.2** Formal arrangements for trading of water allocations in New South Wales were first introduced in 1983.<sup>4</sup> Permanent transfers of water rights were then introduced in 1989, and inter-valley trading commenced in 1991.<sup>5</sup> NSW Young Lawyers explained that by the 1990s, it became apparent that a more extensive regulatory scheme for water trading was required:

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). 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. These factors contributed to the development of a number of fundamental initiatives being introduced (particularly at the Commonwealth level).<sup>6</sup>

**1.3** There were various intergovernmental initiatives during the 1990s and early 2000s that reformed and formalised rules relating to water trading. These include the Murray–Darling Basin Agreement 1992, the Council of Australian Governments Water Reform Framework 1994, and the National Water Initiative 2004.<sup>7</sup> According to the Department of Climate Change, Energy,

<sup>3</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

<sup>4</sup> Submission 18, NSW Young Lawyers, p 3; Australian Government, *History of Australian water markets* (25 August 2021), Department of Climate Change, Energy, the Environment and Water, <https://www.dcceew.gov.au/water/policy/markets/history>.

<sup>5</sup> Submission 18, NSW Young Lawyers, p 3; Australian Government, *History of Australian water markets* (25 August 2021), Department of Climate Change, Energy, the Environment and Water, <https://www.dcceew.gov.au/water/policy/markets/history>.

<sup>6</sup> Submission 18, NSW Young Lawyers, p 3.

<sup>7</sup> Australian Government, *History of Australian water markets* (25 August 2021), Department of Climate Change, Energy, the Environment and Water, <https://www.dcceew.gov.au/water/policy/markets/history>.

the Environment and Water, these initiatives led to interstate entitlement trading, a basin-wide cap on water extractions, further reforms of entitlements, and efforts to address overallocation.<sup>8</sup>

- 1.4 A key reform in New South Wales was the passing of the *Water Management Act 2000*. This 'unbundled' water rights from land rights, allowing holders of water rights to sell their water without also selling their land, and leading to the growth of the water market.<sup>9</sup> The *Water Management Act 2000* also created water sharing plans, which set out the rules for the sharing and trading of water in individual regions.<sup>10</sup>
- 1.5 A key reform at the federal level was the passing of the *Water Act 2007* (Cth). This established the Murray–Darling Basin Authority (MDBA) as a single body responsible for overseeing water resource planning in the Murray–Darling Basin.<sup>11</sup> The MDBA developed the *Murray-Darling Basin Plan* to manage the Basin as a connected system.<sup>12</sup>

## Purposes of water trading

- 1.6 The primary purpose of water trading is to efficiently allocate water resources.<sup>13</sup> This occurs at both a business and industry level.
- 1.7 At a business level, water trading is intended to incentivise individual irrigators to use water more efficiently. This then allows them to generate surplus water entitlements which can be used to expand production or sold to release capital.<sup>14</sup> Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission shared examples of how irrigation farmers use water trading to suit their business needs:

... the case of a farmer moving to more intensive irrigation systems, which are more efficient, and being able to sell some of their existing water, which they would no longer need, to fund the capital investment required to undertake that upgrade of their irrigation system. ... a farmer wanted to expand and buy the property next door. They

<sup>8</sup> Australian Government, *History of Australian water markets* (25 August 2021), Department of Climate Change, Energy, the Environment and Water, <https://www.dcceew.gov.au/water/policy/markets/history>.

<sup>9</sup> Submission 9, Environmental Defenders Office, p 6; Gwydir Valley Irrigators Association, *Key Legislation* (2022), <https://www.gvia.org.au/water-policy/water-management-framework/key-legislation/>. See also Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 59.

<sup>10</sup> Submission 18, NSW Young Lawyers, p 4; Gwydir Valley Irrigators Association, *Key Legislation* (2022), <https://www.gvia.org.au/water-policy/water-management-framework/key-legislation/>.

<sup>11</sup> Murray-Darling Basin Authority, *The Water Act* (5 August 2022), <https://www.mdba.gov.au/about-us/governance/water-act>.

<sup>12</sup> Murray-Darling Basin Authority, *The Water Act* (5 August 2022), <https://www.mdba.gov.au/about-us/governance/water-act>.

<sup>13</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 2; Submission 18, NSW Young Lawyers, p 4.

<sup>14</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26; Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 16 August 2022, p 16; Submission 8, Murray Irrigation, p 6.



may not have had access to sufficient credit or capital to do that but, by trading some of their water, they were able to do that and then buy some of that water back as needed on the allocation market.<sup>15</sup>

- 1.8** Murray Irrigation explained that 'the available water in almost all water sources of NSW is fully committed', and that as a result, 'for many businesses, trading water entitlements or allocations via the market is the primary way to allow businesses to expand or contract'.<sup>16</sup>
- 1.9** At an industry level, water trading is intended to facilitate the transfer of water resources from low-productivity (or low-value) to high-productivity (or high-value) crops.<sup>17</sup> Professor Stuart Kells, co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, explained the 'powerful idea' during the early policy development of water markets was that 'the water rights would flow to where they had the greatest economic benefit ... where the soils are better, where there is more infrastructure, where there is deeper community infrastructure'.<sup>18</sup>
- 1.10** While many inquiry participants agreed that there had been a flow of water allocations to high value crops (such as almonds and cotton), they had mixed views on whether this has been a desirable outcome. We consider this issue further in chapter 4.
- 1.11** The committee also heard that an additional purpose of water trading is to ensure water is allocated in an environmentally sustainable way.<sup>19</sup>

## Characteristics of water trading markets in New South Wales

- 1.12** There is no one, single water market in New South Wales. Instead, there are several markets based on geographical catchment areas.<sup>20</sup> However, the common principles and elements of water trading are the same across each.
- 1.13** There are 22 catchment areas in the Murray-Darling Basin across New South Wales, Queensland, Victoria, and South Australia,<sup>21</sup> as illustrated in Figure 1:

<sup>15</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 30.

<sup>16</sup> Submission 8, Murray Irrigation, p 6.

<sup>17</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2; Submission 8, Murray Irrigation, p 2.

<sup>18</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 7.

<sup>19</sup> Submission 8, Murray Irrigation, p 2; Submission 18, NSW Young Lawyers, p 6.

<sup>20</sup> Submission 8, Murray Irrigation, p 6.

<sup>21</sup> Murray-Darling Basin Authority, *Catchments in the Murray-Darling Basin* (11 March 2022), <https://www.mdba.gov.au/water-management/catchments>.

**Figure 1 Catchments in the Murray-Darling Basin<sup>22</sup>**

- 1.14** The Murray Darling Basin is broadly split into two large regions, the Southern Basin and the Northern Basin.<sup>23</sup> According to the Australian Competition and Consumer Commission (ACCC), the Southern Basin accounts for between 80 and 90 per cent of all water rights trading activity across Australia and is 'regarded by many as the most sophisticated water market in the world'.<sup>24</sup> In contrast, water markets are less developed in the Northern Basin.<sup>25</sup>
- 1.15** Water markets have significant financial value. In 2021 the ACCC estimated:
- the value of water entitlements on issue across Australia in 2019–20 was \$26.3 billion<sup>26</sup>
  - the average annual turnover of water rights markets in the Murray-Darling Basin is \$1.8 billion<sup>27</sup>

<sup>22</sup> Murray-Darling Basin Authority, *Catchments in the Murray-Darling Basin* (11 March 2022), <https://www.mdba.gov.au/water-management/catchments>.

<sup>23</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 52.

<sup>24</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 54.

<sup>25</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 56.

<sup>26</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 80.

<sup>27</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 80.

- the total value of water entitlement trade in Murray-Darling Basin water markets since 2012–13 is \$12.7 billion,<sup>28</sup> and
- the total value of water allocation trade in Murray–Darling Basin water markets since 2012–13 is \$2.73 billion.<sup>29</sup>

### Participants in water trading markets

- 1.16** There are a range of participants in water trading markets, including irrigation farmers, mining companies, environmental water holders, private and institutional investors, irrigation infrastructure operators, water brokers, and government and regulatory agencies.
- 1.17** Irrigation infrastructure operators are the bodies that own or operate the infrastructure that delivers water for irrigation.<sup>30</sup> Mr Ron McCalman, Chief Executive Officer of Murray Irrigation, one such body, told the committee that they deliver water to over 2,100 family-owned landholdings across 724,000 hectares in the Southern Riverina.<sup>31</sup> Irrigation infrastructure operators also create and maintain trading rules within their irrigation network in order to ensure the operation, maintenance and accounting of trades.<sup>32</sup>
- 1.18** Water brokers are intermediaries who, for a commission or fee, provide services such as advising on and executing water trades.<sup>33</sup> Irrigation farmers, mining companies, and private and institutional investors hold water entitlements.
- 1.19** At a public hearing in Griffith, community member Mr Greg Adamson commented on the changing dynamics of water ownership between irrigation farmers and private investors over time:

When water trading was introduced, it was assumed that irrigation landholders would remain the water owners. For a long time, this was predominately true. Over the years, this changed. Retired farmers and those exiting the industry sold their land but retained their water ownership. During droughts, bank managers asked farmers to sell water licences to improve cash flow. Water speculators moved into the market. The demographic owning water changed. More people owned water without owning land, in a trend I don't see changing.<sup>34</sup>

<sup>28</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 84.

<sup>29</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 84.

<sup>30</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 43.

<sup>31</sup> Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 16 August 2022, p 16.

<sup>32</sup> Murray-Darling Basin Authority, *Water markets and trade* (9 May 2022), <https://www.mdba.gov.au/water-management/managing-water/water-markets-trade>.

<sup>33</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 45.

<sup>34</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2.

- 1.20** Similarly, Mr Scott Hamilton and Professor Stuart Kells submitted that 'today, around half a dozen hedge funds dominate the Murray-Darling Basin water market'.<sup>35</sup> Mr Hamilton also commented on the globalised nature of the water trading market, saying 'most people are quite surprised, and even gobsmacked, when they find that not only someone down their street in Sydney or Melbourne can play in the market but someone in Singapore or in Beijing or in Wall Street can play in this market'.<sup>36</sup>
- 1.21** On the other hand, Argyle Group, a private investment fund, submitted that 'there are only four major 'investors' in water markets accounting for 6% of water entitlement ownership and up to 20% of water allocation sales by volume'.<sup>37</sup> They contended that 'the vast majority of entitlement holders are irrigators (family farmers to corporate agribusiness)'.<sup>38</sup> They added that their own water entitlement portfolios collectively represented less than three per cent of water entitlements on issue across the southern Murray Darling Basin.<sup>39</sup>

## How water trading operates in New South Wales

- 1.22** New South Wales water markets are complex, involving a range of distinct types of entitlements and trades.
- 1.23** A *water entitlement* is a perpetual or ongoing right to a share of water within a system. A *water allocation* is the actual water allocated to an entitlement holder each year, which changes depending on factors such as rainfall, inflows into storages and how much water is already stored.<sup>40</sup>
- 1.24** There are different classes of water entitlements in New South Wales, which dictate the priority in which entitlement holders are allocated water.<sup>41</sup> Holders of high security entitlements, which are of higher value, have a right to be allocated water first.<sup>42</sup> Holders of general security entitlements typically only receive water once all high security entitlements have received their full water allocation. General security entitlements are therefore the least secure entitlement category and the most susceptible to seasonal climatic variations.<sup>43</sup>

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<sup>35</sup> Submission 22, Scott Hamilton and Stuart Kells, p 6.

<sup>36</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 6.

<sup>37</sup> Submission 19, Argyle Group, p 8.

<sup>38</sup> Submission 19, Argyle Group, p 8.

<sup>39</sup> Submission 19, Argyle Group, p 2.

<sup>40</sup> Murray-Darling Basin Authority, *Water markets and trade* (9 May 2022), <https://www.mdba.gov.au/water-management/managing-water/water-markets-trade>.

<sup>41</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (July 2020) p 59; NSW Government, *How water is allocated*, Department of Planning and Environment, <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated>.

<sup>42</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (July 2020) p 60.

<sup>43</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (July 2020) p 60; NSW Government, *How water is allocated*, Department of Planning and

- 1.25** Holders of general security entitlements can carry over their water allocations from one year to the next, while holders of high security entitlements cannot.<sup>44</sup> This was subject to criticism by some participants in this inquiry. We discuss this further in chapter 2.
- 1.26** Both water entitlements and water allocations can be traded. Trade in water entitlements is typically referred to as 'permanent' trade, while trade in water allocations is typically referred to as 'temporary' trade.<sup>45</sup> A water entitlement holder can trade their water allocation for one or more years while still retaining their ongoing entitlement.<sup>46</sup>
- 1.27** Another type of entitlement is a *delivery entitlement*. This represents a share of the available flow rate in an irrigation network.<sup>47</sup> It is separate to a water entitlement. When demand for water exceeds the supply capacity of a network, water users with delivery entitlements have priority for their water order.<sup>48</sup> Southern Riverina Irrigators explained that delivery entitlements are now considered to be 'quite valuable':
- Historically, DE's were unattractive because they are a contractual obligation to pay fees to the irrigation infrastructure operator (IIO) for ten years. However, they have become quite valuable because they give the owner: i. Flow share in peak periods; ii. Allocation "enhancements" (i.e. a dividend in the form of water); and iii. Can be sold for a profit.<sup>49</sup>
- 1.28** Anyone holding water entitlements or water allocations may trade them freely, subject to physical constraints or water supply system considerations.<sup>50</sup> While most trade occurs within catchment areas, inter-valley transfers also occur, although these are subject to restrictions based on social, economic, and environmental considerations.<sup>51</sup> There are agreements in place for trade across state boundaries.<sup>52</sup>

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Environment, <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated>.

<sup>44</sup> Submission 7, Speak Up Campaign Inc, p 4.

<sup>45</sup> Submission 8, Murray Irrigation, p 6; Murray-Darling Basin Authority, *Water markets and trade* (9 May 2022), <https://www.mdba.gov.au/water-management/managing-water/water-markets-trade>.

<sup>46</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (July 2020) p 63.

<sup>47</sup> Murrumbidgee Irrigation, *Delivery Entitlements: Frequently asked questions* (21 June 2018), [https://www.mirrigation.com.au/ArticleDocuments/255/Fact%20Sheet\\_Delivery%20Entitlements\\_2018.pdf.aspx?embed=Y](https://www.mirrigation.com.au/ArticleDocuments/255/Fact%20Sheet_Delivery%20Entitlements_2018.pdf.aspx?embed=Y).

<sup>48</sup> Murrumbidgee Irrigation, *Delivery Entitlements: Frequently asked questions* (21 June 2018), [https://www.mirrigation.com.au/ArticleDocuments/255/Fact%20Sheet\\_Delivery%20Entitlements\\_2018.pdf.aspx?embed=Y](https://www.mirrigation.com.au/ArticleDocuments/255/Fact%20Sheet_Delivery%20Entitlements_2018.pdf.aspx?embed=Y).

<sup>49</sup> Submission 20a, Southern Riverina Irrigators, p 1.

<sup>50</sup> Murray-Darling Basin Authority, *Water markets and trade* (9 May 2022), <https://www.mdba.gov.au/water-management/managing-water/water-markets-trade>.

<sup>51</sup> Submission 21, NSW Farmers Association, p 1.

<sup>52</sup> Murray-Darling Basin Authority, *Interstate water trade* (14 December 2021), <https://www.mdba.gov.au/managing-water/water-markets-trade/interstate-water-trade>.

