



LEGISLATIVE COUNCIL

SELECT COMMITTEE ON FLOODPLAIN HARVESTING

Floodplain harvesting

December 2021



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Select Committee on Floodplain Harvesting

Floodplain harvesting

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Floodplain harvesting

"December 2021"

Chair: Ms. Cate Faehrmann MLC



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Terms of reference

1. That a select committee be established to inquire into and report on the Government's management of floodplain harvesting, including:
 - (a) the legality of floodplain harvesting practices,
 - (b) the water regulations published on 30 April 2021,
 - (c) how floodplain harvesting can be licensed, regulated, metered and monitored so that it is sustainable and meets the objectives of the Water Management Act 2000 and the Murray-Darling Basin Plan and,
 - (d) any other related matter.

2. That the committee report by 30 November 2021.¹

The terms of reference were referred to the committee by the Legislative Council referred by the committee on 23 June 2021.

¹ The original reporting date was 30 November 2021 (Minutes, NSW Legislative Council, 23 June 2021, pp 2353 - 2355). The reporting date was later extended to 15 December 2021 (Minutes, NSW Legislative Council, 19 October 2021, p 2505).

Committee details

Committee membership

Ms Cate Faehrmann MLC	The Greens	<i>Chair</i>
The Hon Mark Banasiak MLC	Shooters, Fishers and Farmers Party	<i>Deputy Chair</i>
The Hon Lou Amato MLC	Liberal Party	
The Hon Sam Farraway MLC	The Nationals	
The Hon Ben Franklin MLC	The Nationals	
The Hon Rose Jackson MLC	Australian Labor Party	
The Hon Penny Sharpe MLC	Australian Labor Party	
The Hon Mick Veitch MLC	Australian Labor Party	
The Hon Adam Searle MLC*	Australian Labor Party	

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* The Hon Adam Searle MLC is a participating member from 10 July 2021 for the duration of the inquiry.

Chair's foreword

This inquiry was initiated following a number of attempts by the NSW Government to regulate and license floodplain harvesting. The most recent attempt occurred on 30 April 2021, when the NSW Government introduced three regulations that were subsequently disallowed by the Legislative Council less than a week later, signalling that there remained significant questions around floodplain harvesting.

Indeed, the management of floodplain harvesting has long seen vigorous debate and deep divisions amongst water users, experts and communities across the Murray-Darling Basin for years without resolution – debate and division that continued to play out during the course of this inquiry. There was fundamental disagreement by stakeholders over key aspects of floodplain harvesting policy and practice, including questions over legality, the impacts of the practice, determining volumes and licence design.

To this end, the committee ultimately determined, through its 14 findings, that there are too many inadequacies and uncertainties around floodplain harvesting at this point in time, acknowledging the evidence received during this inquiry that caution and improvement is required before a licensing framework is embedded. In particular, the committee finds that floodplain harvesting significantly impacts on downstream flows and river health, with economic, social, cultural and environmental consequences. Further, the committee makes the finding that floodplain harvesting has grown significantly in its volume of extraction over the years, contrary to policy and legislative intent. While the report acknowledges the investment and work completed by the NSW Government in this area to date, it finds that deficiencies remain, particularly in relation to volume measurement, illegal structures, water accounting rules, and community engagement and transparency.

The report accordingly makes 25 recommendations to address the various concerns, including that floodplain harvesting licences are only issued at such a time that the Department of Planning, Industry and Environment is satisfied that the recommendations of this report will be fully met. Other recommendations include that a thorough review of data and an assessment of downstream economic, social, cultural and environmental impacts are conducted prior to finalising floodplain harvesting entitlements, and that the NSW Government establish an independent expert panel coordinated by the Natural Resources Commission to assess and audit floodplain harvesting models and compliance.

On behalf of the committee, I would like to thank the many organisations and individuals who have contributed to this inquiry, in particular Mr Bret Walker AO SC, from whom the committee sought legal advice. I also extend thanks to my fellow committee members for their engagement and contributions to this important inquiry. Finally, I thank Hansard and the committee secretariat for their assistance, particularly in supporting the inquiry under the exceptional circumstances of the pandemic.



Ms Cate Faehrmann MLC
Committee Chair

Findings

- Finding 1** **36**
 That under the *Water Management Act 2000*:
- floodplain harvesting is not an offence under section 60A
 - floodplain harvesting works constructed without approvals are not an offence under section 91B.
- Finding 2** **36**
 That, notwithstanding Finding 1, issues of lawfulness arise in the practice of floodplain harvesting when a work is used, and this must be examined on a case by case basis.
- Finding 3** **36**
 That, should a New South Wales floodplain harvesting licensing framework cause the state to exceed the legal limits of surface water extraction set under the Commonwealth framework, this would constitute a breach of the *Water Act 2007* (Cth).
- Finding 4** **56**
 That floodplain harvesting has had a significant impact on downstream flows and river health, particularly to the Darling Baaka River, Menindee Lakes and Ramsar listed wetlands, leading to numerous economic, social, cultural and environmental impacts, and that to properly understand any and all impacts improvement in real time monitoring through increased river gauges is required.
- Finding 5** **57**
 That there has been insufficient assessment of the cumulative impacts of floodplain harvesting to date, and that the only way to further improve assessments of the cumulative impacts of floodplain harvesting is through accurate metering of take during floodplain harvesting events.
- Finding 6** **57**
 Floodplain harvesting has contributed to a reduction in downstream flows which has had a profound impact on the culture and traditions of First Nations peoples.
- Finding 7** **57**
 That engagement with First Nations peoples on the development of floodplain harvesting policy has been inadequate and, at times, culturally inappropriate.
- Finding 8** **85**
 That the modelling used by the NSW Government to determine floodplain harvesting volumes lacks transparency and accountability, does not provide for validation against actual flows and does not have the public's confidence.
- Finding 9** **87**
 That it is unclear there was a legal right to floodplain harvest at the dates upon which the Murray-Darling Basin Cap and the Baseline Diversion Limits are based and it is therefore unclear on what legal basis the Government intends to amend the Basin Plan to incorporate historic floodplain harvesting volumes.

