

The Senate

Rural and Regional Affairs
and Transport
References Committee

Integrity of the water market in the
Murray-Darling Basin

November 2018

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Abbreviations

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ACF	Australian Conservation Foundation
AFA	Australian Floodplain Association
ANAO	Australian National Audit Office
Barwon-Darling WSP	Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources (2012)
Basin Plan	Murray-Darling Basin Plan
BDW	Barwon-Darling Water
BOC	Basin Officials Committee
CEWH	Commonwealth Environmental Water Holder
COAG	Council of Australian Governments
COFFIE	Commonwealth On-Farm Further Irrigation Efficiency program
committee	Senate Rural and Regional Affairs and Transport References Committee
Compact	Basin Compliance Compact
DAWR	Department of Agriculture and Water Resources
DEWNR	Department of Environment, Water and Natural Resources (SA)
DPI	NSW Department of Primary Industries
Draft report	Murray-Darling Basin Plan: Five-year assessment – draft report (Productivity Commission)
EDO	Environmental Defender's Office
EDOA	EDOs of Australia
GL	Gigalitre
GVIA	Gwydir Valley Irrigators Association

IAC	Independent Assurance Committee
ICAC	NSW Independent Commission Against Corruption
IGA	Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin
IRN	Inland Rivers Network
Matthews review	Independent investigation into NSW water management and compliance, Ken Matthews AO
MDB	Murray-Darling Basin
MDBA	Murray-Darling Basin Authority
Minister	Commonwealth Minister for Agriculture and Water Resources
Ministerial Council	Murray-Darling Basin Ministerial Council
ML	Megalitre
MLDRIN	Murray Lower Darling Rivers Indigenous Nations
NFF	National Farmers' Federation
NIC	National Irrigators' Council
NPA	National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin
NRAR	Natural Resources Access Regulator (NSW)
NSWIC	NSW Irrigators Council
NSWO	New South Wales Ombudsman
NWC	National Water Commission
NWI	National Water Initiative
PAWD	Pastoralists' Association of West Darling
PC	Productivity Commission
QFF	Queensland Farmers' Federation
SAMI	South Australian Murray Irrigators
SDL	Sustainable Diversion Limit

SIU	Strategic Investigation Unit
Water Act	<i>Water Act 2007</i> (Commonwealth)
WCR	Murray-Darling Water Compliance Review
Wentworth Group	Wentworth Group of Concerned Scientists
WESA	Water for the Environment Special Account
WRPs	Water resource plans

List of recommendations

Recommendation 1

6.32 The committee recommends that the Australian Government support the recommendation of the Productivity Commission to separate the Murray Darling Basin Authority into two entities: the Murray-Darling Basin Corporation, and the Basin Plan Regulator, with the Regulator established as a new statutory independent authority.

Recommendation 2

6.33 The committee recommends that the Australian Government ensure sufficient funding and resources are allocated to the Basin Plan Regulator, once established, to ensure that it is adequately resourced to undertake effective compliance, evaluation and review functions.

Recommendation 3

6.34 The committee recommends that the Australian Government consider hypothecating any pecuniary penalties paid to the Basin Plan Regulator, back to the Regulator. This would assist with the ongoing viability of the Regulator's compliance and enforcement roles.

Recommendation 4

6.54 The committee recommends that the Murray Darling Basin Authority allocate sufficient resources to complete its assessment and evaluation of Water Resource Plans.

Recommendation 5

6.65 The committee recommends that the Department of Agriculture and Water Resources present detailed annual reporting on the allocation of funds from the Water for the Environment Special Account, in accordance with the requirements of the *Water Act 2007*.

Recommendation 6

6.73 The committee recommends the development of a uniform schedule of evidentiary requirements, penalties and sanctions be developed to apply to breaches of water legislation in Murray Darling Basin jurisdictions. The schedule should be presented to the Council for Australian Governments for endorsement. The schedule should consider:

- the appropriate burden of evidence for water breaches;
- the use of technology in determining breaches;
- the suitability of strict liability offences; and
- the simplification of offences.

Chapter 1

Introduction and background

1.1 On 16 August 2017, the following matter was referred to the Rural and Regional Affairs and Transport References Committee (committee) for inquiry and report by 5 December 2017:

The integrity of the water market in the Murray-Darling Basin, with particular reference to:

- (a) the allegations of theft and corruption in the management of water resources in the Murray-Darling Basin;
- (b) the investigation and public disclosure by authorities, including the New South Wales Government and the Murray-Darling Basin Authority, of reported breaches within the Murray-Darling Basin, including the Barwon-Darling Water Sharing Plan;
- (c) the actions of member states in responding to allegations of corruption and the potential undermining of the Murray-Darling Basin Plan;
- (d) the use of Commonwealth-owned environmental water for irrigation purposes, and the impact on Basin communities and the environment;
- (e) the operation, expenditure and oversight of the Water for the Environment Special Account, and
- (f) any other related matters.¹

1.2 On 5 December 2017, the committee tabled an interim report. On the same day, the Senate approved an extension of time for the tabling of a final report, to 28 March 2018.²

1.3 On 22 March 2018, the committee tabled a second interim report, which recommended that the Senate extend the time for the presentation of the final report to 29 November 2018. The Senate agreed to this extension.³

Conduct of the inquiry

1.4 The inquiry was publicly advertised online, including on the committee's website. The committee also directly invited submissions from a number of organisations and individuals with interest in the management of the Murray-Darling Basin (MDB).

1 *Journals of the Senate* No. 54, 16 August 2017, p. 1733.

2 *Journals of the Senate* No. 77, 5 December 2017, p. 2462.

3 *Journals of the Senate* No. 91, 22 March 2018, p. 2897.

1.5 The committee received 55 public submissions. A list of individuals and organisations that made public submissions to the inquiry, together with other information authorised for publication, is at Appendix 1.

1.6 The committee held a site visit around the Broken Hill and Menindee Lakes areas of New South Wales on 31 October 2017. It also held the following public hearings:

- Broken Hill on 1 November 2017;
- Adelaide on 2 November 2017; and
- Sydney on 28 August 2018.

1.7 Details of the hearings referred to above can be found in Appendix 2. All public submissions and the Hansard transcripts of evidence from the hearings can be accessed through the committee's webpage.⁴

Acknowledgements

1.8 The committee thanks all those individuals and organisations who contributed to this inquiry by making submissions, as well as appearing before the committee to give evidence. The committee thanks all those who came forward to detail their difficult personal experiences with water management in the Basin, many of which revealed the great personal toll that such experiences have caused.

1.9 The committee particularly thanks those witnesses and individuals who assisted the committee with its inquiry during site visits in the Broken Hill area, including the McBride family of Tolarno Station. The committee appreciates the time and effort of all those who contributed to the visit, and for the information they provided to the committee.

Context of the inquiry

1.10 The committee is aware that the management of the MDB, and the allocation and monitoring of its water resources, is a matter of detailed, long-running, passionate and ongoing debate and discussion. The committee acknowledges the many and varied views on how the Basin should be administered, from a diversity of stakeholders.

1.11 Further, there is considerable breadth to the matters before the Commonwealth and the Basin states with regard to the management of the water resources of the MDB, many of which are beyond the scope of the committee's current inquiry.

4 See http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport

1.12 While the committee is aware of the numerous issues confronting Basin stakeholders at the present time, it is required to concentrate specifically on the terms of reference as referred to it by the Senate. The committee has focused on the allegations of water theft in the MDB and has considered the findings and recommendations of the various reviews and investigations that resulted from these allegations. The water monitoring and compliance mechanisms in place across the system, or lack thereof, discrepancies in approaches to water metering and monitoring between Basin states, and the role of the Murray-Darling Basin Authority (MDBA) in water compliance have been of particular interest throughout the inquiry.

1.13 Further, the committee acknowledges that some time has lapsed since the commencement of this inquiry. Accordingly, a number of matters raised by submitters and witnesses have progressed or reached a resolution (for example, the Northern Basin Review and adjustments to water recovery targets, the installation of the Broken Hill pipeline, and the ongoing South Australian royal commission into the MDB). Some of the developments that have taken place since the inquiry was first initiated are considered throughout this report.

Report Structure

1.14 This chapter provides a summary of the allegations made concerning water theft across the MDB. It also examines the principles of effective water compliance and enforcement.

1.15 Chapter 2 provides information on the governance arrangements and legislative framework for the MDB and implementation of the Basin Plan. It also details the water metering and monitoring regulatory framework for the Basin, with a focus on a number of Basin state jurisdictions.

1.16 Chapter 3 summarises the key findings and recommendations of the various investigations and reviews into water management across the Basin, particularly in NSW via the Ken Matthews review.

1.17 The fourth chapter looks specifically at the compliance review undertaken by the MDBA and the findings of that review.

1.18 Chapter 5 examines the Water for the Environment Special Account, including its expenditure, oversight and annual reporting. The chapter also provides discussion and case studies on water buybacks by the Commonwealth, and the role of the Commonwealth Environmental Water Holder.

1.19 Progress on water compliance matters since the commencement of this inquiry is considered in Chapter 6. This chapter also presents the committee's views and recommendations.

Background

1.20 On 24 July 2017, the ABC Four Corners program aired an episode titled 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?'. The program made allegations regarding water theft and corruption in the MDB by certain cotton irrigators in northern NSW. The significance of the program was made clear, as it became a catalyst for greater scrutiny of the administration of the MDB.

1.21 The episode put forward a series of allegations about the manner in which the Murray-Darling Basin Plan (Basin Plan) was working, and included 'accusations of illegal water use, pumping water from fragile rivers and tampering with [water] metres'.⁵ It also brought to light concerns about compliance and the willingness of Basin states to enforce water rules, which led to a number of reviews and investigations into the matter.

1.22 In presenting these allegations, the committee notes that some of the claims made by Four Corners have been disputed by some stakeholders, who have argued that the allegations presented a lack of understanding about the water management regulatory framework.

Allegations aired by Four Corners

1.23 As detailed by the committee's first interim report, the allegations raised by Four Corners included those of water theft⁶ against a prominent cotton farmer from the Bourke and Brewarrina areas of northern NSW. In addition to allegations of water rule breaches by other large property owners and irrigators, the Four Corners program also alleged that:

- large volumes of water were being extracted beyond licensed limits;
- pumping of large volumes of water was occurring at times when pumping was not allowed;
- appropriate records and log books were not maintained in instances where water meters were not working, as required under NSW water legislation;
- water channels and other structures were being constructed by large property owners, on Crown land, without approval;
- water pumping was occurring during embargo periods;

5 Sarah Ferguson, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 2].

All references to the Four Corners program 'Pumped' are based on a PDF of the transcript of the program, as published on the Four Corners website, at <http://www.abc.net.au/4corners/pumped/8727826> (accessed 15 January 2018).

6 The committee acknowledges the legal concerns put forward about water rights, land rights and personal property, and the difficulties these may present in determining what constitutes 'water theft'; see for example, Law Council of Australia, *Submission 10*, and Dr Adam Loch, Dr Erin O'Donnell, Dr David Adamson and Dr Avril Horne, *Submission 12*.

-
- water meters appeared to have been tampered with and had parts removed;
 - the relevant NSW Government agencies had no appetite for water compliance activities;
 - a senior officer in the NSW Department of Primary Industries (DPI) shared confidential departmental documents with irrigator lobbyists; and
 - irrigation companies were making money by selling water at a profit.⁷

1.24 Additionally, the program aired claims that top NSW Government officials from the DPI deliberately assisted wealthy irrigators along the Barwon and Darling Rivers, around Bourke and Brewarrina, to undermine the Basin Plan. The program also suggested that NSW Government officials had discussed withdrawing NSW from the Basin Plan.⁸

1.25 Particular details on the allegations made by Four Corners are provided below.

Property owners

1.26 Four Corners alleged that certain large property owners and irrigators in NSW had taken more water than they were entitled to under approved water licensing arrangements. A number of the allegations concerned Mr Peter Harris and his family. Mr Harris is a proprietor of the businesses operating as P&J Harris & Sons, and Clyde Cotton. Mr Harris owns a number of properties, including *Rumleigh* and *Miralwyn*, and other properties around Bourke, Brewarrina, Carinda and Hay.

1.27 With regard to the Harris family, the Four Corners program alleged that:

- the Environmental Defender's Office (EDO) had obtained data via Freedom of Information processes that 'appears to show huge volumes of water have been taken beyond what Peter Harris' properties are allowed';⁹
- at the Harris's property *Rumleigh* in 2016, the Mayor of Brewarrina Shire Council, Councillor Phillip O'Connor, saw 'pipes pulling huge volumes of water out of the river when pumping wasn't allowed';¹⁰
- there was evidence of water meters that didn't work, with cables unplugged, batteries removed and impellers missing, on Harris property;¹¹

7 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 24 July 2017.

8 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 24 July 2017.

9 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 9].

10 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 8].

- for the Harris's property *Miralwyn*, Jack Harris, son of Peter Harris, conceded they had not been keeping a detailed log book, as required under the NSW *Water Management Act 2000* when a meter is not working;¹² and
- investigators had found a water channel dug on a Harris property through Crown land, resulting in the road requiring rerouting. The program alleges that this was built without approval.¹³

1.28 Mr Harris has refuted all allegations made by Four Corners against him and the operation of his families' properties. Mr Harris stated that:

We look forward to an opportunity to vigorously defend these baseless allegations in a legitimately constituted forum where the rule of law applies.

We maintain we have at all times fully complied with our obligations under our Water Access Licences and have nothing to hide.¹⁴

1.29 The program made additional allegations against the proprietors of the *Burren Downs* property, located near Mungindi, and owned by the Barlow family. Four Corners contended that:

- *Burren Downs* had been pumping during a water extraction ban set up to ensure water travelled downstream to Broken Hill for its drinking supply;¹⁵
- a member of the NSW Strategic Investigations Unit (SIU) in DPI-Water alleged that, in relation to a particular pump on *Burren Downs*, his team discovered a broken meter, attached to a pump extracting millions of litres of water into a private dam; it also appeared that the meter had been tampered with;¹⁶ and

11 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 9].

12 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [pp. 7-8].

13 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 9].

The Ken Matthews review, discussed further in Chapter 3, found records indicating that the structure was built without approval but that NSW DPI, in conjunction with NSW Lands & Forestry, decided not to pursue enforcement action (due to difficulties associated with this) but rather sought retrospective authorisation of the structure.

14 Andrew Clennell, 'Irrigator Peter Harris summonsed for 'illegal' water use', *The Australian*, 14 November 2017, <https://www.theaustralian.com.au/national-affairs/state-politics/irrigator-peter-harris-summonsed-for-illegal-water-use/news-story/25b0d3cd0e19dd6a304fc6d1c023b130> (accessed 14 November 2017 and 12 November 2018).

15 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 7.]

16 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 7].

- Mr Anthony Barlow alleged at a community meeting that former NSW Minister for Water, Mr Kevin Humphries, had 'given a room full of irrigators permission to pump' and advised those present that the ban then imposed on water extraction was being lifted.¹⁷

1.30 The program also asserted that cotton company Webster Limited owned 'more water than anyone else in the country outside the federal government', thus providing the company with an opportunity to make more money selling water during times of drought, than by growing cotton. The program alleged that Webster owned water storages containing a combined 30 billion litres of water drawn from the Barwon-Darling, some of which may have been obtained by using large pumps in periods of low flows.¹⁸

1.31 Webster Limited issued a rebuttal of the claims made by Four Corners, claiming that the program contained factual errors, poorly researched allegations, and fabrications. Webster argued that it owns less than one per cent of all water entitlements along the MDB, with the company only extracting water in accordance with licensing and strict flow conditions, regardless of pump size. It reiterated its position that 'Webster has not extracted water in breach of its extraction limits'.¹⁹

NSW Department of Primary Industries

1.32 Mr Jamie Morgan, previously the head of the SIU unit within DPI-Water, advised Four Corners that he sought authority to conduct a major investigation along the Barwon-Darling, due to the alleged instances in that region of breaches of water licences. However, Mr Morgan stated that a major investigation was never approved by senior management within DPI-Water, with no reasons provided as to why.²⁰

1.33 In the Four Corners program, Mr Morgan stated that 'it was clear that there was no appetite for compliance anymore' within NSW Government, despite the 'significant problems' his team located in the northwest of NSW.²¹

17 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 7].

The Ken Matthews review was unable to independently verify the accuracy of the statements attributed to Mr Kevin Humphries.

18 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 4].

19 Webster Limited, *Investor Information – Response to ABC Fabrications*, <http://www.websterltd.com.au/> (accessed 17 January 2018).

20 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 10].

21 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 10].

1.34 The Four Corners program alleged that in 2016, Mr Gavin Hanlon, Deputy Director General of Water in the DPI, set up a secretive group with irrigator lobbyists and offered to share sensitive, official 'de-badged' departmental documents, to help irrigators progress their interests. The program broadcast an alleged audio recording of Mr Hanlon participating in a teleconference with the group.²²

Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012

1.35 The Four Corners program alleged that changes to rules within the Barwon-Darling system in 2012 (presumed to be the 2012 Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources), had 'been a boon' for companies such as Webster Limited. In the program, University of NSW scientist Richard Kingsford alleged that government water buybacks intended to provide environmental water could be pumped for other purposes, such as irrigation for cotton farms.²³

1.36 The program alleged that the new rules were introduced after extensive lobbying by irrigators. It was alleged that the changes allowed irrigators to access more water than prior to the implementation of the Basin Plan in 2012. It was further alleged that the changed rules allowed larger pumps to extract water during periods of low flows.²⁴

Further allegations of water theft

1.37 A number of media reports subsequent to the airing of the Four Corners program described other instances of alleged water theft in NSW, and possible instances of inadequate compliance and enforcement by the relevant authorities.

1.38 On 5 August 2017, it was reported that water licence rule changes had given a small number of irrigators in northwest NSW the ability to extract large volumes of water. The report claimed that the NSW EDO had documents establishing that licences for Barwon-Darling river water extraction were sub-divided, 'apparently in breach of the NSW *Water Management Act 2000*', which does not allow additional water to be extracted after subdivision. Other documents were said to reveal excess water extraction. It was reported in the press that:

As part of the sub-division, the licence holder was permitted to install 11 pumps with diameters of 600-660 millimetres – as much as eight times the

22 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 10].

23 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 4].

24 Linton Besser, 'Pumped: Who is benefitting from the billions spent on the Murray-Darling?', *ABC Four Corners*, 25 July 2017, [p. 4].

previous size of the nine 80-150 mm pumps used – capable of extracting significantly more water.²⁵

1.39 The same report indicated that another irrigator on the Barwon-Darling had been found to have pumped five times more A Class water in 2014-15 than was allowed by the water licence, and had extracted a very significant amount of water—3.147 billion litres—during 2015-16, some of which was possibly in breach of permitted extraction limits.²⁶

1.40 The enforcement of water licences in NSW has also come under scrutiny. Data indicated that in NSW in 2016-17, only 14 penalty notices were issued to water licence holders, compared with 70 in 2015-16, and 98 in 2014-15. Similarly, in 2016-17 there were no prosecutions, and only three stop work orders issued (to prevent the construction of illegal water infrastructure). It was argued that these figures supported claims made by Four Corners that there was little appetite for dealing with water theft within some sections of the NSW Government.²⁷

Murray-Darling Basin Authority

1.41 The actions of the MDBA have also been examined, with reports that the MDBA knew of the allegations of substantial water theft as early as July 2016, yet took no action, instead passing on information about alleged water theft to state enforcement agencies. Further, it was suggested that the public final report on the MDBA's investigations of water extractions in the Barwon River had all references to possible unlawful water extraction removed.²⁸

1.42 In media reports of September 2017, it was suggested that the MDBA had used a satellite monitoring program called Data Cube in order to track water flows down the Barwon River. Data Cube was 'initially intended not as a compliance-monitoring program but a scientific one, tracking the effects of environmental flows on the river and wetlands.' It was alleged that use of the Data Cube program showed that:

25 Peter Hannam, 'More claims of excess water extraction by NSW irrigators surface', *Sydney Morning Herald*, 5 August 2017, <http://www.smh.com.au/environment/more-claims-of-excess-water-extraction-by-nsw-irrigators-surface-20170805-gxq2jh.html> (accessed 23 August 2017).

26 Peter Hannam, 'More claims of excess water extraction by NSW irrigators surface', *Sydney Morning Herald*, 5 August 2017.

27 Anne Davies, 'Policing of NSW water licences slowed to trickle over 12 months', *The Guardian*, 28 September 2017, <https://www.theguardian.com/australia-news/2017/sep/27/policing-of-nsw-water-licences-slowed-to-trickle-over-12-months> (accessed 22 January 2018).

28 The report referred to is *Identifying locations and timing of water extractions in the Barwon-Darling using remote sensing data – Australian Geoscience Data Cube pilot project*, April 2017, <https://www.mdba.gov.au/sites/default/files/pubs/Data-cube-report.pdf> (accessed 9 November 2018).

billions of litres of water bought by taxpayers to improve the environment were being taken from the river in one small part of the Barwon river in New South Wales. Much of it appeared to be taken unlawfully when the river was too low, or during times when pumping was banned to protect the drinking water for Broken Hill.

...But when experts from the MDBA and Geosciences Australia examined satellite imagery (showing where water was in the landscape) and flow gauges in the river, the data suggested water bought for the environment upstream was disappearing before it reached the downstream gauge.²⁹

1.43 The MDBA contended that early drafts of the report contained allegations of possible illegal water take, but these claims were not adequately supported by the information available to the MDBA at the time. Following an internal review, the MDBA determined to remove the allegations from the final report.³⁰ Further, the MDBA was of the view that compliance matters were being managed by the states and actioned appropriately.³¹

1.44 The MDBA did, however, express some optimism about the application of Data Cube in the future. The MDBA submitted that:

The project demonstrated that the Data Cube can provide useful information to assist with the tracking of water in remote parts of the Basin, but it does have some limitations at present. For example it can determine geographic spread but not depth of water at a particular location and time. In the MDBA's view, the technology could already be applied to help target compliance activities, and in future could have more direct application.³²

1.45 In its submission to the inquiry, the MDBA indicated that it had formally referred concerns about alleged instances of illegal water take in the Barwon-Darling to WaterNSW and the NSW DPI in August 2016.³³

Prosecutions relating to water theft

1.46 On 14 November 2017, it was reported that Mr Harris had been served with a summons by the NSW EDO for the return of more than five billion litres of water, allegedly extracted illegally from the Barwon-Darling River. It was also claimed that:

29 Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report', *The Guardian*, 27 September 2017, <https://www.theguardian.com/australia-news/2017/sep/27/murray-darling-basin-authority-knew-of-allegations-of-water-theft-a-year-before-abc-report> (accessed 27 September 2017).

30 Murray-Darling Basin Authority, *Submission 26*, p. 5.

31 Michael Slezak, 'Murray-Darling Basin Authority knew of allegations of water theft a year before ABC report', *The Guardian*, 27 September 2017.

32 Murray-Darling Basin Authority, *Submission 26*, p. 5.

33 Murray-Darling Basin Authority, *Submission 26*, p. 3.

NSW Primary Industries Minister Niall Blair benefited Mr Harris, a cotton farmer, and other irrigators by changing the laws to pardon Mr Harris retrospectively for illegal flood works [on his property] and that Mr Blair lobbied Environment Minister Gabrielle Upton to change the law to justify a decision to give Mr Harris more water trading rights.³⁴

1.47 In March 2018, it was further reported that the NSW Government would prosecute the Harris family, who were accused of taking water when the flow conditions did not permit it, and of breaching licence and approval conditions for water use. The Barlow family were also to be prosecuted—accused of pumping during an embargo and pumping while metering equipment was not working.³⁵

1.48 Both the Harris and Barlow families have entered not guilty pleas, with the trials for both families—being heard in the NSW Land and Environment Court—set down for November 2018.³⁶

1.49 On 28 August 2018 it was reported that two members of the Norman Farming cotton farm enterprise had been arrested for fraud, with allegations that the director of the company had submitted fraudulent claims, including falsified invoices, to the Queensland Department of Natural Resources, Mines and Energy. The invoices related to six water-efficiency projects on a property near Goondiwindi. The projects formed part of the Healthy Headwaters Water Use Efficiency program, and the alleged fraud totalled a financial gain of over \$20 million.³⁷

Investigations and inquiries

1.50 Following the publication of the various allegations of water theft, and particularly the claims made by Four Corners, a number of investigations and inquiries into these matters have been completed or remain in progress. While many

34 Andrew Clennell, 'Irrigator summonsed for 'illegal' water use', *The Australian*, 14 November 2017, <http://www.theaustralian.com.au/national-affairs/state-politics/irrigator-peter-harris-summonsed-for-illegal-water-use/news-story/25b0d3cd0e19dd6a304fc6d1c023b130> (accessed 14 November 2017).

35 Lucy McNally, 'Alleged Barwon-Darling water thieves to be prosecuted after ABC investigation', *ABC News*, 8 March 2018, <http://www.abc.net.au/news/2018-03-08/nsw-water-theft-barwon-darling-government-prosecuting/9527364> (accessed 31 July 2018).

36 Alex Druce, 'Harris and Barlow families plead not guilty to alleged Barwon-Darling water thefts in Land and Environment Court', *The Northern Daily Leader*, 29 June 2018, <http://www.abc.net.au/news/2018-03-08/nsw-water-theft-barwon-darling-government-prosecuting/9527364> (accessed 31 July 2018).

37 Queensland Police News, 'Two men charged for \$20m fraud offences', 28 August 2018, <https://mypolice.qld.gov.au/blog/2018/08/28/two-men-charged-for-20m-fraud-offences/> (accessed 14 September 2018); Lexy Hamilton-Smith, 'Cotton farm execs accused of \$20m fraud over Murray-Darling water funding', *ABC News*, 28 August 2018, <http://www.abc.net.au/news/2018-08-28/cotton-executives-20-million-fraud-allegation-norman-farming/10172736> (accessed 14 September 2018).

of these focus their attentions on NSW, some also consider the role of the MDBA, and the broader national context of the Basin Plan.

1.51 At the time of the committee's first interim report in early December 2017, a number of these reviews were close to completion, and have since been published. The committee was thus able to draw on their findings as it progressed with its own inquiries.

1.52 To date, the inquiries and investigations have been extensive and thorough. They include:

- a Murray-Darling Water Compliance Review (WCR) by the MDBA, which provided an independent review of Basin-state water compliance frameworks, and compliance with legislation and policy governing water use across the MDB. An independent panel further assessed the compliance and enforcement arrangements within the MDBA. The WCR was published on 25 November 2017;³⁸
- an Australian National Audit Office (ANAO) limited assurance review into NSW's Protection and use of Environmental Water under the National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin (NPA). The report was released on 28 November 2017;³⁹
- an independent investigation into NSW water management and compliance by Mr Ken Matthews AO. Mr Matthews examined the allegations raised by Four Corners that involved the responsibilities of DPI-Water and its employees. An interim report was presented on 8 September 2017, and a final report was released on 30 November 2017;⁴⁰
- a NSW Ombudsman (NSWO) investigation into water compliance and enforcement. An interim report was tabled in NSW Parliament on 15 November 2017, which indicated that three previous investigations of a

38 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, MDBA reports, 25 November 2017, <https://www.mdba.gov.au/publications/mdba-reports/murray-darling-basin-water-compliance-review> (accessed 16 January 2018).

39 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 of 2017-18, <https://www.anao.gov.au/work/assurance-review/dept-agriculture-water-resources-assessment-nsw-protection-use-environmental-water-mdb> (accessed 16 January 2018).

40 NSW Department of Industry, *Independent review of water management and compliance*, <https://www.industry.nsw.gov.au/about/our-business/independent-review-water-management-and-compliance> (accessed 16 January 2018).

similar nature had been undertaken in 2009, 2012 and 2013. A final report was released on 17 August 2018;⁴¹

- a NSW Independent Commission Against Corruption (ICAC) investigation into the allegations raised by Four Corners about the actions of senior officers of the NSW Government;⁴²
- a South Australian state royal commission into the allegations of water theft in the MDB. The commission was established on 23 January 2018 and is examining the operations and effectiveness of the MDB system. It is required to report to the South Australian Governor by 1 February 2019 (with the capacity to release interim reports);⁴³ and
- a draft report released by the Productivity Commission on 30 August 2018, providing a five-year assessment of the Basin Plan. The report considers the progress made in implementation of the Basin Plan, while highlighting a number of major risks and challenges ahead for full and on-time implementation of the Plan.⁴⁴

1.53 The committee further notes that at a Ministerial Council Meeting on 19 December 2017, Basin state water ministers agreed to appoint an independent person to examine all the various inquiries and reviews into the water theft allegations. It was envisaged that this independent examiner would consider whether the reviews and inquiries 'address the serious allegations made about water theft and determine if further compliance and enforcement measures are required'.⁴⁵

1.54 By June 2018 this work was completed, with the Ministerial Council acknowledging work that had brought together 'all the findings of the various Basin

41 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, <https://www.ombo.nsw.gov.au/news-and-publications/publications/reports/state-and-local-government/investigation-into-water-compliance-and-enforcement-2007-17> (accessed 16 January 2018), and *Water: compliance and enforcement – a special report to parliament*, <https://www.ombo.nsw.gov.au/news-and-publications/publications/reports/state-and-local-government/water-compliance-and-enforcement> (accessed 13 September 2018).