## Governance and regulation of water trading markets in New South Wales

**1.29** The current framework for governance and regulation of water trading markets in New South Wales is complex, involving a range of laws and rules administered by various State and Commonwealth government agencies.<sup>53</sup>

**1.30** The main agencies that oversee water trading markets in New South Wales are:

- the Murray-Darling Basin Authority, which is responsible for facilitating fair, consistent and transparent water trade across the Murray–Darling system
- the Inspector-General of Water Compliance, whose role includes strengthening compliance and enforcement of the Murray–Darling Basin Plan
- the ACCC, which has monitoring, enforcement, and advisory roles relating to water market rules and water charge rules
- the New South Wales Department of Planning and Environment, which determines water allocations and sets trading rules, policies, and procedures, and
- the Natural Resources Access Regulator, which is responsible for enforcing water laws in New South Wales through monitoring, compliance and education.<sup>54</sup>

**1.31** We consider the adequacy of current governance and regulatory arrangements in chapter 3.

**1.32** In August 2019, the Australian Government directed the ACCC to conduct an inquiry into water trading markets in the Murray-Darling Basin. The ACCC released an interim report in June 2020<sup>55</sup> and a final report in March 2021.<sup>56</sup> The final report is a comprehensive document containing 29 recommendations for reform. We draw on the findings and recommendations of the ACCC across this report.

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<sup>53</sup> Submission 8, Murray Irrigation, p 8.

<sup>54</sup> Murray-Darling Basin Authority, *Water markets and trade* (9 May 2022), <https://www.mdba.gov.au/water-management/managing-water/water-markets-trade>; Natural Resources Access Regulator, *Natural Resources Access Regulator* (2022), <https://www.nrar.nsw.gov.au/>.

<sup>55</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Interim report* (July 2020).

<sup>56</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021).

## Chapter 2 Issues in the operation of water trading markets

Participants in this inquiry raised a number of concerns around the operation of water trading markets in New South Wales. Some of these are discrete concerns, relating to specific aspects of the entitlement system, while others raise larger questions. This chapter considers five of these issues in detail, these are: volatility in water prices; the role of private and institutional investors; difficulties in participating in water trading markets; conveyance water losses; and 'parking' of carryover water.

### Volatility in water prices

- 2.1** A key concern presented to the committee during this inquiry was the volatility in the price of water traded in water markets.
- 2.2** Some participants commented that there were wide variations in water prices, both between bids and offers, and across different catchment areas. For example, Mr Paul Pierotti, President, Griffith Business Chamber described 'berserk activity going on between above and below the choke, with over \$100 per megalitre difference at any given time'.<sup>57</sup> Argyle Group added that by comparison to most other markets, the spread between bids and offers in water markets is wide.<sup>58</sup>
- 2.3** The committee heard that a sharp increase in water prices is likely to influence the behaviour of irrigation farmers. Argyle Group argued that if water allocation prices rise rapidly, some annual crop irrigators may determine that it is more cost effective to abandon their annual crops and instead sell their unused water allocations.<sup>59</sup>
- 2.4** Inquiry participants identified several factors that contribute to variations in water prices, including:
- market liquidity<sup>60</sup>
  - the types of crops grown in a region,<sup>61</sup> and
  - climatic conditions and water scarcity.<sup>62</sup>
- 2.5** Researchers at the University of Sydney argued that price volatility reflects the illiquidity of water markets:

<sup>57</sup> Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 9.

<sup>58</sup> Submission 19, Argyle Group, p 8.

<sup>59</sup> Submission 19, Argyle Group, p 9.

<sup>60</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, pp 1-2; Submission 19, Argyle Group, p 8.

<sup>61</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 1.

<sup>62</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2; Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 1; Submission 19, Argyle Group, p 8.

We found that price volatilities of both entitlements and allocations are negatively associated with trading volume in the water market, which is contradicting with the findings in financial markets, where larger trading volume often corresponds to larger price volatility. It is possibly because water markets, especially entitlement markets, are generally much thinner than financial markets. There are often only a few transactions in a month, or even in a quarter in the entitlement market. With infrequent transactions, the prices can be highly scattered.<sup>63</sup>

**2.6** These researchers also argued that the proportion of water allocated to high-value crops in a trading zone, which they identified as fruit and nut trees and cotton, can increase water prices.<sup>64</sup> They concluded that this was a sign that the market was functioning effectively, as prices 'reflect the value that can be derived from the use of the water'.<sup>65</sup>

**2.7** Other stakeholders observed that climatic conditions contribute to price volatility. Argyle Group, as well as others,<sup>66</sup> contended that water scarcity, such as during a drought, will lead to higher prices:

In times of severe drought, the cost of acquiring irrigation water can escalate dramatically. A higher water price does not create new sources of supply and there is no substitute for water. No amount of money can make it rain. If all farmers are seeking to buy, there may be increasingly fewer sellers as water is offered and used up. In those circumstances bid/offer spreads will widen and spot price volatility will likely increase.<sup>67</sup>

**2.8** In relation to water scarcity, several participants in this inquiry contended that the volume of available water in New South Wales, particularly in the Southern Basin, has reduced since water trading was first regulated in the 1980s and 1990s.

**2.9** Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators submitted that compared to 1980, 'we've got about 33 per cent of the available water in the New South Wales Murray'.<sup>68</sup> Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, similarly argued that 'the actual water that gets delivered in our footprint would be much less than 50 per cent'.<sup>69</sup> Mr Hare and Mr Polkinghorne pointed to reliability reductions, buy-backs, water trading, and conveyance losses as the reasons for this reduction.<sup>70</sup>

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<sup>63</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, pp 1-2.

<sup>64</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 1.

<sup>65</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 1.

<sup>66</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2; Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 1.

<sup>67</sup> Submission 19, Argyle Group, p 8.

<sup>68</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 23.

<sup>69</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10.

<sup>70</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, pp 23-24; Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10.



- 2.10** Murray Irrigation submitted that water delivery in its irrigation area 'has reduced from an average annual delivery of over 1,000 GL around 1995 to an average of around 600 GL'.<sup>71</sup> It argued that 'the reduction in water availability from the Basin Plan and water acquired through government water policy reform should be acknowledged as a contributing factor to trade prices and subsequent trade behaviour'.<sup>72</sup>

## The role of private and institutional investors

- 2.11** A key area of debate among stakeholders to this inquiry was the impact that private and institutional investors have had within New South Wales water markets.

- 2.12** Some stakeholders were critical of external investors. Griffith Business Chamber argued that 'the water market has been gamed and manipulated by speculator traders to the detriment of commodities and industries and communities'.<sup>73</sup> The NSW Farmers Association called for the 'prevention of distortion of water markets by managed investment schemes'.<sup>74</sup>

- 2.13** Mr Scott Hamilton and Professor Stuart Kells argued that traders manipulate the market through a variety of tactics:

In our own research, we found further evidence of water market manipulation and the use of market power. We heard traders explain how they used information gaps against farmers, and how they used their own agribusiness investments as cover for large-scale arbitrage trading. And we saw how hedge funds used large purchases and sales to affect the price of water in a way that maximised their profits.<sup>75</sup>

- 2.14** Professor Kells further contended that while external traders were introduced to bring more liquidity into the market, 'in reality that has not worked. The market is not very liquid and the external traders are reaping very high profits, at the community's expense, for no public value'.<sup>76</sup>

- 2.15** NSW Farmers Federation identified inter-valley transfers as a case where external traders, because of their size and technological advantages, have an advantage over irrigation farmers:

... traders and water brokers trade extremely large parcels on behalf of several clients while individual irrigators are faced with the choice of paying water brokers to try to get their water transferred or taking a chance at trying to get their small individual volume through. For example, during a recent inter-valley transfer event between the Murrumbidgee and Murray Valleys, trading closed within minutes which left 47,000 megalitres unprocessed in the queue.<sup>77</sup>

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<sup>71</sup> Submission 8, Murray Irrigation, p 5.

<sup>72</sup> Submission 8, Murray Irrigation, p 6.

<sup>73</sup> Submission 3, Griffith Business Chamber, p 2.

<sup>74</sup> Submission 21, NSW Farmers Association, p 2.

<sup>75</sup> Submission 22, Scott Hamilton and Stuart Kells, p 6.

<sup>76</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 2. See also Submission 22, Scott Hamilton and Stuart Kells, p 9.

<sup>77</sup> Submission 21, NSW Farmers Association, pp 1-2.

- 2.16** On the other hand, stakeholders including the Australian Competition and Consumer Commission (ACCC), Argyle Group, and researchers from the University of Sydney argued there is no evidence that private investors manipulate market prices.<sup>78</sup> Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, told the committee:

I think there's certainly criticism of corporate investors participating in the market, and we had a detailed analysis in our inquiry of the four major corporate investors. When it was all boiled down, our finding was that, at most, they held around 10 per cent of the water in any of the trading areas. In looking in detail at their activities—and we had them in and interviewed them and were able to obtain all their trading records over quite a few years—we didn't find any adverse outcomes. Sure, they were able to do things in the market that perhaps others weren't because of their better information or resourcing, but there was nothing aberrant in what they were doing.<sup>79</sup>

- 2.17** Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council referred to the ACCC report, remarking that the ACCC 'found no evidence that investors exercised market power or manipulated markets'.<sup>80</sup>

- 2.18** PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, and Associate Professor Willem Vervoort of the University of Sydney argued that not only do institutional investors not significantly impact water prices, but they may in fact contribute to *decreased* price volatility by increasing trading volume and trading frequency in water markets.<sup>81</sup> They subsequently argued that more active entitlement trading, including by financial investors, should be encouraged and facilitated.<sup>82</sup>

- 2.19** In their submission to this inquiry, Mr Scott Hamilton and Professor Stuart Kells argued that there has been 'widespread misunderstanding and misreporting' of the ACCC's findings in relation to the extent to which private traders manipulate the market.<sup>83</sup> They told the committee that it is not accurate to say the ACCC found market manipulation does not occur; rather, the ACCC found that this is either permissible under current market rules, or that it may occur but cannot be detected:

The qualified ACCC comments about lack of evidence of investors using market power or manipulation to increase prices in the field of study – should not be construed that these are not issues of concern to the regulator and stakeholders. ACCC Deputy Commissioner Mick Keogh emphasised that, by virtue of the lax rules, market manipulation is legal in the water market. The ACCC also found there were significant

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<sup>78</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 30; Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, pp 2-3; Submission 14, Australian Competition & Consumer Commission, p 3; Submission 19, Argyle Group, p 3. See also Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 17.

<sup>79</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 30. See also Submission 14, Australian Competition & Consumer Commission, p 3.

<sup>80</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 17.

<sup>81</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, pp 2-3.

<sup>82</sup> Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 2.

<sup>83</sup> Submission 22, Scott Hamilton and Stuart Kells, p 5.

gaps in data and evidence that made market manipulation difficult to detect. 'It is very difficult to **regulate**,' Keogh said, 'what is not **recorded**' (original emphasis).<sup>84</sup>

## Difficulties in participating in water trading markets

**2.20** Another key issue raised during this inquiry was the difficulty water users face participating in water trading markets. Stakeholders cited a range of practical issues, including:

- the lack of a central register of trades
- frequent delays in application approvals, and
- the limited amount of market and trading information available.<sup>85</sup>

**2.21** Mr Scott Hamilton, co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, told the committee that the market is 'overly fragmented', making it difficult for users to understand the market at any one time:

The water market is overly fragmented. There are multiple trading platforms for every type of water right. There is no single market price at any moment. Therefore, it's difficult to understand the depth and breadth of the market at any particular time. The cap-and-trade model doesn't cover the whole system.<sup>86</sup>

**2.22** Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, similarly commented that 'we have three different registers in three different States, which all work slightly differently'.<sup>87</sup> Ms Miller also noted that 'trades can occur and not, be ... put to the register for sometimes weeks at a time. So it's not really real-time'.<sup>88</sup> The NSW Minerals Council gave an example of a company that had to report non-compliances due to delays of around five years approving a valid water licence application.<sup>89</sup> Yancoal Australia Ltd added, 'it is difficult for participants to track opportunities and to access the water market'.<sup>90</sup>

**2.23** Some stakeholders argued that the difficulties associated with participating in water trading puts some market participants, such as private and institutional investors, at an advantage over

<sup>84</sup> Submission 22, Scott Hamilton and Stuart Kells, pp 5-6.

<sup>85</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22; Evidence, Mr Nick Cook, Manager, Property and Water, Yancoal Australia Ltd, 16 August 2022, p 35; Evidence, Mr David Frith, Director, Policy, NSW Minerals Council, 16 August 2022, pp 36-37; Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, pp 2-3; Submission 1, Yancoal Australia Ltd, p 1; Submission 17, NSW Minerals Council, p 2; Submission 22, Scott Hamilton and Stuart Kells, p 9.

<sup>86</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, pp 2-3.

<sup>87</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22.

<sup>88</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22.

<sup>89</sup> Submission 17, NSW Minerals Council, p 2.

<sup>90</sup> Submission 1, Yancoal Australia Ltd, p 1.

others, like irrigation farmers.<sup>91</sup> Ms Miller contended that current arrangements put 'anyone other than a broker who has all day, every day, to watch the markets—it puts your ordinary irrigators at a great disadvantage.'<sup>92</sup> Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, concurred, saying 'the complexities of these markets are such that it requires a full-time, dedicated and skilled staff resource to adequately navigate them and take advantage of them. That's well beyond the resources of individual family farming businesses'.<sup>93</sup>

**2.24** Mr Scott Hamilton, co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, provided an example of how the market is not a 'level playing field':

To give just one example—there was an example that we spoke to about a farmer standing on top of a tractor, trying to get a signal to make a water trade. That person taking place in that market is competing with people that have much better IT systems, have much better knowledge about the market and what is going on. They also have the benefit of heft often and the ability to track and monitor up to 30 websites at a time. Farmers don't have the time or the capacity to be able to do that.<sup>94</sup>

**2.25** To address the difficulties associated with trading in water markets, several inquiry participants supported the establishment of a single digital trading platform:

- Yancoal Australia Ltd were in favour of 'establishing a platform where “buyers” and “sellers” can be matched in an “expression of interest” context'.<sup>95</sup>
- The NSW Minerals Council suggested 'creating some type of expression of interest page or providing the option of including contact details on the WAL [Water Access Licence] Register'.<sup>96</sup>
- Murray Irrigation supported 'an open and transparent market platform so that both the buyer and seller are aware of the current “live” market and have the ability to quickly understand market trends'.<sup>97</sup>
- Professor Stuart Kells argued 'we need a single platform or umbrella that brings the different exchanges together or a single source of information about pricing'.<sup>98</sup>

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<sup>91</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22; Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, p 28; Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 2.

<sup>92</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22.

<sup>93</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, p 28.

<sup>94</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 2.

<sup>95</sup> Submission 1, Yancoal Australia Ltd, p 1. See also Evidence, Mr Nick Cook, Manager, Property and Water, Yancoal Australia Ltd, 16 August 2022, p 35.

<sup>96</sup> Submission 17, NSW Minerals Council, p 2.

<sup>97</sup> Submission 8, Murray Irrigation, p 12.

<sup>98</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 3.

- Argyle Group argued that 'a centralised 'clearing house' or single common register to assess transfer applications may create efficiencies for each state government water agency / registry and enable swift information capture'.<sup>99</sup>

**2.26** The ACCC also canvassed this issue in its 2021 report into water trading markets in the Murray-Darling Basin. The ACCC recommended (recommendation 11) that Australian and Basin State governments should work collaboratively with trade service providers to establish and implement a digital platform (called the 'Backbone Platform') to act as a single repository for water market data and a single hub for trade approvals.<sup>100</sup> The recommended platform would comprise:

- a secure digital repository for water market data and related information
- digital connections between the Backbone Platform and market participants
- a single portal for lodging trade applications in the Southern Connected Basin, and
- a harmonised 'trading rules engine' for assessing trade applications in the Southern Connected Basin.<sup>101</sup>

**2.27** The ACCC considered that the Backbone Platform would make trade approvals timelier and more consistent but stopped short of recommending that it should operate as an exchange platform or replace the role of existing trade approval authorities.<sup>102</sup>

**2.28** The ACCC also recommended that Australian and Basin State governments should implement consistent mandatory service standards that apply to all trade approval authorities, including irrigation infrastructure operators (recommendation 8).<sup>103</sup> The ACCC commented that this 'will help ensure that trade approvals are undertaken in a consistent and timely manner'.<sup>104</sup>

## Conveyance water losses

**2.29** Another issue raised during this inquiry was that of conveyance water losses. These refer to losses in water volume that are accrued while water is delivered through a river system, due to evaporation and seepage.<sup>105</sup> These losses can be significant; Southern Riverina Irrigators estimated it takes three megalitres of water to convey one megalitre along the Murray River.<sup>106</sup>

<sup>99</sup> Submission 19, Argyle Group, p 11.

<sup>100</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 32.

<sup>101</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 32.

<sup>102</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 32.

<sup>103</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 30.

<sup>104</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 30.

<sup>105</sup> Submission 18, NSW Young Lawyers, pp 6-7.

<sup>106</sup> Submission 20, Southern Riverina Irrigators, p 4. See also Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 10.

**2.30** The committee heard that currently, conveyance losses are accounted for by reducing the volume of water allocated to general security entitlement holders.<sup>107</sup> NSW Young Lawyers explained that under this approach, 'the cost of conveyancing losses is socialised across all water entitlement holders'.<sup>108</sup> Mr Paul Pierotti, President, Griffith Business Chamber remarked on the impact of this to upstream water users:

One megalitre that gets bought in Griffith gets [brought] to, say, Riverland. It takes three megalitres to deliver, in conveyance. That three megalitres comes out of the allocation of general security in this region, and our allocations have gone from above 90 per cent average to below 30 per cent at start of season. Right now we're in flood and our general security allocation is 41 per cent.<sup>109</sup>

### **How conveyance water losses should be distributed**

**2.31** Several inquiry participants were critical of spreading the costs of conveyance water losses across general security entitlement holders. Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, argued it was unfair that 'the extra water required to run the system is picked up by those who get their water allocated last'.<sup>110</sup> NSW Young Lawyers also argued that this is inefficient, as 'individual water users face no incentive to avoid seeking water deliveries over longer distances or outside of peak periods'.<sup>111</sup>

**2.32** Some participants therefore called for a change in the way the costs of conveyance water losses are allocated. Murray Irrigation argued the impact of conveyance water losses 'should be explicitly assessed not assumed away'.<sup>112</sup> NSW Young Lawyers proposed conducting a cost-benefit analysis of altering the current scheme.<sup>113</sup> Griffith Business Chamber went further, arguing that transmission losses should be directly passed on to downstream buyers 'so the furthest downstream purchaser must buy 3 megs to get 1 delivered'.<sup>114</sup>

**2.33** Some participants pointed to the use of conveyance loss factors such as exchange rates or conversion factors between upstream and downstream areas to reflect the cost of conveyance water losses. These are provided for in Schedule 3 of the *Water Act 2007* (Cth), as Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, explained:

Again, if you look at schedule 3, the Basin water market and trading objectives—which is Federal legislation, but the New South Wales Government has obligations to deliver against those objectives—it clearly states that if we're going to be trading water from one zone to another, whether it's below choke or above choke, we need to put in exchange rates if this water is being delivered in a way that is inefficient, which is if it

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<sup>107</sup> Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 10; Submission 8, Murray Irrigation, p 2; Submission 20, Southern Riverina Irrigators, p 4.

<sup>108</sup> Submission 18, NSW Young Lawyers, p 7.

<sup>109</sup> Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 10.

<sup>110</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 9.

<sup>111</sup> Submission 18, NSW Young Lawyers, p 7.

<sup>112</sup> Submission 8, Murray Irrigation, p 2.

<sup>113</sup> Submission 18, NSW Young Lawyers, p 7.

<sup>114</sup> Submission 3, Griffith Business Chamber, p 2. See also Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 8.

goes out of bank or if there are deliverability concerns or supply constraints or it breaches channel capacity to get delivered from the dams to where it's used.<sup>115</sup>

- 2.34** Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, asserted that despite this legislation, conversion factors are not currently being used, but they should:

So if I have a megalitre of water up the top of the system and I buy a megalitre of water down the system, the conversion rate shouldn't be one to one because there's a delivery loss in evaporation and seepage. But as it stands, currently, we ignore those parts of the legislation and we convert one to one ...<sup>116</sup>

- 2.35** Other stakeholders were in agreement; Mr Hare argued 'I think we've got to implement some sort of conversion factor, going forward'<sup>117</sup> and Mr Ron McCalman, Chief Executive Officer, Murray Irrigation contended 'if there are additional conveyance losses through the trade of this water then, in addition to current rules, exchange rates should be used between different zones of the river'.<sup>118</sup>

- 2.36** In its 2021 report into water trading markets in the Murray-Darling Basin, the ACCC recommended that 'Basin States and the MDBA [Murray-Darling Basin Authority] investigate the implementation of loss factors which would apply to traded water in the Southern Connected Basin, so as to attribute increased conveyance losses associated with water trades directly to those incurring them'.<sup>119</sup> In not directly recommending that loss factors be implemented, the ACCC acknowledged the challenges this would involve, such as needing to accurately estimate conveyance losses, likely market disruption, and the need to make decisions about whether existing rights holders or just those trading water downstream should be subject to loss factors.<sup>120</sup>

### 'Parking' of carryover water

- 2.37** Another key issue raising during this inquiry related to carryover water. As explained in chapter 1, holders of general security entitlements can carry over their water allocations from one year to the next. In their submission, Speak Up Campaign Inc explained the purpose of carryover:

The role of carryover was very clear from the start, it was a tool to allow food and fibre producers to manage risks, allowing them to plan for the following season. For example ... cereal producers planting in autumn [who] intend to do a spring watering will adjust fertiliser application and sowing rates knowing they have water carried over for spring.

<sup>115</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 17.

<sup>116</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 9.

<sup>117</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, pp 18-19.

<sup>118</sup> Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 16 August 2022, p 16.

<sup>119</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 540.

<sup>120</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 540.

For rice producers, carryover is an essential planning tool, crops are planted in late spring and rarely have a high enough allocation at planting to manage their needs.<sup>121</sup>

**2.38** Stakeholders presented the committee with evidence of an increasing trend of irrigation farmers being offered payments to 'park' carryover water. Speak Up Campaign Inc reported that they are 'regularly contacted by concerned landholders who are being approached to "park" water on their accounts to carryover water for those without entitlements to carryover water'.<sup>122</sup> Similarly, Ms Joy Boucher, Ms Narelle Pratt and Mr Jamie Park commented that 'members who are in the know and with the financial ability, can 'park' their carry over till the next season, for a fee and then return to their landholding at the start of the season and have lost nothing'.<sup>123</sup>

**2.39** Argyle Group, a private investment fund, acknowledged that occasionally when water allocation prices are inexpensive, 'we may buy water to carry over on our own accounts to the next season'.<sup>124</sup> However, it reported that it will only do this 'where we have forward sold a corresponding water allocation volume for a future delivery in the subsequent Water Year'.<sup>125</sup>

**2.40** Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc articulated his concern that 'parking' of carryover water leads to higher water prices:

But, under the current system, high-security water holders can get their entitlement, they can actually take that water, and they can pay someone and park it on a general security licence. So that impacts water as it's stored in the dam, and it also impacts how it appears to bureaucrats and MDBA, because they go, "Oh, there's quite a lot of water in the dam. People don't seem to be using it, so, you know, I don't know what you are complaining about." But they might not be food and fibre producers. They might be the bloke on the other side of the country, sitting on his laptop—or the other side of the world—going, "Hang on, if I hold my water—" So this year water is, in our region, down to \$45 a megalitre, temporary. But if he holds it to a dry time, well, he might get \$300 a megalitre or \$700 a megalitre.<sup>126</sup>

**2.41** Griffith Business Chamber argued that there should be a zero-trade carryover rule, so that 'a farmer carrying over could use it or lose it but can not any longer trade it'.<sup>127</sup> They argued this would 'prevent the market being further gamed' and mean that 'ridiculous "parking" rorts are eliminated'.<sup>128</sup>

**2.42** When asked about carryover water, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, reported that the ACCC 'looked in very close detail' at this issue.<sup>129</sup> He

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<sup>121</sup> Submission 7, Speak Up Campaign Inc, p 4.

<sup>122</sup> Submission 7, Speak Up Campaign Inc, p 4. See also Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 13.

<sup>123</sup> Submission 15, Joy Boucher, Narelle Pratt, Jamie Park, p 4.

<sup>124</sup> Submission 19, Argyle Group, p 5.

<sup>125</sup> Submission 19, Argyle Group, p 5.

<sup>126</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10.

<sup>127</sup> Submission 3, Griffith Business Chamber, p 2. See also Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 8.

<sup>128</sup> Submission 3, Griffith Business Chamber, p 2.

<sup>129</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 31.



expressed a view that 'there is an argument that better coordination of the rules between States, which would effectively remove or reduce some of those incentives, may be needed to deal with the adverse consequences that can sometimes be associated with those activities'.<sup>130</sup> However, he also acknowledged that carryover also has an important purpose for irrigation farmers.<sup>131</sup>

## Committee comment

- 2.43** It is evident to the committee that water trading markets in New South Wales are not operating effectively. This inquiry shed light on several concerning issues in water markets, including volatility in water prices, unscrupulous practices by private and institutional investors, barriers to participation, and issues around conveyance water losses and carryover water.
- 2.44** We are concerned with the volatility in water prices. The fact that some irrigation farmers find it more cost effective to abandon their crops and instead sell their water allocations demonstrates that the water market is failing the people who produce our state's food and fibre.
- 2.45** There are clearly a range of complex factors that contribute to volatility in the water trading market. However, the role of private and institutional investors in destabilising and manipulating the market cannot be understated. The research by Professor Stuart Kells and Mr Scott Hamilton demonstrating widespread unscrupulous practices by investors, who reap significant profits at the expense of farmers and local communities, is compelling and alarming.

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### Finding 1

The introduction of private and institutional investors in water trading markets has led to market destabilisation and manipulation at the expense of irrigation farmers, regional communities and the natural environment.

- 2.46** Despite water trading occurring in New South Wales for almost four decades, it is evident that the market is difficult to access and use. It is concerning that there is no single platform in which to trade water in this state, and that trading is plagued by delays, information asymmetries, and market fragmentation. This is particularly concerning because it benefits those who have the time and resources to navigate this system, such as private and institutional investors, at the expense of everyday farmers.
- 2.47** There was widespread support among stakeholders for the establishment of a single digital platform for water trading. Hence to address key stakeholder concerns about the fragmentation of, and difficulties in accessing, existing trading platforms, we recommend that a single digital water trading and exchange platform be established.
- 2.48** In response to stakeholder concerns about frequent delays in trade approvals, we also recommend the New South Wales Government consider implementing consistent mandatory service standards that apply to all trade approval authorities, including irrigation infrastructure operators. This is similar to a recommendation reached by the ACCC (recommendation 8,

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<sup>130</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 31.

<sup>131</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 31.

discussed in this chapter). We also recommend that the NSW government collaborate with the Commonwealth and other Basin States to ensure the single trading platform operates nationally, which is preferable to separate state based platforms.

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### **Recommendation 1**

That the New South Wales Government establish a digital platform as a single repository for water market data and a single hub for trade approval and exchange, comprising:

- a secure digital repository for water market data and related information
- digital connections between the platform and water market participants
- a single portal for lodging trade applications in the Southern Connected Basin
- a harmonised ‘trading rules engine’ for assessing trade application against trading rules in the Southern Connected Basin, and
- a single exchange platform for water market trades.

### **Recommendation 2**

That the New South Wales Government implement consistent mandatory service standards that apply to all trade approval authorities, including irrigation infrastructure operators.

### **Recommendation 3**

That the NSW government collaborate with the Commonwealth Government and Basin States to ensure the single trading platform operates nationally, which is preferable to separate state-based platforms.

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**2.49** Another issue in which the committee received troubling evidence was that of conveyance water losses. It strikes us as both unfair and inefficient for conveyance water losses to be socialised across water users in upstream communities in New South Wales, when one of the significant causes of losses is the increase in demand for water among downstream water users in Victoria and South Australia.

**2.50** The use of conversion factors or exchange rates is a cogent and effective way in which to address this issue. We recommend that the New South Wales Government advocate for implementation of these solutions at the federal level.

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### **Recommendation 4**

That the New South Wales Government advocate for the introduction of conveyance water loss factors in Murray-Darling water markets.

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**2.51** The committee was also concerned by evidence of current practices relating to carryover water. We understand and acknowledge the important function that this plays in allowing irrigation farmers to plan their water usage according to seasonal requirements. However, it is apparent that private and institutional investors are exploiting carryover water rules to their advantage, making profits off unused water while driving up prices for the irrigation farmers who need it.

**2.52** This is, simply, further evidence of the ways in which private and institutional investors are gaming water trading markets to make profits at the expense of our state's food and fibre

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producers. We recommend that the New South Wales Government investigate this issue and develop ways to prevent this from happening, while still providing for those who need to carryover water to be able to do so.

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**Recommendation 5**

That the New South Wales Government investigate reports of 'parking' of carryover water and develop solutions that restrict this from occurring except where water users genuinely require it.

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## Chapter 3 Governance, regulation, and transparency of water trading markets

This chapter considers the governance, regulation, and transparency of water trading markets. The first section considers the current governance and regulation framework, and how deficiencies in this framework can be improved. It focuses on the lack of a single overarching regulatory body and the lack of regulation of market participants and market behaviour. The chapter then considers transparency in water trading markets, including proposals for a water market register, and concludes with a review of the accuracy and transmission of water market information.

### Governance and regulation of water trading markets

**3.1** Several participants to the inquiry argued that the current governance and regulatory framework for water trading in New South Wales is inadequate.<sup>132</sup> Key problems identified by stakeholders included:

- confusion over the roles and responsibilities of the various regulatory agencies<sup>133</sup>
- the lack of, or inconsistency in the application of, rules governing the conduct of market participants<sup>134</sup>
- the lack of rules prohibiting certain trading behaviours,<sup>135</sup> and
- differences in rules and processes across the Basin States.<sup>136</sup>

**3.2** Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission told the committee that deficiencies in the governance and regulation of water markets can inhibit the confidence of market participants:

A serious additional consequence of these problems is that many water users reported they do not trust the markets and the key institutions in them to be fair or to work to the benefit of water users, in particular irrigation farmers. These problems are impeding informed and confident trading and investment to support efficient agricultural production.<sup>137</sup>

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<sup>132</sup> Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 10; Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26; Submission 18, NSW Young Lawyers, p 4.

<sup>133</sup> Submission 17, NSW Minerals Council, p 2.

<sup>134</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26; Submission 18, NSW Young Lawyers, p 4.

<sup>135</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

<sup>136</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26; Submission 18, NSW Young Lawyers, p 5; Submission 19, Argyle Group, p 7; Submission 22, Scott Hamilton and Stuart Kells, p 5.