42 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – interim report*, 8 September 2017, pp. 14-15, https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf (accessed 16 January 2018).

43 The Hon Jay Weatherill MP, Premier of South Australia, 'Bret Walker SC recommended to lead Murray-Darling Basin Royal Commission', *Media release*, 16 December 2017, <https://www.premier.sa.gov.au/index.php/jay-weatherill-news-releases/8455-bret-walker-sc-recommended-to-lead-murray-darling-basin-royal-commission> (accessed 16 January 2018); and Murray-Darling Basin Royal Commission, <https://mdbrcsa.govcms.gov.au/> (accessed 13 September 2018)

44 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment*, <https://www.pc.gov.au/inquiries/current/basin-plan/draft> (accessed 13 September 2018).

45 The Hon Lisa Neville MP, Victorian Minister for Water, 'Standing up for the Basin Plan and Victorian Communities', *Media Release*, 19 December 2017, <https://www.premier.vic.gov.au/standing-up-for-the-basin-plan-and-victorian-communities/> (accessed 11 January 2018).

water use compliance reviews and audits', using this to guide the development of the new Basin Compliance Compact (discussed further in Chapter 4).⁴⁶

1.55 While focusing on individual jurisdictional issues in some instances, these reviews and reports have provided extensive information on the operation of the Basin Plan as a whole, the actions—or lack thereof—of Basin states in relation to water administration, and have highlighted significant shortfalls in the implementation of effective water management and oversight.

1.56 While the committee is unable to involve itself in individual cases of water theft, or in matters for individual states, it welcomes the findings of these reviews in assessing the management of the MDB from a Commonwealth perspective. These reviews will greatly assist the MDBA in implementing more effective oversight of the Basin Plan.

1.57 The committee discusses the findings and recommendations of these investigations in greater detail in Chapters 3 and 4.

Water compliance and enforcement

1.58 The strength and success of the Basin Plan, and ensuring the appropriate allocation of water between agriculture and the environment, hinges on Basin states implementing and enacting effective water compliance and enforcement regimes.

1.59 There are significant risks to the communities and river users along the MDB whenever there is insufficient water supply. These risks may threaten the viability of river communities, agricultural and other farming industries, and individual livelihoods and businesses. As noted by the committee's interim report, the allegations of water theft have highlighted the need for considerable improvements to the monitoring, compliance and enforcement of water use across the Basin.

1.60 Water compliance and enforcement were well-defined by the NSWOW, which stated in its November 2017 report that:

Compliance and enforcement is understood to be the sharp end of regulation, namely, the investigation of alleged breaches of water legislation and enforcement action to compel legislative compliance. This spans proactive monitoring, investigative, evidence gathering and enforcement processes, and can include a wide spectrum of activities ranging through advisory letters, warning letters, stop work orders,

46 Murray-Darling Basin Authority, *Communique: Murray-Darling Basin Ministers meet in Canberra*, 8 June 2018, <https://www.mdba.gov.au/media/mr/communique-murray-darling-basin-ministers-meet-canberra> (accessed 8 November 2018).

remediation directions, license suspensions, license cancellations, penalty notices and prosecutions.⁴⁷

1.61 Additionally, the issues of transparent water management, which is an aspiration shared by diverse stakeholders, was highlighted in the interim report of September 2017 by Mr Ken Matthews, who stated that:

Despite the frequent discord about many water management issues, there is one thing that all parties agree on—non-compliant or illegal extraction of water should not be tolerated and should be dealt with firmly. Environmental groups want assurance that the environment is not being short-changed. State governments want to be confident that other states are observing the rules. Irrigators want assurance that their peers are behaving honestly. In submissions to this Investigation many irrigators have made clear their disappointment about the damage now done to the good name of the sector by the alleged behaviour of a few.⁴⁸

1.62 The MDBA has clearly expressed its view on the vital role that compliance plays in ensuring the ongoing health and sustainability of the MDB system. The MDBA noted that effective compliance 'underpins the integrity of water resource plans, environmental watering, water property rights and the water market'. The MDBA went on to argue that:

Being effective means that entitlement holders understand their rights and obligations, offences are promptly detected and investigated, and enforcement action pursued. The perception that wrong doers are not punished is corrosive to other entitlement holders, whose commitment to compliance is undermined, and to the broader community, which may doubt the appropriateness of the social licence under which water is taken.

The social authority of a compliance system depends critically on it being fair and seen to be fair. Fairness means that breaches are dealt with and that those who abide by the rules do not suffer any consequences from wrongdoers, whose actions go undetected or are not dealt with. This requires that the compliance system is effective. Fairness also means the same kinds of offences are dealt with in the same way, no matter who or where the offender is. This requires consistency of compliance arrangements and practices across the Basin.⁴⁹

47 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 12, https://www.ombo.nsw.gov.au/_data/assets/pdf_file/0012/50133/Investigation-into-water-compliance-and-enforcement-2007-17.pdf (accessed 9 January 2018).

The Ombudsman's report is discussed in further detail in Chapter 3.

48 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 5.

The Matthews review is discussed in further detail in Chapter 3.

49 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 11, <https://www.mdba.gov.au/sites/default/files/pubs/MDB-Compliance-Review-Final-Report.pdf> (accessed 11 January 2018).

1.63 The ramifications of an inadequate compliance regime were put to the committee by Dr Adam Loch and colleagues, who argued that:

if we allow unlawful extraction to go unchallenged, and even more importantly, unpunished it signals a weakness in our markets that goes to its heart: unenforced water access property rights. If we do not act to address this issue, with a corresponding strong message to those who rely on the water market, we threaten a waste of taxpayer's money to date as well as significant future public spending to reclaim public and private confidence in the water market.⁵⁰

1.64 In conducting this inquiry, the committee sought to establish whether there was appropriate transparency within water administration. The committee was particularly interested in whether the compliance and enforcement structures in place across Basin states allowed for appropriate scrutiny of water use and extraction, and provided states with the sufficient authority to enforce water use rules and licence conditions. The role of technology in proper water metering and monitoring, and the support such technology could offer to compliance efforts, was also of interest to the committee.

Differences between the southern and northern Basin

1.65 The committee notes the general observations made by various submitters and stakeholders that the southern and northern Basins of the MDB are considerably different, and appear to have different regulatory oversight frameworks.

1.66 The northern and southern Basins vary considerably in terms of land and water use, rainfall volumes and patterns, river systems, topography and climate. The northern Basin is drier, having considerably less rainfall which occurs in the summer months, as opposed to the southern Basin where rainfall occurs in winter. Further, the northern Basin has less regulation and development, and uses less water than the southern Basin. These differences in the Basins have resulted in different management frameworks and regulatory approaches.⁵¹

1.67 In addition to these differences, the extent of water metering across the Basin varies greatly between jurisdictions. As part of its compliance review, the MDBA identified that:

Over the four years from 2012-13 to 2015-16, between 64% and 73% of Basin surface water was metered. Among the states, South Australia has the highest metering rate with 96% of take being metered. In the northern Basin between 25% and 51% is metered. Groundwater metering varies

50 Dr Adam Loch, Dr Erin O'Donnell, Dr David Adamson and Dr Avril Horne, *Submission 12*, p. 4.

51 Senate Select Committee on the Murray-Darling Basin Plan, *Refreshing the Plan*, March 2016, pp. 17-18, https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Murray_Darling_Basin_Plan/murraydarling/Report (accessed 1 November 2018).

considerably. In Victoria, 91% is metered, with South Australia and NSW metering 88% and 83% respectively, and Queensland 28% (due in part to the high volume of overland flow harvesting).⁵²

1.68 With no more than 51 per cent of northern Basin surface water metered, it appears to the committee as no surprise that such large scale water theft is alleged to have occurred in that area. The lack of proper metering and monitoring makes it difficult for authorities to determine if breaches of the water rules have occurred, and if so, to what extent. This in turn makes prosecution, or other enforcement activity, hard to instigate.

1.69 The different approaches to compliance and monitoring regimes between the northern and southern Basin were consistently highlighted to the committee.⁵³ Concerns were also put forward that there appeared to be different approaches taken within a single jurisdiction—NSW—to compliance and monitoring regimes, depending on the geographical area.

1.70 For example, Mr Ben Bruce, from the South Australian Department of Environment, Water and Natural Resources (DEWNR), acknowledged that there were compliance risks and challenges in the unregulated areas of the NSW northern Basin, due to its remoteness and the nature of water courses in that area.⁵⁴

1.71 Mr Leon Zanker of the Australian Floodplain Association (AFA) identified a number of perceived differences between the management of the northern Basin and the southern Basin. Mr Zanker said that it was his understanding that:

in the southern basin, because they have tamper-proof metres, real-time monitoring and reporting, virtually every drop of water taken is accounted for...But I don't fully understand the way the licence system works on the unregulated rivers in the northern basin. I imagine the bulk of laypeople out here are the same and don't fully understand the complexities surrounding A, B and C class licences, the associated pump sizes or how many pumps you can have.

I doubt whether they understand—and I don't fully understand—the complexities around commence-to-pump and cease-to-pump thresholds that are taken at various gauging stations for all different classes of licences, how those extractions are metered or who is responsible for ensuring compliance with those licence conditions.⁵⁵

52 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 17.

53 The differences in water metering between the northern and southern Basins are discussed in further detail in Chapter 2.

54 Mr Ben Bruce, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, p. 2.

55 Mr Leon Zanker, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, p. 23.

1.72 Mayor Darriea Turley, of the Broken Hill City Council, voiced her concern that water was not flowing down the Darling, and questioned why water-sharing plans were managed in the southern part of the Basin in NSW, but not in the northern Basin. The Deputy Mayor of Broken Hill, Councillor Marion Browne, expanded on this view, stating that:

Something that's been brought up a number of times is the absence of proper metering of water in the upper Darling. That's certainly one of those issues that led to the accusations of meter tampering and so on. It's my understanding – and I stand to be corrected – that an opportunity was given some years ago to a number of these larger irrigators to install proper electronic metering...but they declined that.⁵⁶

1.73 As an example of the differences between the management of the northern and southern Basins, Mayor Turley advised the committee that:

One of the irrigators who spoke to me in the lower sector said that he had received a letter for overextraction, and it was within a week of the overextraction. So it's immediate; it's monitored. There was a warning. He won't be overextracting again, but he said he can't understand what's happening with the management in the lower sector as opposed to the northern Basin.⁵⁷

The impact of over-extraction

1.74 Given the breadth of issues and concerns with the management of the MDB, there was considerable volume and variety to the submissions received by the committee. The committee received evidence from a number of submitters expressing serious concerns about the over-extraction of water from the Basin. Several submitters contented that water extraction may have been taking place illegally, or beyond what was allowed by a particular licence, on repeated occasions. Other submitters were of the view that compliance with the Basin Plan and other regulatory frameworks was not being properly enforced by either Basin state governments, or the MDBA.

1.75 Conversely, many irrigators and irrigator representatives expressed their dismay at the claims made by Four Corners, and urged caution in accepting all claims made by the program as correct, or proven.

Social and environmental impacts

1.76 The impacts on river communities of alleged water theft, or low or non-existent water flows through the Basin, were put forward consistently in evidence, with some examples below.

56 Councillor Darriea Turley and Councillor Marion Browne, Broken Hill City Council, *Committee Hansard*, 1 November 2017, pp. 16-17.

57 Councillor Darriea Turley, Broken Hill City Council, *Committee Hansard*, 1 November 2017, p. 17.

1.77 Mr Rene Woods of the Murray Lower Darling Rivers Indigenous Nations (MLDRIN) advised the committee of the devastating impacts on Indigenous communities of a lack of water flow across the Basin. Mr Woods stated that:

It's a proven fact in the northern basin that when there was no water in the river up there, the crime rate in town rose quite significantly. The health of people in those basin communities also put pressure on the Medicare system in those towns. The doctors were under pressure because of the amount of people who were in the day surgeries and seeing doctors. When there's water in the river, our people are out there fishing; they're enjoying their knowledge transfer to the younger generation; they're happy to see water in the river. When Mother Earth is healthy, we're healthy.⁵⁸

1.78 Councillor Phillip O'Connor, of Brewarrina Shire Council, NSW, advised the committee that there were many people along the Darling River who were 'too afraid to speak out' about water theft, and felt that the authorities did nothing to address concerns when they were raised. The Councillor provided the committee with evidence from the Brewarrina area of numerous instances of alleged water theft, arguing that if no-one knows of these allegations, and nothing is done about them, 'the river is not going to survive'.⁵⁹

1.79 Some witnesses expressed their concern over the diminished flows into the southern parts of the Basin and the impacts on river communities. Miss Kate McBride, of Tolarno Station, NSW, advised the committee that:

Before 2002, there was only one cease-to-flow event in history, but since then there have been 15 along the lower Darling that have had significant impacts on the economic, social, physiological and physical health of the communities that live along it. The most recent, in 2015-16, was the longest seen in white man's history and was not due to drought.⁶⁰

1.80 Mr Rob McBride, also of Tolarno Station, also drew attention to the dry river event in 2015-16, which he viewed as a direct result of excessive diversions upstream in the northern Basin, including the use of environmental water for irrigation purposes. Mr McBride highlighted the impacts of the 2015-16 dry river period on the area:

During this period, there were significant and long-lasting social and economic impacts to the community. On my property alone, I experienced significant loss of land, stock and production totalling approximately \$3.6 million during this period alone. Over 200,000 acres of land was lost to production due to loss of property borders (the river is a natural boundary between properties) and no potable water for stock or domestic use. The

58 Mr Rene Woods, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard*, 2 November 2017, p. 10.

59 Councillor Phillip O'Connor, *Committee Hansard*, 1 November 2017, p. 9.

60 Miss Kate McBride, *Committee Hansard*, 1 November 2017, p. 1.

water quality in the remaining water hole was so poor, the water became toxic and was unsafe for use.⁶¹

1.81 Mr Bill Johnson, formerly of the MDBA, described the angst amongst the various water users within Basin communities. Mr Johnson argued that if the current rules were properly adhered to, the management of the Basin would be 'much further down the track'. He noted that:

At the moment there is no trust between extractive users and even amongst extractive users. There is even less trust between extractive users and other members of the community, and there's almost no trust in some of the water bureaucracies. Without that, the very difficult negotiations and the very difficult sharing just can't happen, as people put their energies into fighting with each other and taking sides.⁶²

1.82 Concerns were consistently raised in evidence about the impact on the environment of water theft and over-extraction from the MDB of water intended for the environment. Other concerns were raised that the Basin Plan does not properly consider the impact of climate change on the regulation of water use. The Nature Conservation Council of NSW summarised the concerns for the environment resulting from the over-extraction of water in the Basin as follows:

Preventing the over-extraction of water is critical to protecting the health of the rivers, floodplains and wetlands in the Murray-Darling Basin. This includes 16 wetlands listed as wetlands of international importance under the Ramsar Convention. Water for the environment is also significant for preventing the extinction of dozens of threatened animal species including fish, amphibians and birds.⁶³

Low or diminished flows

1.83 Some witnesses expressed their concern over the diminished flows into the southern parts of the Basin, resulting from alleged excessive over-extraction from the northern Basin. For example, Environment Victoria expressed its concerns over the issue as follows:

Increased pumping and the extraction of Commonwealth-owned environmental water by irrigators upstream of Bourke means that less water is getting through to Menindee Lakes and the Lower Darling, and hence to the Murray, Victoria and South Australia. This is having serious consequences for the lower Darling environment, water users and Aboriginal people. Their concerns have been extensively reported in the media, Northern Basin Review submissions and elsewhere.⁶⁴

61 Mr Robert McBride, *Submission 14*, [p. 2].

62 Mr Bill Johnson, Private capacity, *Committee Hansard*, 1 November 2017, p. 43.

63 Nature Conservation Council of NSW, *Submission 16*, [p. 1]. See also Australian Conservation Foundation, *Submission 37*, [p. 1].

64 Environment Victoria, *Submission 55*, [p. 5].

1.84 Mr Mark Zanker noted the considerable contribution that irrigated agriculture had made to Australian prosperity, but made clear that there must be 'some reasonable limits on what activities are regarded as within the legitimate scope of permissible irrigation'. Mr Zanker was of the view that these limits were exceeded when downstream users had insufficient water for stock and domestic purposes.⁶⁵

1.85 Mr Justin McClure, of the AFA, advocated for the protection of low flows throughout the MDB and thus the maintenance of connectivity between the top and the bottom of the system. He argued that doing so would address many of the health issues of the river while meeting community expectations.⁶⁶

1.86 Dr Anne Jensen supported this view, arguing that urgent action was needed to restrict the conditions for taking irrigation water in low flows, and to shepherd environmental water to its intended targets. Dr Jensen stated that 'environmental water should be re-used along the full length' of the system, and not revert to irrigation water after a single environmental use.⁶⁷

Floodplain harvesting and overland flows

1.87 The lack of proper metering and monitoring with regard to overland flows, and concerns with floodplain harvesting, were raised throughout the inquiry. Submitters noted that inaccurate or absent monitoring of this water, and a lack of regulation and enforcement of irrigation earthworks, would result in modelling and frameworks developed under the Basin Plan that were inaccurate and did not properly account for water volume or take. Further, some floodplain harvesting activities could deprive other water users of access to floodwaters.

1.88 The Pastoralists' Association of West Darling (PAWD) raised its concerns with unmetered floodplain harvesting in NSW and Queensland, and called for its review. Mr Lachlan Gall of PAWD argued that:

For Australia's longest rivers, it is the floods upstream the permit volumes of water to penetrate across the dry interior. Capturing floodwaters or adducing flood peak volumes and/or frequency ensures that downstream water users get less than they should. Water harvested from flood plains should be accounted for as part of an irrigation entitlement.⁶⁸

1.89 Mr Gall noted the importance of occasional floods that spread over a floodplain. However, Mr Gall argued that 'it's a cumulative impact of unregulated

65 Mr Mark Zanker, *Submission 5*, [p. 1].

66 Mr Justin McClure, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, pp. 21-22.

67 Dr Anne E Jensen, *Submission 23*, [p. 2].

68 Mr Lachlan Gall, Pastoralists' Association of West Darling, *Committee Hansard*, 1 November 2017, p. 32.

upstream floodplain harvesting that has a very large detrimental effect on the amount of water that makes it through to the bottom of the system'.⁶⁹

1.90 Professor Richard Kingsford drew attention to the issues with inadequate legislative frameworks for floodplain ecosystems, noting that floodplains have remained largely unregulated and outside the legislative framework for water. Professor Kingsford argued that:

Floodplain structures are very well developed in the Northern (Darling) Basin. Many cause considerable problems to environments, changing flow regimes, and also affecting agriculture downstream. These problems have been exacerbated in irrigation areas as a result of levee banks allegedly changing access to water resources for irrigation enterprises.⁷⁰

1.91 Similar concerns were raised by the South Australian Murray Irrigators (SAMI), which told the committee that it had previously raised concerns with the MDBA about floodplain harvesting. Ms Caren Martin of SAMI advised that:

an area we had a lot of concerns about, the flood-plain harvesting accumulation of water methods, was not seen as a surface-water flow and was not regulated and, therefore, was not a take. I thought the Murray-Darling Basin Authority were empowered or put in place to be independent and to look at all water takes. I think they were made aware time and time again that flood-plain harvesting was having a detrimental effect on everyone downstream of it and it wasn't addressed, I believe, in the basin plan. That's why we're sitting here today having this trouble, because, from what I understand of it, what they did was legal. And that in itself is a problem.⁷¹

1.92 With regard to overland flows, Mr Bill Johnson noted that while the Basin Plan considers overland flows as part of the amount of water diverted, the amounts were estimates as it was very difficult to determine the volume of this water. It was also difficult to distinguish between floodplain harvesting and overland flows.

1.93 Mr Johnson suggested that anecdotal evidence indicated that some people were including floodplain harvesting in their overland flow category, and thus not including that volume in the amount of water taken. Mr Johnson also noted that it was 'very difficult' to control the construction of illegal structures used to capture overland flows, particularly for smaller, regional councils where it was difficult to challenge large-scale operators.⁷²

69 Mr Lachlan Gall, Pastoralists' Association of West Darling, *Committee Hansard*, 1 November 2017, p. 33.

70 Professor Richard Kingsford, *Submission 27*, p. 7.

71 Ms Caren Martin, South Australian Murray Irrigators, *Committee Hansard*, 2 November 2017, p. 24.

72 Mr Bill Johnson, Private capacity, *Committee Hansard*, 1 November 2017, p. 41.

Transparency and consultation

1.94 A number of submitters and witnesses expressed frustration over a perceived lack of consultation on behalf of the MDBA, with regard to the administration of and amendments to the Basin Plan. Further concerns were voiced over a lack of transparency around the actions of the MDBA and of Basin States, particularly with regard to compliance activity.

Consultation

1.95 Mr Stuart LeLievre of the AFA expressed his frustration that a number of river users felt excluded from decision-making processes concerning the operation of the river. He argued that the 'big end of town' had direct access to government officials and ministers, but local community members and non-irrigator bodies did not have similar access. He was also of the view that many decisions were taken by water authorities and officials prior to any consultation occurring.⁷³

1.96 Likewise, the Macquarie Marshes Environmental Landholders Association expressed its frustration that it had experienced constant difficulty over many years in dealing with various water departments. The Association felt that the 'irrigation industry has consistently been favoured by departmental managers in water management development and decision making'.⁷⁴

1.97 The Inland Rivers Network (IRN) likewise suggested that environmental and indigenous groups, floodplain graziers and downstream communities had not been afforded similar access to information or consultation with the MDBA as had irrigator representatives, which it saw as having greater political influence.⁷⁵

1.98 SAMI encouraged the MDBA to seek input from industry stakeholders when considering its allocation of resources, with Ms Martin of SAMI arguing that the MDBA was 'very policy heavy' and that better allocation of funding could occur towards compliance and monitoring.⁷⁶

1.99 Conversely, MLDRIN advised the committee that the South Australian government engaged very well with Indigenous nation groups with regard to water management and planning, as did Victoria. However, there was room for

73 Mr Stuart LeLievre, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, pp. 27-28.

74 Macquarie Marshes Environmental Landholders Association, *Submission 20*, [p. 1].

75 Inland Rivers Network, *Submission 54*, pp. 2, 4.

76 Ms Caren Martin, South Australia Murray Irrigators, *Committee Hansard*, 2 November 2017, pp. 29-30.

improvement in NSW, and MLDRIN encouraged NSW to commence re-engagement, particularly in the west of the state.⁷⁷

Transparency

1.100 Professor Richard Kingsford called for multiple lines of evidence to be used in determining levels of water use, observing that adequate measurement and reporting with transparency was essential. Professor Kingsford suggested that satellite imagery, water meter data—with proper compliance—and the monitoring of developments on floodplains would allow for 'transparent and rigorous reporting on water use, particularly in relation to floodplain flows'.⁷⁸

1.101 Similar views were expressed by the Wentworth Group of Concerned Scientists (Wentworth Group), which argued that:

Standard auditing practices should be in place to validate data on water use, by applying financial reporting, auditing and insurance standards to a water context, and using multiple lines of evidence, such as hydrographs, metering records, aerial imagery and production data. Risk assessments can help focus auditing efforts on valleys where risks of non-compliance are high, such as valleys which are poorly metered or remote.⁷⁹

Irrigator responses to Four Corners allegations

1.102 There were strong sentiments expressed by a number of MDB water users about the Four Corners allegations and the negative assertions these allegations made against entire water-use industries. Irrigators in particular urged caution in taking the Four Corners claims as factually correct, and argued that the majority of water users were fully compliant and had no tolerance for water theft.

1.103 For example, the Gwydir Valley Irrigators Association (GVIA) argued that irrigators and their communities had, for many years, undertaken significant reform to ensure water was managed sustainably. As a result, 'many communities are fatigued by the consistent requirement to defend the foundation of their economies and social fabric'.⁸⁰

1.104 The GVIA argued that the water management framework clearly identified that users were able to legally access water, when the conditions of their access were met. The GVIA concluded that 'operating outside these specific access arrangements

77 Mr Grant Rigney, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard*, 2 November 2017, pp. 8-9.

78 Professor Richard Kingsford, *Submission 27*, pp. 4, 7.

79 Wentworth Group of Concerned Scientists, *Submission 33*, p. 4.

80 Gwydir Valley Irrigators Association, *Submission 46*, p. 11.

is illegal water take but operating within them is not, regardless of the source of the water being accessed'.⁸¹ This view was put forward by several other submitters.

1.105 Barwon-Darling Water (BDW) responded to the claims by Four Corners, noting that several members of its organisation had been implicated by its allegations and that Barwon-Darling irrigators had 'excellent systems that measure water diversion and use'. BDW stated its belief that a 'good metering and monitoring program is 90% of any compliance program'. BDW put forward a strong statement in response to the allegations:

There were statements made in the original Four Corners program that were blatantly untrue, and commentary that exhibited an ignorance of the industry, water markets and recent water reform issues. These comments ignore the enormous amount of work irrigators have done over the last twenty years during a massive water reform process; and they fail to appreciate the contribution irrigated agriculture makes in local and regional communities.⁸²

1.106 Cotton Australia put forward its expectation that any allegations of non-compliant water management be investigated in an appropriate and transparent manner, reiterating that it had zero tolerance for water theft. Cotton Australia expressed the view that:

the vast majority of all irrigation entitlement holders, in all jurisdictions and catchments, do the right thing. However, as with any cross-section of society there will be small minority who do not, and they need to be dealt with appropriately.

Like any viewer, Cotton Australia found the allegations in "Pumped" disturbing, and it is appropriate that compliance activities be reviewed.

However, Cotton Australia also strongly cautions against anyone taking those allegations at "face value", and making rash decisions as a result.⁸³

1.107 The sentiments expressed by Cotton Australia were echoed by the National Irrigators' Council (NIC), which stated its 'zero tolerance' for water theft, and its support for enforced compliance activity and 'best possible metering'. The NIC reiterated its willingness to work with all stakeholders to ensure the Basin Plan was implemented, provided there were 'no further negative impacts on communities'. The NIC agreed that the existing sanctions should be applied where a water offence has been proven. However, the NIC observed that:

the vast majority of irrigators in the Basin do the right thing. They get angry if people steal water and right now they are also angry at having their

81 Gwydir Valley Irrigators Association, *Submission 46*, p. 18.

82 Barwon-Darling Water, *Submission 50*, pp. 3-4, 9.

83 Cotton Australia, *Submission 17*, pp. 10, 12.

reputation, hard work and even their product tarnished by unfair generalisations.⁸⁴

1.108 Lachlan Valley Water suggested that there was some public confusion as to water management in the Basin, stating that Four Corners failed to differentiate between the total water in the system, and 'the much smaller proportion that is available to licence holders'. Lachlan Valley Water agreed that any shortcomings in compliance systems should be addressed, with licence holders supportive of reliable and workable water measurement and regulatory systems.⁸⁵

1.109 The Queensland Farmers' Federation (QFF) put forward its support for the metering of all irrigation areas across the Basin states, in order to 'accurately measure water take and effectively manage compliance'. The QFF continued that:

Irrigators depend on robust and transparent regulation to help them manage their use of water, so compliance arrangements must have high standards of transparency and be well managed to ensure the system has confidence of irrigators and wider community.⁸⁶

1.110 The Mungindi Water Users' and Cotton Growers Association Inc. argued that irrigators complied with strict guidelines and water pumping procedures, and understood that 'acting outside these parameters is illegal'. The Association continued that irrigators endorse a transparent reporting system on water usage, to uphold the industry's integrity and demonstrate its compliance with the water rules and regulations. The Association concluded that:

It is critical that the Murray-Darling Basin Plan continues through its complexities with all states uniting to provide accurate reporting of flows and deliver the key objectives of the Plan.⁸⁷

84 National Irrigators' Council, *Submission 31*, pp. 6-8.

85 Lachlan Valley Water, *Submission 39*, p. 3.

86 Queensland Farmers' Federation, *Submission 7*, p. 2.

87 Mungindi Water Users' and Cotton Growers Association Inc., *Submission 53*, pp. 5-6.

Chapter 2

Regulatory framework for the Murray-Darling Basin and water metering and monitoring

2.1 The MDB has a complex history, with competing demands for water resources from various stakeholders, such as Basin states, irrigators and other agricultural groups, river communities, and environmental bodies. These competing demands therefore make it challenging to manage the appropriate allocation and use of water via legislation and other regulatory frameworks.