<sup>137</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

### **The lack of a single overarching regulatory body**

- 3.3** Some stakeholders commented on a perceived lack of clarity around the roles and responsibilities of the various regulatory bodies that oversee water trading. The committee heard this could be a result of frequent changes to each body's mandate; for example, the NSW Minerals Council remarked that 'the water agencies have suffered from virtually continual structural change over the last decade'.<sup>138</sup> Mr Scott Hamilton and Professor Stuart Kells described the result of this as 'regulatory fragmentation and overlapping of roles of different governing bodies'.<sup>139</sup>
- 3.4** Various outcomes were posited to result from this. The Minerals Council argued that the 'constant change' to water agencies has 'prevented any ability to deliver substantive improvements to water licensing processes as the agencies are always coming to terms with new structures', and has also 'contributed to ongoing difficulties and delays in having water policy issues resolved'.<sup>140</sup> NSW Young Lawyers contended that the complexity in the regulatory environment has 'obscured lines of responsibility', making the market 'susceptible to mediated corruption by decision makers and rent-seeking behaviour and regulatory capture by irrigation companies and industry'.<sup>141</sup>
- 3.5** In its 2021 report into water trading markets in the Murray-Darling Basin, the Australian Competition and Consumer Commission (ACCC) recommended establishing a single Water Markets Agency with the power and resources to oversee the market, enforce market rules and provide advice to government on future market development (recommendation 26).<sup>142</sup> The key functions of the proposed Water Markets Agency would include market regulation and surveillance, provision of market information, market evaluation and reporting, and advisory and advocacy to Australian and Basin State governments.<sup>143</sup>
- 3.6** In explaining this recommendation, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission told the committee:

I think it's grown to the stage now where it needs a much more dedicated focus to manage that market, just the same as the Australian Stock Exchange manages the share market in Australia. That was the basis of our recommendation—to really bring some focused attention to and focused management of those markets and the way they operate to improve the confidence of market participants, including, in particular, the smaller scale farmers.<sup>144</sup>

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<sup>138</sup> Submission 17, NSW Minerals Council, p 2.

<sup>139</sup> Submission 22, Scott Hamilton and Stuart Kells, p 5.

<sup>140</sup> Submission 17, NSW Minerals Council, p 2.

<sup>141</sup> Submission 18, NSW Young Lawyers, pp 5-6.

<sup>142</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, pp 26-27. See also Submission 18, NSW Young Lawyers, p 6; Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 40.

<sup>143</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 40.

<sup>144</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 31.

- 3.7 However, not all inquiry participants were of the view that a market regulator is required. Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council argued that creating a specific water markets agency would just add 'another layer of bureaucracy' and the cost would be borne by irrigators, thereby increasing the costs of engaging in the water market.<sup>145</sup>
- 3.8 Argyle Group argued that creating a government regulator of water markets 'represents a considerable over-reach relative to other agricultural input and produce markets', as water is 'not a financial product'.<sup>146</sup> On the other hand, however, Professor Stuart Kells, co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, contended that the water market 'has become a financial market'.<sup>147</sup> Mr Scott Hamilton, his co-author, added that 'it's now a market which has literally hundreds of millions of dollars and billions of dollars involved, so we need to regulate it like we would other financial commodity markets'.<sup>148</sup> Professor Kells expressed his preference that the water trading market be regulated by a financial markets regulator like ASIC, but noted that ASIC 'is not interested' in doing so.<sup>149</sup>

### **The lack of regulation of market participants and market behaviour**

- 3.9 Another key issue raised by participants during this inquiry was a perceived lack of regulation of market participants and of market conduct.

#### ***Concerns around regulation of market participants***

- 3.10 In relation to market participants, stakeholder concerns centred around water brokers and irrigation infrastructure operators.
- 3.11 The committee heard that brokers in water markets are not subject to the same types of regulations as, for example, brokers in financial markets.<sup>150</sup> As a result, stakeholders gave examples of brokers trading their own assets, or operating on behalf of both the buyer and seller in a trade, without this being disclosed.<sup>151</sup> Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, subsequently remarked:

That sort of clarity of responsibility and framework for good practice is not there in the water market as it is in the financial markets. I don't think anyone would say the financial

<sup>145</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 22.

<sup>146</sup> Submission 19, Argyle Group, p 13.

<sup>147</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 5.

<sup>148</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 4.

<sup>149</sup> Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 5.

<sup>150</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32; Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 3.

<sup>151</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32; Evidence, Professor Stuart Kells, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 3.

market's perfect, but I think it's a lot more transparent and it's a lot clearer who's doing what for whom in that market.<sup>152</sup>

**3.12** Mr Nick Cook, Manager, Property and Water, Yancoal Australia Ltd also remarked on the fees charged by water brokers, commenting 'I can't see where it's regulated, like in a banking context, for example, or any other trading platform. It doesn't seem to have any regulation around it or oversight'.<sup>153</sup>

**3.13** In its 2021 report, the ACCC recommended there should be an enforceable mandatory code of practice for water market intermediaries (recommendation 2).<sup>154</sup> Mr Keogh remarked that unusually, the industry had supported this recommendation.<sup>155</sup> Mr Anthony McCloskey, a water broker, agreed that water brokers would welcome further regulation:

We want regulation; we want this thing to be something that people are confident in using, are able to use confidently and know that they are protected when they do use it. Regulation would provide water brokers with similar things to real estate agents, where you're able to develop trust accounts for managing clients' water. At the moment, because we don't have the regulation, we're not able to do that.<sup>156</sup>

**3.14** Conversely, Argyle Group argued that there is no mandatory licensing or regulation of intermediaries in other agricultural markets, as 'those markets are sufficiently developed to self-regulate' and that 'transacting in water should not be viewed differently'.<sup>157</sup> They also added that in their view, government regulation is costly and adds inefficiency.<sup>158</sup>

**3.13** Some inquiry participants also raised concerns about irrigation infrastructure operators. Ms Joy Boucher, Ms Narelle Pratt, and Mr Jamie Park called for all irrigation infrastructure operators to be investigated and audited, claiming many had engaged in 'unfair trading, inequity, abuse of power' and that irrigators have been 'denied fair competition and discriminated against'.<sup>159</sup> Alternatively, the authors suggested that irrigation infrastructure operators cease to exist altogether, 'due to their conduct and lack of accountability over the years'.<sup>160</sup>

**3.14** Mr Stuart Heffer and Ms Katrina Heffer were critical of Murrumbidgee Irrigation, claiming it has lost focus on delivering water and maintaining irrigation systems, as it has shifted towards

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<sup>152</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32.

<sup>153</sup> Evidence, Mr Nick Cook, Manager, Property and Water, Yancoal Australia Ltd, 16 August 2022, p 35.

<sup>154</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 27. See also Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32.

<sup>155</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32.

<sup>156</sup> Evidence, Mr Anthony McCloskey, 16 August 2022, p 41.

<sup>157</sup> Submission 19, Argyle Group, p 14.

<sup>158</sup> Submission 19, Argyle Group, p 14.

<sup>159</sup> Submission 15, Joy Boucher, Narelle Pratt, Jamie Park, p 4.

<sup>160</sup> Submission 15, Joy Boucher, Narelle Pratt, Jamie Park, p 4.



water trading and corporate shareholders.<sup>161</sup> They argued there should be an ombudsman with jurisdiction over irrigation infrastructure operators.<sup>162</sup>

**3.15** The committee was also made aware of historical governance issues relating to Murray Irrigation. Their Chief Executive Officer, Mr Ron McCalman, advised the committee that the company had engaged an external consultant twice, in 2017 and 2022, to conduct reviews of the company's governance arrangements.<sup>163</sup> Mr McCalman said that the recommendations from the 2022 report included implementing new training on the Director's Handbook, updating the code of conduct relating to compliance with codes and policies, and updating sanctions procedures.<sup>164</sup> He further advised that since 2017, Murray Irrigation had:

- appointed an external firm to undertake their internal audits
- established or updated key documents including the Company Constitution, Board Charter, Code of Conduct and Director's Handbook
- updated their conflicts of interest policies and procedures
- engaged the Australian Institute of Company Directors to run training for directors, and
- introduced a secure Board portal to upload and securely distribute Board and committee packs and papers.<sup>165</sup>

### *Concerns around regulation of market conduct*

**3.16** In relation to market conduct, the committee was told that water trading markets lack rules in relation to conduct such as insider trading and market manipulation.<sup>166</sup> Mr Keogh said 'trading behaviours that can undermine the integrity of markets such as market manipulation are not prohibited, insider trading prohibitions are insufficient and information gaps make these types of detrimental conduct difficult to detect'.<sup>167</sup> Mr Scott Hamilton and Professor Stuart Kells remarked that there is a need for greater compliance and enforcement of market behaviours:

There are few controls in Australia on water exchanges or water brokers. Behaviours that are prohibited in other markets are widespread in water trading. Greater transparency, compliance and enforcement is needed.<sup>168</sup>

**3.17** To improve regulation of market conduct, in its 2021 report, the ACCC made several recommendations, including:

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<sup>161</sup> Submission 6, Stuart and Katrina Heffer, p 1.

<sup>162</sup> Submission 6, Stuart and Katrina Heffer, p 4.

<sup>163</sup> Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 21 November 2022, pp 2-3.

<sup>164</sup> Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 21 November 2022, p 3.

<sup>165</sup> Evidence, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 21 November 2022, pp 3, 8; Answers to questions on notice, Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, 15 September 2022, pp 1-3.

<sup>166</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 32.

<sup>167</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

<sup>168</sup> Submission 22, Scott Hamilton and Stuart Kells, p 9.

- new centralised Basin-wide legislation should be introduced to protect the integrity of Basin water markets by regulating conduct of market participants, to be enforced by the proposed Water Markets Agency (recommendation 1)<sup>169</sup>
- existing price reporting obligations and insider trading prohibitions should be removed from the Basin Plan Water Trading Rules, should be broadened and strengthened, and then incorporated into the new water market conduct and integrity legislation (recommendation 3),<sup>170</sup> and
- traders should be required to include a unique common identifier on trade forms (recommendation 4).<sup>171</sup>

### Transparency in water trading markets

**3.18** A key concern for many participants in this inquiry was a perceived lack of transparency in water trading markets. The committee heard that:

- information about water ownership is not available, difficult to access, or inaccurate<sup>172</sup>
- information about water trades is not available, difficult to access, or inaccurate,<sup>173</sup> and
- information about applications for developments or permits is not available.<sup>174</sup>

**3.19** To address these concerns, several inquiry participants supported the creation of a publicly accessible water register.<sup>175</sup> Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators said this would allow the public to 'look at whether this water is being accrued or owned by foreign interests that don't have the best interests of New South Wales regional communities at heart'.<sup>176</sup> Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc also suggested it could make

<sup>169</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 26.

<sup>170</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 28.

<sup>171</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 28.

<sup>172</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 17; Evidence, Mr Nick Cook, Manager, Property and Water, Yancoal Australia Ltd, 16 August 2022, p 36; Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 4; Submission 7, Speak Up Campaign Inc, p 3; Submission 9, Environmental Defenders Office, p 10; Submission 17, NSW Minerals Council, p 2.

<sup>173</sup> Submission 7, Speak Up Campaign Inc, p 3; Submission 8, Murray Irrigation, pp 3, 13; Submission 9, Environmental Defenders Office, p 10.

<sup>174</sup> Submission 9, Environmental Defenders Office, p 10.

<sup>175</sup> Evidence, Ms Joy Boucher, Retired, 16 August 2022, p 6; Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, pp 8, 10; Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 14; Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 16; Submission 15, Joy Boucher, Narelle Pratt, Jamie Park, p 2; Submission 20, Southern Riverina Irrigators, p 2; Submission 21, NSW Farmers Association, p 2.

<sup>176</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 16.

the market more transparent and could prevent unfair market practices such as insider trading.<sup>177</sup> Mr Polkinghorne compared the lack of transparency in water markets to other industries:

I think we really need an open and transparent water register where people can see who owns what water. If I buy real estate, my wife can get on the computer in a couple of seconds and tell me who owns it, where they live, all the rest of it. We have so many other industries that we have to be transparent in and yet water—it's almost \$2 billion in annual water trade—is completely unregulated.<sup>178</sup>

**3.20** Yancoal Australia Ltd added that a water register may also carry practical benefits, as it would 'allow participants to identify potential options to trade rather than operating in constant competition'.<sup>179</sup>

**3.21** Some stakeholders noted that there are existing requirements for a water register under the National Water Initiative and the *Water Act 2007* (Cth).<sup>180</sup> However, it was contended that creation of a register has been delayed due to reluctance or inaction by both the Australian and New South Wales Governments.<sup>181</sup> In their submission, Southern Riverina Irrigators argued:

Despite the commitment to the creation of a publicly accessible and reliable Water Register almost two decades ago, NSW has made very little headway into progressing this. Companies such as H2OX have demonstrated that it is possible to create such an open and transparent register, however, they are inhibited by the lack of cooperation from NSW to display this information. This Inquiry must recommend that NSW honour its commitment to the NWI and establish a clear and transparent register.<sup>182</sup>

**3.22** The Environmental Defenders Office reported that 'other Australian jurisdictions already publish ownership details for water access licences for free, including in Queensland'.<sup>183</sup> Some inquiry participants cited Victoria's publicly accessible water register as a model that New South Wales could adopt.<sup>184</sup>

**3.23** There was some disagreement among inquiry participants as to what information should be included on a public water register. Several, including Speak Up Campaign Inc, the

<sup>177</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10.

<sup>178</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 14.

<sup>179</sup> Submission 1, Yancoal Australia Ltd, p 1.

<sup>180</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10; Evidence, Mr Paul Pierotti, President, Griffith Business Chamber, 16 August 2022, p 10; Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 16; Submission 20, Southern Riverina Irrigators, p 2.

<sup>181</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10; Submission 20, Southern Riverina Irrigators, p 2.

<sup>182</sup> Submission 20, Southern Riverina Irrigators, p 2.

<sup>183</sup> Submission 9, Environmental Defenders Office, p 10.

<sup>184</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 14; Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 4; Submission 22, Scott Hamilton and Stuart Kells, p 9.

Environmental Defenders Office, and NSW Farmers Association, argued that the names of all water owners and the details of their entitlements should be made publicly available.<sup>185</sup>

**3.24** However, Yancoal Australia Ltd and the NSW Irrigators' Council raised concerns that publishing certain information would breach privacy and commercial confidentiality. Yancoal Australia Ltd argued that information such as individual account meter readings, carry over balances and real time account balances are 'commercial information and should be kept confidential'.<sup>186</sup> Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council argued that publishing individuals' water account balances and allocation trading activity 'is akin to making a person's bank account details public to any and all'.<sup>187</sup>

**3.25** In response to these concerns, the Environmental Defenders Office argued that the public interest in open access to information outweighs privacy concerns:

In NSW, development applications, development consents and pollution licences are also publicly accessible. That is because the law recognises the public interest in open access to this information. It is thus logically inconsistent to fail to extend the same level of access to the Water Register, particularly given the importance of managing water resources in a sustainable manner.<sup>188</sup>

## Accuracy and transmission of market information

**3.26** Several participants to this inquiry raised concerns about the way that information about water trading markets is collected, disseminated, and used. The committee heard that authorities often use out-dated assumptions and data to underpin policy or regulatory decisions, and that there are deficiencies in the way information is communicated to market participants. We consider these issues in further detail below.

### The use of incorrect information and assumptions in policy and regulatory decisions

**3.27** The committee received evidence about several areas in which it was argued that policy or regulatory decisions in water trading markets are made using out-dated assumptions or data. These included:

- government agencies using out-dated assumptions about minimum inflows to determine water availability<sup>189</sup>
- government agencies using overly conservative settings in water sharing plans,<sup>190</sup> and

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<sup>185</sup> Submission 7, Speak Up Campaign Inc, p 5; Submission 9, Environmental Defenders Office, p 10; Submission 15, Joy Boucher, Narelle Pratt, Jamie Park, pp 2-3; Submission 21, NSW Farmers Association, p 2.

<sup>186</sup> Submission 1, Yancoal Australia Ltd, p 2.

<sup>187</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, p 17.

<sup>188</sup> Submission 9, Environmental Defenders Office, p 11.

<sup>189</sup> Submission 18, NSW Young Lawyers, p 7.

<sup>190</sup> Submission 17, NSW Minerals Council, p 3.

- irrigation infrastructure operators using incorrect water meter readings.<sup>191</sup>

**3.28** Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission argued that changes to structural and climatic factors underpinning water markets mean there is a need for key assumptions to be reassessed:

... changing conditions such as reduced inflows, shifts in water use, declining channel capacity and increasingly binding trade restrictions are challenging key assumptions that underpin current trade arrangements and the design of tradeable water rights markets. These assumptions need to be reassessed so that water markets operate more efficiently, in close connection with the river system's physical characteristics, into the future.<sup>192</sup>

**3.29** Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council told the committee that the Council 'agree[s] with the ACCC that the rules, policies and arrangements that enable and support trade do not always adequately reflect scarce storage and delivery capacity'.<sup>193</sup>

**3.30** In its 2021 report, the ACCC made several recommendations to improve the accuracy of data and assumptions that underpin water trading markets, including:

- Australian and Basin State governments should establish mandatory Water Market Data Standards governing the collection, storage, transmission and publication of water market data and related information by trade service providers (recommendation 7)<sup>194</sup>
- Australian and Basin State governments should implement lifetime traceability for water allocations (recommendation 14)<sup>195</sup>
- Basin States should increase the transparency of inputs, assumptions and administrative decision making involved in determining allocation announcements (recommendation 15)<sup>196</sup>
- New South Wales and South Australia should update carryover rules and policies to appropriately account for evaporation losses associated with storing water in a dam beyond the year in which that water was allocated (recommendation 16)<sup>197</sup>

<sup>191</sup> Submission 6, Stuart and Katrina Heffer, p 3.

<sup>192</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

<sup>193</sup> Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 16 August 2022, pp 17-18. See also Submission 22, Scott Hamilton and Stuart Kells, p 5.

<sup>194</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 30.

<sup>195</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 33.

<sup>196</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 34.

<sup>197</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 34.

- Australian and Basin State governments and the Murray Darling Basin Authority should strengthen existing commitments to better metering and measurement of water take across the Basin (recommendation 17),<sup>198</sup> and
- Australian and Basin State governments should improve modelling of water use, delivery, and trade across the Basin, including through improving linkages between models (recommendation 18).<sup>199</sup>

### Publication of market information

**3.31** Another concern heard by the committee was that information about water trading markets, such as trading rules or market conditions, are not well communicated to participants. We refer to this issue in the previous chapter as one of the factors contributing to difficulties in participating in water trading markets. The committee heard:

- information about changes to water trading rules are not well publicised<sup>200</sup>
- information about market or industry conditions are not provided to market participants,<sup>201</sup> and
- there are frequent delays in decisions being made and communicated to market participants.<sup>202</sup>

**3.32** Mr Scott Hamilton and Professor Stuart Kells argued that these 'information failures' favour better resourced and professional traders at the expense of other market participants.<sup>203</sup> They described it as an 'information arms race in Australian water' in which 'everyday farmers lost'.<sup>204</sup> The Environmental Defenders Office added that making more information available would assist to improve governance of, and confidence in, water trading markets:

Access to information and good water governance go hand-in-hand. Indeed, a great deal of mistrust in governments and between stakeholders could be avoided if more information was made publicly available (and in a readily accessible format) ... Unfortunately, EDO and our clients remain concerned that public access to certain water-related information is lacking or non-existent in NSW.<sup>205</sup>

**3.33** Deficiencies in the provision of market information, and the effect of this in creating inequalities in the market, was a key finding from the ACCC's inquiry into Murray-Darling Basin water

<sup>198</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 35.

<sup>199</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 35.

<sup>200</sup> Submission 8, Murray Irrigation, p 3.

<sup>201</sup> Submission 14, Australian Competition & Consumer Commission, p 3; Submission 22, Scott Hamilton and Stuart Kells, pp 4-5.

<sup>202</sup> Submission 17, NSW Minerals Council, p 2.

<sup>203</sup> Submission 22, Scott Hamilton and Stuart Kells, p 5.

<sup>204</sup> Submission 22, Scott Hamilton and Stuart Kells, p 4.

<sup>205</sup> Submission 9, Environmental Defenders Office, pp 9-10.

markets.<sup>206</sup> In its 2021 report, the ACCC made several recommendations to improve transmission of water market information, including:

- Australian and Basin State governments should work collaboratively to improve existing information portal initiatives to improve information availability and prepare to transition towards the proposed digital infrastructure for water markets (recommendation 6)<sup>207</sup>
- Australian and Basin State governments should implement rules and processes for water announcements, which apply, at a minimum, to all governments or government agencies, and all trade service providers (recommendation 9)<sup>208</sup>
- Australian and Basin State governments should work collaboratively with trade service providers to establish and implement a mandatory Digital Messaging Protocol for water trade and water market data (recommendation 10),<sup>209</sup> and
- Australian and Basin State governments should build on centralised information platform initiatives already in place to improve the transparency of water market information, and that industry and government should work collaboratively to implement a public-facing Water Market Information Platform (recommendation 12).<sup>210</sup>

## Committee comment

**3.34** This inquiry has uncovered serious deficiencies in the governance, regulation, and transparency of New South Wales water markets.

**3.35** There are a number of issues with the way water markets are governed and regulated. These include the lack of a single overarching regulatory body and a lack of regulation of market participants and market behaviour. We believe that it is simply not good enough that a sophisticated market worth billions of dollars lacks rigorous government oversight. This is creating an environment where unethical market practices are allowed to flourish, usually to the detriment of irrigation farmers.

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### Finding 2

The existing governance and regulatory framework for water trading in New South Wales is inadequate and facilitates unfair market practices.

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**3.36** We note that, in its inquiry into the Murray-Darling Basin water markets, the ACCC identified several of the same issues around governance and regulation. Its recommendations to address

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<sup>206</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 28.

<sup>207</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 29.

<sup>208</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 31.

<sup>209</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 31.

<sup>210</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin water markets inquiry: Final report* (February 2021) p 33.

these issues (recommendations 1 to 4 and 26, discussed in this chapter) are, in the view of the committee, practical and cogent solutions. We therefore recommend that the New South Wales work with other governments to implement them.

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### **Recommendation 6**

That the New South Wales Government advocate for:

- the establishment of an independent Basin-wide Water Markets Agency to consolidate and carry out new and existing trade-related roles and functions
  - implementing centralised, Basin-wide water market conduct and integrity legislation
  - incorporating key obligations as part of an enforceable mandatory code for water market intermediaries
  - removing existing price reporting obligations and insider trading prohibitions from the Basin Plan Water Trading Rules, broadening and strengthening them, and incorporating them into the new water market conduct and integrity legislation, and
  - requiring traders to include a unique common identifier on trade forms.
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- 3.37** The committee is seriously concerned about the lack of transparency in New South Wales water markets. Information about water ownership and trades is typically not available, difficult to access, or inaccurate. This prevents the public from being able to scrutinise water ownership in this state. We therefore recommend the creation of a public register of water ownership.
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### **Recommendation 7**

That the New South Wales Government establish a public water market register which contains accurate and up-to-date information on water entitlement ownership and trades.

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- 3.38** Finally, the committee is concerned about the poor quality and lack of information provided to participants in New South Wales water markets. This is another example of how the market disadvantages irrigation farmers. There is clearly a pressing need for the way information about New South Wales water markets is collected, used, and disseminated to be improved.
- 3.39** This is another issue in which the committee's findings are similar to those reached by the ACCC. We therefore recommend that the New South Wales government implement the ACCC's recommendations relating to improvements to data collection and modelling (recommendations 7 and 14 to 18, discussed in this chapter), and transmission of water market information (recommendations 6, 9, 10, and 12, discussed in this chapter).
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**Recommendation 8**

That the New South Wales Government work collaboratively with the Australian and other Basin State governments to:

- improve existing information portal initiatives to improve information availability and prepare to transition towards new digital infrastructure for water markets
  - establish mandatory Water Market Data Standards governing the collection, storage, transmission and publication of water market data and related information by trade service providers
  - implement rules and processes for water announcements, which apply, at a minimum, to all governments or government agencies, and all trade service providers
  - establish and implement a mandatory Digital Messaging Protocol for water trade and water market data
  - improve the transparency of water market information, and implement a public-facing Water Market Information Platform
  - implement lifetime traceability for water allocations
  - increase the transparency of inputs, assumptions and administrative decision making involved in determining allocation announcements
  - update carryover rules and policies to appropriately account for evaporation losses associated with storing water in a dam beyond the year in which that water was allocated
  - strengthen existing commitments to better metering and measurement of water take across the Basin, and
  - improve modelling of water use, delivery, and trade across the Basin, including through improving linkages between models.
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## Chapter 4      **The effects of water trading on the economy, communities, and the environment**

This chapter considers the effects of water trading on the economy, communities, and the environment. In the first section, we consider whether water trading has achieved its purpose of efficiently allocating water resources in the Murray Darling Basin. The second part looks at the effects of water trading on local communities, including on First Nations people. Finally, the effects of water trading on the environment, including on the Murray River and its local ecology, are discussed.

### **The effects of water trading on the economy**

**4.1**      As discussed in chapter 1, one of the primary purposes of water trading is to efficiently allocate water resources. One of the ways this is intended to occur is by facilitating the transfer of water resources from low-productivity (or low-value) to high-productivity (or high-value) crops.<sup>211</sup>

**4.2**      Many inquiry participants observed that this transfer of water use had occurred in the Southern Murray-Darling Basin. The committee was pointed to the growth in almond and cotton plantations as examples of higher-value industries that have prospered in tandem with the growth in water trading.<sup>212</sup> For example, Mr Scott Hamilton and Professor Stuart Kells reported that the almond industry has grown by 1500 per cent since 2000.<sup>213</sup>

**4.3**      Some participants argued this is evidence that water trading has met its purpose of efficiently allocating water resources.<sup>214</sup> Mr Greg Adamson, a community member in the Griffith area, told the committee that water trading has allowed profitable crops to flourish:

In my view, the fundamental objectives of the water trading were successful and water trading has achieved the commercial objectives desired 30 or more years ago. In fact, most people within this region would have to agree that more profitable commodities are being produced as a result. We have witnessed water trading allow crops like cotton and grapes to flourish.<sup>215</sup>

**4.4**      Mr Chris Hardy, an irrigation farmer in the Riverina, said that many irrigation farmers are pleased with the growth of high-value crops, as they can profit from selling water to the growers of these crops:

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<sup>211</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2; Submission 8, Murray Irrigation, p 2; Submission 20, Southern Riverina Irrigators, p 3.

<sup>212</sup> Evidence, Mr Jamie Park, Farmer, 16 August 2022, p 6; Submission 20, Southern Riverina Irrigators, p 3; Submission 22, Scott Hamilton and Stuart Kells, p 8.

<sup>213</sup> Submission 22, Scott Hamilton and Stuart Kells, p 8.

<sup>214</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2; Evidence, Mr Chris Hardy, 16 August 2022, pp 39-40; Submission 13, PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney, p 2.

<sup>215</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 2.

It's probably safe to say that our irrigation industry has grown significantly since the basin plan, which is a little bit unexpected, but that's all due to water trading. The high-value users are working a treat. We're more than happy to sell to them on dry years. We don't have to grow crops. If they need our water more than we do on dry years, we'll sell to them. We'll be happy to do that.<sup>216</sup>

**4.5** Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission also argued that water trading had brought economic benefits to the whole Southern Basin region. He reported that 'despite tough and volatile climatic conditions, the value of production from irrigated agriculture in the southern Basin has trended upwards in real terms since 2010-11'.<sup>217</sup>

**4.6** Other participants, however, were less positive about the growth in high-value crops. One of the main concerns was the impact on food security. Some stakeholders reported that the growth in crops such as almonds and cotton had led to the decline in staples such as rice, dairy and oranges.<sup>218</sup> Southern Riverina Irrigators submitted 'we cannot survive on nuts and cotton', emphasising that these would not sustain the population in a difficult period like a pandemic.<sup>219</sup>

**4.7** Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, was also concerned about the loss of Australian-grown staple foods:

... while we can import all these other things, Australia's regulation and control of chemicals and how we manage our environment is really second to none. If I was feeding my family, I'd want clean produce grown close to home with a low carbon footprint that is tightly regulated. We have all that. We had all that. If we don't address these things, we won't have it.<sup>220</sup>

**4.8** Mr Polkinghorne also argued that a loss in agricultural diversity risks creating economic instability and insecurity in the Southern Basin region:

We actually had strength within the variety, the commodities we grew. Because you never know which market is going to be up or down, depending on global markets and seasonal conditions. So there is a real benefit in having diversity and a spread across production types.<sup>221</sup>

**4.9** Mr Jamie Park, a farmer, was concerned that increased demand for water from almond plantations would make it increasingly uncompetitive to grow other crops in the future:

It's like these almonds that are around at the moment. There are more and more of those getting grown. Effectively, later on, once a lot of those trees grow and need more water, that's going to manipulate the water market once again. That's going to be a huge worry not just now, but I would say in four or five years' time. When they start to

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<sup>216</sup> Evidence, Mr Chris Hardy, 16 August 2022, pp 39-40.

<sup>217</sup> Evidence, Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission, 16 August 2022, p 26.

<sup>218</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 15; Evidence, Mr Stephen McGrath, 16 August 2022, p 39; Submission 20, Southern Riverina Irrigators, p 3.

<sup>219</sup> Submission 20, Southern Riverina Irrigators, p 3.

<sup>220</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 15.

<sup>221</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 13.

produce the fruit, that's when you're going to see real demands for water. A lot of these other crops, like rice and different things that you're growing, I don't know how they're going to even afford to grow them. Because those trees—they will pay up to \$2,000 a megalitre for water to keep them alive, and they've got to keep them alive. So no-one can really compete with that.<sup>222</sup>

## The effects of water trading on communities

**4.10** Over the course of this inquiry, the committee heard a range of perspectives about the impact of water trading on communities within the Southern Murray-Darling Basin.

**4.11** Some inquiry participants expressed negative views about the impact of water trading on local communities. At a public forum in Griffith, Mr Darren De Bortoli argued that water trading was enriching private investors in capital cities at the expense of local irrigated communities:

What's going to happen over time is all the water's going to slowly migrate to Martin Place or Collins Street in Melbourne, and you're going to develop a franchisor-franchisee relationship. We know how that works: They'll charge the maximum amount for water that the buyer can bear. I just think it's going to, over time, hollow out the Murray communities, the small irrigated communities on the Murray-Darling Basin.<sup>223</sup>

**4.12** Similarly, Mr Scott Hamilton and Professor Stuart Kells argued that hedge funds were making 'hundreds of millions of dollars in trading profits each year', which was a 'direct loss' to the Basin.<sup>224</sup> They claimed that instead, 'this money could be retained to pursue economic, environmental, social and cultural benefits for the Basin and regional Australia'.<sup>225</sup>

**4.13** Mr Greg Adamson, Community Member, contended that his main concern was not necessarily that outside traders were profiting from water trading, but that they were not contributing these profits back to local communities:

The main concern that I have is that we have an increase in people who are not actively engaged within the agriculture industry holding water which, for this region, leads to a draining of profits and a transfer of funds that could be coming to our community and staying within our community into other markets. Ideally that is fine, and I don't want to see that changed. What I would like to see is that they contribute back to the real costs that continue to be paid by this community ... the ongoing costs of the delivery and infrastructure upgrades needs to be shared by all, not by those who are living in our community.<sup>226</sup>

<sup>222</sup> Evidence, Mr Jamie Park, Farmer, 16 August 2022, p 6.

<sup>223</sup> Evidence, Mr Darren De Bortoli, 16 August 2022, p 42.

<sup>224</sup> Submission 22, Scott Hamilton and Stuart Kells, p 6.

<sup>225</sup> Submission 22, Scott Hamilton and Stuart Kells, p 6.

<sup>226</sup> Evidence, Mr Greg Adamson, Community Member, 16 August 2022, p 3. See also Evidence, Ms Joy Boucher, Retired, 16 August 2022, p 5.