2.2 Historically, water management was controlled by the individual Basin states. However, the Basin Plan, which came into effect in 2012, allowed the Commonwealth to take a more prominent role in the management of the Basin's water resources.

2.3 This chapter details the various Commonwealth and state governance arrangements and legislative frameworks that regulate water management, compliance and enforcement across the MDB. The chapter also considers the metering and monitoring regulations and systems in place, with some examination of metering in both South Australia and NSW.

Legislation

2.4 The MDB is governed by a complex arrangement of interacting legislation at both the Commonwealth and state level.

2.5 It should be noted that it is the states that directly regulate water usage in the Basin, with no direct involvement of the Commonwealth in state matters such as licensing, regulation, and day-to-day water management.

Water Act 2007 (Commonwealth)

2.6 The *Water Act 2007* (Water Act) commenced on 3 September 2007, giving effect to the Government's National Plan for Water Security. This Plan provided an initial \$10.05 billion for modernising Australia's irrigation infrastructure, addressing over-allocation of water in the Basin, reforming management of the Basin and investing in water information.¹

2.7 The Water Act provides for a Basin-wide approach to setting supportable limits on water that can be taken from the Basin, while sustainably managing water resources.

2.8 The objects of the Act are to:

1 Explanatory Memorandum, Water Bill 2007, p. 2.

- enable the Commonwealth, in conjunction with the Basin states, to manage Basin water resources;
- to give effect to relevant international agreements, to the extent those agreements are relevant to the use and management of the Basin's water resources, and provide special measures in accordance with those agreements to address threats to the water resources of the Basin;
- promote the use and management of Basin water resources 'in a way that optimises economic, social and environmental outcomes';
- without limiting the previous two points:
 - ensure the return to environmentally sustainable levels of extraction for water resources that are over-allocated or overused,
 - protect, restore and provide for the ecological values and ecosystem services of the Basin,
 - subject to the above two points, 'maximise the net economic returns to the Australian community from the use and management' of Basin water resources;
- improve water security for all users of Basin water resources;
- ensure the management of Basin water resources is in accordance with the broader management of natural resources in the Basin;
- achieve 'efficient and cost effective water management and administrative practices' for Basin water resources; and
- provide for the 'collection, collation, analysis and dissemination' of information on Australia's water resources and the use and management of water in Australia.²

Murray-Darling Basin Plan

2.9 The Basin Plan was adopted as a legislative instrument in November 2012 and provides for the integrated management of the water resources in the Basin. The Plan limits the amount of water that can be extracted or taken annually from the Basin for consumptive use, while leaving enough water for the environment. This amount is called the Sustainable Diversion Limit (SDL).³

Sustainable Diversion Limits

2.10 SDLs have been determined for each catchment and aquifer in the Basin. The Basin Plan 'determines the long term average amount of water that can be extracted

2 *Water Act 2007*, Part 1, s. 3, <https://www.legislation.gov.au/Details/C2017C00151>

3 Murray-Darling Basin Authority, *What's in the Basin Plan?*, <https://www.mdba.gov.au/basin-plan/whats-basin-plan> (accessed 19 January 2018).

each year from the Basin for urban, industrial and agricultural use', and this is reflected in the SDLs. DAWR advised the committee that:

The Basin-wide SDL for surface water is 10,783 gigalitres, which represents a reduction of 2,750 gigalitres (GL) from pre-existing levels of diversion, with this SDL formally commencing from 1 July 2019.⁴

2.11 This 2750GL reduction is referred to as the water recovery target. The Basin Plan included a seven-year transition period to enable time for adjustment to the Plan and SDLs across the Basin, with opportunities to review and improve the Plan during this implementation phase. As of 1 July 2019, the SDLs will come into effect.⁵

Water Resource Plans

2.12 The SDL will be implemented through Basin state water resource plans (WRPs). The WRPs are developed under the existing water planning frameworks in Basin states, and are a key mechanism by which each state will implement the Basin Plan.

2.13 There are 36 WRP areas across the Basin, incorporating groundwater and surface water areas. The WRPs outline how water resources will be managed to be consistent with the Basin Plan, and help to align Basin-wide and state-based water resource management. The WRPs detail, among other things, annual limits on water take, how water will be managed during extreme events, environmental water, and strategies to achieve water quality standards.⁶

2.14 WRPs must be submitted to the MDBA for assessment, which then evaluates if the WRPs are consistent with the Basin Plan. The MDBA will then advise the Minister for Agriculture and Water Resources (Minister) if the WRP should be accredited, with the Minister making the final determination on accreditation. This process must be completed prior to 1 July 2019. Despite this deadline, there is currently only one accredited WRP (for Warrego-Paroo-Nebine). The MDBA has monitoring and compliance responsibilities for WRPs.⁷

Roles and responsibilities

2.15 There are many different actors and legislative instruments involved in the governance of the MDB. Each Basin state (Queensland, NSW, Victoria and South

4 Department of Agriculture and Water Resources, *Submission 47*, p. 2.

5 Murray-Darling Basin Authority, *Basin Plan timeline*, <https://www.mdba.gov.au/basin-plan/basin-plan-timeline>

6 Murray-Darling Basin Authority, *Water resource plans*, <https://www.mdba.gov.au/basin-plan-roll-out/water-resource-plans> (accessed 19 January 2018).

7 Murray-Darling Basin Authority, *Water resource plans*, <https://www.mdba.gov.au/basin-plan-roll-out/water-resource-plans> (accessed 19 January 2018).

Australia) and the ACT⁸ has its own water legislation, and the MDB as a whole is governed by the Water Act and the Basin Plan. Compliance and enforcement activities are distributed amongst various state and federal agencies.

2.16 The Water Act ascribed responsibilities to a number of Commonwealth agencies in developing, implementing and enforcing the Basin Plan. Each Basin state government also has a role to play in protecting state water resources and enforcing state legislation. Below is an overview of the role and responsibilities of the various governing bodies.

Commonwealth

Murray-Darling Basin Authority

2.17 The MDBA was established under the Water Act as an independent statutory authority. Its responsibilities include, among other things, to:

- prepare, implement and review the Basin Plan, including setting and altering SDLs;
- work with Basin states to develop and accredit WRPs;
- measure, monitor and record the quality and quantity of the Basin's water resources;
- support and conduct research and investigations into the Basin's water resources and dependent ecosystems;
- efficiently deliver water to users on behalf of partner governments; and
- support sub-committees (including the Basin Community Committee and the Basin Plan Implementation Committee) and give effect to the decisions of the Ministerial Council and the Basin Officials Committee in relation to the Basin governments' joint programs.⁹

2.18 With respect to compliance and enforcement of the Water Act and the Basin Plan, the MDBA has a number of responsibilities. The Water Act identifies the MDBA as the appropriate enforcement agency for a contravention of the provisions of the Act relating to the management of Basin water resources, including the Basin Plan and WRPs.¹⁰

2.19 The compliance activity undertaken by the MDBA complements the compliance activities of the Basin states. The powers of the MDBA in regard to compliance and enforcement are detailed in Part 8 (Enforcement) and Part 10 (MDBA special powers) of the Water Act.

8 Any references in this report to 'Basin state' includes the Australian Capital Territory.

9 Murray-Darling Basin Authority, *Annual Report 2016-17*, pp. 7, 11; Senate Select Committee on the Murray-Darling Basin Plan, *Refreshing the Plan*, March 2016, p. 10.

10 *Water Act 2007*, s.136.

2.20 Under Part 8, the MDBA enforcement powers include—but are not limited to—the power to seek injunctions, declarations, court orders for pecuniary penalties, issue enforcement notices and infringement notices, and enter into enforceable undertakings. Under Part 10, the MDBA has special powers to enforce contraventions, including the power to appoint authorised officers to exercise relevant powers. Authorised officers have the power to enter land in certain circumstances, including for compliance purposes.¹¹

Commonwealth Water Minister

2.21 In addition to making the final determination on the accreditation of WRPs, the Minister approves program funding allocations, and, pursuant to the Water Act, approves the Basin Plan. The Minister also evaluates the progress of implementation of the Basin Plan, and chairs the Murray-Darling Basin Ministerial Council.¹²

2.22 The Minister has enforcement powers with respect to contraventions of a provision of Part 7 of the Water Act, which relates to 'water information' functions.¹³

Department of Agriculture and Water Resources

2.23 The Department of Agriculture and Water Resources (DAWR) is responsible for recovering water through on- and off-farm infrastructure investment and water purchases (commonly referred to as 'buybacks'). It is also responsible for funding projects through the SDL adjustment mechanism.¹⁴

2.24 DAWR chairs the Basin Officials Committee (BOC). The BOC facilitates cooperation and coordination between the Australian Government, the Basin states and the MDBA in funding works and managing Basin water and other natural resources. It is responsible for providing advice to the Ministerial Council.¹⁵

2.25 The Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin (IGA) is an undertaking by the Commonwealth and Basin states to ensure that the Basin Plan is implemented in a cost effective manner to support the goals of the Plan. Under the IGA, it was agreed that the Commonwealth would provide financial support to the Basin States via the National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin (NPA). This NPA recognises the costs that states will incur in the implementation of the Basin

11 *Water Act 2007*, ss. 136-170; ss. 216-239. The MDBA's compliance functions are discussed further in Chapter 4.

12 Murray-Darling Basin Authority, *Annual Report 2016-17*, p. 21; Senate Select Committee on the Murray-Darling Basin Plan, *Refreshing the Plan*, March 2016, p. 179.

13 *Water Act 2007*, s. 136.

14 Murray-Darling Basin Authority, *Basin Plan Annual Report 2015-16*, April 2017, p. 12.

15 Murray-Darling Basin Authority, *Basin Officials Committee*, <https://www.mdba.gov.au/about-us/governance/basin-officials-committee> (accessed 12 October 2017).

Plan, including through the development of WRPs, implementation of new compliance and reporting requirements, and amendment of water trading rules.¹⁶

2.26 The NPA sets out milestones for implementation of reforms and each state is required to report on their milestone progress through an annual statement of assurance. DAWR is responsible for the assessment of the states' progress against these milestones.¹⁷

Commonwealth Environmental Water Holder

2.27 The Commonwealth Environmental Water Holder (CEWH), established under the Water Act, manages the Commonwealth's environmental water holdings to 'protect and restore environmental assets' of the MDB and manage water in accordance with the Basin Plan.

2.28 The Basin Plan requires that the CEWH 'perform its functions and exercise its powers in a way that is consistent with the Basin-wide environmental water strategy', while having regard to the 'Basin annual environmental watering priorities'.¹⁸

2.29 Commonwealth environmental water holdings are water acquired by the Australian Government through a combination of investments in water-saving infrastructure, water purchases (buybacks) and other water recovery programs. The Commonwealth environmental water holdings are a mix of entitlement types, including regulated, unregulated and groundwater licences with varying levels of security. Commonwealth environmental water entitlements are subject to the same allocation, carryover and other rules as equivalent entitlements held by other water users. They are also subject to the same fixed and variable tariffs as other equivalent entitlements across the Basin.¹⁹

State governments

2.30 Each Basin state government is responsible for implementing the Basin Plan within its jurisdiction, including through:

- developing projects for the SDL adjustment mechanism;
- implementing water trading rules;

16 Council of Australian Governments, *Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin*, June 2013, pp. 2 and 6.

17 Department of Agriculture and Water Resources, *National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin: milestone assessment reports*, October 2016, <http://www.agriculture.gov.au/water/mdb/npa-water-reform-mdb-milestone-reports> (accessed 11 December 2017).

18 Commonwealth Environmental Water Holder, *Submission 9*, p. 1.

19 Commonwealth Environmental Water Holder, *Response to the ACCC Review of Water Charges Rules Draft Advice*, November 2015, p. 1.

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- coordinating the delivery of environmental water;
 - monitoring and reporting;²⁰ and
 - allocating water to licence holders.²¹

2.31 Basin states must also set and enforce the rules for water take. The most pressing issue for Basin states at the moment is the development of WRPs, which must be accredited before 1 July 2019. The MDBA advised that:

Basin states prepare WRPs under their own legislation to be accredited under the Basin Plan so that an accredited WRP will align with, and give effect to, the requirements of the Water Act and the Basin Plan. Basin states will continue to be responsible for ensuring compliance with their own legislation—that is, states will continue to be responsible for preventing illegal take. The MDBA's role is principally to ensure compliance at the valley (or SDL resource unit) scale, through a new SDL accounting framework supported by an appropriate audit and assurance regime.²²

2.32 The MDBA confirmed during Senate Estimates in 2017 that it would exercise its powers to not endorse a WRP, should the situation warrant it. The MDBA noted that 'compliance is clearly an issue' and this will be considered when WRPs were presented by the states for approval.²³

2.33 In confirming that compliance with Basin state water licences was a matter for the relevant state government agency, the MDBA observed that the allegations made by Four Corners were a matter for NSW, and that 'none of the allegations relate to the actions of the MDBA'.²⁴

NSW Barwon-Darling Water Sharing Plan

2.34 The Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (Barwon-Darling WSP) was alluded to in the Four Corners program, with the program alleging that the water available for extraction by irrigators increased under that WSP. A number of submitters and witnesses to the inquiry held strong views on the Barwon-Darling WSP.

20 Murray-Darling Basin Authority, *Annual Report 2015-16*, April 2017, p. 12.

21 Senate Select Committee on the Murray-Darling Basin Plan, *Refreshing the Plan*, March 2016, p. 179.

22 Murray-Darling Basin Authority, *Submission 26*, p. 2.

23 Mr Phillip Glyde, Murray-Darling Basin Authority, *Estimates Hansard*, 27 October 2017, p. 73.

24 Murray-Darling Basin Authority, *Submission 26*, p. 2.

2.35 The Barwon-Darling WSP commenced on 4 October 2012. The Barwon-Darling WSP covers the towns of Mungindi, Mogil Mogil, Collarenebri, Walgett, Brewarrina, Bourke, Louth, Tilpa and Wilcannia.²⁵

2.36 In its submission to the committee, the MDBA provided comment on the Barwon-Darling WSP, and expressed concern that it could impact on environmental flows, thus lending support to some of the claims made by Four Corners and by others in evidence to the inquiry. The MDBA advised that this particular WSP:

commenced a month prior to the Basin Plan coming into effect [in 2012]. Significant changes occurred between the draft plan and the final plan being released, including a change to the sharing components that resulted in fewer C Class (high flow) shares, and an increased number of A Class and B Class (low and medium flow) shares. The net effect of this was to allow extraction of water more often at the lower end of the flow regime. These and other changes, such as allowing trade of A class water, removing pump intake size limitations, and allowing storage of A class water, made by NSW to the WSP have the potential to impact on the integrity of environmental flow events and the magnitude of downstream flow.

Stakeholders have raised concerns about aspects of the current Barwon-Darling WSP and, in particular, whether it is consistent with the Basin Plan and whether the MDBA has any role in compliance for this WSP. Under the Water Act 2012 [sic] (Cth), the Barwon-Darling WSP is deemed to be an 'interim' water resource plan because it was made under NSW law prior to the Basin Plan being finalised. 'Interim' plans prevail over the Basin Plan to the extent of any inconsistency between the two.²⁶

2.37 The MDBA stated that they were consulted by the NSW Government in 2011 in the preparation of the WSP but did not provide comment. As the Basin Plan was not in effect at that time, the MDBA contended that there was no legislative basis on which it could make comment. The MDBA were not consulted over late changes made to the draft WSP.²⁷

2.38 The CEWH likewise made clear its significant concerns over the Barwon-Darling WSP, observing that changes to it allowed some irrigators to divert more water from low flow events.²⁸ Further, while Individual Daily Extraction Limits were provided for by the WSP, NSW had not implemented these limits. The CEWH stated that 'some flow events since 2012 have been significantly reduced by water extraction'. The CEWH noted that the 'effective and efficient use of Commonwealth

25 NSW Department of Primary Industries, *Barwon-Darling Unregulated and Alluvial*, http://www.water.nsw.gov.au/water-management/water-sharing/plans_commenced/water-source/bdua (accessed 30 August 2017).

26 Murray-Darling Basin Authority, *Submission 26*, p. 4.

27 Murray-Darling Basin Authority, *Submission 26*, p. 4.

28 This view was disputed by Barwon-Darling Water; see *Submission 50*, pp. 14-15.

environmental water' is dependent on the appropriateness of Basin state WRPs and other water use regulations.²⁹

Views on the Barwon-Darling WSP

2.39 A number of submitters suggested that the Barwon-Darling WSP did not sufficiently protect environmental water, identifying pump sizes and extraction limits as primary concerns.

2.40 These concerns were well summarised by Mr Lachlan Gall of PAWD, who argued that excessive water extraction resulting from the Barwon-Darling WSP had a 'devastating impact on the reliability of the Darling River below Bourke'. Mr Gall stated that:

The 2012 Barwon-Darling water sharing plan has failed to meet its own objectives in terms of equitable resource sharing between all stakeholders. Several operating rules were introduced that resulted in significant windfalls for irrigators. The operating rules of particular concern were the removal of pump-size limits, the approval to extract 300 per cent of an entitlement per annum and the failure to implement daily extraction limits. The association recommends that prompt action is taken to reverse these provisions in the Barwon-Darling water sharing plan.³⁰

2.41 Cotton Australia, however, defended the Barwon-Darling WSP, stating that its rules of access had been developed with an acknowledgement that the Barwon-Darling was an unregulated river, and therefore was managed differently to regulated systems. Cotton Australia argued that under the WSP all licence holders had a volumetric limit on take which they could not exceed, and viewed this volumetric limit as preserving environmental flows.³¹

2.42 The NIC likewise suggested that the size or capacity of a pump did not change the overall amount a licence holder was entitled to extract. The NIC was of the view that the size of the pump was unlikely to make much difference to overall take, concluding that 'it is the overall amount that should be regulated not the equipment used to extract it'.³²

Sustainable diversion limit adjustment mechanism

2.43 The Basin Plan allows the SDL to be adjusted. This could occur if Basin Plan environmental outcomes were reached with less water, resulting in more water

29 Commonwealth Environmental Water Holder, *Submission 9*, pp. 3-4.

30 Mr Lachlan Gall, Pastoralists' Association of West Darling, *Committee Hansard*, 1 November 2017, p. 31.

31 Cotton Australia, *Submission 17*, p. 9.

32 National Irrigators' Council, *Submission 31*, pp. 14-15. See also Barwon-Darling Water, *Submission 50*, p. 15.

remaining in the system for other uses (such as irrigation). Likewise, more efficient farming practices could result in more water being available for the environment.³³ The adjustment mechanism in the Basin Plan allows for the recovery target to be amended up or down, prior to 2019, but by no more than five per cent.³⁴

2.44 Activities under the SDL adjustment mechanism fall into one of two categories, being either a supply or an efficiency measure.

2.45 Supply measures are 'works, river operations or rule changes that enable the use of less water but still achieve the Plan's environmental outcomes', such as reconfiguring lakes or storage systems to reduce evaporation. Supply measures would allow a reduction in the 2750GL recovery target, 'thereby reducing the social and economic impact of water recovery to achieve the Basin Plan's SDL'.³⁵

2.46 Efficiency measures recover and provide more water for the environment but only if there are no negative social and economic impacts in doing so, and the measures would allow for environmental water savings without adverse impact on production. Efficiency measures, such as improvements to on-farm irrigation, would allow for the 2750GL recovery target to be increased without reducing the Basin's productive capacity.³⁶

2.47 The adjustment mechanism is intended to provide greater flexibility in setting the final water recovery figure. At the time of making its submission to the committee, DAWR advised that some of the adjustment mechanisms included:

- reducing the Southern Basin water recovery target by up to 650GL through supply measure offsets, such as environmental works on floodplains;
- allowing the recovery of an additional 450GL to achieve enhanced environmental outcomes with neutral or improved socio-economic outcomes through efficiency measures; and
- constraints measures that support better environmental outcomes by easing or removing constraints on the capacity to deliver environmental water.³⁷

33 Murray-Darling Basin Authority, *Sustainable Diversion Limit Adjustment Mechanism*, <https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits> (accessed 19 January 2018).

34 Department of Agriculture and Water Resources, *Sustainable Diversion Limit (SDL) adjustment mechanism*, 9 October 2017, <http://www.agriculture.gov.au/water/mdb/policy/sdl-adjustment-mechanism> (accessed 19 January 2018).

35 Department of the Environment and Energy, *Fact sheet: Sustainable Diversion Limit (SDL) adjustment mechanism*, <http://www.environment.gov.au/water/publications/mdb/factsheet-sustainable-diversion-limit-sdl-adjustment-mechanism> (accessed 23 January 2018).

36 Department of the Environment and Energy, *Fact sheet: Sustainable Diversion Limit (SDL) adjustment mechanism*.

37 Department of Agriculture and Water Resources, *Submission 47*, p. 2.

2.48 Basin states have since been able to identify a number of projects that would make the delivery of water 'more efficient and flexible', and the MDBA subsequently determined that 605GL of water would be available for communities through the SDL adjustment mechanism, if the projects were implemented.³⁸

2.49 Since DAWR providing its advice to the inquiry, the SDL adjustment mechanism has been utilised to reduce some water recovery targets. In January 2018, the Basin-wide water recovery target was formally reduced by 605GL. In July 2018, and following from a review of the northern Basin, the recovery target for the northern Basin was reduced from 390GL per year to 320GL per year.³⁹ The MDBA determined, via the Northern Basin Review, that the same environmental benefits could be achieved without having to use as much water.⁴⁰

2.50 Some concerns were raised in evidence about the SDL adjustments, as they relate to water theft. For example, Mr Grant Rigney of MLDRIN urged that SDL adjustments not proceed until the extent of water theft was known, and all inquiries and investigations into the allegations of water theft were concluded. Mr Rigney argued that the level of alleged theft could have ramifications for the 5 per cent up or down adjustment allowed to the SDL.⁴¹

Water metering and monitoring

2.51 To implement effective water compliance and enforcement regimes, it is vital that appropriate water metering and monitoring systems are in place. In theory, such systems provide the water market with transparency and allow breaches of the water rules to be addressed. Given the allegations of water theft made throughout 2017, it is clear that improvements are needed in metering and monitoring, particularly in NSW.

Background

2.52 The National Water Initiative (NWI), agreed to by the Council of Australian Governments (COAG) in 2004, was considered 'the national blueprint for water reform', under which Basin states committed to—among other things—introduce registers of water rights and standards for water accounting. In the same year, the National Water Commission (NWC) was established, with responsibility for

38 Murray-Darling Basin Authority, *Sustainable Diversion Limit Adjustment Mechanism*, <https://www.mdba.gov.au/basin-plan-roll-out/sustainable-diversion-limits> (accessed 19 January 2018).

39 Murray-Darling Basin Authority, *Water recovery*, <https://www.mdba.gov.au/basin-plan-roll-out/water-recovery> (accessed 31 October 2018).

40 Mr Phillip Glyde, Murray-Darling Basin Authority, *Estimates Hansard*, 27 October 2017, p. 63.

41 Mr Grant Rigney, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard*, 2 November 2017, pp. 10-11.

monitoring, auditing and assessing the national progress of the NWI; however, the NWC was abolished in 2014 and its functions transferred to other agencies.⁴²

2.53 As part of the NWI, the Basin states agreed to develop a national meter specification, and national standards for meter installation and the data collection systems associated with those meters. Further, there was agreement to apply national reporting guidelines on 'metered water use and associated compliance and enforcement actions'. The NWI provided that:

The Parties agree that the outcome of water resource accounting is to ensure that adequate measurement, monitoring and reporting systems are in place in all jurisdictions, to support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for environmental and other public benefit outcomes.⁴³

2.54 Further to the aims of the NWI, in 2010 the National Framework for Non-Urban Water Metering was established, to provide a nationally consistent basis for water metering. The National Framework provided for meter construction, installation and maintenance; the use of certified installers, maintainers and validators, and the requirements for compliance, auditing and reporting. It required all non-urban meters to comply with the national standards by 1 July 2020.⁴⁴

2.55 DAWR advised that the National Framework applies to meters owned by entitlement holders, water service providers and jurisdictional governments, and 'used for trade and/or related resource management activities'. Further, compliance with agreed national standards was a responsibility for individual jurisdictions. DAWR continued that:

Progress to date has included the development of new metering standards, development of a certification course and the development of some jurisdictional implementation plans. The Australian Government has also supported the establishment, accreditation and upgrading of two meter testing facilities in Australia, however meter suppliers and manufacturers have been slow to present meters for testing due to lack demand in the field.⁴⁵

42 Department of Agriculture and Water Resources, *National Water Initiative*, 10 August 2017, <http://www.agriculture.gov.au/water/policy/nwi> (accessed 6 November 2018).

43 Department of Agriculture and Water Resources, Intergovernmental Agreement on a National Water Initiative, pp. 18-19, <http://www.agriculture.gov.au/SiteCollectionDocuments/water/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> (accessed 6 November 2018).

44 Department of Agriculture and Water Resources, *National Framework for Non-urban Water Metering*, <http://www.agriculture.gov.au/water/policy/nwi/nonurban-water-metering-framework> (accessed 6 November 2018).

45 Department of Agriculture and Water Resources, *Submission 47*, p. 4.

2.56 Despite compliance responsibility resting with individual jurisdictions, some Commonwealth funding has been provided for water meter installation, where water savings have been demonstrated.⁴⁶

2.57 The MDBA noted that it was important to make the distinction between water meters—which measure the volume of flows—and telemetry, which transmits metering data in real time to state regulatory authorities. The MDBA continued that not all meters are fitted with telemetry, and those that are not must be manually read on location. Information on whether individual entitlements are metered or fitted with telemetry is held by the relevant state authorities. To this end, the MDBA advised that:

The recent Basin-wide Compliance Review considered this issue and included a recommendation for Basin states to require that all meters be easily identifiable by a unique reference number, and that information about entitlements, annual allocations, licence conditions, meter readings and account balances be made publically accessible.⁴⁷

Jurisdictional approaches to metering and compliance

2.58 The committee was interested to understand the differences in metering and monitoring between Basin states. To that end, the committee was particularly interested in the different approaches taken by South Australia and NSW.

South Australia

2.59 The committee was advised that in South Australia, all licensed water extraction is metered and monitored, with some exemptions for areas such as low-risk dams, and small extractions for stock and domestic use.⁴⁸ Mr Mike Fuller, of DEWNR, advised that:

In South Australia the meter fleet is privately owned; it's not government owned. So you get a variety of technologies of use. But, essentially, they are all flow recording meters. Some of them are electromagnetic and some of them are mechanical, but essentially all of the major licensed extractions are metered, and we go through a process of accounting water use against each licence each year. So there's a water account for each property, if you like.⁴⁹

2.60 DEWNR supplied further information regarding the water reporting and metering technology in place in that jurisdiction:

46 Department of Agriculture and Water Resources, *Submission 47*, p. 4.

47 Murray-Darling Basin Authority, answers to questions on notice, 27 October 2017 (received 20 December 2017).

48 The Victorian Government provided a submission detailing its compliance and enforcement framework; see *Submission 45*, pp. 1-2.

49 Mr Mike Fuller, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, p. 5.

The Department of Environment, Water and Natural Resources is using online technology to allow water licence holders to submit an online meter reading at any time. Should a customer submit a meter reading and provide contact details, an automatic water usage advice statement is supplied (like a bank statement for a water account). This functionality allows water users to more closely monitor their water usage against the available allocation as well as make business decisions more readily.

The Department is currently exploring the potential benefits of utilising satellite technology (such as the internet of things or virtual water meter technology) to enhance compliance monitoring programmes, as well as gain insight into crop/industry based irrigation practices.⁵⁰

2.61 With regard to compliance, Mr Fuller advised that on the River Murray in South Australia, meter readings are required quarterly, with any anomalies followed up on by the department. However, as a condition of their licence, licensees are required to immediately report broken meters. This can be completed online 'fairly easily and fairly readily'. Mr Fuller stated that:

If we determine that somebody knew that they had a meter that wasn't functioning and continued to take without reporting it, that would become a compliance action.

...I've got a team of technical compliance [officers]. In this state we have technical and compliance officers who administer the rules of water allocation plans, but they're also out there actively monitoring compliance activities. Then, if they find activities and it needs to be escalated, we have a team of investigators within the organisation who then...take the higher level investigations of these issues.⁵¹

2.62 Compliance action in South Australia is funded partly by a levy, but mostly through a state government appropriation.⁵²

2.63 The committee was advised of the various ways in which complaints could be made in South Australia to DEWNR, regarding potential breaches of water use rules and licences. Mr Fuller stated that complaints could be made through a water compliance website (anonymously or otherwise), via interactions with DEWNR water licensing and compliance staff, or through correspondence to the department. Staff then follow up on these allegations within 24 to 48 hours. How the department responds depends on the type of allegation:

If it is an allegation of illegal or unlicensed extraction, an officer in most cases can go out and make a determination if there is anything there that is

50 Department of Environment, Water and Natural Resources, answers to questions on notice, 2 November 2017 (received 23 February 2018).

51 Mr Mike Fuller, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, pp. 5-6.

52 Mr Mike Fuller, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, p. 5.

not supposed to be there to take that water. It could be a dam that has been illegally constructed, a pump that has been illegally put in place, or some other diversion. That is fairly obvious and if we can get out there soon enough we have normally been able to determine pretty quickly whether that this fact or just innuendo.

Sometimes it may be around meter tampering, which can be a little bit more difficult. That may be an activity that occurs and then is taken away and it all looks normal when you arrive there. In those sorts of cases there are other mechanisms we use to estimate the water use to see whether what is recorded on the meter is reasonable. We have about four or five other mechanisms that are actually gazetted mechanisms for estimating water use. They are used on occasions where we have a suspicion about what is being recorded on a water monitoring device and we may use those other mechanisms to estimate whether we think that is real or is based on the type of crop for the type of activity that is being undertaken on that property.⁵³

2.64 DEWNR undertakes random and scheduled compliance inspections on licensees, while also conducting random audits across the state over a 12-month period. These audits aim for a 10 per cent sample of meter reads, of the 2000 to 3000 meters along the river.⁵⁴

2.65 With regard to transparency, DEWNR advised that it maintains a publicly accessible Water Licence and Permit Register, allowing member of the public to view information on a water licence, such as the water allocation and water source. This Register does not include water usage information. DEWNR also reports publicly each year on its compliance actions taken the year prior, and its compliance focus during the current water year.⁵⁵

2.66 Ms Caren Martin of SAMI advised the committee that water theft by irrigators in South Australia was rare, due to effectively developed compliance and enforcement regimes. Ms Martin stated that in South Australia:

Our metering systems are more advanced. We've been investing in them longer. Our irrigation systems are mostly pump and suction delivered, so the gravity problems of metering are not the same. It comes through a pipe. Yes, modern technology is definitely employed here by a vast majority—if not 90 per cent, 100 per cent of the irrigators. If not, they are brought to account by the departments.⁵⁶

53 Mr Mike Fuller, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, p. 6.

54 Mr Mike Fuller, Department of Environment, Water and Natural Resources, *Committee Hansard*, 2 November 2017, pp. 6-7.

55 Department of Environment, Water and Natural Resources, answers to questions on notice, 2 November 2017 (received 23 February 2018).

56 Ms Caren Martin, South Australia Murray Irrigators, *Committee Hansard*, 2 November 2017, p. 24.

2.67 Mr Paul Shanks of SAMI provided further information on the irrigation techniques being used in South Australia, including drip irrigation, soil moisture measurement, the specific application of water for specific products, the cultivation of dry-grown products and the use of water only in drought years. Mr Shanks noted that these steps ensure that water is being surrendered for the environment.⁵⁷

New South Wales

2.68 In 2010, the then NSW Office of Water put forward a business case titled 'NSW Sustaining the Basin Program: NSW Metering Project'. The project aimed to improve the quality and coverage of the metering of rural water users in NSW. The business case observed that in the regulated river systems of the NSW MDB, there were 7500 pumps extracting water, and up to 4000 meters would be installed in the area. In the unregulated systems, there were thought to be 5000 pumps, with only 300 equipped with meters. The project sought to install up to 2500 meters on unregulated rivers.⁵⁸

2.69 The Commonwealth provided approximately \$31.5 million in funding for the NSW Southern Metering project, administered by the NSW Government between 2012 and 2017. The project aimed to 'improve the quality and coverage of the metering of rural water users in the NSW Murray-Darling Basin and provide access to real data on water extraction'.⁵⁹

2.70 The committee was unable to determine whether the project put forward by the 2010 business case, and the NSW Southern Metering project funded by the Commonwealth, were the same programs. Despite this, during Senate Estimates in October 2017, some concerns were raised that the Commonwealth funding which had been provided to NSW for the installation of the water meters, was allocated for the installation of meters in areas of the least water use, or focused on the southern, rather than northern Basin.

2.71 In response to questions on notice, DAWR did confirm that as of July 2014, the NSW metering project 'had not met water, project delivery or participation expectations'. As a result:

The department considered that the failure to deliver milestone requirements was more than sufficient to invoke the project termination process outlined in the NSW Water Management Partnership Agreement and held discussions with NSW Department of Primary Industries – Water

57 Mr Paul Shanks, South Australia Murray Irrigators, *Committee Hansard*, 2 November 2017, p. 25.

58 NSW Government Office of Water, *NSW Sustaining the Program: NSW Metering Project Business Case*, June 2010, p. iii; http://www.water.nsw.gov.au/_data/assets/pdf_file/0008/549278/recovery_sustain_basin_bc_meters_now_11june10.pdf (accessed 8 November 2018).

59 Department of Agriculture and Water Resources, response to questions on notice, 27 October 2017 (received 20 December 2017).

(DPI Water) to consider ways to ensure the project would deliver contracted obligations. NSW DPI Water advised that it should reduce the scope to focus initially on rolling-out meters in southern valleys.⁶⁰

2.72 The project saw 710 meters installed and 10.65GL of surface and groundwater recovered from the Murray, Murrumbidgee and Lower Darling catchments.⁶¹

2.73 DAWR did note that the northern and southern Basins had very different characteristics, with the northern Basin containing more flood plains, and the southern Basin more 'highly modified and managed' in comparison.⁶²

2.74 Mr Paul Morris of DAWR acknowledged that the southern Basin was much more regulated than the northern Basin, with the northern Basin going through a 'transition to becoming more regulated'. Mr Morris continued that:

the metering arrangements have been much more sophisticated and well developed in the south, and that happens to be where probably there is a larger predomination of the relatively smaller properties; and in the north, where...there is quite a large number of large properties, that's the area that in the past has been more unregulated.⁶³

2.75 DAWR provided further information on the progress of its water monitoring programs. Ms Mary Colreavy of DAWR advised that:

some very significant programs that we've rolled out in the southern connected basin, the Murray and Murrumbidgee valleys, have involved a wide range of installations of both meters and other installation that is all connected to telemetry. Coleambally is already fully automated. Murray will be by the end of the current round of works that they're undertaking, which will be in the next few months, and Murrumbidgee is also largely fully automated.⁶⁴

2.76 The committee notes that significant attention appears to have been given to metering in the southern areas of the NSW MDB. There also appears to be a stark contrast between the approaches of South Australia and NSW to water metering and compliance.

60 Department of Agriculture and Water Resources, response to questions on notice, 27 October 2017 (received 20 December 2017).

61 Department of Agriculture and Water Resources, response to questions on notice, 27 October 2017 (received 20 December 2017).

62 Mr Malcolm Thompson, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 58.

63 Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 57.

64 Ms Mary Colreavy, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, pp. 58-59.

Views on water metering in Basin states

2.77 There was a wide range of views put forward throughout the inquiry as to the effectiveness of the Basin Plan and the mechanisms put in place—via water metering and monitoring—to determine compliance with the various agreements and legislative frameworks administered by the Basin states.

2.78 The Wentworth Group made clear its concerns with metering and compliance across the Basin, stating that it was 'inconceivable that we do not know how much water is being extracted from surface and groundwater systems for consumptive use', particularly given the technology available and the extent of public investment. The Group was of the view that metering of all water extractions was 'fundamental for equitable and sustainable management of water' in the MDB.⁶⁵

2.79 The AFA likewise put forward its strong support for proper water metering, arguing that it was:

unsound and negligent business practice to invest billions of dollars of taxpayer funds in water management of the MDB and not have a system in place to measure the time, place and amount of the extracted volume of the water resource.⁶⁶

2.80 The National Farmers' Federation (NFF) was of the view that water users expect 'fair, responsive, strong, risk based and transparent' regulatory approaches to water management. The NFF observed that it was an active participant in the development of national metering standards, and that Australian irrigators were using very technical and accurate meters in most locations. However, the NFF did caution that meter technology used in the southern Basin, may not be compatible with the conditions of the northern Basin.⁶⁷

2.81 BDW commented that the recent decline in the confidence of compliance systems coincided with the reduction of meter readers in the field. Despite the benefits of telemetry, BDW felt that 'nothing can replace boots and eyes on the ground'. BDW noted that having meter readers in the field was a 'visible sign of government presence, and represented a vital element of any quality compliance system', being monitoring and surveillance.⁶⁸

2.82 The Mayor of Paroo Shire Council, Mr Lindsay Godfrey, argued that current technology should enable an appropriate compliance regime that provides confidence through the whole system. This would ensure that 'when you're buying back water in a certain area and you're trying to rebuild the river, you know that that water is actually going to get to where it's supposed to'. However, Mr Godfrey was of the view that it

65 Wentworth Group of Concerned Scientists, *Submission 33*, pp. 2, 3.

66 Australian Floodplain Association, *Submission 44*, p. 4.

67 National Farmers' Federation, *Submission 42*, pp. 5-6.

68 Barwon-Darling Water, *Submission 50*, p. 11.

would be difficult for irrigators to bear the cost of any further compliance measures. He stated that:

To put an extra charge on the irrigators for the compliance measures would be a very difficult bill, especially for a lot of the smaller irrigators to carry. I think the cost of compliance would have to be borne by the federal government because across the board state governments would have different ideas on compliance and there wouldn't be a constant process that would be transparent to everyone.⁶⁹

National Water Commission

2.83 The NWC, abolished in 2014, appeared to hold a number of oversight responsibilities that may have gone some way to addressing—or indeed stopping—the mismanagement of the Basin's water resources, and may have played a role in monitoring and auditing water meter coverage. There were numerous calls by submitters for the NWC, or a body similar to it, to be reinstated.

2.84 Dr Adam Loch and colleagues voiced their concerns over the abolishment of the NWC, noting that the independent statutory body provided assurance, monitoring and reporting on the progress of the NWI goals, and progressed national approaches to managing, pricing and trading water. It was observed that the NWC played an important role in the allocation of funding, with:

the capacity to recommend that a state not receive its annual payments from the Commonwealth if they were found to be lagging or non-compliant with water reform objectives. They were free to comment publicly on these issues, and did so a number of times—although the Commonwealth ultimately never withheld payments on the basis of an NWC finding. This 'naming and shaming' earned the NWC plenty of political enemies across the national landscape; but also earned them the respect of many in the wider water sector, as well as international admiration for Australia's strong and independent water reform institutions.⁷⁰

2.85 Dr Loch and colleagues observed that the NWC was abolished on the basis that doing so would save \$20 million over the forward estimates at the time, and that the objectives of the NWI had been achieved. However, as the authors noted, 'given the recent accusations and identified problems in NSW this claim seems premature at best, and political foolishness at worst'. Additionally, the \$20 million in savings 'may pale in comparison' to the cost of the independent inquiries recently undertaken into water theft and compliance, and the cost of implementing compliance frameworks in Basin states.⁷¹

69 Mr Lindsay Godfrey, Paroo Shire Council, *Committee Hansard*, 2 November 2017, pp. 16-17.

70 Dr Adam Loch, Dr Erin O'Donnell, Dr David Adamson and Dr Avril Horne, *Submission 12*, p. 9.

71 Dr Adam Loch, Dr Erin O'Donnell, Dr David Adamson and Dr Avril Horne, *Submission 12*, p. 10.

2.86 The Australian Conservation Foundation (ACF) expressed its dismay over the abolition of the NWC. The ACF was of the view that while the NWC did not have strong compliance powers, its abolishment had contributed to a decline in the audit and oversight of national water reform.⁷²

2.87 Mr Rigney of MLDRIN called for an independent federal body to undertake annual audits of compliance processes in Basin states and as a means of doing so, Mr Rigney suggested the reinvigoration of the NWC.⁷³

2.88 This view was also put forward by Ms Elizabeth Tregenza of the River Lakes and Coorong Action Group Inc, who supported the establishment of an independent compliance organisation, similar to the NWC.⁷⁴

72 Australian Conservation Foundation, *Submission 37*, [p. 5].

73 Mr Grant Rigney and Mr Rene Woods, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard*, 2 November 2017, p. 9.

74 Ms Elizabeth Tregenza, River Lakes and Coorong Action Group Inc., *Committee Hansard*, 2 November 2017, p. 22.

Chapter 3

Investigations into Basin-state water management

3.1 The airing of allegations of water theft by Four Corners—and through other media reports—prompted a significant number of investigations and inquiries into the management and oversight of the MDB. Some of these inquiries also examined the enforcement of and compliance with water use rules by both the Commonwealth and the Basin states.

3.2 This chapter considers each of the major inquiries and investigations that have examined the adequacy of compliance, enforcement, transparency and monitoring of water use throughout the Basin. The committee considers these reports and their recommendations to be of great importance for both this inquiry and to the successful management of the Basin more broadly.

3.3 The review by the MDBA and the independent review panel into the MDBA's compliance functions (the Murray-Darling Water Compliance Review) is discussed in Chapter 4.

Independent investigation into NSW water management and compliance – interim report

3.4 On 26 July 2017, the NSW Minister for Regional Water, Mr Niall Blair, announced that Mr Ken Matthews AO had been appointed to independently investigate the allegations raised by Four Corners that involved DPI-Water and its employees. Mr Matthews presented an interim report on 8 September 2017 (interim report) and a final report on 30 November 2017 (final report).¹

3.5 The interim report sought to clarify the circumstances around the allegations made by Four Corners, and to provide independent advice on opportunities to improve compliance and enforcement of water arrangements in NSW. Any identified breaches of the relevant water legislation were referred to the relevant authorities for further investigation and action, as this was not the role of the Matthews review.²

3.6 The interim report found that water-related compliance and enforcement in NSW was 'ineffectual' and required 'significant and urgent improvement'.

1 NSW Department of Industry, *Independent review of water management and compliance*, <https://www.industry.nsw.gov.au/about/our-business/independent-review-water-management-and-compliance> (accessed 11 December 2017).

2 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 16; https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/120193/Matthews-interim-report-nsw-water.pdf (accessed 11 December 2017).

Mr Matthews argued that in the Barwon-Darling, metering, monitoring and measurement of water extractions was not of a standard required for proper water management, with individual cases of alleged non-compliance remaining unresolved 'for far too long'.³

3.7 Further, the interim report argued that there was insufficient transparency around compliance and enforcement in NSW, weakening public confidence in water regulation arrangements in NSW.⁴

Outcomes

3.8 Following the release of the interim report, Minister Blair announced that misconduct proceedings as set out in the NSW government sector employment legislation had been commenced and Mr Gavin Hanlon (NSW Deputy Director General of the Department of Industry) had been stood down while the misconduct proceedings were underway.⁵ Mr Hanlon was alleged by Four Corners to offer irrigation lobbyists classified departmental material. Mr Hanlon resigned shortly after being stood down.⁶

3.9 The interim report called for a systemic fix to the NSW water management system, and presented a number of options for improving compliance and enforcement arrangements in NSW. The options recognised that:

A trusted compliance and enforcement system is essential if the new Barwon–Darling Water Resource Plan is to be accepted by all parties, and if the wider Murray–Darling Basin Plan is to succeed.⁷

3.10 The interim report suggested three principles for the future re-design of compliance and enforcement in NSW:

- transparency – increased public transparency would help contribute to greater compliance;

3 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 4.

4 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 4.

5 Australian Associated Press, 'Top bureaucrat faces misconduct proceedings over Murray-Darling water theft allegations', *The Guardian*, 11 September 2017, <https://www.theguardian.com/australia-news/2017/sep/11/top-bureaucrat-misconduct-proceedings-over-murray-darling-water-theft-allegations> (accessed 15 January 2018).

6 Patrick Begley, 'Top water bureaucrat Gavin Hanlon resigns after corruption allegations', *Sydney Morning Herald*, 16 September 2017, <http://www.smh.com.au/nsw/top-water-bureaucrat-gavin-hanlon-resigns-after-corruption-allegations-20170915-gyiq7h.html> (accessed 15 January 2018).

7 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 36.

- independence – decisions about enforcement and compliance should be sufficiently independent of 'water policy making, water planning, water regulation-making, and water delivery services to customers'; and
- effectiveness – compliance and enforcement efforts should be 'sufficiently resourced, empowered and professional to support public and investor confidence that the quantities, timing and means of water extractions', for whatever purpose, were consistent with allowed entitlements.⁸

3.11 The interim report encouraged the implementation of common arrangements across the MDB, so that enforcement, compliance and auditing activities could be readily undertaken and be suitably transparent.⁹

Transparency

3.12 In stressing the need for greater transparency, the interim report stated that the public should have ready access to a single source that provides all relevant information on water entitlements, including meter reading, real time water account balances and other information. Further, transparency should be improved around environmental water entitlements and flows.¹⁰

3.13 Mr Matthews argued strongly for improved transparency in the management of water. The interim report stated that:

water is a community-owned resource and members of the public have the right to satisfy themselves that it is being used in compliance with the law. Accordingly, changes proposed include enabling the public to readily access from a single source all details of individuals' water entitlements, licence conditions, meter readings, water account balances, and trading activities. Similarly it is recommended that arrangements be put in place for the public to readily identify any specific pump, off-take or works. Corresponding improvements to the transparency of environmental water flows are proposed. Such full transparency would, of itself, add considerably to a more compliant culture among water users.¹¹

3.14 Transparency would be further increased with the establishment of state-wide non-compliance reporting channels, which would allow for anonymous reporting of

8 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 37.

9 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 5.

10 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 39.

11 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 4-5.

breaches. Informants would then receive regular feedback on actions taken in response to complaints.¹²

3.15 The interim report also stated that the NSW Department of Industry needed clear reporting channels, so that there was sufficient independent scrutiny of water users. Any water users found guilty of serious offences would have their identity published. All NSW compliance and enforcement actions would be reported annually, with the reports delivered to a fixed schedule.¹³

Independence

3.16 The interim report called for the separation of water compliance staff from other staff involved in areas such as regulation and policy, with the aim to 'separate approvals of rights and conditions from enforcement of conditions and related legislation'.¹⁴

3.17 Mr Matthews called for clarity around 'responsibility, authority, accountability, and delegations' with regard to compliance and enforcement functions, and suggested the appointment of a Chief Compliance and Enforcement Officer.¹⁵

3.18 To strengthen the compliance and enforcement systems in place, the interim report recommended that these systems be periodically reviewed by other Basin states, possibly via facilitation from the MDBA. With regard to the MDBA, the Matthews interim report found that its compliance and enforcement powers and functions should be more clearly articulated and made public, including when powers to intervene would be invoked.¹⁶

Effectiveness

3.19 Of importance to the committee's inquiry, the interim report called for universal metering of water use, under a 'no meter, no pump' rule, and the enforcement of modern Australian metering standards. It also called for the removal of all

12 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 40.

13 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 40.

14 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 40.

15 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 40-41.

16 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 41.

self-reporting on water use, such as the use of log books, to be replaced by fully operational water meters.¹⁷

3.20 The interim report argued that the tolerance for differences in conditions between the northern and southern areas of the MDB should be reduced, with standards and rules—including those for metering—applied Basin-wide. The review argued that 'divergences in approach should only be allowed where the need for differences can be convincingly demonstrated'.¹⁸

3.21 The report called for a mandatory requirement for meter readers to report 'defective, inoperable or apparently tampered-with meters in real time', with more random and frequent meter reading schedules. The meter readings should be published in real time.¹⁹

3.22 With regard to compliance, the interim report encouraged the use of structures and documented processes for 'commencing, progressing, and decision making on compliance actions'. The interim review also called for the NSW Government to:

Assertively adopt and implement new monitoring and compliance techniques and technologies such as: remote sensing of crop growth and water holdings; back to base and remote meter reading and telemetry; and targeted covert operations. These techniques can be made first-line tools or utilised as cross-checks of more conventionally sourced data. To date, there had been limited use only of these techniques—it is time to utilise them assertively.²⁰

3.23 Effectiveness would also be increased with:

- post-action audits of each major enforcement case, to seek and implement improvements;
- more stable and secure resourcing for compliance and enforcement activities;
- targeted recruitment of specialist investigators and minimum training levels for compliance and enforcement staff (including ethics training on commencement);
- the wider and more ready use of innovative penalties for breaches of water licence conditions, other than monetary penalties; and

17 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 41.

18 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 5, 41.

19 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 41.

20 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 41-42.

- establishing best practice information sharing among jurisdictions and other natural resource-based industries.²¹

Natural Resources Access Regulator

3.24 The interim Matthews report presented a Water Management Compliance Improvement Package. The two elements of the Package consisted of structural reforms for consideration by ministers, and operational and administrative improvements for consideration by the Secretary of the NSW DPI.²²

3.25 As part of the structural reforms, the report recommended the formation of a NSW Natural Resources Access Regulator (NRAR). The NRAR would consolidate all enforcement and compliance functions across WaterNSW and DPI-Water.²³ Following the release of the interim report, the NSW Government implemented legislation establishing the NRAR.²⁴

3.26 The NRAR became operational on 30 April 2018, with principal objectives of ensuring the 'effective, efficient, transparent and accountable compliance and enforcement measures for the natural resources management legislation', and to maintain public confidence in the enforcement of natural resources management legislation. Members of the public can make confidential reports to the NRAR should they have any concerns about potentially illegal or suspicious water activities.²⁵

3.27 The NRAR, led by an independent board, now has oversight of all water compliance and enforcement activities in NSW. It provides directions to the NSW Department of Industry on improvements or the need for corrective actions, and determines whether proceedings for breaches of water legislation should commence. The Matthews review recommended that the NRAR also make public an annual report 'attesting to the adequacy of the department's regulatory activities, and information on areas that it has recommended or directed improvement'.²⁶

21 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 42.

22 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 38.

23 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 38.

24 Parliament of New South Wales, Natural Resources Access Regulator Bill 2017, <https://www.parliament.nsw.gov.au/bills/Pages/bill-details.aspx?pk=3460> (accessed 12 December 2017).

25 NSW Department of Industry, *Natural Resources Access Regulator (NRAR)*, <https://www.industry.nsw.gov.au/natural-resources-access-regulator> (accessed 2 November 2018).

26 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 38-39.

Role of the MDBA

3.28 The interim report found that the MDBA could offer a greater contribution to water enforcement and compliance. Specifically, the review called for the roles, functions, and scope of action for the MDBA to be more clearly articulated and made public. It further called for the urgent development of a revised whole-of-basin compliance and enforcement strategy. The strategy would:

include standards and the levels of effort (resourcing) to be achieved by each member state. The objective would be to build confidence that all states were achieving a similar standard of compliance. The strategy should set out a rolling program of review of the highest areas of risk of non-compliance and routinely audit the adequacy of each state's water measurement (especially metering) and monitoring arrangements.²⁷

3.29 The interim report called for further contributions from the MDBA, including:

- the provision of more effective annual assurance reports from Basin states about their compliance and enforcement arrangements, with the reports to be made public;
- implementation of reciprocal third-party auditing of each Basin state's compliance and enforcement systems by other states; and
- sponsorship of a new national forum for compliance and enforcement agencies from Basin states to share best practice and address cross-border issues.²⁸

Independent investigation into NSW water management and compliance – final report

3.30 Mr Matthews' final report, dated 24 November 2017 and presented on 30 November 2017, examined the progress made by the NSW Government on implementation of the recommendations from the interim report. The final report noted that steps had been taken immediately by NSW following the release of the interim report, to implement a 'historic program of reforms to the way water compliance and enforcement is managed' in NSW. The final report summarised the steps taken, including the establishment of the NRAR, the appointment of its board and other measures such as:

A new division of the department to manage water and Crown Lands...A new Deputy Secretary experienced in natural resource management was recruited from outside the department to lead it. Leadership of the water group within the new division was changed. Additional staff were assigned. Within the broader department, a major program to foster ethical conduct

27 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 42-43.

28 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 43.

was launched. Considerable top management attention has been directed towards rebuilding staff morale, team performance and commitment to the reform journey ahead. In my view, the department has made a good start.²⁹

3.31 However, the final report presented five key risks to the successful implementation of a water reform program, being:

- risks associated with planning implementation of the reforms;
- risks in not allocating sufficient financial and staff resources to tasks;
- translating high-level reform outcomes into specific and practical measures at ground level;
- pressure from stakeholders to 'water down' key reforms, including those for water metering; and
- an uncooperative relationship between government agencies and risks with compliance and enforcement staff restructures.³⁰

3.32 It was noted in the final report that 'certain important stakeholders' had expressed concerns over the interim report's recommendations about water metering and improved transparency of information about water usage. The final report acknowledged these concerns, and that they may result in 'practical adjustments' to the desired policy outcomes. However, the report warned that:

if too many 'adjustments' accumulate, there is a risk of gradually losing the current unprecedented opportunity to achieve long-overdue remedies to NSW compliance problems.³¹

3.33 To counteract such an event, the final report recommended that the NSW Government announce its intention to commission an independent audit and evaluation of results against the original policies and desired outcomes, after a 12-month period.³²

3.34 The final report suggested that the NSW Government seek from the Commonwealth funds that are available for Basin Plan implementation. It was noted that Commonwealth funding for metering, compliance and enforcement, and

29 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, p. 1.

30 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, p. 1.

31 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, p. 3.

32 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, p. 3.

protection of environmental water, could advance the objectives of both the state and federal governments.³³

3.35 In implementing reforms to water management, the final report called on the MDBA to have a more assertive role with regard to compliance and enforcement, with clear delineation between the complementary roles of Basin states and the MDBA. The report stated that:

The MDBA is uniquely positioned to engage and lead the other Basin states. NSW will not be able to achieve whole-of-basin improvements acting alone. It therefore makes sense for NSW to seek to align its compliance reform efforts with those of the MDBA.³⁴

3.36 It was recommended by the final report that the MDBA focus its compliance and enforcement efforts at the Basin Plan level, and exercise its full powers in doing so. The final report called for the MDBA to intervene 'where a Basin state has manifestly failed to act satisfactorily'. Further, the MDBA should provide a common framework for Basin states' planning, execution and regular public reporting of compliance and enforcement.³⁵

3.37 The final report noted that it would be desirable for the MDBA and the NSW Government to align their metering objectives and any technical or minimum threshold standards to be applied throughout the Basin. The report noted that it would be of no benefit if different metering outcomes were recommended by the MDBA and NSW, and that MDBA minimum standards should be the basis for the NSW standards.³⁶

Reception of the Matthews review

3.38 There was widespread support from a variety of MDB stakeholders for the recommendations of the Matthews reviews. Many parties expressed their pleasure that the investigation had been comprehensive and offered practical and much-sought-after solutions and recommendations.

3.39 For example, Mr Rob McBride expressed his view that the Matthews recommendations were 'without doubt' adequate to address issues with water compliance and enforcement in NSW. Further, Mr McBride felt that the

33 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, pp. 10-11.

34 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, pp. 24-25.

35 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, p. 25.

36 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance – advice on implementation*, final report, 24 November 2017, pp. 25-26.

recommendations made by the Matthews review could enable some integrity to return to the NSW water system.³⁷

3.40 Mr Justin McClure of the AFA acknowledged that the Matthews review was a 'very significant step in the right direction', while recognising that there was much further to go.³⁸

3.41 MLDRIN thought that the recommendations of the Matthews review signified a start to improving compliance and regulation, but it was important that the NSW Government implement the recommendations, especially those concerning metering and compliance.³⁹

NSW Ombudsman – Investigations into water compliance and enforcement

3.42 While the allegations made on Four Corners regarding water theft were made in mid-July 2017, the NSW Ombudsman had already commenced, in 2016, an investigation into water compliance and enforcement issues in NSW. The 2016 investigation was the fourth such investigation since 2006 (with previous investigations completed in 2009, 2012 and 2013). The NSW Ombudsman investigations were instigated by complaints and public interest disclosures about a lack of compliance and enforcement with water management principles in NSW.⁴⁰

3.43 The most recent investigations arose from allegations made by DPI-Water staff in June 2016, about the performance of DPI-Water in relation to its statutory compliance and enforcement functions. Staff had made a number of allegations, including that:

- the SIU had been 'scaled down and rendered ineffectual' due to staffing reductions and transfers;
- staff member delegations to undertake enforcement action were removed;
- senior DPI-Water executives allegedly directed staff to take no enforcement action in relation to an alleged offence of an unlawfully modified and enlarged dam;
- no enforcement action was taken on unlicensed dams containing large volumes of water, being used for irrigation purposes and without a water licence; and

37 Mr Robert McBride, *Committee Hansard*, 1 November 2017, p. 4.

38 Mr Justin McClure, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, p. 22.

39 Mr Grant Rigney and Mr Rene Woods, Murray Lower Darling Rivers Indigenous Nations, *Committee Hansard*, 2 November 2017, p. 9.