- 4.14** Some inquiry participants pointed to examples where they believed water trading had contributed to the decline of towns and communities.<sup>227</sup> Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators discussed the experience in Wakool, in the Western Riverina:

Just from where I'm from, Wakool—from 2006 to 2016, as a part of that Murray-Darling Basin community profiling that they did, we lost about 40 per cent of the population of Wakool when that water started to get bought back ... It means that you don't have as good a sense of community. You have businesses shut down. You have football clubs shut down. You have bus runs shut down. When I started going in year 7—I think it was 2004—there were about 45 people going to town to high school and to primary school. Now I think they run a car that's got about four people in it.<sup>228</sup>

- 4.15** On the other hand, however, some participants argued that water trading has contributed to positive outcomes in Southern Basin communities. At a public forum, Mr Chris Hardy argued that water trading had brought wealth to the Griffith region:

If it wasn't for water trading, we wouldn't have a nut industry. Our communities are thriving because of that. I don't know whether you guys have had a look around Griffith, but it's a pretty wealthy place. Industries are doing well, really well. It's all based on water.<sup>229</sup>

- 4.16** Mr Anthony McCloskey, another participant at the public forum in Griffith, argued that water trading had also benefitted farmers by providing alternate means to enter the industry:

When you look at young farmers who want to get into primary industries, and when you look at the cost of land and water these days, stumping up the capital for a deposit or something like that is hugely prohibitive. That these companies that own land and water and can lease them out to people for an annual cost—it is much more affordable to get people into agriculture. It's actually a really good way of helping them get a foothold into agriculture—lease the land and water for five years, maybe roll it over. And then when you've got some money to do it yourself, you can do it, because when you speak to your bank manager you're looking at an annual cost, not this huge lump of capital that you've got to find to buy all this stuff in the first place.<sup>230</sup>

### **Water dispossession of First Nations people**

- 4.17** The committee received evidence that First Nations people and communities are underrepresented among those who own and trade water. The Environmental Defenders Office told the committee that Aboriginal people and groups in the Murray Darling Basin hold two per cent of available surface water entitlements, while making up approximately ten per cent of the population.<sup>231</sup> Mr Scott Hamilton and Professor Stuart Kells added that the State of the

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<sup>227</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 10; Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 25; Evidence, Mr Stephen McGrath, 16 August 2022, p 39; Submission 20, Southern Riverina Irrigators, p 12.

<sup>228</sup> Evidence, Mr Darcy Hare, Executive Officer, Southern Riverina Irrigators, 16 August 2022, p 25.

<sup>229</sup> Evidence, Mr Chris Hardy, 16 August 2022, p 40.

<sup>230</sup> Evidence, Mr Anthony McCloskey, 16 August 2022, p 41.

<sup>231</sup> Submission 9, Environmental Defenders Office, p 6.

Environment Report 2021 found 'Indigenous people remain distant from the benefits of water ownership and participation in the water market'.<sup>232</sup>

- 4.18** The Environmental Defenders Office claimed that there has been a 'trend of Aboriginal water dispossession' in the Murray Darling Basin which has continued since colonisation.<sup>233</sup> They explained that historical allocations of water rights in the Murray Darling Basin did not recognise or benefit First Nations people:

Water allocation for the purpose of water trade did not begin with a blank canvas. Instead, it was founded on existing rights to water which began with a riparian system of water regulation from the British common law. This system entitled landholders with an incidental right to use water from natural water sources passing through or adjacent to their land. The rights privileged the owner of the riparian land, and since the Australian Government did not recognise Indigenous land rights, First Nations did not benefit from those riparian rights.<sup>234</sup>

- 4.19** The committee heard that it can be prohibitive for First Nations people to access the water market. The Environmental Defenders Office pointed to factors including 'difficulty in obtaining the financial resources to buy water ... information access barriers, water literacy gaps and the complexity of the market' as those contributing to water dispossession among Aboriginal people.<sup>235</sup> Mr Scott Hamilton, co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, agreed, pointing to the 'power difference' between First Nations people and professional traders:

... there is a huge power imbalance between the farmers and the professional traders. When it comes to First Nations people, the power difference is even greater. I think that, if we really want to talk about closing the gap in this country, we have to think about how we have much better and fairer sharing of water and benefits with all our people and, most importantly, with our First Nations people.<sup>236</sup>

- 4.20** The committee was told that one way that governments can seek to address this gap is through granting allocations of water to First Nations communities. Mr Scott Hamilton referred the committee to a recent allocation of water rights to the Gunaikurnai people in Gippsland (Victoria), saying 'I think that's the sort of thing that we should be encouraging'.<sup>237</sup>

- 4.21** The Environmental Defenders Office reported that in 2018, the Federal Government announced it would spend \$40 million over four years to support Aboriginal Basin Communities by investing in cultural and economic water entitlements and associated planning activities. However, they stated that 'to date, no cultural water has been purchased'.<sup>238</sup>

<sup>232</sup> Submission 22, Scott Hamilton and Stuart Kells, p 7.

<sup>233</sup> Submission 9, Environmental Defenders Office, p 5.

<sup>234</sup> Submission 9, Environmental Defenders Office, p 6.

<sup>235</sup> Submission 9, Environmental Defenders Office, p 7.

<sup>236</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 3.

<sup>237</sup> Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 8.

<sup>238</sup> Submission 9, Environmental Defenders Office, p 7.

## The effects of water trading on the environment

- 4.22 Several participants to this inquiry raised concerns about the impact of water trading on the environment in the Murray-Darling Basin (particularly the Southern Basin). The main impacts identified were riverbank erosion and ecological changes. Stakeholders also identified ways to address environmental impacts.

### Riverbank erosion

- 4.23 Several stakeholders told the committee that water trading had led to increased erosion of the banks of the Murray River.<sup>239</sup> They attributed this to an increased volume of water being pushed downstream, particularly at unseasonal times, as Southern Riverina Irrigators explained:

The erosion of capacity at the Barmah Choke and the riverbanks along the Murray is due to the rapid drawdowns of the Hume Dam in key demand windows (ie. over summer). These dramatic changes have occurred (or accelerated) since water trading has become much more widespread. Consequently a clear objective of the Basin Plan has been disregarded in the pursuit by the MDBA [Murray Darling Basin Authority] (in its role overseeing river operations of the Murray River) to deliver this traded water to different parts of the system when the river cannot support it.<sup>240</sup>

- 4.24 Mr Scott Hamilton and Professor Stuart Kells quoted former Murray Darling Basin Authority Director Maryanne Slattery to explain how the growth in permanent plantations has contributed to increased demand for water downstream:

We've seen a huge increase in nut plantations around the border and they need water permanently. You can't turn off water to permanent plantings like nuts... [they] need water all the time. What we are seeing now is a huge amount of water being pushed down through the Murray, to go down through that [Barmah-Millewa] forest at the wrong time of year. The time of year that the environment doesn't want it, causing a huge amount of scouring because of the volumes of water that is being pushed through.<sup>241</sup>

- 4.25 Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, argued that the growth in permanent plantings was inconsistent with the environmental constraints of the river system, saying 'now we've sort of thrown out climate variability and we're trying to grow permanent plantings and trade and deliver consistent volumes down rivers that actually need ebbs and flows, and high flows and low flows'.<sup>242</sup>

- 4.26 Several inquiry participants provided the committee with evidence of the erosion of the Murray River banks. Southern Riverina Irrigators described 'large numbers of mature gumtrees falling

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<sup>239</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 14; Evidence, Mr Scott Hamilton, Co-author of *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market*, 6 October 2022, p 7; Submission 8, Murray Irrigation, p 2; Submission 20, Southern Riverina Irrigators, p 10; Submission 22, Scott Hamilton and Stuart Kells, pp 7-8.

<sup>240</sup> Submission 20, Southern Riverina Irrigators, p 10.

<sup>241</sup> Submission 22, Scott Hamilton and Stuart Kells, pp 7-8.

<sup>242</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 8.



into the river' and 'a reduction of capacity at the Barmah Choke (downstream from Picnic Point) from an estimated 8,500ML per day in 2008 to 7,000ML in 2019'.<sup>243</sup> Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc said at Koondrook-Barham, they had witnessed 'between seven to eight metres of the riverbank being eroded in the last 10 years', remarking that people had lost fences, pumps and parts of lawn from erosion.<sup>244</sup>

### *Ways to mitigate or prevent riverbank erosion*

- 4.27** Some stakeholders expressed the view that regulatory decisions to increase the volume of water that can flow downstream, particularly through the Barmah Choke, was facilitating erosion of the Murray Riverbanks. The Barmah Choke is a narrow section of the Murray River that runs through the Barmah–Millewa Forest.<sup>245</sup>
- 4.28** Southern Riverina Irrigators told the committee that in 2018 and 2019, the Murray Darling Basin Authority disregarded normal river operation practices and 'exceeded capacity of the Murray River to get water past the Barmah Choke to water users such as the large almond plantations (Lower Murray Plantations) amongst others'.<sup>246</sup> Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc similarly reported that 'we also see the exceeding of the natural constraints of the river in delivering both permanent and temporary water trades further downstream to permanent plantings and other ventures'.<sup>247</sup>
- 4.29** Southern Riverina Irrigators argued that New South Wales should never permit the breach of channel capacity to meet a delivery shortfall again.<sup>248</sup> Murray Irrigation submitted that they would support a rule prohibiting trading water from above to below the Barmah Choke.<sup>249</sup>
- 4.30** Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc told the committee that 'schedule 3 of the 2007 Water Act ... says water trading can be restricted if it's actually damaging the integrity of the river or causing environmental damage', but commented that 'for whatever reason, we don't implement the rules and the safeguards that are in place'.<sup>250</sup> He compared the experience in New South Wales to that of Victoria:

The Goulburn River has seen massive destruction in delivering water further downstream for, essentially, new permanent plantings ... Victoria recognised that they're destroying the river system in trying to meet these needs and so they've put restrictions on trade.<sup>251</sup>

<sup>243</sup> Submission 20, Southern Riverina Irrigators, p 10.

<sup>244</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 9.

<sup>245</sup> Submission 8, Murray Irrigation, p 9.

<sup>246</sup> Submission 20, Southern Riverina Irrigators, p 8.

<sup>247</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 8.

<sup>248</sup> Submission 20, Southern Riverina Irrigators, p 13.

<sup>249</sup> Submission 8, Murray Irrigation, p 3. Currently, sellers upstream of the Choke can sell water to buyers downstream of the Choke, but only if the same or greater volume of water has been transferred from downstream to upstream of the Choke first: Murray-Darling Basin Authority, *Barmah Choke Trade Balance*, <https://www.mdba.gov.au/managing-water/water-markets-trade/interstate-water-trade/barmah-choke-trade-balance>.

<sup>250</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 9.

<sup>251</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, pp 8-9.

### Ecological change

- 4.31** Another environmental issue raised during this inquiry was that of ecological change in the Murray-Darling Basin. Mr Lloyd Polkinghorne said that the increased volumes of water flowing through the Murray River was leading to 'forests getting destroyed', highlighting the ecological value of the forests as platypus and kingfisher habitats, and as hosting culturally significant redgum trees.<sup>252</sup>
- 4.32** In their submission, Mr Scott Hamilton and Professor Stuart Kells cited the State of the Environment Report 2021, which found that rivers and catchments in the Murray Darling Basin are in 'poor condition', and native fish populations have declined:

The most recent State of the Environment Report 2021 (released in July 2022) found water levels in the MDB [Murray Darling Basin] were at record low levels in 2019 due to extraction of water and drought. Rivers and catchments are mostly in poor condition, and native fish populations have declined by more than 90 per cent in the past 150 years, a trend that appears to be continuing.<sup>253</sup>

### *Ways to mitigate or prevent ecological change*

- 4.33** One market mechanism intended to protect the environment is the allocation of water to environmental water holders. Environmental water holders include the Commonwealth Environmental Water Holder, the New South Wales Office of Environment and Heritage, and the Murray Darling Basin Authority.<sup>254</sup> The Australian Competition and Consumer Commission reported that as of 30 June 2018, 2,938 gigalitres of water had been recovered for the environment and held by government environmental water holders across the Murray Darling Basin.<sup>255</sup>
- 4.34** However, not all inquiry participants were supportive of allocating water to environmental water holders. Mr Jamie Park, a farmer, commented that removing water from the overall pool creates scarcity, thereby increasing water prices: 'the more water that disappears out of the system or out in the forest, or wherever else they want to put it—the environment and all the rest of it—that puts the water price up too'.<sup>256</sup> Mr Chris Morshead, a community member, added that water recovered from the environment reduces what can be grown, saying that an additional 450 gigalitres of water recovered for the environment represents 'basically 675,000 tonnes of rice, 450,000 eggs' which is 'what the entire industry grew this season'.<sup>257</sup>

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<sup>252</sup> Evidence, Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc, 16 August 2022, p 9.

<sup>253</sup> Submission 22, Scott Hamilton and Stuart Kells, p 7.

<sup>254</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 115.

<sup>255</sup> Australian Competition and Consumer Commission, *Murray-Darling Basin Water Markets Inquiry: Final Report* (February 2021), p 115.

<sup>256</sup> Evidence, Mr Jamie Park, Farmer, 16 August 2022, p 6.

<sup>257</sup> Evidence, Mr Chris Morshead, 16 August 2022, pp 40-41.

## Committee comment

- 4.35** Water trading has had a diverse range of impacts on the economy, communities, and environment within the Murray Darling Basin and across New South Wales more broadly.
- 4.36** The committee recognises that there are divergent views about whether water trading has brought benefits to local communities and economies. However, we are persuaded by those who raised concerns about the growth in permanent plantings of 'high-value' crops such as almonds, at the expense of others. It is our view that if this trend continues, New South Wales will face a serious loss in agricultural diversity. This presents a risk to our food security, and to the health and prosperity of all the local communities that rely on irrigated agriculture.
- 4.37** The committee is extremely concerned about the decline of local towns in the Southern Murray Darling Basin. At a time when regional Australia is struggling through the effects of the COVID-19 pandemic and successive natural disasters, it is unconscionable that we permit a market in which millions of dollars flow away from these communities and towards traders in the capital cities.
- 4.38** We are also concerned to hear that First Nations people only hold approximately two per cent of water allocations in the Murray Darling Basin. As the custodians of our lands for tens of thousands of years, First Nations people should have a clear role in the ongoing use and management of our waterways. We acknowledge that water trading has contributed to ongoing water dispossession of First Nations people, and we urge the New South Wales government to investigate ways to improve this.

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### Recommendation 9

That the New South Wales Government investigate ways to improve water access for First Nations people, such as through grants of water allocations.

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- 4.39** While the effects of water trading on the economy and communities elicited mixed views from inquiry participants, the effects on the environment were much clearer. We heard compelling evidence from multiple stakeholders about the changes to the environment that have come about from water trading. The increase in erosion of the Murray Riverbanks is concerning and the government should act now to address this. While it will take time to fully remediate this damage, as a first step we recommend that the government commit to preventing capacity limits at the Barmah Choke from being exceeded in the future.

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### Recommendation 10

That the New South Wales Government ensure that capacity limits at the Barmah Choke are not exceeded because of water trading.

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## Appendix 1 Submissions

No.	Author
1	Yancoal Australia Ltd
2	Mr Greg Adamson
3	Griffith Business Chamber
4	Mr Kenneth England
5	NSW Irrigators' Council (NSWIC)
6	Stuart and Katrina Heffer
7	Speak Up Campaign Inc
8	Murray Irrigation
9	Environmental Defenders Office
10	Mrs Barbara Hanley
11	Mr Dugald Bucknell
12	Mr Garry Hall
13	PhD Candidate Maruge Zhao, Associate Professor Tiho Ancev, Associate Professor Willem Vervoort, The University of Sydney
14	Australian Competition & Consumer Commission
15	Joy Boucher, Narelle Pratt, Jamie Park
15a	Confidential
16	Ms Pauline Carr (Doherty)
17	NSW Minerals Council
18	NSW Young Lawyers
19	Argyle Group
20	Southern Riverina Irrigators
20a	Southern Riverina Irrigators
21	NSW Farmers Association
22	Scott Hamilton and Stuart Kells

## Appendix 2 Witnesses at hearing

Date	Name	Position and Organisation
<b>Thursday 16 August 2022</b> <b>Burley Griffin Room</b> <b>Griffith Regional Theatre,</b> <b>Griffith</b>	Ms Joy Boucher <i>(via teleconference)</i>	Private individual
	Mr Jamie Park	Private individual
	Mr Greg Adamson	Private individual
	Mr Paul Pierotti	President, Griffith Business Chamber
	Mr Lloyd Polkinghorne	Deputy Chair, Speak Up Campaign Inc
	Ms Claire Miller <i>(via videoconference)</i>	CEO, NSW Irrigators' Council
	Mr Peter Sheppard <i>(via videoconference)</i>	Director, NSW Irrigators' Council
	Mr Ron McCalman	CEO, Murray Irrigation
	Mr Michael Pisasale	Water Policy Manager, Murray Irrigation
	Mr Darcy Hare	Vice Chair, Southern Riverina Irrigators
	Mr Mick Keogh <i>(via videoconference)</i>	Deputy Chair, Australian Competition and Consumer Commission
	Mr Nick Cook <i>(via videoconference)</i>	Manager, Property and Water, Yancoal Australia Pty Ltd
	Mr David Frith <i>(via videoconference)</i>	Director, Policy, NSW Minerals Council
	Mr Stephen McGrath	Private individual ( <i>Public forum</i> )
	Mr Chris Hardy	Private individual ( <i>Public forum</i> )
Mr Anthony McCloskey	Private individual ( <i>Public forum</i> )	
Mr Darren De Bortoli	Private individual ( <i>Public forum</i> )	
Mr Chris Morshead	Private individual ( <i>Public forum</i> )	

Date	Name	Position and Organisation
<b>Thursday 6 October 2022</b> <b>Macquarie Room</b> <b>Parliament House, Sydney</b>	Mr Scott Hamilton	Co-author, <i>Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market</i>
	Professor Stuart Kells	Co-author, <i>Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market</i>
<b>Monday 21 November 2022</b> <b>Macquarie Room</b> <b>Parliament House, Sydney</b>	Mr Ron McCalman	Chief Executive Officer, Murray Irrigation
	Mr Brett Jones <i>(via videoconference)</i>	Chief Executive Officer and Managing Director, Murrumbidgee Irrigation
	Mr Michael Carter <i>(via videoconference)</i>	Deputy Chair and Chair Audit and Risk Sub Committee, Murrumbidgee Irrigation
	Mr Michael Turnell <i>(via videoconference)</i>	Company Secretary, Murrumbidgee Irrigation

## Appendix 3 Minutes

### Minutes no. 1

Wednesday 18 May 2022

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

Room 1136, Parliament House, 1.30 pm

#### 1. Members present

Mr Borsak, *Chair*

Ms Faehrmann, *Deputy Chair*

Mr Amato

Mr Fang

Ms Jackson

Mr Poulos

Mr Veitch

#### 2. Apologies

Mr Buttigieg

#### 3. Tabling of resolution establishing the committee

The Chair tabled the resolution establishing the committee which reads as follows:

- (1) That a select committee be established to inquire into and report on the status of water trading in New South Wales, and in particular:
  - (a) the origins of the water trading market, its purpose, regulation and abuse,
  - (b) market practices and effects, including playing the market, cornering the market and fixing the market,
  - (c) the effectiveness of water registration and disclosure in New South Wales,
  - (d) the effects of water trading on the economy, communities and the environment, and
  - (e) any other related matter.
- (2) That, notwithstanding anything to the contrary in the standing orders, the committee consist of eight members comprising:
  - (a) three government members, being Mr Amato, Mr Poulos and Mr Fang,
  - (b) three opposition members, being Mr Buttigieg, Ms Jackson and Mr Veitch, and
  - (c) two crossbench members, being Mr Borsak and Ms Faehrmann.
- (3) That the Chair of the committee be Mr Borsak and the Deputy Chair be Ms Faehrmann.
- (4) That, unless the committee decides otherwise:
  - (a) submissions to inquiries are to be published, subject to the Committee Clerk checking for confidentiality and adverse mention and, where those issues arise, bringing them to the attention of the committee for consideration,
  - (b) the Chair's proposed witness list is to be circulated to provide members with an opportunity to amend the list, with the witness list agreed to by email, unless a member requests the Chair to convene a meeting to resolve any disagreement,
  - (c) the sequence of questions to be asked at hearings is to alternate between government, opposition and crossbench members, in order determined by the committee, with equal time allocated to each,



- (d) transcripts of evidence taken at public hearings are to be published,
- (e) supplementary questions are to be lodged with the Committee Clerk within two days, excluding Saturday and Sunday, following the receipt of the hearing transcript, with witnesses requested to return answers to questions on notice and supplementary questions within 21 calendar days of the date on which questions are forwarded to the witness, and
- (f) answers to questions on notice and supplementary questions are to be published, subject to the Committee Clerk checking for confidentiality and adverse mention and, where those issues arise, bringing them to the attention of the committee for consideration.

(5) That the committee report by 30 November 2022.

#### **4. Conduct of Committee proceedings – media**

Resolved on the motion of Mr Veitch: That unless the committee decides otherwise, the following procedures apply for the duration of the Committee:

#### **5. Filming, broadcasting and still photography of public proceedings**

That the filming, broadcasting, webcasting and still photography of its public proceedings will be conducted in accordance with the resolution of the Legislative Council of 18 October 2007.

That the webcast of public proceedings will occur via the Parliament's website, where technically possible.

That the interim guidelines on the use of social media and electronic devices for committee proceedings, will be adopted as developed by the Chair's Committee in May 2013.

That media statements on behalf of the committee will be made only by the Chair.

That where feasible, the committee will record and publish the video of any hearings.

#### **6. Conduct of the inquiry into the status of water trading in New South Wales**

##### **6.1 Closing date for submissions**

Resolved on the motion of Ms Faehrmann: That the closing date for submissions be 3 July 2022.

##### **6.2 Stakeholder list**

Resolved on the motion of Ms Jackson: That the attached list of stakeholders be invited to make written submissions, and that members have two days after the meeting to amend the list or nominate additional stakeholders.

Proposed by the Chair and resolved on the motion of Ms Jackson: That Scott Hamilton and Stuart Kells, authors of "Sold down the river" be invited as witnesses to the hearings.

##### **6.3 Advertising**

The committee noted that all inquiries are advertised via Twitter, Facebook, stakeholder emails and a media release distributed to all media outlets in New South Wales.

##### **6.4 Hearing dates**

Resolved, on the motion of Ms Faehrmann: That the committee hold a 3 day site visit in regional NSW, with dates and locations to be decided by the Chair after consultation with members.

#### **7. Adjournment**

*Sine die*

Sarah Newlands  
Committee Clerk

**Minutes no. 2**

Tuesday 28 June 2022

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

Via Webex at 11.00 am

**1. Members present**

Mr Borsak, *Chair*

Ms Faehrmann, *Deputy Chair*

Mr Amato

Mr Fang

Ms Jackson

Mr Poulos

**2. Apologies**

Mr Buttigieg

Mr Veitch

**3. Previous minutes**

Resolved, on the motion of Mr Fang: That draft minutes no.1 be confirmed.

**4. Regional hearing scheduled for August**

**4.1 Proposed itinerary and format of hearings**

Resolved on the motion of Mr Amato: That the committee hold hearings in Griffith and Deniliquin over 2 days:

- Day 1, Tuesday 16 August, Arrive Griffith. Public hearing (morning), public forum (afternoon)
- Day 2, Wednesday 17 August, Deniliquin, Public hearing (morning) public hearing (afternoon). Return to Sydney.

**4.2 Business case for using charter flights from Sydney**

Resolved on the motion of Mr Amato: That the committee use a charter flight to travel to Griffith and Deniliquin, staying overnight in Deniliquin on 16 August (cost approximately \$26,600).

**5. Adjournment**

*Sine die*

Sarah Newlands

**Committee Clerk**

**Minutes no. 3**

Tuesday 16 August 2022

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

Griffith Regional Theatre, Griffith at 9.54 am

**1. Members present**

Mr Borsak, *Chair*

Ms Faehrmann, *Deputy Chair*

Mr Amato

Mr Barrett (substituting for Mr Fang)

Ms Jackson

Mr Poulos

Mr Veitch

**2. Apologies**

Mr Buttigieg

**3. Previous minutes**

Resolved, on the motion of Mr Poulos: That draft minutes no.2 be confirmed.

**4. Correspondence**

The committee noted the following items of correspondence:

***Received:***

- 8 August 2022 – Email from Ms Leah Serafim, President, NSW Young Lawyers, to secretariat, declining an invite to appear at the hearing
- 9 August 2022 – Email from Ms Nadja Zimmerman, Solicitor, Environmental Defenders Office, to secretariat, declining an invite to appear at the hearing.

**5. Submissions****5.1 Public submissions**

The committee noted that submissions number nos. 1–5 and 7–15, 17-20 were published by the Committee Clerk under the resolution appointing the committee.

**5.2 Partially confidential submissions**

Resolved, on the motion of Ms Faehrmann: That the committee keep the following information confidential as per the recommendation of the secretariat: potential adverse mentions in submissions 6 and 16.

**6. Public hearing Griffith Regional Theatre, Griffith**

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Ms Joy Boucher, private citizen (via teleconference)
- Mr Jamie Park, private citizen
- Mr Greg Adamson, private citizen

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Paul Pierotti, President, Griffith Business Chamber
- Mr Lloyd Polkinghorne, Deputy Chair, Speak Up Campaign Inc

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Claire Miller, CEO, NSW Irrigators' Council (via videoconference)
- Mr Peter Sheppard, Director, NSW Irrigators' Council (via videoconference)
- Mr Ron McCalman, CEO, Murray Irrigation
- Mr Michael Pisasale, Water Policy Manager, Murray Irrigation
- Mr Darcy Hare, Vice Chair, Southern Riverina Irrigators

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Mick Keogh, Deputy Chair, Australian Competition and Consumer Commission (via videoconference)

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Nick Cook, Manager, Property and Water, Yancoal Australia Pty Ltd (via videoconference)

- Mr David Frith, Director, Policy, NSW Minerals Council (via videoconference)

The evidence concluded and the witnesses withdrew.

The public hearing concluded.

#### **6.1 In camera evidence**

Resolved, on the motion of Ms Jackson: That the committee proceed to take evidence *in camera*.

The public and the media withdrew. The committee proceeded to take *in camera* evidence. Persons present other than the committee: Stewart Smith, Sarah Newlands, Madolyn Hollins and Hansard reporters.

The evidence concluded and the witnesses withdrew.

The *in camera* hearing concluded.

#### **6.2 Public forum**

The following witnesses spoke at the public forum:

- Mr Stephen McGrath
- Mr Chris Hardy
- Mr Chris Morshead
- Mr Anthony McCloskey
- Mr Darren De Bortoli

The public forum concluded.

The meeting concluded at 6:45 pm.

### **7. Adjournment**

*Sine die*

Sarah Newlands

**Committee Clerk**

### **Minutes no. 4**

Thursday 6 October 2022

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

Macquarie Room, Parliament House, Sydney at 9.49 am

#### **1. Members present**

Mr Borsak, *Chair*

Ms Faehrmann, *Deputy Chair* (from 9.57 am)

Mr Amato (via Webex)

Mr Buttigieg (via Webex) (until 9.58 am)

Mr Fang

Ms Jackson (via Webex until 10.29 am)

Mr Poulos (via Webex)

Mr Veitch

#### **2. Previous minutes**

Resolved, on the motion of Mr Veitch: That draft minutes no. 3 be confirmed.

#### **3. Correspondence**

The committee noted the following items of correspondence:

**Received:**

- 11 August 2022 – Email from Ms Joy Boucher, private individual to Committee, attaching correspondence from the Natural Resources Access Regulator
- 15 August 2022 – Emails from Ms Joy Boucher, private individual to secretariat, attaching documents relating to Murray Irrigation Limited
- 23 August 2022 – Email from Mr Lloyd Polkinghorne, Editor/ Photo Journalist, The Koondrook and Barham Bridge Newspaper to secretariat, attaching information and photos for the committee
- 29 August 2022 – Email from Ms Joy Boucher, private individual to Committee, clarifying evidence given at public hearing on 16 August
- 31 August 2022 – Email from Ms Katrina Heffer, private individual to secretariat, attaching correspondence from Murrumbidgee Irrigation
- 7 September 2022 – Email from Ms Katrina Heffer, private individual to secretariat, attaching correspondence from Murrumbidgee Irrigation
- 12 September 2022 – Email from Ms Yvette Mansfield, Executive Assistant to the CEO, Murray Irrigation to secretariat, declining invitation to appear at hearing on behalf of Ron McCalman
- 13 September 2022 – Email from Ms Sophie Baldwin, Senior Electorate Officer - Deniliquin, Office of Helen Dalton MP, Member for Murray to secretariat, declining invitation to attend hearing on behalf of Ms Helen Dalton MP
- 14 September 2022 – Email from Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council to secretariat, attaching additional information for the committee
- 15 September 2022 – Email from Murray Irrigation to secretariat, requesting committee do not refer to Deloitte Report and attaching additional information for the committee
- 18 September 2022 – Email from Ms Joy Boucher, Ms Narelle Pratt and Mr Jamie Park, private individuals to secretariat, attaching amended figures relating to water sales
- 18 September 2022 – Email from Ms Joy Boucher, private individual to secretariat, attaching documents relating to Murray Irrigation Limited
- 21 September 2022 – Email from Mr Nathan Holahan, Company Secretary & General Manager Corporate Services, Murray Irrigation to secretariat, declining invitation to appear at hearing on behalf of Ron McCalman
- 26 September 2022 – Email from Mr Nathan Holahan, Company Secretary & General Manager Corporate Services, Murray Irrigation to secretariat, declining invitation to appear at hearing on behalf of Ron McCalman.

**Sent:**

- 12 August 2022 – Letter from Chair to Mrs Helen Dalton MP, informing of Committee's public hearing and forum in Griffith
- 20 September 2022 – Email from secretariat to Ms Yvette Mansfield, Executive Assistant to the CEO, Murray Irrigation, requesting Mr Ron McCalman reconsider invitation to appear at public hearing
- 23 September 2022 – Email from secretariat to Mr Nathan Holahan, Company Secretary & General Manager Corporate Services, Murray Irrigation, requesting Mr Ron McCalman reconsider invitation to appear at public hearing
- 29 September 2022 – Email from secretariat to Mr Nathan Holahan, Company Secretary & General Manager Corporate Services, Murray Irrigation, accepting Mr Ron McCalman's decline to invitation to appear at public hearing and advising future attendance before the committee may be sought.

**4. Public submissions**

The committee noted that submission nos. 20a and 21 were published by the Committee Clerk under the resolution appointing the committee.

Resolved, on the motion of Mr Fang: That the committee authorise the publication of submission no. 22.

**5. Answers to questions on notice**

The committee noted that the following answers to questions on notice were published by the committee clerk under the authorisation of the resolution appointing the committee:

- answers to questions on notice from Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, received 15 September 2022.

**6. Transcript clarification - Ms Joy Boucher**

The committee noted that Ms Joy Boucher, private individual has requested to clarify her evidence given at the hearing on 16 August 2022. She has requested that the statement '1 in 10 farmers commit suicide' is corrected to '1 farmer every 10 days commits suicide'.