40 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, Foreword, https://www.ombo.nsw.gov.au/_data/assets/pdf_file/0012/50133/Investigation-into-water-compliance-and-enforcement-2007-17.pdf (accessed 9 January 2018).

- there were systemic failures by senior management to take action on water compliance matters.⁴¹

3.44 Also in June 2016, a further allegation was made by a member of the public of large-scale water theft by a cotton farmer, with the member of the public asserting that DPI-Water was not taking adequate action in light of the allegations.⁴²

3.45 In November 2017, the NSW O presented a progress report into its fourth investigation. The progress report did not present findings or concluded opinions on the fourth investigation. The report did note, however, that the Matthews review made findings largely similar to the three earlier NSW O investigations, the findings of which had been reported to the relevant NSW minister and department upon completion but were not made public.⁴³

Outcomes

3.46 The progress report observed that the NSW O had been raising concerns over inadequate water compliance resourcing in NSW since 2009, and had previously made recommendations to properly resource compliance functions. The first NSW O investigation, concluded in 2009, determined that the ten water compliance officers then engaged by the relevant department was 'seriously inadequate to ensure the proper protection of the state's increasingly scarce and valuable water resources'. This was highlighted by the fact that approximately 600 breach allegations were being received per year, with only 20 per cent of these subject to investigation.⁴⁴

3.47 Further, the first investigation, conducted between 2006 and 2009, concluded that:

the Department's compliance function was in disarray. There were no adequate policies, no proactive monitoring of compliance, no adequate system for logging and responding to alleged breach reports, no compliance strategy, and poor record keeping and custody of evidence practices.⁴⁵

3.48 These concerns continued into the NSW O's third investigation, conducted between 2011 and 2013. The 2013 report of the NSW O highlighted issues with excessive delays in completing investigations and subsequent enforcement and

41 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 7.

42 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 7.

43 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, pp. 2, 9, 14.

44 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, pp. 14-15.

45 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 19.

prosecution actions, with poor communication between compliance and legal staff noted as a particular concern.⁴⁶

3.49 In its 2013 report, the NSW O again expressed its 'grave concerns' for water compliance and enforcement should there be further resourcing reductions. The NSW O also cautioned against the engagement of water licensing officers in compliance roles, as they may be unqualified to conduct water investigations to an acceptable standard.⁴⁷

3.50 However, the progress report noted that the creation of the SIU in 2013, and its operation in 2014-15 (prior to staff reductions in 2016), was effective in targeting higher risk breaches and delivering effective enforcement outcomes.⁴⁸

3.51 The NSW O progress report noted that the frequency of administrative changes to water management and regulation in NSW had 'substantially impaired' water compliance and regulatory functions. The report noted that:

Over the past two decades the administration of functions related to water management and regulation have been restructured and moved between different government agencies close to twenty times. At least eight of those changes in the last fifteen years were major restructures that resulted in substantial staff relocations and retrenchments, carving up of functions, splitting of departments, amalgamation of units and establishment of new agencies. Since 2003 when the Department of Land and Water Conservation was abolished, there has been a restructure involving water management functions approximately every two years.

The opinion of the Ombudsman's office is that the impact of these changes on staff, loss of expertise and corporate knowledge, disruptions to systems and strategy, and continuity of service delivery, have been devastating.⁴⁹

3.52 The NSW O concluded that many of the underlying structural and systemic problems that it had raised throughout the course of its investigations had not been properly addressed, or the impetus for change, when it occurred, was not maintained. This was due to 'chronic under-resourcing of the enforcement and compliance roles', constant departmental restructures and transfers of responsibility, and a 'clash of cultures between a customer service focus and enforcement obligations'.⁵⁰

46 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 20.

47 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 16.

48 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 23.

49 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, pp. 5-6.

50 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 28.

3.53 The NSW O progress report recommended that to avoid the previous failures in water compliance in NSW:

it is vital that any water compliance and enforcement effort is adequately funded and resourced and staffed by qualified experienced persons with investigative experience in dealing with offences where the burden of proof is beyond reasonable doubt. It is equally important that investigators are supported by, and have easy access to, water experts and legal officers experienced in water issues. The expertise that was developed by DPI Water and the SIU in particular should not be lost. Strong leadership support and a clear mandate from Government are paramount to the success of any future compliance model.⁵¹

Final report

3.54 On 17 August 2018, the NSW O presented a special report to NSW Parliament on water compliance and enforcement. With the implementation of the NRAR, the NSW O noted that the water management landscape in NSW was considerably different to when the investigations first commenced.⁵²

3.55 The final report reiterated the view that over many years, water compliance functions had been significantly under-resourced, with WaterNSW failing to adequately staff its compliance functions until after the Four Corners allegations were broadcast. The NSW O further stated that:

The lack of resources, the impact of the disruptions, the failure to manage staff expectations, the lack of effective communication, and a failure to integrate staff in a timely fashion had a significant negative effect on compliance performance.⁵³

3.56 However, since the Four Corners episode and the Matthews reviews, the NSW O acknowledged that the NRAR had been established, and commended the NSW Government for 'giving this issue the attention and resources it requires'. The NSW O observed that, as of August 2018, the NRAR had:

- 64 compliance officers engaged in compliance, breach investigations and monitoring activities, on-the-ground education and engagement;
- 4 staff in the Water Enforcement Team, including 3 legal officers, overseeing and supervising investigations; and

51 NSW Ombudsman, *Investigation into water compliance and enforcement 2007-17*, November 2017, p. 28.

52 NSW Ombudsman, *Water: compliance and enforcement*, 17 August 2018, p. i. <https://www.ombo.nsw.gov.au/news-and-publications/publications/reports/state-and-local-government/water-compliance-and-enforcement> (accessed 13 September 2018).

53 NSW Ombudsman, *Water: compliance and enforcement*, 17 August 2018, p. o.

- 12 coordination officers for intake and triage of non-compliance reports and preliminary investigations.⁵⁴

3.57 The final report of the NSW O made a number of findings and recommendations with regard to the NRAR, as well as other matters. To ensure best practice moving forward, the NSW O recommended that the responsible state minister ensure that the NRAR received sufficient resourcing to enable it to undertake efficient and effective compliance operations. This would help to avoid the inadequacies observed by the NSW O in its investigations over the past decade.⁵⁵

3.58 The NSW O also turned its attention to prosecutions of water theft using various technologies, and recommended that the NSW water minister:

Reviews the evidentiary requirements to prove offences under the Water Management Act and Water Act so that evidence obtained through appropriate technology, such as remote sensing, is prima facie admissible in prosecutions—similar to evidence obtained by speed cameras in driving offences.⁵⁶

NRAR actions

3.59 In September 2018, the NRAR advised that it had completed 147 on-site inspections, 58 property audits and 109 compliance actions in its first 100 days of operation, with four compliance actions progressing to prosecutions under the NSW *Water Management Act 2000*. The NRAR identified the compliance actions as follows:

- four prosecutions in the NSW Land and Environment Court;
- five penalty infringement notices;
- eight remediation notices directing landholders to undertake remedial actions;
- 81 advisory letters notifying landholders of alleged breaches; and
- 11 warning letters advising of suspected minor breaches.⁵⁷

3.60 Additionally, on October 10 a Carinda man was found guilty of providing false and misleading information to NRAR water investigators, an offence under the *Water Management Act 2000*. The NRAR also advised that two directions had been

54 NSW Ombudsman, *Water: compliance and enforcement*, 17 August 2018, p. o.

55 NSW Ombudsman, *Water: compliance and enforcement*, 17 August 2018, pp. 62-63.

56 NSW Ombudsman, *Water: compliance and enforcement*, 17 August 2018, p. 63.

57 NSW Department of Industry, 'Over 100 actions taken by new water regulator', *Media release*, 19 September 2018, <https://www.industry.nsw.gov.au/media/releases/2018/over-100-actions-taken-by-new-water-regulator> (accessed 7 November 2018).

issued to cotton farms in the Brewarrina-Walgett area, to upgrade their metering equipment.⁵⁸

ANAO – National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin, NSW

3.61 In 2013, COAG agreed to the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin (IGA). Under the IGA, the Australian Government provides financial support to the Basin states via the National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin (NPA).

3.62 This financial assistance contributes to the costs involved in implementing the Basin Plan, such as the preparation of new WRPs, and implementing new compliance and reporting requirements. The payments to Basin states are based on performance against milestones in the NPA, with the milestones based on measures and objectives stipulated in the IGA and in the Basin Plan. Milestone assessment reports are prepared by DAWR, which recommends whether payments should be made under the NPA.⁵⁹

3.63 The Commonwealth therefore ensures that:

outputs are delivered and outcomes are achieved within agreed timeframes. This includes [Basin states] making suitable progress in sustainable water extraction, which involves the protection and use of environmental water through effective regulatory and compliance arrangements.⁶⁰

3.64 As a result of the allegations made by Four Corners, the ANAO expanded an already existing audit into National Partnership Agreements, and undertook a limited assurance review of the New South Wales NPA.⁶¹

Outcomes

3.65 The ANAO's review into the NPA made the following findings:

58 NSW Department of Industry, 'Water regulator sends strong message', *Media release*, 15 October 2018, <https://www.industry.nsw.gov.au/media/releases/2018/water-regulator-sends-strong-message> (accessed 7 November 2018).

59 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, pp. 9, 13.

60 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, p. 10.

61 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, p. 10.

- the milestones and criteria for assessing the performance of NSW under the NPA lack specific, measurable deliverables and outcome measures, representing 'significant weaknesses in the performance framework';
- the NPA framework does not support DAWR to 'effectively assess the performance of NSW in protecting and using environmental water in line with the Basin Plan';⁶² and
- that DAWR recommended that NSW receive payments under the NPA despite NSW not meeting required milestones in 2014-15 and 2015-16, and despite significant concerns being raised by the CEWH about NSW's 'failure, if not active disinterest' in supporting the effective delivery of environmental water in line with the Basin Plan.⁶³

3.66 The ANAO review found that:

While DAWR has followed agreed processes for monitoring performance, there was a lack of evidence and explanation to substantiate its positive assessment of NSW's progress under Milestone 8 of the Murray-Darling Basin NPA in light of the serious issues raised by the CEWH. Importantly, there was little in DAWR's submission to the Minister for 2015–16 to suggest there were risks that NSW was not delivering environmental water consistent with the Basin Plan. These factors indicate that DAWR has had limited effectiveness in assessing the performance of NSW against the milestones in the Murray-Darling Basin NPA.⁶⁴

3.67 Notwithstanding the effects of these findings, the Auditor-General determined that there was no indication that DAWR had not provided a high level of assurance about the protection and use of environmental water in the Murray-Darling Basin, for the 2014-15 and 2015-16 assessment years.⁶⁵

62 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, p. 14.

63 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, pp. 17-18.

64 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, p. 18.

65 Australian National Audit Office, *Department of Agriculture and Water Resources' Assessment of New South Wales' Protection and use of Environmental Water under the National Partnership Agreement in Implementing Water Reform in the Murray-Darling Basin*, ANAO Report No. 17 2017-18, p. 6.

Productivity Commission – five-year review of the Basin Plan

3.68 In August 2018, the Productivity Commission (PC) released its draft report titled *Murray-Darling Basin Plan: Five-year assessment* (draft report). The PC has responsibility for assessing the effectiveness of implementation of the Basin Plan and associated WRPs, every five years, to ensure public confidence in implementation of the Basin Plan.⁶⁶

3.69 While noting that significant practical progress had been made under the Basin Plan, the draft report highlighted that 'immediate improvement' was needed with regard to the development and accreditation of WRPs, which were behind schedule. The PC also noted that over the next five years it would be important that the Basin Plan arrangements were embedded and complied with.⁶⁷

3.70 The draft report argued that there was 'major shortcomings in the current institutional and governance arrangements and these pose a significant risk to successful implementation'. The PC further found that the two major roles of the MDBA – supporting Basin States to implement the Plan, and, as the regulator, ensuring compliance with the Plan – were in conflict, and that this conflict would intensify in coming years. It was unclear to the PC whether it was the Basin States, or the MDBA, that was responsible for leading implementation of the Plan.⁶⁸

3.71 The PC spoke strongly to the matter of conflict within the MDBA with regard to its varied roles, observing that this conflict:

will be exacerbated over the next five years. Its agent of Government role will grow, as Basin Governments draw on its technical capability and river operations skills to implement supply projects. Its role as regulator of the Basin Plan comes into full effect when WRPs are accredited. This conflict cannot be successfully managed through internal controls. In its current form, the MDBA cannot be a trusted adviser to Basin Governments and be a credible regulator.⁶⁹

3.72 Additionally, the PC has found that stakeholders were concerned about the lack of an adequate compliance regime in many of the Basin states. The draft report stated that:

66 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 3.

67 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, pp. 2, 14; <https://www.pc.gov.au/inquiries/current/basin-plan/draft/basin-plan-draft-overview.pdf> (accessed 14 September 2018).

68 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, pp. 2, 21.

69 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 22.

An overwhelming number of participants to the inquiry indicated that stakeholder confidence has been rocked by concerns that some Basin States have been lax in ensuring compliance with water take rules. An unwillingness to demonstrate that water acquired for the environment can be protected from extraction further downstream, and allegations of fraud in water recovery programs have compounded these concerns and left stakeholders sceptical of the motivations of Basin Governments.⁷⁰

3.73 The PC observed that the MDBA was required to manage breaches or non-compliance with all aspects of the Basin Plan, and that it may—at times—be required to call out states who were non-compliant. The PC saw the MDBA as being 'an inherently conflicted entity...perceived as such by stakeholders'.⁷¹

3.74 To help address these concerns and the conflicted role of the MDBA, the PC called for it to be separated into two institutions, known as the Murray-Darling Basin Corporation, and the Basin Plan Regulator.

3.75 The Corporation would be governed and funded by the Basin states. The compliance, evaluation and review functions of the MDBA would be assigned to the Regulator, which would be a new, independent Commonwealth statutory entity. The Regulator would be governed by a board 'comprising of members with skills that are aligned to its compliance and evaluation role'. The PC stated that these institutional reforms should be in place by 2021.⁷²

South Australian Murray-Darling Basin Royal Commission

3.76 On 26 November 2017, the then Premier of South Australia, Mr Jay Weatherill MP, announced a state royal commission to investigate the allegations of water theft by upstream irrigators. In announcing the royal commission, the Premier stated that it would have 'wide-ranging coercive powers' to investigate breaches of the Basin Plan and the Murray-Darling Basin Agreement, and would examine any changes to the legislation and policies implemented in 2012 that were inconsistent with the Basin Plan and the Agreement.⁷³

70 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 14.

71 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 21.

72 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, pp. 22-23, 48. See p. 23 for a diagrammatic representation of the suggested new arrangements.

73 The Hon Jay Weatherill MP, Premier of South Australia, 'South Australia to establish Royal Commission into River Murray water theft', *Media release*, 26 November 2017, <https://www.premier.sa.gov.au/index.php/jay-weatherill-news-releases/8354-south-australia-to-establish-royal-commission-into-river-murray-water-theft> (accessed 10 January 2018).

3.77 Upon release of the draft terms of reference for the royal commission, the SA Government at the time stated that it was:

concerned at recent reports as to the alleged non-compliance with the Basin Plan, the current state of implementation of the Basin Plan, and whether the Basin Plan will achieve its objects and purposes and those of the Act. It considers that an independent Commission of Inquiry with coercive powers is required to inquire into these and related matters.⁷⁴

3.78 The commission was formally established on 23 January 2018. The terms of reference provided that the royal commission, led by Bret Walker SC, would examine, among other things:

- whether the WRPs will be delivered in full by 30 June 2019, in a form compliant and consistent with the Basin Plan, and whether any WRPs are unlikely to be delivered in full and in a compliant form;
- whether the current Basin Plan, its implementation and any proposed amendments to it are likely to achieve the purposes of the Water Act and the Plan, including enhanced environmental outcomes and the additional 450GL as provided for in the Water Act;
- if the Basin Plan is unlikely to achieve any of the Water Act or Basin Plan objectives and purposes, what amendments should be made to ensure those objectives are achieved and what legislative impediments should be changed, if needed;
- whether the underlying assumptions in the original modelling used to develop the objects and purposes of the Water Act and the Basin Plan have been sufficiently adjusted for the impact of improved technologies;
- the likely impact of alleged illegal take or other non-compliance on achieving the objects and purposes of the Water Act and Basin Plan, and whether appropriate enforcement proceedings have been taken in such instances (and if not, why);
- whether enforcement and compliance powers in the Water Act are adequate to address non-compliance, and recommendations for legislative change if required;
- whether monitoring, metering and access to relevant information, such as usage data, is adequate to achieve the objects and purposes of the Water Act and Basin Plan; and

74 Government of South Australia, *Murray-Darling Basin Royal Commission – Draft Terms of Reference*, pp. 2-3, available from 'The Murray-Darling. Who's taking more than their fair share?', *YourSAy*, December 2017, <https://yoursay.sa.gov.au/decisions/murray-darling/about> (accessed 16 January 2018).

- whether water purchased by the Commonwealth will be adequately protected from irrigation extraction under WRPs, and recommendations for legislative or other changes.⁷⁵

3.79 The South Australian royal commission has concluded its public hearings, with a final report to be provided to the South Australian Governor by 1 February 2019.⁷⁶

Views on a Commonwealth judicial inquiry

3.80 There was strong support put forward throughout the inquiry for a federal-level judicial inquiry or royal commission into the management of MDB water resources.⁷⁷

3.81 For example, Mr Leon Zanker, of the AFA, stated that there has been a 'loss of confidence in the ability of government regulatory authorities to do their job', and further, that there was no integrity left in the water system. Mr Zanker, along with the AFA more broadly, called for a royal commission or judicial inquiry to look at the overall state of the water system, as well as the underlying premise of the Basin Plan and its expenditure of taxpayer money.⁷⁸

3.82 PAWD was supportive of the calls for a royal commission, noting that such a fulsome inquiry would have the necessary powers to compel evidence and offer protection for whistle-blowers, while allowing irrigation and agricultural communities the chance to 'start afresh in the court of public opinion'.⁷⁹

3.83 However, the NFF cautioned against a judicial inquiry or royal commission, noting such inquiries often take considerable time and at great expense. The NFF was instead supportive of the reviews undertaken since the Four Corners program, as these

75 Murray-Darling Basin Royal Commission, *Terms of Reference*, <https://www.mdbrc.sa.gov.au/resources/terms-reference> (accessed 2 November 2018).

76 Murray-Darling Basin Royal Commission, <https://www.mdbrc.sa.gov.au/> (accessed 2 November 2018).

77 See, for example: River Lakes and Coorong Action Group Inc., *Submission 11*, [p. 2]; WWF-Australia, *Submission 15*, p. 2; Nature Conservation Council of NSW, *Submission 16*, [pp.2-3]; EDOs of Australia, *Submission 18*, p. 10; Ms Sarah Moles, *Submission 19*, [p. 2]; Ms Anne Hartnett, *Submission 34*, [p. 2]; Broken Hill City Council, *Submission 25*, [p. 2]; Professor Richard Kingsford, *Submission 27*, p. 3; South Australian Murray Irrigators, *Submission 35*, [p. 3]; Australian Conservation Foundation, *Submission 37*, [p.7]; Ms Anne E. Reeves OAM, *Submission 38*, p. 4; Pastoralists' Association of West Darling, *Submission 40*, p. 2; Ms Ruby Davies, *Submission 52*, [p. 5], and Inland Rivers Network, *Submission 54*, p. 3.

78 Mr Leon Zanker, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, p. 23.

79 Mr Lachlan Gall, Pastoralists' Association of West Darling, *Committee Hansard*, 1 November 2017, p. 37.

had shown that 'focused and expert inquiries can report and deliver clear recommendations, in a very timely and effective manner'.⁸⁰

3.84 Likewise, Cllr O'Connor of the Brewarrina Shire Council did not fully agree with the calls for a judicial inquiry or royal commission. The Councillor noted that as water theft was now in the public domain, the issue was 'too big now to be swept under the carpet'. Cllr O'Connor argued that the Matthews review went further than many people were expecting it to, and that, in conjunction with the other inquiries such as the ICAC investigation, things were heading in the right direction.⁸¹

Committee view

3.85 The committee acknowledges the strong sentiment amongst stakeholders and other interested parties for the establishment of a Commonwealth-level judicial inquiry or a royal commission into the management and operation of the MDB. The committee, however, is not the appropriate body to make a determination on whether such an inquiry or commission proceeds at a federal level.

3.86 The committee recognises that underpinning these demands are concerns regarding perceived inequalities in the management of the MDB system, furthered by a lack of transparency in Basin management and modelling, and a lack of effective compliance activity in some Basin jurisdictions. The committee observes that there is a consistency to the themes and issues that have been raised about the management of the Basin, regardless of the forum.

3.87 To this end, the committee notes that the various reviews and investigations completed in recent months, addressing concerns with water monitoring and compliance, have gone a considerable way to improving water management across the Basin, with increased clarity around compliance and the ramifications for those who breach the water use rules.

3.88 Further, despite the issues highlighted by this inquiry and many others, the Basin Plan is yet to be fully implemented and operational. Until such time as it is, and the legislative frameworks and water management plans can be properly tested, a federal judicial inquiry or similar may be pre-emptive.

Other investigations

3.89 In its submission to the inquiry, DAWR noted that Queensland was undertaking an independent review into rural water metering, which would examine the operation and maintenance of meters, and water use reporting.⁸²

80 National Farmers' Federation, *Submission 42*, p. 9.

81 Councillor Phillip O'Connor, *Committee Hansard*, 1 November 2017, p. 11.

82 Department of Agriculture and Water Resources, *Submission 47*, p. 7.

3.90 Queensland has since completed, in March 2018, an audit into its regulatory frameworks for water measurement and compliance. The audit identified three key areas to be addressed as a matter of priority, being the introduction of robust measurement and compliance governance, implementation of a new policy for water metering, and implementation of better water information management systems and improved resourcing.⁸³

3.91 In response to the recommendations made by the audit, Queensland has established a Rural Water Management Program. Among other things, the program seeks to identify regulatory enhancements with regard to offences, penalties, measurement and monitoring; review water metering policies, and undertake a risk assessment of measurement and monitoring activities.⁸⁴

3.92 Additionally, the committee notes that the NSW ICAC has not yet made public any information regarding its investigations following the allegations in Four Corners, nor has it released any findings to date. The committee trusts that once ICAC does finalise and publicise its conclusions, that the appropriate NSW agencies will take the necessary steps to address any concerns raised with regard to water management and compliance in that state.

83 *Independent audit of Queensland non-urban water measurement and compliance – final report*, 23 March 2018, pp. i-ii, https://www.dnrme.qld.gov.au/_data/assets/pdf_file/0010/1396756/independent-audit-water.pdf (accessed 2 November 2018).

84 Queensland Government, Department of Natural Resources, Mines and Energy, *Improving Queensland's rural water management*, <https://www.dnrme.qld.gov.au/land-water/initiatives/rural-water-management> (accessed 2 November 2018).

Chapter 4

Compliance and the Murray-Darling Basin Authority

4.1 The investigations into alleged instances of water theft, and the subsequent reviews and reports into water compliance—including this inquiry—have highlighted the vital roles that proper monitoring, regulatory oversight and compliance need to play in order to properly administer and manage the MDB.

4.2 The committee received significant evidence pointing to gaps in the metering systems and compliance structures in a number of Basin states, meant to ensure that water was properly allocated throughout the Basin for both users and the environment.

4.3 Following the serious allegations and concerns that came to light, the MDBA undertook to review its role in water compliance, particularly with regard to its oversight of the actions of Basin states. This chapter considers the findings of the Murray-Darling Water Compliance Review conducted by the MDBA, and the role of the MDBA in compliance more broadly.

MDBA compliance functions

4.4 The compliance and enforcement functions of the MDBA are complex. The enforcement role of the MDBA is primarily in relation to the Basin Plan which does not fully come into effect until 2019. As noted by the MDBA, its regulatory role will increase from July 2019, and if 'instances of unauthorised take constitute action that is inconsistent with a WRP, or leads to an exceedance of an SDL, MDBA may take compliance action'.¹

4.5 In 2016-17, out of a budget of \$44.746 million, the MDBA spent \$1.747 million on compliance-related activities, with 16 staff allocated to these activities. In 2017-18, with a budget of \$40.970 million, \$2.917 million was allocated for compliance-related activities. In 2017-18, 32 staff were dedicated to compliance, which included 14 staff for the Water Compliance Review.²

4.6 While the MDBA holds some powers to investigate breaches of water rules, Mr Phillip Glyde, Chief Executive of the MDBA, said that it did not have the 'breadth of capability that the state governments would have' regarding compliance. He argued that the MDBA was 'quite comfortable with the fact that the New South Wales government and the Queensland government are looking specifically and deeply [at water rule breaches], with their stronger powers in relation to those particular issues'. Further to this, Mr Glyde stated that:

1 Murray-Darling Basin Authority, *Submission 26*, p. 2.

2 Murray-Darling Basin Authority, answers to questions on notice, 27 October 2017 (received 20 December 2017).

The responsibility and the legal power for enforcing water entitlements in a particular jurisdiction rest with that jurisdiction, which is why, when we get allegations, we refer them to authorities in the jurisdictions.³

4.7 The MDBA submitted that:

The MDBA's current role in compliance allegations concerning individual water users is limited. Such a role was never contemplated for the Authority, and it is not resourced to perform this intensive role across the Basin. Rather, it has been assumed that Basin states are enforcing their own laws diligently.⁴

4.8 Mr Glyde stated that the MDBA was generally supportive of the recommendations of the Matthews review, as they related to the MDBA. Mr Glyde advised that the MDBA would develop a comprehensive response that took into consideration the findings of both the Matthews review and MDBA's own compliance review, detailed below.⁵

Murray-Darling Water Compliance Review

4.9 On 5 September 2017, the then Prime Minister and then Deputy Prime Minister announced the Murray-Darling Water Compliance Review (WCR), to be presented to the Murray-Darling Basin Ministerial Council (Ministerial Council). The MDBA was tasked with conducting the WCR, which would 'provide an independent, Basin-wide strategic review into compliance with state- and territory-based regulations governing water use in the Murray-Darling Basin'.⁶

4.10 As part of the WCR, the MDBA examined the:

- appropriateness of and compliance with state laws and statutory instruments such as WRPs;
- adequacy of water measurement and monitoring arrangements, including metering;
- adequacy of penalty arrangements to deter and punish non-compliant water use;
- adequacy of governance and institutional arrangements ensuring legally compliant water use; and

3 Mr Phillip Glyde, Murray-Darling Basin Authority, *Estimates Hansard*, 27 October 2017, pp. 67, 78.

4 Murray-Darling Basin Authority, *Submission 26*, p. 3.

5 Mr Phillip Glyde, Murray-Darling Basin Authority, *Estimates Hansard*, 27 October 2017, p. 56.

6 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 1, <https://www.mdba.gov.au/sites/default/files/pubs/MDB-Compliance-Review-Final-Report.pdf> (accessed 11 January 2018).

- steps required to improve confidence in water compliance and enforcement arrangements.⁷

4.11 In addition, an independent, expert panel would provide advice on the approaches and methodologies used by the MDBA in conducting the WCR. The expert panel would present a separate report to the Ministerial Council, assessing the MDBA report. The expert panel would also examine the compliance and enforcement arrangements of the MDBA, how these interact with Basin state arrangements, and present options for improving the overall effectiveness of the Basin Plan.⁸

4.12 In its submission to the inquiry, DAWR advised that the Australian Government considered the WCR to be an 'appropriate whole of Basin response to the allegations aired by the Four Corners report', which would complement the other investigations already completed or in train.⁹

Findings

State compliance and enforcement

4.13 The WCR found that the Basin states had significant variations in their compliance cultures, resourcing levels, transparency and 'comprehensiveness and clarity of the policy framework'. Via a state-by-state analysis, the WCR determined that South Australia has had a long commitment to a compliance culture, with licensed water take metered since 1994. SA had a well-codified compliance regime, with good transparency and detailed annual reports on compliance activity and outcomes.¹⁰

4.14 In Victoria, compliance was undertaken by regional water authorities. In examining Goulburn Murray Water, the WCR determined that the modern, remote sensed meters in place provided accurate and real-time data, through a networked system. The WCR argued that 'whereas excess take by an entitlement holder pumping from a river might be seen as a victimless crime, in a network system it is a crime against neighbours'. The network system therefore leads to a compliance culture amongst irrigators.¹¹

4.15 However, the WCR suggested that Victoria lacked a full suite of penalties and sanctions for illegal water take, resulting in administrative compliance action reliant

7 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 2.

8 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 1.

9 Department of Agriculture and Water Resources, *Submission 47*, p. 8.

10 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 12.

11 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 12-13.

on limited penalties and sanctions, or by criminal prosecution requiring a very high standard of proof.¹²

4.16 The WCR noted that compliance in NSW was hindered by the fact that the state had both the greatest number of water licences and volume of water take, and the largest geographic area in the Basin. In addition, there was a 'significant volume' of unregulated water and floodplain harvesting, making it difficult to determine breaches. The WCR found that addressing these issues had been a low priority for NSW for the past 20 years. As a result, the WCR determined that:

The absence of a culture of compliance, organisational instability and limited resourcing have meant that compliance has relied heavily on custom and practice, resulting in a lack of effectiveness, consistency and transparency.¹³

4.17 With regard to Queensland, the WCR noted that the state only adopted a cap on diversions in 2010, and thus had the least experience with compliance. While Queensland was at the time undertaking a significant review of metering, the WCR was of the view that compliance efforts would be hampered by significant floodplain harvesting, as well as 'challenges of distance and an industry with some very large entitlement holders'.¹⁴

4.18 Between the Basin states, the WCR noted a 'striking variation' in enforcement activity. For example, in 2016-17, Victoria issued 562 warning letters and notices, SA issued 355 and NSW issued 44. Across all Basin states there were a very small number of prosecutions, with no prosecutions in 2016-17 in NSW and Queensland, and six in the other states.¹⁵

4.19 The WCR concluded that NSW, Queensland and Victoria had a 'notable lack of transparency', reflecting a closed culture and lack of codification of compliance tasks, thus restricting the ability to publish results. In NSW and Queensland, the WCR stated that compliance was 'bedevilled by patchy metering, the challenges of measuring unmetred take and the lack of real-time, accurate water accounts'. It also determined that NSW and Queensland had low levels of compliance resources, with South Australia more adequately equipped.¹⁶

4.20 The WCR concluded that ineffective compliance systems could be explained by a lack of commitment to compliance by responsible organisations. Additionally,

12 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 13.

13 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 13.

14 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 13.

15 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 13.

16 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 14.

the difficulty in proving water offences constrained enforcement activity. The WCR therefore suggested that the burden of evidence of water breaches be reduced, and the offences simplified, perhaps by way of strict liability offences and the use of technology.¹⁷

Water resource plans

4.21 The WCR noted that full compliance with the Basin Plan could not be achieved until state WRPs were accredited, due for completion by 30 June 2019. However, the WCR acknowledged that progress on the development of state WRPs has not been adequate. While there are 36 WRPs to be developed across the Basin (the majority of which are in NSW), to then be accredited by the MDBA by 30 June 2019, only one WRP has been accredited, in Queensland. The WCR notes particular concern with the progress made by NSW and Victoria, but considers South Australia, Queensland and the ACT better placed to meet the timeframes. The WCR details actions the MDBA would take to help ensure the 30 June 2019 deadline was met by all Basin states.¹⁸

4.22 The WCR called for the ability to manage water flows on an event-by-event basis, rather than on the basis of long-term average use levels, and to protect low flows for downstream communities. To this end, the WCR found that the Barwon-Darling WSP does not adequately protect environmental water, especially during low flows. The Northern Basin Review, completed in late 2016, presented measures to improve the protection of environmental flows in the unregulated rivers of northern NSW.¹⁹

MDBA compliance and enforcement

4.23 The WCR noted that under the Basin Plan, the MDBA had considered water compliance and enforcement a matter for the states. Despite this, the WCR states that:

in the course of the Review, it has been made very clear that the community does not accept this arrangement. Numerous stakeholders have expressed considerable frustration that the MDBA did not respond adequately to allegations of serious breaches. They are looking to the MDBA to take more responsibility for compliance and enforcement.

The MDBA has not given sufficient attention to compliance, has not provided a clear statement of its compliance role, and has not dealt adequately with allegations of compliance breaches. The Review presents a

17 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 14.

18 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 15, 25.

19 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 15.

program of actions the MDBA will undertake to redress these deficiencies and cement its role in compliance and enforcement.²⁰

Recommendations

4.24 While making a number of recommendations to Basin state governments to improve water management, and detailing the actions the MDBA would take to improve its functions, the WCR recommended that COAG commit to a Basin Compliance Compact. The Compact would commit Basin state governments to 'the actions required to restore public confidence in water management within the Basin'. The Compact would be published by 30 June 2018, with annual progress reports detailing the progress in each state in enacting the WCR recommendations, including:

- implementation of improved water metering and measurement;
- the state's compliance strategy and how the strategy addresses the concerns raised by the WCR;
- the state's compliance activities, including the timeliness of responding to allegations;
- the development of WRPs compliant with the Basin Plan;
- implementation of measures to improve the protection of environmental water; and
- the establishment of a network of water compliance practitioners to promote best practice (coordinated by the MDBA).²¹

4.25 More details on each of these key recommendations made by the WCR are presented below.

Technology

4.26 The WCR called on Basin state governments to implement a metering target of 95 per cent per water resource area for meterable take. Such a target would in effect implement the 'no meter, no pump' rule (as proposed by the Matthews review). It was also argued that this target would avoid placing cost burdens on small entitlement holders, as the metering would apply to those extracting more than 20 megalitres (ML) on average annually. The WCR made recommendations as to the appropriate standards of the meters, how the meters should be installed and audited, and that the pump details and water entitlements be made publicly available.²²

4.27 To further improve the measurement of water take, particularly with regard to floodplain harvesting in the Northern Basin, the WCR recommended that NSW and

20 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 14-15.

21 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 27-28.

22 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 17-18.

Queensland improve the assessment of water taken by floodplain harvesting in their annual accounts, and have accurate measurements of non-metered floodplain harvesting in place by 30 June 2022.

4.28 The MDBA undertook to publish, by 30 June 2018, guidelines for the requirements of hydrometric networks and hydrologic models for compliance and enforcement. From 2018 onwards, the MDBA would also publish an annual report on the 'data quality and assurance processes for hydrometric data for Basin Plan reporting and river operations in the River Murray System'.²³

4.29 To this end, in August 2018 the MDBA released a program report titled 'Model improvement program from MDBA hydrological models'. The report 'outlines components and timeframes for three models used to support Basin Plan implementation'.²⁴

Compliance frameworks

4.30 The WCR made a number of recommendations for Basin states to implement effective compliance regimes. The WCR determined that good governance for water compliance required Basin states to adopt the following elements:

- organisational stability and a strong compliance culture, led 'from the top';
- the clear assignment of responsibilities and accountabilities for decision-making, with transparency and close connections in making compliance decisions;
- compliance functions to be held within one agency, with a separation between enforcement and customer service (as in place in South Australia and Goulburn Murray Water);
- adequate resourcing of and budget allocations to compliance functions, in conjunction with well-trained and knowledgeable staff;
- the publication of compliance risk tools, risk classification of water sources and annual audit priorities (with South Australia at the time the only state publishing its compliance strategy);
- clear escalation pathways for enforcement action against alleged offences, and publication of this pathway (with South Australian at the time the only state publishing its escalation pathway);
- good annual reporting on compliance activity, including numbers, types and locations of breaches, the actions taken, outcomes achieved and the timeliness of each step in the compliance pathway; and

23 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 20.

24 Murray-Darling Basin Authority, *Model improvement program*, 16 August 2018, <https://www.mdba.gov.au/publications/mdba-reports/model-improvement-program> (accessed 12 November 2018).

- provision of clear, simple and publicly available information to entitlement holders so that they understood their rights and obligations and could therefore voluntarily comply with the rules.²⁵

4.31 The WCR recommended that each state review its compliance and governance arrangements, considering the elements listed above, and for each state to publish its compliance strategies. Both tasks were to be completed by 30 June 2018. By 31 March 2018, the MDBA would issue guidelines for the consistent reporting of compliance activities.²⁶

4.32 Given the shared nature of water resources across the Basin, the WCR called for consistency across the states in the penalties and sanctions imposed against water breaches.²⁷ It was also recommended that an appropriate range of administrative, civil and criminal penalties be put in place across all states, so that 'the punishment can match the crime', and to allow compliance resources to be allocated in a way that was proportionate to the offence.²⁸

MDBA compliance

4.33 The WCR acknowledged the strong community and stakeholder concerns that the MDBA's compliance powers were unclear, including the view that the MDBA should more actively enforce compliance with the Basin Plan.²⁹

4.34 The Basin Plan is enacted through state WRPs. The WCR noted that under these arrangements, states have the lead compliance and enforcement function against individual water entitlement holders. It was stated that the 'MDBA is not resourced to take over this role, and it would be inefficient for the MDBA to do so'. However, the WCR continued that:

the MDBA's role is to hold states to account if they are not performing their compliance and enforcement functions effectively. The MDBA accepts that it has not adequately escalated allegations of water theft when the relevant state authorities have not dealt adequately with them. A more assertive and transparent approach to compliance by the MDBA is needed, including a proactive escalation strategy (set out in Attachment B [of the WCR]), an

25 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 20-21.

26 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 21-22.

27 As an example of inconsistencies, the WCR stated that the maximum penalty in NSW for illegal take is \$2.2 million for a corporation, with a first offence in Victoria attracting a penalty of \$9,514.

28 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 22.

29 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 23.

audit and assurance program, better public reporting, and a willingness to employ its enforcement powers where necessary.³⁰

4.35 The WCR detailed the actions the MDBA would take to improve its compliance functions. These actions included:

- taking a more proactive approach to compliance and enforcement by adopting a revised proactive escalation strategy;
- revising and publishing the MDBA compliance and enforcement strategy, ensuring its compliance with the Basin Plan. The strategy would include, among other things, a risk-based audit program to check that the obligations of the Basin Plan are being met, including via state compliance arrangements; and
- the establishment of a dedicated compliance and enforcement branch and an independent assurance committee that will provide advice to the MDBA on its enforcement and compliance work.³¹

4.36 The WCR further suggested that to improve implementation of the Basin Plan, the governance arrangements between the Australian Government and state agencies should be improved and streamlined. Improvements would aim to 'better reflect roles and responsibilities so as to ensure that all relevant agencies are engaged on issues for which they have responsibility and avoid duplication', while improving transparency and the integration of decision-making.³²

Environmental water

4.37 The WCR agreed with the assertions made in Four Corners that the rules in the Barwon-Darling system allowed environmental water to be used by irrigators.³³ The WCR called for improvements to the water entitlement system, to provide confidence that water recovered for environmental purposes was used as such. The WCR saw scope for the improved protection of environmental water in the unregulated northern Basin, and in more regulated areas of the southern Basin (such as the Murray and Murrumbidgee rivers).³⁴

4.38 While it was acknowledged that work was underway in NSW and Queensland to better protect environmental water, the WCR recommended that NSW and

30 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 23.

31 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 24.

32 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 24-25.

33 See also the 'Case Study on Protection of Environmental Flows in the Barwon-Darling, NSW', Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 69-70.

34 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 26.

Queensland take action to 'immediately introduce Daily Extraction Limits and encourage the development of voluntary agreements to protect low flows (of less than 2000ML/ day at Bourke)'.³⁵

4.39 The WCR recommended that the NSW and Queensland governments revise their WRPs to ensure they include effective policies for the protection of environmental water, particularly during low flows. Such policies should 'include event-based management or other innovative policy tools capable of delivering equivalent environmental outcomes'.³⁶

Independent Panel Report – Murray-Darling Basin Water Compliance Review

4.40 The independent panel reviewing the MDBA's WCR also made a number of findings and recommendations regarding compliance and enforcement, in addition to those recommendations and actions presented by the WCR (which the panel fully supported).

4.41 The independent panel found that it was difficult to understand the progress of Basin Plan implementation, given the variety of reports between the MDBA, the CEWH and the Basin states. Nevertheless, the panel found that insufficient progress had been made in the accreditation of WRPs and in the protection of environmental water. It further contended that while the MDBA had a central leadership and coordinating role:

it has been unable to assert its authority during the development of water resource plans and transition to SDLs; the Australian Government Department of Agriculture and Water Resources (DAWR) and the Basin Officials Committee (BOC) also have important roles which are not being effectively discharged. The Panel notes an underlying lack of acceptance that the Water Act has fundamentally changed roles and responsibilities for management of Basin water resources: it is not business as usual.³⁷

4.42 The independent panel made a number of recommendations relating to accountability, including, among other things, that:

- the MDBA revise and clearly communicate its compliance and enforcement arrangements, provide advice on how it will assess compliance and report publicly, while providing clear guidance on the reporting obligations of all stakeholders, and
- COAG endorse amendments to the Water Act with regard to the appointment of members to the MDBA. Those appointed should have a 'high level of expertise, and be widely recognised as having high standing in, one or more

35 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 26.

36 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 27.

37 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 100.

fields relevant to the Authority's functions', with members collectively having experience across the necessary variety of fields.³⁸

4.43 In finding that Basin states should continue to be responsible for water law enforcement, the independent panel also found that clarity was needed as to when the MDBA would act in instances of illegal take, and WRPs were needed to help provide this clarity on MDBA action. The panel recommended that COAG endorse amendments to the Water Act that would provide a 'more comprehensive suite of sanctions and powers, such as appropriate evidentiary provisions and criminal sanctions'.³⁹

4.44 The independent panel supported the WCR's calls for improved water measurement and monitoring. It made the additional recommendations that the Minister call on DAWR to take a more active role, given the significance of WRPs to the administration of the Water Act. Further, the MDBA should work with the states and the Bureau of Meteorology to improve environmental water management via a review of the hydrometric network.⁴⁰

4.45 In relation to environmental water, the panel considered that there was a 'concerning systemic failure to protect low flows in unregulated rivers in the northern Basin', and that the water take rules in NSW had contributed to the loss of low flows in unregulated rivers. The independent panel also argued that held environmental water was not properly protected from take. To address this, the panel recommended that the MDBA ensure accredited WRPs include policies for the protection of environmental water, particularly low flows in the northern Basin.⁴¹

4.46 In concluding, the independent panel stressed that the review and subsequent report of the WCR was both valuable and essential. Without the WCR, the panel considered that the Basin Plan could have been placed in 'real jeopardy', due to lack of action by the MDBA and the failure of Basin states to deliver on their commitments.⁴²

Independent Assurance Committee

4.47 On 12 February 2018, the MDBA announced the appointment of members to an Independent Assurance Committee (IAC), established to provide 'expert advice on the design, implementation and adequacy of the MDBA's Basin Plan compliance

38 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 101.

39 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 102.

40 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 103.

41 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, pp. 103-104.

42 Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p. 104.

program'. The establishment of the IAC was a result of the WCR and aims to ensure the MDBA 'fully and proactively' executes its compliance functions.⁴³

4.48 Mr Glyde advised that the IAC would:

provide advice – which will be publicly available – on the MDBA's compliance strategy and approach, program design and agency capability.

[The IAC] will help [the MDBA] to ensure adequate attention is given to high risk areas for Basin Plan implementation, including state and MDBA compliance arrangements and reporting, state water resource plans and improved management of environmental water.⁴⁴

4.49 The IAC consists of four independent experts with knowledge in various relevant fields. As part of its annual work program, in 2018 the IAC was expected to implement MDBA actions resulting from the WCR, provide advice on the Compact, and progress with Commonwealth accreditation of Basin state WRPs and the protection of environmental water.⁴⁵

MDBA compliance action since the WCR

4.50 Since the completion of the WCR, the MDBA and the Ministerial Council have taken steps to implement the recommendations of that review. The MDBA has established an Office of Compliance to provide a 'focal point within the MDBA to improve water compliance in line with the Basin Plan'.⁴⁶

4.51 The MDBA has further developed an online register, detailing how it has handled allegations of non-compliance that have been reported to it. The MDBA has adopted a compliance escalation pathway, to be followed when handling non-compliance allegations.⁴⁷

4.52 In June 2018, the MDBA published its 'Compliance and enforcement policy 2018-21', detailing the MDBA's approach to compliance and enforcement under the Water Act and Basin Plan. The policy outlines the seven compliance areas of the MDBA, being:

43 Murray-Darling Basin Authority, *Independent Assurance Committee to strengthen Basin-wide compliance*, 12 February 2018, <https://www.mdba.gov.au/media/mr/independent-assurance-committee-strengthen-basin-wide-compliance> (accessed 13 February 2018).

44 Murray-Darling Basin Authority, *Independent Assurance Committee to strengthen Basin-wide compliance*, 12 February 2018.

45 Murray-Darling Basin Authority, *Compliance and enforcement: Compliance Independent Assurance Committee*, <https://www.mdba.gov.au/basin-plan-roll-out/compliance-enforcement/compliance-independent-assurance-committee> (accessed 13 February 2018).

46 Murray-Darling Basin Authority, *Action on Compliance Review*, <https://www.mdba.gov.au/basin-plan-roll-out/basin-wide-compliance-review/action-compliance-review> (accessed 13 February 2018).

47 Murray-Darling Basin Authority, *Action on Compliance Review*, <https://www.mdba.gov.au/basin-plan-roll-out/basin-wide-compliance-review/action-compliance-review> (accessed 13 February 2018).

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- WRPs and ensuring state water laws remain consistent with accredited WRPs;
 - SDLs, including continual improvement to measuring consumptive use;
 - compliance and enforcement in relation to illegal take;
 - improving water metering and measuring of water take (including the use of remote sensing and emerging technologies);
 - planning and protection of environmental water;
 - water trade; and
 - water quality and salinity.⁴⁸

Basin Compliance Compact

4.53 At a meeting of the Ministerial Council on 19 December 2017, Basin state water ministers acknowledged that confidence in the governance of the MDB had been eroded by the allegations of water theft and inadequate enforcement of the rules. The Council committed to 'prompt and effective responses to the reviews that had been conducted to date, and to those still underway'.⁴⁹

4.54 To that end, the ministers agreed to appoint an independent person to examine and collate the findings and recommendations of the various compliance reviews, to provide the Council with advice on implementation. The Council further determined that Basin officials would establish a draft Basin Compliance Compact (Compact), as recommended by the WCR. The draft Compact would:

detail a compliance implementation framework, including specific plans for improving compliance and enforcement activities for each Basin jurisdiction and for the MDBA, and transparent reporting and accountability arrangements on progress.⁵⁰

4.55 The MDBA supported the appointment of an independent person to assist with implementation of the compliance review recommendations. The MDBA also noted that the Compact had been recommended by the WCR, and thus supported its development. Mr Glyde of the MDBA observed that given the numerous reviews completed and ongoing, a 'well-coordinated response and plan of action will be

48 Murray-Darling Basin Authority, *Compliance and enforcement policy 2018-21*, June 2018, pp. 5-6, <https://www.mdba.gov.au/sites/default/files/pubs/MDBA-Compliance-and-enforcement-policy-2018.pdf> (accessed 12 November 2018).

49 Murray-Darling Basin Authority, *Communique: Murray-Darling Basin Ministers meet in Albury*, 19 December 2017, <https://www.mdba.gov.au/media/mr/communique-murray-darling-basin-ministers-meet-albury> (accessed 13 February 2018).

50 Murray-Darling Basin Authority, *Communique: Murray-Darling Basin Ministers meet in Albury*, 19 December 2017.

essential to give proper effect to the numerous recommendations resulting from the reviews'.⁵¹

4.56 The draft Compact was agreed to by the Ministerial Council, at its meeting on 8 June 2018, but is yet to be endorsed by COAG. The Compact addresses and responds to the WCR, the interim and final reports of the Matthews review, and the independent audit of Queensland water measurement and compliance, completed in March 2018. The Compact commits the Basin states—within set timeframes—to 'building improved compliance and enforcement practices into their 'business as usual' management of Basin water resources', with a focus on five key themes:

- transparency and accountability;
- compliance and enforcement frameworks;
- metering and measurement;
- finalising water resource plans, and
- protecting and managing environmental water.⁵²

4.57 Importantly, the Compact commits Basin states to effective water metering, and notes that all water meters should comply with the national standard (AS4747), by no later than June 2025. Additionally, Basin states would be required to meter all take via water entitlements (however defined by each jurisdiction) by June 2025, and introduce a program, no later than 2025, to progressively automate the reporting of water take. The Compact specifically notes that for higher risk take, 'including large users in the Barwon-Darling', that the take be accurately metered and telemetered by December 2019.⁵³

4.58 The Basin states, as parties to the Compact, agreed to the adoption of 'consistent approaches for compliance arrangements and practices across the Basin' which would be supported by a 'network of compliance practitioners, who will share knowledge and experience'.⁵⁴

4.59 The Compact further notes that:

telemetry should be utilised to improve the timeliness and efficiency of capturing and reporting water take data for compliance, and flag possible breaches of water management rules for immediate investigation.

However, currently there are insufficient meters that meet the standard to suit every metering situation, and telemetry may not be cost effective for some water users. A risk-based approach will initially be taken, with the

51 Murray-Darling Basin Authority, *MDBA welcomes Basin ministers' shared commitment to compliance*, 21 December 2017, <https://www.mdba.gov.au/media/mr/mdba-welcomes-basin-ministers%E2%80%99-shared-commitment-compliance> (accessed 13 February 2018).

52 Murray-Darling Basin Compliance Compact, 8 June 2018, pp. 2-8, https://www.mdba.gov.au/sites/default/files/pubs/Basin-Compliance-Compact_0.pdf (accessed 1 November 2018).

53 Murray-Darling Basin Compliance Compact, 8 June 2018, pp. 5-6.

54 Murray-Darling Basin Compliance Compact, 8 June 2018, p. 2.

ultimate aim of achieving comprehensive coverage of compliant meters and telemetry across the Basin.⁵⁵

55 Murray-Darling Basin Compliance Compact, 8 June 2018, p. 5.

Chapter 5

Use and oversight of Commonwealth water

5.1 As part of its inquiry, the committee undertook to examine the operation, expenditure and oversight of the Water for the Environment Special Account (WESA).

5.2 This chapter examines the funding and expenditure of the WESA, and also looks at the expenditure of government funds more broadly through the purchase of water entitlements, known as buybacks.

5.3 The committee notes that the purchase of water for environmental purposes is the remit of DAWR, and not the CEWH. The CEWH is instead tasked with management of the water purchased by DAWR, and with making determinations on its best use.

5.4 The committee further notes that the House of Representatives Standing Committee on the Environment and Energy is currently undertaking an inquiry into the management and use of Commonwealth environmental water, with particular focus on the role of the CEWH.¹

Environmental water

5.5 The MDBA states that the key to improving the health of the Basin's environment is 'using water recovered for the environment to deliver more natural and variable flows'. The MDBA further states that water holders and managers—including the Australian Government and Basin states—coordinate the delivery of environmental water with irrigation demands and rainfall, with water recovered through improvements to irrigation infrastructure, or through water buybacks.²

5.6 The NSW Government noted that environmental water includes planned environmental water allowances accrued through the regulated river WSPs, and 'environmental water licences arising from the purchase of entitlements by governments and the recovery of water savings from infrastructure projects'. In its submission, the NSW Government observed that the Matthews interim report had drawn 'attention to the complexity surrounding the management of environmental water and the need for a cooperative approach to solutions'.³

5.7 The CEWH manages the government's environmental water holdings and is governed by the Water Act. The CEWH must perform its functions and exercise its

1 House of Representatives Standing Committee on the Environment and Energy, https://www.aph.gov.au/Parliamentary_Business/Committees/House/Environment_and_Energy/EnvironmentalWater (accessed 5 November 2018). A tabling date for the final report is yet to be specified.

2 Murray-Darling Basin Authority, *Water for the environment*, <https://www.mdba.gov.au/managing-water/water-for-environment> (accessed 5 November 2018).

3 NSW Government, *Submission 13*, p. 3.

powers in a manner consistent with the Basin-wide environmental watering strategy and with regard to the Basin annual environmental watering priorities.⁴

5.8 The CEWH submitted that there were 'some state government policies in place which limit the protection and use of environmental water', despite the commitments made by Basin states to maximise the utility of environmental water. The CEWH continued that:

If environmental water is allowed to be extracted by consumptive users it would represent a significant third-party gain at the expense of the Australian tax payer. While a major focus of NSW government water resource management is the mitigation of third-party impacts from environmental watering, facilitating a third-party benefit for some irrigators at the expense of the environment and other water users is not appropriate.⁵

5.9 The EDOs of Australia (EDOA) likewise expressed concern over whether the money expended to date on buybacks had occurred 'without a detailed analysis of the medium to longer-term environmental and social value of this expenditure', or whether the expenditure met the requirements of the Basin Plan or Water Act.⁶

5.10 The Wentworth Group suggested that environmental water held by the Commonwealth and Basin states was not well protected by the existing water management rules, and noted that environmental water could be vulnerable to both illegal extraction, and lawful extraction with adverse consequences. The Group identified the Barwon-Darling system as being one area where environmental water was vulnerable to extraction.⁷

5.11 The NSW Irrigators Council (NSWIC) put forward a different perspective on the same issue, arguing that irrigators had to be assured that their legitimate rights to take water were not impacted 'due to the simplistic approach to a very complex issue of determining what water is environmental water and what water is able to be taken by irrigators, industry and urban utilities' under WSPs.⁸

5.12 The interim report of the Matthews review noted the public perception that water purchased with taxpayer's money, to be used for the environment, was not being appropriately managed. Further, protection of environmental flows was a 'major and complex issue'. The interim report argued that it was 'critical' that the new WRPs being developed for 2019 be assessed by the MDBA 'against the criterion of adequacy of their arrangements for protecting environmental flows'.⁹

4 Commonwealth Environmental Water Holder, *Submission 9*, [p. 1].

5 Commonwealth Environmental Water Holder, *Submission 9*, [p. 2].

6 EDOs of Australia, *Submission 18*, p. 7.

7 Wentworth Group of Concerned Scientists, *Submission 33*, p. 5.

8 NSW Irrigators Council, *Submission 48*, [p. 5].

9 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, pp. 43-44.

5.13 The Matthews review found that environmental flows would further be protected by more short-term solutions, including implementation of individual daily extraction limits, and more flexible commence-to-pump rules during low flow periods and other event-based mechanisms.¹⁰

Water for the Environment Special Account

5.14 The WESA was established in 2013, with the aim of enhancing the environmental outcomes of the Basin Plan via protection of environmental assets and biodiversity. Section 86AA of the Water Act details the ways in which the WESA can enhance environmental outcomes, such as reducing salinity in the Coorong and Lower Lakes, and increasing the water resources available for environmental use.¹¹

5.15 DAWR submitted that specifically, the WESA:

provides funds to ease or remove constraints on the capacity to deliver environmental water and to recover 450 GL of water for the environment with neutral or beneficial social and economic impacts.¹²

5.16 DAWR advised the committee that \$1.775 billion had been allocated for use by the WESA over a ten-year period, commencing in 2014-15. Of this, \$1.575 billion had been allocated for efficiency measure projects, aimed at delivering the additional 450GL of environmental water, by 2024, with a further \$200 million for constraints projects. Supply measures are not funded by the WESA.¹³

5.17 According to DAWR, efficiency projects funded by the WESA could include infrastructure projects to support more efficient use of irrigation water. The WESA could provide payments to address 'adverse social or economic impacts associated with such a project on the wellbeing of a community'.¹⁴

5.18 Total water recovery under the WESA will depend on a range of factors, such as the market value of water, water location, and the security classification type of the water recovered. DAWR advised the committee that:

the Water Act provides for progress in water recovery under WESA to be independently reviewed in 2019 and 2021. These reviews will assess progress that has been made towards recovering environmental water and whether funding in the account is sufficient to meet its objectives.¹⁵

5.19 DAWR provided information regarding its involvement in the oversight and finalisation of projects funded by the WESA, stating that:

10 Mr Ken Matthews AO, *Independent investigation into NSW water management and compliance*, interim report, 8 September 2017, p. 44.

11 *Water Act 2007*, s. 86AA. The WESA was incorporated into the Water Act by the *Water Amendment (Water for the Environment Special Account) Act 2013*.