Resolved, on the motion of Mr Veitch: That the committee authorise:

- the publication of Ms Boucher's email clarifying her evidence; and
- the insertion of footnote/s to the relevant paragraphs within the hearing transcript for 16 August 2022, as requested by the witness.

**7. Further public hearing**

Mr Fang moved: That the committee hold a further public hearing, the date to be determined by the Chair after consultation with members regarding their availability, and invite the Chief Executive Officer of Murray Irrigation, the Chief Executive Officer of Murrumbidgee Irrigation, the Chair of Southern Riverina Irrigators, and the Member for Murray, Mrs Helen Dalton MP.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Noes: Mr Buttigieg, Ms Jackson, Mr Veitch.

Question resolved in the affirmative.

**8. Public hearing**

Witnesses were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Scott Hamilton, Co-author, *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market* (via videoconference)
- Professor Stuart Kells, Co-author, *Sold Down the River: How Robber Barons and Wall Street Traders Cornered Australia's Water Market* (via videoconference)

The evidence concluded and the witnesses withdrew.

The public hearing concluded at 10.46 am.

**9. Adjournment**

The committee adjourned at 10.46 am, *sine die*.

Arizona Hart

**Committee Clerk**

**Minutes no. 5**

Thursday 20 October 2022

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

Room 1043, Parliament House, Sydney at 1.59 pm

**1. Members present**

Mr Borsak, *Chair*  
Ms Faehrmann, *Deputy Chair* (from 2.00 pm)  
Mr Amato  
Mr Fang  
Ms Jackson  
Mr Poulos

**2. Apologies**

Mr Buttigieg  
Mr Veitch

**3. Previous minutes**

Resolved, on the motion of Mr Amato: That draft minutes no. 4 be confirmed.

**4. Correspondence**

The committee noted the following items of correspondence:

***Received:***

- 11 October 2022 – Email from Ms Joy Boucher, private individual to committee, attaching information relating to Murray Irrigation
- 11 October 2022 – Email from Ms Kristy Buckley, Electorate Officer, Office of Helen Dalton MP to secretariat, declining invitation to appear at public hearing on 21 October
- 13 October 2022 – Email from Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation to secretariat, declining invitation to appear at public hearing on 21 October
- 14 October 2022 – Email from Nathan Holahan, Company Secretary & General Manager Corporate Services, Murray Irrigation to secretariat, declining invitation to appear at public hearing on 21 October.

**5. Further public hearing**

Mr Amato moved: That:

- the committee hold a further public hearing in November, the date to be determined by the Chair after consultation with members regarding their availability;
- Mr Ron McCalman, Chief Executive Officer of Murray Irrigation, Mr Brett Jones, Chief Executive Officer and Managing Director of Murrumbidgee Irrigation, and Mr Chris Brooks, former Chairman of Southern Riverina Irrigators be invited to attend and give evidence before the committee on the date of the public hearing;
- the committee acknowledges that this is up to the third attempt to invite the above witnesses to appear to give evidence before the committee, and that in the event that the witnesses decline the invitation, under the authority of s 4(2) of the *Parliamentary Evidence Act 1901*, the committee issue a summons to Mr Ron McCalman, Chief Executive Officer of Murray Irrigation, Mr Brett Jones, Chief Executive Officer and Managing Director of Murrumbidgee Irrigation, and Mr Chris Brooks, former Chairman of Southern Riverina Irrigators to attend and give evidence before the committee on the date of the public hearing.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Borsak, Ms Faehrmann, Mr Fang, Mr Poulos.

Noes: Ms Jackson.

Question resolved in the affirmative.

**6. Extension of reporting date**

Resolved, on the motion of Mr Fang: That the committee authorise the Chair to seek a resolution in the House to extend the reporting date for the inquiry to 20 December 2022.

**7. Adjournment**

The committee adjourned at 2.03 pm, *sine die*.

Arizona Hart

**Committee Clerk**

**Minutes no. 6**

Monday 21 November 2022

Select Committee on the status of water trading in New South Wales  
Macquarie Room, Parliament House, Sydney at 8.47 am

**1. Members present**

Ms Faehrmann, A/*Chair*  
Mr Amato (via Webex)  
Mr Fang  
Ms Jackson  
Mr Poulos (via Webex)

**2. Apologies**

Mr Borsak, *Chair*  
Mr Buttigieg  
Mr Veitch

**3. Chair**

In the absence of the Chair, the Deputy Chair took the Chair for the purpose of the meeting.

**4. Previous minutes**

Resolved, on the motion of Ms Jackson: That draft minutes no. 5 be confirmed.

**5. Correspondence**

The committee noted the following items of correspondence:

***Received:***

- 16 August 2022 – Letter from Ms Katrina Heffer and Mr Stuart Heffer, private individuals to committee, attaching documents relating to Murrumbidgee Irrigation
- 18 August 2022 - Letter from Ms Katrina Heffer, private individual to committee, attaching documents relating to Murrumbidgee Irrigation
- 30 August 2022 - Email from Ms Katrina Heffer, private individual to secretariat, attaching brief to counsel relating to legal action against Murrumbidgee Irrigation
- 28 October 2022 – Email from Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation to secretariat, declining invitation to appear at public hearing on behalf of Mr Ron McCalman
- 31 October 2022 – Email from Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation to secretariat, declining invitation to appear at public hearing
- 2 November 2022 – Email from Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation to secretariat, requesting committee consider receiving written responses instead of requiring attendance at public hearing



- 2 November 2022 – Email from Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation to secretariat, declining further invitation to appear at public hearing on behalf of Mr Ron McCalman
- 8 November 2022 – Email from Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation to secretariat, accepting invitation to appear at public hearing
- 10 November 2022 – Email from Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation to secretariat, declining further invitation to appear at public hearing on behalf of Mr Ron McCalman
- 15 November 2022 – Email from Mr Chris Brooks, private citizen to secretariat, declining invitation to appear at public hearing
- 15 November 2022 – Email from Mr Tim Horne, Principal, Horne Legal to secretariat, declining invitation to appear at public hearing on behalf of Mr Chris Brooks
- 16 November 2022 – Affidavit of service on Mr Ron McCalman by Senior Sergeant Wayne Fitzpatrick JP, Officer in Charge, Deniliquin Sheriff's Office
- 17 November 2022 – Email from Witness A, private citizen to secretariat, introducing himself prior to hearing.

***Sent:***

- 31 October 2022 – Email from secretariat to Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation, requesting Mr Ron McCalman reconsider the invitation to appear at public hearing
- 31 October 2022 – Email from secretariat to Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation, requesting he reconsider the invitation to appear at public hearing
- 8 November 2022 – Email from secretariat to Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation, requesting he reconsider the invitation to appear at public hearing and indicating he will be summoned if he declines
- 8 November 2022 – Email from secretariat to Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation, requesting Mr Ron McCalman reconsider the invitation to appear at public hearing and indicating he will be summoned if he declines
- 8 November 2022 – Letter from secretariat to Mr Chris Books, private citizen, inviting him to appear at public hearing and indicating he will be summoned if he declines
- 11 November 2022 – Summons from the committee to Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, ordering Mr McCalman to attend and give evidence at a hearing on Monday 21 November 2022
- 15 November 2022 – Email from secretariat to Mr Tim Horne, Principal, Horne Legal, stating that Mr Chris Brooks is still required to attend the hearing and will be summoned
- 15 November 2022 – Email from secretariat to Mr Tim Horne, Principal, Horne Legal, accepting Mr Chris Brooks' decline to appear at hearing.

Resolved, on the motion of Mr Fang: That the committee keep the following correspondence confidential, as per the recommendation of the secretariat, as it contains identifying and/or sensitive information:

- Correspondence from Ms Katrina Heffer and Mr Stuart Heffer, regarding Murrumbidgee Irrigation, dated 16 August 2022
- Correspondence from Ms Katrina Heffer, regarding Murrumbidgee Irrigation, dated 18 August 2022
- Correspondence from Ms Katrina Heffer, regarding legal action against Murrumbidgee Irrigation, dated 30 August 2022.

**6. Confidential correspondence**

Resolved, on the motion of Mr Fang: That the committee keep the following correspondence confidential, as per the recommendation of the secretariat, as it contains identifying and/or sensitive information:

- Correspondence from Ms Katrina Heffer, regarding Murrumbidgee Irrigation, dated 31 August 2022
- Correspondence from Ms Katrina Heffer, regarding Murrumbidgee Irrigation, dated 7 September 2022.

**7. Timeframe for answers to questions on notice and supplementary questions**

Resolved, on the motion of Ms Jackson: That:

- members provide any supplementary questions to the secretariat within 24 hours of receiving the transcript of evidence; and
- witnesses be required to provide answers to questions on notice/supplementary questions by 29 November 2022.

**8. *In camera* hearing**

The committee noted the request from Witness A to give evidence *in camera* at the hearing today.

Resolved, on the motion of Ms Jackson: That the committee take evidence *in camera* from Witness A at the hearing on 21 November 2022.

The committee proceeded to take evidence *in camera* at 9.00 am.

Persons present other than the committee: Mr Stewart Smith, Ms Arizona Hart, Mr Andrew Ratchford, audio-visual operators, and Hansard reporter.

The Chair made an opening statement regarding the confidentiality of proceedings and other matters.

The following witness was sworn and examined:

- Witness A (via videoconference)

The evidence concluded at 9.56 am and the witness withdrew.

**9. Public hearing**

The committee proceeded to take evidence in public at 10.00 am.

The witnesses were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witness was sworn and examined:

- Mr Ron McCalman, Chief Executive Officer, Murray Irrigation

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Brett Jones, Chief Executive Officer and Managing Director, Murrumbidgee Irrigation (via videoconference)
- Mr Michael Carter, Deputy Chair and Chair Audit and Risk Sub Committee, Murrumbidgee Irrigation (via videoconference)
- Mr Michael Turnell, Company Secretary, Murrumbidgee Irrigation (via videoconference)

The evidence concluded and the witnesses withdrew.

The hearing concluded at 11.36 am.

**10. Adjournment**

The committee adjourned at 11.38 am until 9.30 am, Wednesday 14 December (report deliberative).

Arizona Hart

**Committee Clerk**

**Draft minutes no. 7**

Wednesday 14 December 2022

Select Committee on the status of water trading in New South Wales  
via Webex at 9.30 am

**1. Members present**

Mr Borsak, *Chair*  
 Mr Amato  
 Mr Buttigieg  
 Mr Fang  
 Ms Higginson (substituting for Ms Faehrmann)  
 Ms Jackson  
 Mr Poulos

**2. Apologies**

Ms Faehrmann  
 Mr Veitch

**3. Previous minutes**

Resolved, on the motion of Ms Jackson: That draft minutes no. 6 be confirmed.

**4. Correspondence**

The committee noted the following items of correspondence:

***Received:***

- 17 November 2022 – Email from Mr Nathan Holahan, Company Secretary and General Manager Corporate Services, Murray Irrigation to secretariat, declining invitation to appear at public hearing on behalf of Mr Noel Baxter
- 6 December 2022 – Email from Witness A to secretariat, providing additional evidence to the committee.

Resolved, on the motion of Mr Fang: That the committee keep the following correspondence confidential, as per the recommendation of the secretariat, as it contains identifying information:

- correspondence from Witness A, regarding additional evidence provided to the committee, dated 6 December 2022
- correspondence from Witness A, regarding their evidence at the hearing, dated 17 November 2022.

**5. Answers to questions on notice**

The committee noted the following answers to questions on notice were published by the committee clerk under the authorisation of the resolution appointing the committee:

- answers to questions on notice from Mr Ron McCalman, Chief Executive Officer, Murray Irrigation, received 29 November 2022.

**6. Consideration of Chair's draft report**

The Chair submitted his draft report entitled *Status of water trading in new South Wales*, which, having been previously circulated, was taken as being read.

Resolved, on the motion of Ms Jackson: That Finding 1 be amended by inserting ', regional communities and the natural environment' after 'irrigation farmers'.

Ms Jackson moved: That the following new recommendation be inserted after Recommendation 2:

**Recommendation 3**

That the NSW government collaborate with the Commonwealth Government and Basin States to ensure the single trading platform operates nationally, which is preferable to separate state-based platforms.

Question put.

The committee divided.

Ayes: Mr Borsak, Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Fang, Mr Poulos.

Question resolved in the affirmative.

Ms Higginson moved: That the following new recommendation be inserted after Recommendation 4:

**Recommendation 5**

That the New South Wales Government prohibit trade of high security or conveyance water to general security for carryover.

Question put.

The committee divided.

Ayes: Ms Higginson.

Noes: Mr Amato, Mr Borsak, Mr Buttigieg, Mr Fang, Ms Jackson, Mr Poulos.

Question resolved in the negative.

Ms Higginson moved: That Recommendation 5 be amended by inserting the following dot point after 'That the New South Wales Government advocate for':

- The establishment of an independent Water Trading regulator

Question put.

The committee divided.

Ayes: Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Question resolved in the negative.

Ms Higginson moved: That Recommendation 6 be amended by:

- a) Inserting a dot point before 'contains accurate and up-to-date information on water entitlement ownership and trades'
- b) Inserting the following dot points below 'contains accurate and up-to-date information on water entitlement ownership and trades':
  - Ensures that trades within bulk entitlement licences are included on the public trade register
  - Includes delivery shares, including within irrigation infrastructure operators, and trade or transfer of delivery shares

Question put.

The committee divided.

Ayes: Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Question resolved in the negative.

Ms Higginson moved: That the following new paragraph be inserted after paragraph 4.21:

In their submission the Environmental Defenders' Office also noted:

In the absence of government action and in an essentially fully-allocated system, Aboriginal People must resort to the water market to obtain water access entitlements. However, access to the market is prohibitively expensive and First Nations in the MDB have difficulty in obtaining the financial resources to buy water. 11 Not only are water shares expensive, but they also incur annual fees and charges for trading or re-allocating water. Access to the market is also prohibitive because of information access barriers, water literacy gaps and the complexity of the market. [FOOTNOTE: Submission 9, Environmental Defenders Office, p 7.]

Question put.

The committee divided.

Ayes: Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Question resolved in the negative.

Ms Higginson moved: That paragraph 4.38 be amended by omitting 'improve' and inserting instead 'rectify'.

Question put.

The committee divided.

Ayes: Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Question resolved in the negative.

Resolved, on the motion of Ms Jackson: That Recommendation 7 be amended by:

- a) Inserting 'work collaboratively with the Australian and other Basin State governments to:' after 'That the New South Wales Government'
- b) Omitting 'work collaboratively with the Australian and other Basin State governments to' before 'improve existing information portal initiatives'.

Ms Higginson moved: That Recommendation 8 be amended by:

- a) Omitting 'improve water access' and inserting instead 'remove barriers'
- b) Inserting 'to enter the water market, including' after 'for First Nations people'
- c) Omitting 'such as' before 'through grants of water allocations'
- d) Inserting 'and by, where appropriate, removing fees and charges for entry, purchases and re-allocations' after 'through grants of water allocations'.

Question put.

The committee divided.

Ayes: Mr Buttigieg, Ms Higginson, Ms Jackson.

Noes: Mr Amato, Mr Borsak, Mr Fang, Mr Poulos.

Question resolved in the negative.

Resolved, on the motion of Mr Fang: That:

- The draft report as amended be the report of the committee and that the committee present the report to the House;
- The transcripts of evidence, submissions, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;
- Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;
- Upon tabling, all unpublished transcripts of evidence, submissions, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;
- The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;
- The committee secretariat be authorised to update any committee comments where necessary to reflect changes to recommendations or new recommendations resolved by the committee;
- Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;

- The report to be tabled on Tuesday 20 December;
- The Chair to advise the secretariat and members if they intend to hold a press conference, and if so, the date and time.

**7. Adjournment**

The committee adjourned at 10.15 am, *sine die*.

Arizona Hart

**Committee Clerk**