12 Department of Agriculture and Water Resources, *Submission 47*, p. 5.

13 Department of Agriculture and Water Resources, *Submission 47*, p. 5.

14 Department of Agriculture and Water Resources, *Submission 47*, p. 5.

15 Department of Agriculture and Water Resources, *Submission 47*, p. 5.

In some cases we go down to the individual project level. In some cases we have delivery partners. In the case of the pilot program in South Australia, the South Australian government are a delivery partner there. They assess individual projects and then we do our own assessments on top of that. It's a combination of us and relevant delivery partners who undertake that.¹⁶

5.20 The DAWR 2016-17 annual report stated that a delivery partner had been secured (in September 2016) for the Commonwealth On-Farm Further Irrigation Efficiency (COFFIE) program. This program aims to implement the efficiency measures component of the SDL adjustment mechanism in the Basin Plan, by assisting irrigators to improve their water use efficiency. The annual report maintains that COFFIE will 'assist irrigators to improve the water use efficiency and productivity of their irrigation activities, with water savings being made available to the environment'.¹⁷

5.21 As of September 2017, up to \$15 million of the WESA had been set aside for the COFFIE pilot projects, with 29 projects approved at a cost of \$5.7 million.¹⁸

Reporting and oversight

5.22 Pursuant to the Water Act, the Secretary of DAWR is required to prepare an annual report to the Minister (as soon as practicable after 30 June each year), detailing the operation of the WESA (this annual report is incorporated into DAWR's annual report). The Water Act also provides what details must be included in the annual report, including:

- the objectives and priorities for amounts debited from the WESA during the report year;
- achievements against those objectives and priorities, including the increase to Commonwealth environmental water holdings due to amounts debited from the WESA, a description of the kinds of water rights acquired by the Commonwealth, and the WRP areas in which those water rights were acquired;
- for each project for which an amount was debited from the WESA, a description of the project, the aim of the project and the WRP area in which the project is (or will) be taking place; and
- any significant developments during the report year on projects funded in a previous year.¹⁹

16 Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 75.

17 Department of Agriculture and Water Resources, *2016-17 Annual Report*, p. 151, http://www.agriculture.gov.au/SiteCollectionDocuments/about/annualreport/2016-17/annual-report_16-17.pdf (accessed 19 January 2018); Department of Agriculture and Water Resources, *Submission 47*, p. 6. The delivery partner is the SA Murray-Darling Basin Natural Resources Management Board.

18 Department of Agriculture and Water Resources, *Submission 47*, p. 6.

5.23 The amount to be appropriated to the WESA each financial year, from 2014-15 to 2023-2024, is stipulated by section 86AG of the Water Act. The largest allocation of funds took place—as scheduled—in 2017-18, with a total appropriated amount of \$430 million. In 2018-19, \$320 million was to be credited to the WESA pursuant to the Water Act.

5.24 In its 2017-18 annual report, DAWR presented a summary of expenditure from the WESA since its commencement, provided at Table 5.1 below.

Table 5.1: Water for the Environment Special Account, 2015-16 to 2017-18²⁰

Item	2015-16	2016-17	2017-18
Appropriated amount	\$40,000,000	\$110,000,000	\$430,000,000
Movement of funds	Nil	\$64,857,000 ¹	\$43,352,000
Funds expended	\$3,985,145.00	\$1,790,598.34	\$6,958,866

¹ The figure for the 2016-17 movement of funds was incorrectly reported at \$70,000,000 in the 2016-17 annual report.

Expenditure in 2015-16

5.25 In 2015-16, payments totalling \$3.985 million were made from the WESA, from an appropriated amount of \$40 million. This expenditure supported business case development on the movement of environmental water in NSW, South Australia and Victoria. Further payments (of \$6145) were made for specialist advice on development of the COFFIE program.²¹

5.26 In its submission, the NSW Government advised that up to \$2.4 million of funds from the WESA had been made available to it through a December 2015 funding agreement, which provided for NSW to develop constraints management strategy business cases. In March 2016, NSW received a first milestone payment of \$2 million, which included \$1.1 million to engage the MDBA to 'provide hydraulic mapping and monitoring, input into costings and assistance with stakeholder consultation'.²²

Expenditure in 2016-17

5.27 In 2016-17, a number of payments were made from the WESA, totalling \$1.790 million. The payments were made from an appropriated amount of \$110 million. The DAWR annual report provided further information on the 2016-17 expenditure, stating that:

19 *Water Act 2007*, s. 86AI(2).

20 Department of Agriculture and Water Resources, *2017-18 Annual Report*, p. 149.

21 Department of Agriculture and Water Resources, *2015-16 Annual Report*, p. 148.

22 NSW Government, *Submission 13*, p. 3.

Thirteen on-farm projects [under COFFIE] have been approved with a total value of \$4,228,264.80 and contracted water recovery of 814 megalitres. Payments of \$1,749,523.95 have been made. No water contracted has yet been returned to the Commonwealth Environmental Water Holder. All water contracted to date under the COFFIE program has involved works within the South Australian River Murray water resource plan area (SS11).

Payments totalling \$41,074.39 were made for specialist advice in the development and promotion of the COFFIE program.²³

Expenditure in 2017-18

5.28 The payment of \$6.959 million in 2017-18 was for a number of projects and initiatives, including:

- \$100,000 to Victoria for it to complete its constraints projects business cases;
- \$5.792 million in payments to on-farm projects under the COFFIE program;
- \$956,853 to Ernst and Young, engaged by the Ministerial Council in March 2017 to complete an independent review of efficiency measures; and
- other minor expenses on promotional activities for COFFIE, an assurance review of the COFFIE pilot process, and legal advice.²⁴

Reviews of WESA

5.29 Pursuant to section 86AJ of the Water Act, two independent reviews of the WESA must be completed into:

whether the amount standing to the credit of, and to be credited to, the Water for the Environment Special Account is sufficient to increase, by 30 June 2024, the volume of the Basin water resources that is available for environmental use by 450 gegalitres, and to ease or remove constraints identified by the Authority on the capacity to deliver environmental water to the environmental assets of the Murray-Darling Basin.²⁵

5.30 The report of the first review must be provided to the Minister by 30 September 2019, with the report of the second review to be provided to the Minister by 30 September 2021.²⁶

Concerns raised in evidence

5.31 A number of submitters expressed concerns over the management, expenditure and transparency of the WESA.

5.32 WWF-Australia questioned whether expenditure of WESA funds on business cases for constraints measures, underpinning the SDL adjustment mechanism, complied with the objectives of the WESA and the provisions of the Water Act.

23 Department of Agriculture and Water Resources, *2016-17 Annual Report*, p. 151.

24 Department of Agriculture and Water Resources, *2017-18 Annual Report*, p. 148.

25 *Water Act 2007*, s. 86AJ(1).

26 *Water Act 2007*, s. 86AJ(5) and (6).

WWF-Australia raised further concerns about the management of the WESA, including:

- a lack of transparency about how the WESA is managed;
- an inability for the public to engage in the management of the WESA, and
- poor public reporting on how the WESA is managed.²⁷

5.33 Professor Richard Kingsford also questioned the level of transparency around the expenditure of the WESA, stating that 'currently there are relatively few accessible reports in the public arena, apart from high level distribution regarding the total budget'. Professor Kingsford called for auditing and monitoring to better understand the environmental gains or losses associated with efficiency upgrades.²⁸

5.34 The EDOA noted that a number of its clients had expressed concerns that:
in the absence of the necessary checks and balances, public money may be misused at the expense of the environment and other users in the Basin. This is a serious issue that must be urgently addressed.²⁹

5.35 The AFA echoed the sentiments of other submitters, observing that government reporting on the WESA expenditure revealed little about how the money was spent and who it was allocated to, and did not explain 'the accrued benefits...for the Australian taxpayer'.³⁰

5.36 The IRN reiterated these views, noting that there appeared to be 'little or no reporting on how this money has been used'. Further, the IRN observed that there did not appear to be any business cases in the public domain. IRN called for more transparency around the expenditure of the WESA.³¹

5.37 The NIC spoke strongly against the COFFIE program, arguing that the program was 'completely inadequate...untargeted and fails completely to assess impact on communities or irrigation scheme viability.' For these reasons, the NIC objected to the use of WESA funds on the COFFIE program, suggesting that to do so would cause 'significant harm to irrigation communities'.³²

5.38 Environment Victoria also expressed concern about the expenditure on the COFFIE program:

The COFFIE program is the only program to be rolled out so far to meet the objectives of the Special Account and recover the additional 450GL. If \$5,000/ML is the benchmark for water recovery using funds from the Special Account, the \$1.55 billion set aside for efficiency projects will recover only 310GL, well short of the legislated 450GL, and the enhanced

27 WWF-Australia, *Submission 15*, p. 4.

28 Professor Richard Kingsford, *Submission 27*, p. 5.

29 EDOs of Australia, *Submission 18*, p. 8.

30 Australian Floodplain Association, *Submission 44*, p. 13.

31 Inland Rivers Network, *Submission 54*, p. 8.

32 National Irrigators' Council, *Submission 31*, p. 19.

environmental outcomes set out in the Water Act will not be achieved. This would be a very unfortunate outcome.³³

5.39 The NSWIC suggested that the transparency around the projects and programs funded by the WESA was 'sufficient at this stage, as the activities related to water recovery under the Account provision are preliminary and are yet to fully commence'. However, the NSWIC did not support the WESA contributing to any of the 450GL environmental water recovery planned as part of the Basin Plan.³⁴

Government water buybacks

5.40 It has become apparent over recent years that one of the more contentious issues around the management of the MDB and allocation of its water resources is the purchase of water (buybacks) by DAWR, on behalf of the government.

5.41 In limited circumstances, DAWR can consider proposals to sell water directly to the government. DAWR advised that it commissions independent consultants to compile quarterly market price reports, in order to assist the public in understanding the prices being paid for water entitlements across the MDB. In a monthly report, DAWR reports on all water purchased, with pricing information:

usually published at the conclusion of an open water purchase tender to help provide greater transparency and to assist water entitlement holders who may be considering placing an offer to sell water in the future.³⁵

5.42 Under the Sustainable Rural Water Use and Infrastructure Program, \$3.1 billion has been allocated to purchase water to 'assist with bridging the gap to the sustainable diversion limits' in the Basin Plan. The purchase of surface water has been limited to 1500GL, in order to 'provide certainty to Basin communities that the government is prioritising infrastructure investment over water purchasing'.³⁶

Case study - purchase of water entitlements from Tandou

5.43 The concerns around government buybacks have been well demonstrated in a number of recent high-profile examples, including the purchase of water entitlements from Tandou.

5.44 On 22 June 2017, it was reported that the cotton farm Tandou in far west NSW, owned by Webster Limited, was decommissioning its irrigation system. Media reports suggested Webster made an unsolicited approach to the Commonwealth and subsequently entered an agreement to sell its water entitlements, totalling nearly

33 Environment Victoria, *Submission 55*, [p. 6].

34 NSW Irrigators Council, *Submission 48*, [pp. 5-6].

35 Department of Agriculture and Water Resources, *Commonwealth water purchasing in Murray-Darling Basin*, 19 April 2018, <http://www.agriculture.gov.au/water/markets/commonwealth-water-mdb> (accessed 1 November 2018).

36 Department of Agriculture and Water Resources, *Commonwealth water purchasing in Murray-Darling Basin*, 19 April 2018.

22 000MLs. Webster stated that it would receive \$78 million for the sale, and was preparing its final cotton crop for harvest in autumn of 2018.³⁷

5.45 It was later reported that the water entitlements had been independently valued by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) at nearly half the \$78 million claimed by Webster, but this valuation was not utilised by DAWR. DAWR instead relied on a valuation completed by a private valuer, Herron Todd White, which was prepared for the NSW Government. The purchase proceeded on the basis that the property received 100 per cent of its water entitlement.³⁸

5.46 The media reporting on this issue indicated that ABARES argued that the Herron Todd White valuation, which put the price of water at \$3500 per megalitre for lower Darling high security water, and \$1500 per megalitre for general security water, was 'greatly inflated relative to current prices in the Lower Darling'. It was further reported that the water purchase was not generally advertised, did not proceed through the cabinet process, and was not subject to comment from other relevant government agencies, such as the CEWH.³⁹

Explanations from DAWR

5.47 During Senate Estimates in October 2017, DAWR provided explanations as to the price paid for the Tandou water. Mr Malcolm Thompson, Deputy Secretary, advised that ABARES had valued the water at between \$24 and \$52 million, with the Commonwealth making a payment within that range. The ABARES valuation did not consider the value of the property.⁴⁰

5.48 DAWR considered that the 'most comprehensive assessment' of the value of the property was that completed by Herron Todd White. That valuation valued the water on the property at \$38 million, the midpoint of the ABARES valuation of the water. The further \$40 million reflected compensation for the loss of value of property and for the cessation of future irrigation activity on the property. In summarising the purchase, Mr Paul Morris of DAWR stated that DAWR had bought the water from the property but also:

37 Declan Gooch and Nikolai Beilharz, 'Cotton grower Tandou to sell water entitlements, convert NSW farm to lamb business', *ABC News*, 22 June 2017, <http://www.abc.net.au/news/2017-06-21/cotton-grower-tandou-to-sell-water-entitlements-convert-farm/8639968> (accessed 22 January 2018).

38 Anne Davies, '\$78m government spending on Darling water buyback nearly double its valuation', *The Guardian*, 26 October 2017, <https://www.theguardian.com/australia-news/2017/oct/26/78m-spent-on-darling-water-buyback-nearly-double-its-valuation> (accessed 22 January 2018).

39 Anne Davies, '\$78m government spending on Darling water buyback nearly double its valuation', *The Guardian*, 26 October 2017.

40 Mr Malcolm Thompson, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 53; Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 54.

bought the rights for them to not irrigate in the future. So, this was removing the servicing of irrigation water—removing some infrastructure that services that property—and also purchasing what they call works rights, which are their entitlements, I suppose, from the New South Wales government to undertake irrigation works on their properties. So we bought out those works rights, we bought out the water and effectively we removed infrastructure that would have serviced water into that property. So there will now be a dry-land property going forward.⁴¹

5.49 It was the position of DAWR that it does not usually release its water evaluation advice, 'due to its commercially sensitive content'. DAWR further argued that the release of such advice could impact on the Commonwealth's future negotiating position and ability to ensure best value for money in expenditure of government funds.⁴²

5.50 DAWR also responded to claims that the property was not receiving 100 per cent of its annual water entitlement, and thus that the amount paid for the water was too much. Mr Morris noted that:

in terms of Lower Darling high security and Lower Darling general security, which are the two types of water we purchased [from Tandou], over the last 40 years, in most years those two types of entitlement received 100 per cent of their allocations, and in a fairly limited number of years they received less than 100 per cent of their allocations.⁴³

5.51 DAWR confirmed that in the previous 12 years for Lower Darling high security water, there was only one year where the water allocation was less than 100 per cent, at 80 per cent. There were therefore no 'ghost years' where no water was available for allocation.⁴⁴

5.52 Mr Morris of DAWR argued that from the department's perspective, 'the Tandou purchase was an important part of delivering the Basin Plan'. Mr Morris stated that the purchase had a broad range of benefits, such as delivering on a Menindee Lakes project as part of the SDL adjustment mechanism.⁴⁵

5.53 The CEWH at the time, Mr David Papps, advised that the Commonwealth Environmental Water Office would provide 'generic acquisition advice' to DAWR on what it believes would be valuable water but that DAWR was responsible for the acquisition of water. In clarifying the roles of DAWR and the CEWH, Mr Papps

41 Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, pp. 53, 55.

42 Department of Agriculture and Water Resources, answers to questions on notice, 27 October 2017 (received 20 December 2017).

43 Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 54.

44 Mr John Robertson, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 54.

45 Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 53.

reiterated that the CEWH is principally concerned with the management of Commonwealth water holdings, while the acquisition of those holdings was the responsibility of DAWR. DAWR confirmed that the CEWH did not provide specific advice on the Tandou purchase.⁴⁶

Views raised in evidence

5.54 Strong views were put forward by submitters as to the efficacy or otherwise of government water buybacks and the allocation of environmental water, with a number of submitters giving their views on the Tandou purchase and others commenting on the role of the CEWH in buybacks.

Tandou purchase and other buybacks

5.55 The AFA submitted to the committee that the Tandou purchase equated to approximately \$3500 per megalitre of water. However, other property owners would struggle to receive \$800 to \$1100 per megalitre. The AFA was of the view that from its position, '\$78 million worth of public money has disappeared' with the Tandou purchase.⁴⁷

5.56 Mr Mark Zanker also contended that the purchase price per megalitre at Tandou was greatly inflated. Mr Zanker spoke strongly about the Tandou purchase as highlighting the issues with government buybacks:

This transaction highlighted a significant deficiency with the water market, and one that caused Commonwealth funds in all probability to be wasted. The water market does not appear to recognise the real possibility that the so-called water entitlements associated with a class A water licence or any other class of licence for that matter, may be illusory - stranded assets that have no real value, because in truth, there is no water associated with them, and there is no person or group willing to pay the price, other than a Commonwealth agency doing so for political reasons, rather than reasons of sensible policy and administration. The entitlement may have a notional market value, but no value in reality.⁴⁸

5.57 SAMI contended that the large water purchases by both state and federal governments had influenced the water market, 'by artificially increasing the permanent water price and creating unnecessary volatility in the temporary trade market'.⁴⁹

5.58 The EDOA raised a number of concerns regarding the buyback process more broadly, particularly with regard to closed-tender purchases. The EDOA's reasons for concern included:

46 Mr David Papps, Commonwealth Environmental Water Holder, *Estimates Hansard*, 27 October 2017, pp. 52-53; Mr Paul Morris, Department of Agriculture and Water Resources, *Estimates Hansard*, 27 October 2017, p. 54.

47 Mr Stuart LeLievre, Australian Floodplain Association, *Committee Hansard*, 1 November 2017, p. 24. See also Australian Floodplain Association, *Submission 44*, p. 16.

48 Mr Mark Zanker, *Submission 5*, [p. 2].

49 South Australian Murray Irrigators, *Submission 35*, [p. 2]. See also Murray Irrigation, *Submission 41*, pp. 11-12.

- a lack of public consultation (noting that such consultation is not required by law);
- that DAWR does not—and is not legally required to—explain how the purchases will further the objectives of the Basin Plan and the Water Act; and
- the security level of the water entitlements purchased is not readily available, making it difficult to assess environmental and social value.⁵⁰

5.59 However, the Goulburn Valley Environment Group was of the view that 'the buyback of water rights from willing sellers is by far the most effective use of taxpayer funds to release water to alternative uses'.⁵¹ This view was supported by the ACF, which also argued that the cap on buybacks and the prioritisation of investment in infrastructure was an inefficient mechanism by which to acquire water entitlements.⁵²

5.60 Similarly, Mr Rob Foster argued that selling water entitlements when prices were high could be sensible, and that trading water up and down a river was not 'intrinsically bad'. However, he argued that this should not mean that additional water was being taken from the river, and that compliance should continue to be properly monitored and allocations suitably managed.⁵³

Environmental water

5.61 The NIC remarked that it 'will never be possible to completely prevent some cross over of environmental and commercial use of water'. The NIC suggested that environmental flows could create secondary benefits for landowners, 'just as commercial watering on some private properties often creates environmental benefits'. The NIC concluded that:

When it comes to substantive allegations of use of environmental water by irrigators, those allegations need to be split up into actual allegations of illegal activity and impacts on environmental flow that arise from entirely legal pumping.⁵⁴

5.62 The Mungindi Water Users' and Cotton Growers Association Inc. argued that Commonwealth-owned environmental water was not being used for irrigation. The Association noted that some releases of Commonwealth-owned water could legally be extracted by irrigators, if there were appropriate flows and heights. The Association was of the view that 'misrepresenting the complexities of the relationship between environmental flows and the legal extraction of water has pointed the blame for water shortages at irrigators'.⁵⁵

50 EDOs of Australia, *Submission 18*, p. 7.

51 Goulburn Valley Environment Group, *Submission 21*, [p. 2].

52 Australian Conservation Foundation, *Submission 37*, [p. 9].

53 Mr Rob Foster, *Submission 3*, p. 3.

54 National Irrigators' Council, *Submission 31*, p. 13.

55 Mungindi Water Users' and Cotton Growers Association, *Submission 53*, [p. 10].

5.63 Mr Drew Martin submitted that the CEWH should adopt clear policies for the leasing of water to irrigators, particularly during drought. Mr Martin stated that such policies would assist the irrigation industry by reducing the damage done to it during the next dry period of low allocations. This would in turn enhance both the environment and irrigation communities.⁵⁶

Role of the CEWH

5.64 A number of submitters raised concerns with the actions of DAWR during buybacks, and suggested that the CEWH should be given a greater role and perhaps decision-making abilities in water buybacks, rather than leaving buybacks solely in the remit of the department.

5.65 WWF-Australia argued that the water buybacks that have occurred to date lacked any strategic focus, with the payment of high prices leading to distortions in the water market. The organisation further contended that there had been negligible environmental impacts provided by buybacks in some cases, with an overall lack of transparency regarding DAWR's decision-making process for purchasing environmental water. WWF-Australia called for the CEWH to be given the decision-making responsibility for purchasing environmental water.⁵⁷

5.66 Ms Sarah Moles echoed the sentiments expressed by WWF-Australia, in stating that it was a 'fundamental problem' that the CEWH could manage environmental water, but was not empowered to purchase water from willing sellers directly. Ms Moles suggested that there was 'therefore no opportunity for the CEWH to make strategic purchases with specific environmental needs or desired outcomes in mind'. To this end, Ms Moles expressed concerns over a lack of transparency regarding DAWR's water purchases, arguing it was difficult to determine value for money and environmental outcomes.⁵⁸

5.67 The ACF also supported a legislative framework for the CEWH to be consulted on the security of all water acquired through either purchase or infrastructure, and on the appropriateness of WRP mechanisms of safeguarding environmental water.⁵⁹

5.68 DAWR, however, submitted that it worked closely with the CEWH 'to ensure that strategic acquisitions of water are selected where possible to prioritise environmental outcomes'. DAWR stated that these outcomes could be diverse, including the protection of local natural assets, or 'enhancing major environmental indicators through increased bird or fish breeding events'. As an example, DAWR stated that it had consulted with the CEWH on purchases in the Condamine Balonne, as it 'represented a unique opportunity to secure a significant volume of water in a

56 Mr Drew Martin, *Submission 49*.

57 WWF-Australia, *Submission 15*, p. 5. See also EDOs of Australia, *Submission 18*, p. 9.

58 Ms Sarah Moles, *Submission 19*, [p. 2].

59 Australian Conservation Foundation, *Submission 37*, [p. 8].

catchment of particular strategic importance to achieving the outcomes of the Basin Plan'.⁶⁰

60 Department of Agriculture and Water Resources, *Submission 47*, pp. 4-5.

Chapter 6

Committee views and recommendations

6.1 This chapter presents the committee's views and recommendations regarding water metering and compliance across the Basin. In particular, it highlights the role of the MDBA and Basin state governments in improving their approaches to water management, to ensure the ongoing, effective implementation of the Basin Plan and appropriate responses to alleged instances of water theft.

Role of the committee

6.2 The committee appreciates that there are many strong views held on many issues pertinent to the management of the Basin, and the allocation of its resources between extractive users and the environment. This was apparent in the evidence the committee received, which covered a wide variety of topics.

6.3 However, given the terms of reference for this inquiry, there were various matters regarding the MDB and the Basin Plan which the committee was not in a position to address in this instance—for example the adjustments to SDLs, the specific content of WRPs, the water trading market, the basis and adequacy of hydrological modelling, and the particulars of water access licences. The committee also reiterates that it cannot investigate any alleged individual instances of water theft.

6.4 It is now a matter for Basin states to acknowledge the findings of the various reviews and investigations and implement their recommendations wherever possible. The Federal Government will play a vital role—through the MDBA—in progressing improvements to oversight, compliance and monitoring in the Basin. While the committee cannot make recommendations for individual Basin states, it hopes its recommendations will help to progress these aims.

6.5 In addition, the committee is cognisant that some of the matters canvassed in this report and elsewhere were considered (or may be considered) by the South Australian royal commission as part of its investigations. It is expected that the royal commission's findings, due in early 2019, will address a number of these matters in greater detail, as well as the numerous concerns about the implementation of the Basin Plan that are outside the scope of this inquiry.

Progress since referral

6.6 Since the Four Corners episode 'Pumped' first aired in July 2017, there have been significant and positive developments concerning regulatory and enforcement frameworks for compliance with water usage rules across the MDB, and within the Basin states, following a number of detailed investigations and reviews into the issue.

6.7 All the reviews and investigations into adherence with water rules highlighted serious flaws in the compliance and enforcement mechanisms in place across some of the Basin states, accompanied by a lack of transparency into government water policies and strategies. The committee acknowledges that it has greatly benefitted from considering the outcomes of many of these reviews, prior to presenting its own assessment.

6.8 Indeed, in August 2018 the committee heard evidence suggesting that, since completion of the various inquiries and reviews, matters had improved with regard to water extraction and compliance activities in the northern Basin. Councillor O'Connor expressed his pleasure with the outcome of the Matthews review, and advised that he had received 'plenty' of calls from the new NRAR in NSW. The Councillor concluded that, at this stage, 'everything is heading in a more positive direction'.¹

6.9 The committee is also cognisant that a significant period of time has passed since the original allegations were brought to light, and notes that several matters are now before the courts. The committee will therefore not be making any comments or findings on these matters.

Management of the Murray-Darling Basin

6.10 All parties involved in MDB water management appreciate the complexities of the issues before them. The considerable and significant variables in the implementation and management of the Basin Plan, particularly between states, and the states and the Commonwealth, were well highlighted by Mr Bill Johnson, who summarised the matter as follows:

The delivery of the reforms has a lot of moving parts. A part of the complication is that the whole reforms depend on many different parts. Each part is complicated in itself, let alone in the way they interact. There are interdependencies for a lot of them, and they include water resource plans; water recovery through purchase; water recovery through efficiency programs; the protection of the purchased and recovered water; the sustainable diversion limit adjustment mechanism...constraints management strategy; measuring, monitoring, metering, enforcement and compliance; accounting of water use and water recovery; hydrology models; and, underpinning all of that, inclusive consultation. That's just an example of the complexity of the reform. The debate is wrongly and often deliberately categorised as one between community, as represented by the irrigators, and greenies. It's not; it has gone far beyond that.²

6.11 Despite these difficulties, stakeholders from a variety of backgrounds expressed to the committee their strong support for the Basin Plan. The economic, environmental and cultural significance of the Basin is well understood and should not be underestimated. To this end, all Basin states, the MDBA and the Commonwealth must work together to restore public trust in the administration of the Basin, and confidence that water use is being properly managed.

6.12 There are significant challenges in implementing a cohesive and effective monitoring and compliance regime across an area as large and geographically diverse as the MDB. These challenges are amplified for NSW, given the differences between the northern and southern Basins. Despite the differences, the focus for compliance should remain on where there is more water use and extraction.

1 Councillor Phillip O'Connor, Brewarrina Shire Council, *Proof Committee Hansard*, 28 August 2018, pp. 5-6.

2 Mr Bill Johnson, Private capacity, *Committee Hansard*, 1 November 2017, p. 39.

6.13 It became apparent throughout the inquiry that in numerous instances, there were water use rules in place across the various Basin jurisdictions that, while adequate to achieve the desired compliance and Basin Plan outcomes, were not being complied with or enforced. In some instances, enforcement of existing rules was problematic, while in others a lack of adequate rules had brought about poor compliance outcomes.

6.14 This is not to say that some water use rules are not without need for improvement. However, if existing, satisfactory rules had been appropriately enforced, particularly in NSW, the many and varied instances of water over-extraction may have occurred with far less frequency.

6.15 The allegations of water theft, government malfeasance and over-extraction in the MDB, and particularly in NSW, were met with outrage from many sectors of the community. There was further dismay over the perceived lack of compliance and enforcement activity from certain Basin states. Basin water users and communities hold an expectation that the precious water resources of the MDB will be appropriately managed and actions taken to enforce the legislative and regulatory framework wherever necessary.

6.16 The committee understands that the allegations of theft certainly do not apply to all irrigators and other water licence holders. The committee agrees that it is indeed regrettable that the actions of a few may have implications for the many.

6.17 However, the allegations and the investigations into them by the MDBA and Basin states resulted in a thorough examination of compliance across the Basin. The implementation of the recommendations by the various investigations will greatly improve oversight, metering and monitoring throughout the MDB, and this should be seen as a positive outcome.

Water compliance in NSW

6.18 The investigations of the NSWOW made clear that water compliance has been problematic in NSW for many years. The committee was alarmed that the previous investigations of the NSWOW had not been made public when first completed, and that the concerns raised by NSWOW as early as 2009 were not addressed. Had they been, it is possible that the alleged large-scale water theft in NSW, and particularly in the northern Basin, may not have occurred.

6.19 The committee is of the view that the recommendations presented by the Matthews reports, and by the NSWOW, are vital to improving the management of water in the MDB, particularly in NSW. The committee was encouraged by the significant support given by stakeholders to the Matthews recommendations, and by the prompt actions taken by NSW to implement the recommendations.

6.20 The committee was pleased to see that NSW moved quickly to establish the NRAR, and is further encouraged by the work it has already completed. It is hoped that as the NRAR progresses with its important work, compliance and enforcement in NSW will continue to improve. As indicated in evidence to the committee, the NSW Government should ensure that the NRAR remains properly funded and resourced in order to exercise its functions.

6.21 However, the committee agrees with many witnesses and observers of the need to keep the new regulator in place for the long term. As noted by the NSW O, the constant NSW departmental reshuffles and restructures have had a serious, detrimental impact on water rule compliance and enforcement in NSW. The new structures recently put in place through the NRAR and as recommended by the Matthews review, must be given time to realise their potential. Teams like the SIU are vital in ensuring the ongoing viability of water sharing across the Basin.

6.22 The committee was also pleased to see that a number of pathways have been established that allow for confidential tip-offs to be made to relevant authorities in NSW, with clear escalation pathways and set timeframes for response. In addition, in December 2017 and following the Matthews review, the NSW Government released its water reform action plan. The plan provides that the NSW water goals are to:

- introduce best practice for water management;
- build a compliance and enforcement regime that ensures strong regulation;
- ensure transparency in the sharing, allocation and management of NSW water; and
- build capability to support implementation of water reforms.³

Metering regulations

6.23 The NSW Government released a draft policy and regulation for the metering of non-urban water, containing mandatory conditions to be imposed on water access licences and water supply work approvals. The draft policy noted that metering of 95 per cent of water take would meet the objective of the 'no meter, no pump' rule, given that monitoring of all water use was unlikely to be possible or practical. Accordingly, the policy took a risk-based approach and stipulated that:

- all users already required to have a meter will continue to be metered, and
- meters would be required if a threshold had been reached based on:
 - infrastructure size;
 - multiple works on the same licence, approval or landholding, and
 - at-risk groundwater sources.⁴

6.24 Following stakeholder input, it is anticipated that the policy and regulations will soon be finalised, with the regulations commencing on 1 December 2018.⁵

3 NSW Department of Industry, *Securing our water: NSW Government water reform action plan*, December 2017, p. 1, https://www.industry.nsw.gov.au/_data/assets/pdf_file/0016/136204/nsw-government-water-reform-action-plan.pdf (accessed 9 January 2018).

4 NSW Government, *Consultation Paper: NSW water metering framework – Policy, regulations and mandatory conditions*, August 2018, p. 9, https://www.industry.nsw.gov.au/_data/assets/pdf_file/0008/171656/NSW-water-metering-framework-consultation-paper.pdf (accessed 2 November 2018).

South Australian approach

6.25 It was highlighted by a number of reports that South Australia is leading the way when it comes to water use metering and monitoring, compliance and enforcement action, and transparency. The committee was likewise impressed by the evidence it received at its hearing in Adelaide, where a variety of stakeholders from across South Australia and within the South Australian Government expressed their confidence in the water management systems in place in that state.

6.26 The facts speak for themselves, with the WCR noting that in South Australia, there was a substantial volume of enforcement and compliance activity, with a codified compliance regime, adequate resources and personnel, good transparency and detailed reporting, and 96 per cent of water take efficiently metered and monitored.

6.27 The committee encourages other Basin states to adopt similar approaches to South Australia wherever possible and in accordance with regulatory frameworks, particularly with regard to its codified compliance regime, transparent reporting and publicly accessible registers.

Murray-Darling Basin Authority

6.28 The WCR provided a comprehensive and critical examination of the MDBA's compliance and enforcement functions, and an acknowledgement that the MDBA was not effectively performing these functions. The WCR made clear that the MDBA needed to better clarify and communicate its roles, and how these interact with both the Basin Plan and Basin state legislation. Questions remain regarding the delineation of compliance responsibilities between the MDBA and Basin states.

6.29 The PC considered the MDBA to be 'an inherently conflicted entity'. This view was often expressed during the inquiry, along with the view the MDBA was not properly exercising its oversight and compliance functions. It appears to the committee that the PC recommendation to separate the MDBA into two authorities, responsible for regulation and compliance respectively, would address the concerns raised in evidence about the independence and regulatory strength of the Authority.

6.30 The findings of the PC and the MDBA WCR were congruous, in that both sought a clear distinction between the administrative and regulatory roles of the MDBA, and its compliance and enforcement responsibilities. The WCR called for the establishment of a dedicated compliance and enforcement branch within the MDBA. To this end, the PC recommendation to separate the MDBA into two bodies seems to the committee to be a very sensible suggestion, and one which should be progressed as soon as is practicable.

6.31 The compliance role would then shift to the Basin Plan Regulator, and it is imperative that this body be properly financed and resourced in order to undertake its functions through the entirety of the Basin. To this end, the committee further suggests that should the Regulator be empowered to enforce pecuniary penalties for

5 NSW Department of Industry, *NSW water metering framework*, <https://www.industry.nsw.gov.au/water-reform/metering-framework> (accessed 2 November 2018).

water breaches and offences, the financial proceeds from these penalties be returned to the Regulator. This would enable the Regulator to efficiently continue its compliance and enforcement activities.

Recommendation 1

6.32 The committee recommends that the Australian Government support the recommendation of the Productivity Commission to separate the Murray-Darling Basin Authority into two entities: the Murray-Darling Basin Corporation, and the Basin Plan Regulator, with the Regulator established as a new statutory independent authority.

Recommendation 2

6.33 The committee recommends that the Australian Government ensure sufficient funding and resources are allocated to the Basin Plan Regulator, once established, to ensure that it is adequately resourced to undertake effective compliance, evaluation and review functions.

Recommendation 3

6.34 The committee recommends that the Australian Government consider hypothecating any pecuniary penalties paid to the Basin Plan Regulator, back to the Regulator. This would assist with the ongoing viability of the Regulator's compliance and enforcement roles.

Basin Compliance Compact

6.35 The final report of the Matthews review made the point that the MDBA and NSW needed to align their metering objectives and other technical frameworks, as it would be of no benefit if different metering outcomes were recommended and pursued.

6.36 The committee suggests that this risk applies equally across the Basin, and that the MDBA's compliance and enforcement framework should not go against that of the Basin states. Likewise, the Basin states should adopt a uniform approach to metering, monitoring and compliance wherever it is feasible to do so. A uniform approach across all jurisdictions—as far as is practicable—is of clear benefit to all.

6.37 This important issue appears to have been addressed by the Basin Compliance Compact, where Basin states have agreed to implementation of meters that accord with the relevant Australian standard, and have agreed to do so within set timeframes. The Compact further requires prompt metering of more high-risk areas, such as the Barwon-Darling.

6.38 The Compact requires Basin states and the MDBA to complete a number of tasks by 31 December 2018, including:

- a review of internal governance arrangements for water management—in both Basin states and the MDBA—to ensure a strong culture of compliance;
- publication of revised compliance frameworks, in accordance with the requirements stipulated by recommendations in the WCR;

- development of compliance protocols, including how allegations of non-compliance by individual entitlement holders will be coordinated in each jurisdiction (both before and after accreditation of WRPs); and
- publication of a metering policy and implementation plan, addressing meter accuracy, meter coverage and transmission data (among other things) with annual reporting on implementation commencing 30 September 2019.

6.39 Further, by 30 June 2019 all Basin states are required to publish a work program to improve transparency about water take under entitlements, including real-time information on flows and extractions, the location of take, and changes to water registers to ensure that information about water entitlements and trades can be easily accessed by the public. By this date both Queensland and NSW are also required to publish programs for improved measurement of floodplain harvesting and overland flow harvesting.⁶

6.40 Taken as a whole, and when combined with the actions arising from the various other reviews into alleged water theft and water management, the committee sees the Compact as a significant step forward in improving the integrity of the water market. The commitments made by Basin states as part of the Compact directly address many of the concerns raised during both this inquiry, and other investigations.

6.41 The committee encourages COAG to endorse the Compact.

Water resource plans

6.42 The committee notes the commentary from numerous stakeholders of the importance of WRPs in finalising a number of elements of the Basin Plan, and ensuring the best approach to management of the Basin's resources. Implementation of the WRPs will also allow the MDBA to more formally enact its role as regulator.

6.43 The issue was well-summarised by SAMI, which submitted that:

The water market cannot function with integrity until water allocation policy and the triggers that inform water allocation announcements have been bedded down and are not subject to political whims. This will not occur until after 2019/2024 when the Water Resource Plans come into effect, transitional documents have stopped being redrafted and works and measures are complete.⁷

6.44 The EDOA summarised concerns that the WRPs would not adequately protect environmental water, and that the MDBA was inadequately resourced to properly assess the 36 WRPs (particularly given their technicality), with insufficient resources to undertake adequate community consultation.⁸

6 Murray-Darling Basin Compliance Compact, 8 June 2018, pp. 3, 7; https://www.mdba.gov.au/sites/default/files/pubs/Basin-Compliance-Compact_0.pdf (accessed 1 November 2018).

7 South Australian Murray Irrigators, *Submission 35*, [p. 2].

8 EDOs of Australia, *Submission 18*, p. 14.

6.45 The committee observes with considerable concern that the WRPs are to be accredited and in place prior to 1 July 2019. Only one WRP has been accredited, despite 36 WRP areas existing across the Basin. NSW alone is required to develop 22 WRPs, detailing the water sharing arrangements for consumptive use and considering potential and emerging risks to water resources in that state.⁹

6.46 The committee is particularly concerned about the NSW WRPs, given the perceived difficulties in water management and oversight which have resulted from the 2012 Barwon-Darling WSP. It appears that the development of the Barwon-Darling WSP lacked a proper consultation process with communities and other key stakeholders, as well as proper protections for environmental water and may have led to over-extraction of water in the region.

6.47 With the deadline for accreditation fast approaching, the committee draws attention to the PC draft report, which also raised significant concerns about the accreditation of the WRPs, particularly in NSW. The PC observed that:

In some WRP areas, significant rules changes are needed to meet Basin Plan requirements and these changes could impact on the reliability and use of entitlements. In these areas, meaningful consultation is required to resolve these issues and there is a concern that not enough time is left to do this well. There is a risk that old rules will be rolled into the new arrangements, or new rules will be rushed and ill specified, resulting in WRPs being ineffective in addressing the issues. This risk is highest for New South Wales, given the number of outstanding WRPs and the magnitude of proposed rule changes in some plans.¹⁰

6.48 The PC called for the Basin states and the MDBA to 'negotiate a pathway for granting extensions to the 30 June 2019 deadline' for WRP accreditation, in limited instances where there are 'outstanding issues with material impacts'. Additionally, the PC called for longer-term clarification on the purpose and effective format of the WRPs and their associated compliance processes.¹¹

Committee view

6.49 The committee shares the concerns of stakeholders, and the PC, regarding the pending deadline for WRP accreditation. The WRPs will be important instruments in the management of water take across the Basin, including placing limits on annual water take, and therefore will help to guide enforcement and compliance action.

6.50 In addition, any compliance action undertaken by the MDBA needs to better consider overland flows and floodplain harvesting, and how these matters interact with WRPs, before the WRPs are accredited.

9 NSW Department of Industry, *Securing our water: NSW Government water reform action plan*, December 2017, p. 5.

10 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 9.

11 Productivity Commission, *Murray-Darling Basin Plan: Five-year assessment; Draft Report, Overview and Recommendations*, August 2018, p. 20.

6.51 Given the significant importance of WRPs to the overall success of the Basin Plan, the committee shares the concerns of the PC. If WRPs are properly developed and implemented, with adequate oversight, they will play a vital role in maintaining the health of the MDB. Conversely, if the WRPs are incorrect or poorly developed, and based on incorrect assumptions and modelling, they could have a detrimental effect on the success of the Basin Plan.

6.52 The committee therefore encourages the MDBA to work with Basin states, wherever possible, in their development of the WRPs, and echoes the sentiments of the PC in encouraging more flexible timeframes, where warranted. In the event that any WRP accreditation falls beyond the due date, there should not be indefinite extensions, and the process should be finalised as soon as possible.

6.53 The committee is also concerned about the considerable time and resources required by the MDBA to assess and evaluate whether the WRPs are consistent with the Basin Plan. This will need to occur in concurrence with the MDBA's existing regulatory, oversight and compliance functions. The committee therefore recommends that the MDBA ensure adequate resources are allocated to the WRP accreditation process.

Recommendation 4

6.54 The committee recommends that the Murray-Darling Basin Authority allocate sufficient resources to complete its assessment and evaluation of Water Resource Plans.

Water for the Environment Special Account

6.55 The committee holds a number of concerns regarding the operation and oversight of the WESA.

6.56 The committee notes that over the financial years 2015-16 to 2017-18, \$580 million had been allocated to the WESA account (\$900 million with the inclusion of 2018-19), with expenditure across those years only totalling approximately \$12.74 million.

6.57 The committee acknowledges that the WESA is currently in its fifth year of operation, of a ten year funding period, and also recognises that a number of projects may be in development, with payments to be released at a later date. However, the committee notes that of the \$1.775 billion allocated for that ten years, very little of the appropriations to date appear to have been spent. It is unclear to the committee if the funding is flexible enough to adjust to necessary changes that may occur in any number of efficiency projects, as the projects develop over the ten-year funding period.

6.58 It is also unclear to the committee who has direct oversight of the WESA, and the process involved in approving the allocation of funds to various projects.

6.59 The committee hopes that if the recovery of a further 450GL for the environment occurs through efficiency measures, the WESA appropriations are drawn on appropriately to best implement and support these efficiency programs. Given the issues with compliance and enforcement across the Basin, particularly with metering

and over-extraction, the committee would be loath to see such significant funding underutilised or allocated inappropriately to other projects.

Committee views

6.60 The committee is of the view that the details on WESA expenditure, as included in the DAWR annual report, should be more comprehensive. Under section 86AI of the Water Act, a number of particulars must be included in the annual report upon the expenditure of WESA funds.

6.61 To highlight this issue, the NSW Government submission to this inquiry provided detail on the funding it received, in 2015-16, from the WESA. However, this information is not contained in DAWR's annual report for that year. The annual report merely states that payments of nearly \$4 million were made to NSW, South Australia and Victoria to assist in development of business cases.

6.62 The committee acknowledges concerns that the expenditure of the WESA funds may not accord with the provisions of the Water Act. The lack of transparency in the annual reports does not help in this regard—a lack of detail makes it difficult to ascertain exactly what the funded projects entail, and whether these accord with legislated requirements. The Water Act does provide that the WESA can be debited for the purposes of 'improving the rules, policies, practices and procedures in relation to the use and management of the Basin water resources', and the committee observes that this gives a very broad scope to which projects may be funded by the WESA.¹²

6.63 The committee draws the relevant sections of the Water Act about reporting on the WESA to the attention of DAWR, particularly as efficiency projects will—presumably—progress further in coming years, resulting in an increase to the frequency and magnitude of the payments from the WESA. It is important that appropriate levels of transparency are applied to this significant expenditure, to allow proper oversight of its allocation and confidence in the use of taxpayer funds.

6.64 To this end, the committee recommends that DAWR develop more detailed annual reporting on the allocation of payments from the WESA during each financial year, and as required by the Water Act.

Recommendation 5

6.65 The committee recommends that the Department of Agriculture and Water Resources present detailed annual reporting on the allocation of funds from the Water for the Environment Special Account, in accordance with the requirements of the *Water Act 2007*.

Metering, monitoring and enforcement

Metering

6.66 It is possible that a variety of existing, new and emerging technologies could be implemented to better meter and monitor water use. Many of these technologies have been discussed and put forward for implementation by the various reviews and

12 *Water Act 2007*, s. 86AD(2)(vi).

investigations that have been completed over the previous 18 months. While the committee has not examined these technologies in detail, it hopes that all Basin states adopt the metering standards as put forward by the Basin Compliance Compact and other reviews, and takes on the recommendations of other reports where appropriate.

6.67 It is apparent that a lack of water metering and monitoring, particularly in the northern Basin, has direct implications for enacting effective compliance and enforcement regimes.

6.68 The committee is concerned that metering has been on the national agenda for a considerable period, yet the goalposts appear to keep moving. The first national standards for metering, under the National Framework for Non-Urban Water Metering, determined that all non-urban meters should comply with national standards by 2020. Now, under the Basin Compliance Compact, Basin states have committed to an undertaking that all water meters comply with the national standard by 2025.

6.69 While the committee was encouraged to see that water metering has become a focus of many Basin states, as highlighted by the commitments of the Compact, it notes that it may still be some time until meters are installed and operating as intended. This may hamper any efforts to enact better compliance frameworks.

Enforcement

6.70 A number of the investigations examined as part of the inquiry, including the WCR, noted that there were difficulties across the Basin states in proving that a water breach had occurred. They highlighted that the burden of evidence required was considerable, and inconsistent between jurisdictions. Further, the point was repeatedly made that these remedies lacked consistency between jurisdictions as to the maximum penalties applicable for offences against water legislation.

6.71 It is the committee's view that a more nationally consistent penalty regime and clear guidance on the burden of proof of a water breach would greatly assist in compliance efforts. A codified approach to these issues across jurisdictions would support a more cohesive Basin Plan, and demonstrate the commitment of all jurisdictions to address water breaches comprehensively. As noted by the WCR, more clarity in these areas would allow compliance resources to be better allocated, and would see 'the punishment match the crime'.

6.72 Accordingly, the committee recommends that the Ministerial Council, or another appropriate body, develop a codified or uniform schedule of evidentiary requirements, penalties and sanctions in relation to water breaches. The schedule should consider the views put forward by the various investigations about the burden of proof, the use of technology and the simplification of offences.

Recommendation 6

6.73 The committee recommends the development of a uniform schedule of evidentiary requirements, penalties and sanctions be developed to apply to breaches of water legislation in Murray-Darling Basin jurisdictions. The schedule should be presented to the Council for Australian Governments for endorsement. The schedule should consider:

- **the appropriate burden of evidence for water breaches;**
- **the use of technology in determining breaches;**
- **the suitability of strict liability offences; and**
- **the simplification of offences.**

Senator Glenn Sterle

Chair

Additional comments by Government Senators

1.1 The Government members of the Senate Rural and Regional Affairs and Transport References Committee (committee) acknowledge the very real need for communities across the Murray Darling Basin to have confidence that the rules that govern the use of water are complied with. The implementation of reviews undertaken into compliance and enforcement at the state level and by the Commonwealth has seen a range of actions taken over the past 12 months to 18 months.

1.2 In June the Murray Darling Basin Ministerial Council approved the Basin Compliance Compact. The Compact acknowledges that state and territory governments remain responsible for monitoring and enforcing water use and take. The Compact sets out a range of state and territory and Murray Darling Basin Authority (MDBA) commitments to improve the measurement of water take, strengthen compliance and enforcement arrangements, improve the protection of environmental flows and secure the timely completion of water resource plans.

1.3 In respect to recommendations 1-3 of the committee's report relating to the separation of the MDBA into a Murray Darling Basin Corporation and a Basin Plan Regulator, the Government Senators consider these recommendations to be premature. The Productivity Commission is yet to deliver its Final Report into the Murray-Darling Basin Plan and since the release of its Draft Report has held extensive consultations with Basin communities and Basin stakeholders.

1.4 The Government Senators are concerned that there are a range of risks in pursuing a separation of the functions of the MDBA at this time. These include risks to the implementation and delivery of the Basin Plan itself by 30 June 2019. Any separation would also require the approval of all jurisdictions and significant renegotiation of both the Murray-Darling Basin Agreement and the *Water Act 2007*.

Senator Barry O'Sullivan
Deputy Chair

Senator Slade Brockman
Senator for Western Australia

Additional comments by the Australian Greens

1.1 The Australian Greens welcome this comprehensive report from the committee. We have considerable concerns about the implementation of the Basin Plan and feel these concerns are broadly represented.

1.2 While we support the recommendations of the inquiry some of our concerns are not reflected.

Floodplain harvesting

1.3 The Murray-Darling Basin Plan is intended to limit the extraction of water to a Sustainable Diversion Limit (SDL).

1.4 There is insufficient evidence to give any confidence to water markets that the new floodplain harvesting policies and issuing of licences have not increased the capture of water off the floodplain since the 1993-94 level of development or even the 2008-09 level of development.

1.5 Allegations of increased floodplain harvesting are difficult to uphold because:

- they have not been measured historically;
- the estimates in BDL and SDL models are known to be significantly underestimated;
- the records for on farm storages and levee banks are sparse and often rely on self-reporting; and
- the agencies responsible for approving works on the floodplain are not water agencies and don't have hydrological expertise.

Recommendation 1

1.6 The Australian Greens recommend that a register of floodplain works, with works approvals and storage sizes be published.

Transparency and accountability

1.7 The SDL hydrological model will become the compliance tool to ensure that annual extractions are within the legal limit.

1.8 There is a lack of transparency around how the model is made and assessed, which diminishes the market confidence in the compliance with the SDL.

Recommendation 2

1.9 The Australian Greens recommend that the SDL compliance process is revised for transparency and accountability and to include an independent accreditation of the SDL model which is published, and an independent assessment of the annual SDL compliance process.

Allegations of corruption and water theft

1.10 The cross-jurisdictional nature of the Murray Darling Basin Plan, and the involvement of many different government agencies and politicians means that the oversight and investigative abilities of any one monitoring or law enforcement agency may be inadequate to deal with allegations of corruption and water theft. A National Integrity Commission could address some of these concerns.

Recommendation 3

1.11 The Australian Greens recommend that the federal government create an independent, broad-based public sector anti-corruption commission for the Commonwealth.

Senator Sarah Hanson-Young

Senator for South Australia

Appendix 1

Submissions received

Submission Number	Submitter
1	Ms Jennifer Powers
2	Ms Elisabeth Dark
3	Mr Rob Foster
4	Mr Brian Stevens
5	Mr Mark Zanker
6	Ms Kirsten Duncan
7	Queensland Farmers' Federation
8	Ms Melissa Gray
9	Department of the Environment and Heritage
10	Law Council of Australia
11	River Lakes and Coorong Action Group
12	Dr Adam Loch
13	NSW Department of Industry
14	Mr Rob McBride
15	WWF Australia
16	Nature Conservation Council of NSW
17	Mr Michael Murray
18	EDOs of Australia
19	Ms Sarah Moles
20	Macquarie Marshes Environmental Landholders Association
21	Goulburn Valley Environment Group
22	Environmental Farmers Network
23	Dr Anne E Jensen
24	Dr Kerri Muller
25	Broken Hill City Council
26	Murray-Darling Basin Authority
27	Professor Richard Kingsford
28	Moree Plains Shire Council
29	Alexandrina Council
30	Mrs Margaret McDonald

31	National Irrigators Council
32	Mr Paul Harvey
33	Wentworth Group of Concerned Scientists
34	Ms Anne Hartnett
35	South Australian Murray Irrigators
36	Mr Ed Fessey
37	Australian Conservation Foundation
38	Ms Anne E. Reeves OAM
39	Lachlan Valley Water
40	Pastoralists' Association of West Darling
41	Murray Irrigation
42	National Farmers' Federation
43	Ms Margaret Moxon
44	Australian Floodplain Association
45	Victorian Department of Environment, Land, Water and Planning
46	Gwydir Valley Irrigators Association Inc
47	Department of Agriculture and Water Resources
48	NSW Irrigators Council
49	Mr Drew Martin
50	Barwon-Darling Water
51	Mr Geoff Wise
52	Ms Ruby Davies
53	Mungindi Water Users' and Cotton Growers Association Inc.
54	Inland Rivers Network
55	Environment Victoria

Additional information received

Tabled documents

- Document presented by Mr Lachlan Gall of the Pastoralists' Association of West Darling at a public hearing in Broken Hill on 1 November 2017. Document detailing the importance of floodplain water.
- Document presented by Mayor Lindsay Godfrey, Paroo Shire Council at a public hearing in Adelaide on 2 November 2017. 1992 document detailing information on the management of water in the Warrego area

Additional information

- Additional information provided by the Broken Hill City Council. Correspondence between Mayor Darria Turley and the Hon Gladys Berejiklian, NSW Premier. Received on 1 November 2017.
- Additional information provided by Mr Bill Elliot, President, Wilcannia Community Tourism Association Inc. Document and pictures regarding a weir at Wilcannia. Received 1 November 2017.
- Additional information provided by the River Lakes and Coorong Action Group. Copy of the opening statement from a public hearing in Adelaide on 2 November 2017 and a copy of a presentation given by Dr Anne Jensen. Received on 3 November 2017.
- Additional information provided by the Australian Floodplain Association. Correspondence between Terry Korn PSM, President, Australian Floodplain Association and the Hon Barnaby Joyce MP. Received on 6 November 2017.

Correspondence

- Correspondence received from the Hon Dr Anthony Lynham MP, Queensland Minister for State Development and Minister for Natural Resources and Mines. Received on 12 October 2017.

Answers to Questions on Notice

- Answers to questions taken on notice by Ms Caren Martin, Chairperson, South Australian Murray Irrigators at a public hearing in Adelaide on 2 November 2017. Received on 20 November 2017.
- Answers to questions taken on notice by Mr Lachlan Gall, President, Pastoralists' Association of West Darling at a public hearing in Broken Hill on 1 November 2017. Received on 15 December 2017.
- Answers to questions taken on notice by Mr Lachlan Gall, President, Pastoralists' Association of West Darling at a public hearing in Broken Hill on 1 November 2017. Received on 8 January 2018.
- Answers to questions taken on notice by the South Australian Department of Environment, Water and Natural Resources at a public hearing in Adelaide on 2 November 2017. Received on 23 February 2018.

Appendix 2

Public hearings and witnesses

Wednesday, 1 November 2017, Broken Hill, New South Wales

- BROWNE, Councillor Marion, Deputy Mayor, Broken Hill City Council
- GALL, Mr Lachlan, President, Pastoralists' Association of West Darling
- JOHNSON, Mr Bill, Private capacity
- LeLIEVRE, Mr Stuart, Vice President, Australian Floodplain Association
- McBRIDE, Miss Kate Elizabeth, Owner, Tolarno Station
- McBRIDE, Mr Robert Eowin, Owner, Tolarno Station
- McCLURE, Mr Justin, Member, Australian Floodplain Association
- McCLURE, Ms Julie, Secretary, Australian Floodplain Association
- O'CONNOR, Councillor Phillip, Mayor, Brewarrina Shire Council
- SMITH, Mr Terry, Councillor, Pastoralists' Association of West Darling
- SOWIAK, Mr Jeffery, General Manager, Brewarrina Shire Council
- TURLEY, Councillor Darriea, Mayor, Broken Hill City Council
- ZANKER, Mr Leon, Member, Australian Floodplain Association

Thursday, 2 November 2017, Adelaide, South Australia

- BEAL, Mr Andrew, Director, River Murray Operations, Department of Environment, Water and Natural Resources, South Australia
- BRUCE, Mr Ben, Group Executive Director, Water, Department of Environment, Water and Natural Resources, South Australia
- FULLER, Mr Mike, Program Manager, Water and Fauna Permits, Department of Environment, Water and Natural Resources, South Australia
- GODFREY, Mr Lindsay, Mayor, Paroo Shire Council
- JORDAN, Mr Dan, Director, Water Policy, Department of Environment, Water and Natural Resources, South Australia

- MARTIN, Mrs Caren, Chairperson, South Australian Murray Irrigators
- MURRAY, Mr Michael Bernard, General Manager, Cotton Australia
- REEDY, Mr Richard, Board member, South Australian Murray Irrigators
- RIGNEY, Mr Grant, Director, Murray Lower Darling Rivers Indigenous Nations
- SHANKS, Mr Paul, Board member, South Australian Murray Irrigators
- TREGENZA, Ms Elizabeth, Secretary, River Lakes and Coorong Action Group Inc.
- WOODS, Mr Rene Paul, Chairperson, Murray Lower Darling Rivers Indigenous Nations

Tuesday, 28 August 2018, Sydney, New South Wales

- O'CONNOR, Councillor Phillip, Mayor, Brewarrina Shire Council
- SOWIAK, Mr Jeffery, General Manager, Brewarrina Shire Council