- Finding 10** 87
That the process the NSW Government is undertaking to amend the Sustainable Diversion Limit as described by the NSW Department of Planning, Industry and Environment has the potential to be unlawful.
- Finding 11** 88
That the NSW Government has failed to meet its obligations under the Murray-Darling Basin Agreement by allowing the unchecked growth of unregulated floodplain harvesting extraction to volumes well in excess of the 1994 Murray-Darling Basin Cap.
- Finding 12** 89
The NSW Government's Floodplain Harvesting Policy could result in entitlements being granted to landholders for unapproved or illegal works which will need to be modified or decommissioned.
- Finding 13** 90
The 500 per cent carry-over rule would allow significantly more floodplain harvesting to occur in a single year than was possible in 1994.
- Finding 14** 110
That the non-transparent manner in which the NSW Healthy Floodplains Review Committee undertakes its work, including assessing appeals and deciding whether to grant retrospective approval to floodplain structures, is concerning and inappropriate.

Recommendations

- Recommendation 1** **57**
 That the NSW Government conduct a thorough review of low and cease-to-flow data, as well as an assessment of downstream economic, social, cultural and environmental impacts and needs prior to finalising the volume of floodplain harvesting entitlements in each valley identified in the NSW Floodplain Harvesting Policy, and this includes detailed locations of any proposed new river gauges and real time monitoring infrastructure.
- Recommendation 2** **58**
 That the NSW Government urgently prioritise regular and genuine involvement of First Nations peoples in the management of floodplain harvesting, including cultural flows.
- Recommendation 3** **86**
 That the NSW Government's modelling of floodplain harvesting volumes use the best available projections to evaluate the impact of climate change on entitlement reliability, downstream outcomes and environmental impacts.
- Recommendation 4** **86**
 That the NSW Government establish an independent expert panel coordinated by the Natural Resources Commission to:
- assess and accredit the models used in Water Sharing Plans and produce a public report on the accreditation that includes the standard and mean error of models
 - assess the floodplain harvesting 'Cap Scenario' reports for compliance with the Murray-Darling Basin Cap and publish assessment reports
 - annually audit the Sustainable Diversion Limit and Murray-Darling Basin Plan Limit, publishing audit reports that separately identifies the annual Cap or Sustainable Diversion Limit target, and diversions for licence and extraction type.
- Recommendation 5** **86**
 That the Department of Planning, Industry and Environment ensure that model run number and long-term average extraction limits for the Baseline Diversion Limit, the Murray-Darling Basin Cap, and the Plan Limits must be included in water sharing plans for each valley.
- Recommendation 6** **88**
 That, if the NSW Government intends to amend the Sustainable Diversion Limits, the NSW Government must specify the legal pathway through which they intend to do so.
- Recommendation 7** **88**
 That the NSW Government ensure that any allocation of floodplain harvesting volumes and entitlements must be within existing Sustainable Diversion Limits.
- Recommendation 8** **88**
 That, if Sustainable Diversion Limits are to be amended, the Minister for Water, Property and Housing make representations to the Murray-Darling Basin Authority to ensure that the Sustainable Diversion Limits are reflective of an environmentally sustainable level of take under the *Water Act 2007* (Cth), regardless of any adjustments to the Baseline Diversion Limits.

- Recommendation 9** 89
That the NSW Government urgently ensure all floodplain harvesting is metered and measured, including flows that enter and bypass storages, before issuing floodplain harvesting licences to ensure the accuracy of volumes and long-term extraction limits.
- Recommendation 10** 89
That the NSW Water Reform Action Plan include a ‘no meter, no pump’ rule, as recommended by the Independent Investigation into NSW Water Management and Compliance.
- Recommendation 11** 90
That the NSW Government ensure that the NSW Water Register includes information regarding structures on floodplains, including their location, volume, ownership, approvals and licence conditions.
- Recommendation 12** 90
Excluding structures that have been assessed as protecting infrastructure, that the NSW government ensure floodplain structures do not alter the natural flood flows at times when extraction is not permitted.
- Recommendation 13** 90
That the NSW Government decommission or remove unlawful structures and publish a time frame for this initiative within 6 months.
- Recommendation 14** 90
That the NSW Government ensure that no floodplain harvesting licences are granted on the basis of illegal works.
- Recommendation 15** 90
That the NSW Government ensures that any carry-over rule included in floodplain harvesting licences to provide flexibility in accessing floodplain harvesting entitlements does not allocate more than 100 per cent of entitlements in the first year of the accounting period.
- Recommendation 16** 91
That the NSW Government ensure that rainfall run-off is measured, metered and reported as part of extraction limits, and if exemptions are to be granted, they should be limited to landholders with less than 500 megalitres of storage capacity.
- Recommendation 17** 91
That the NSW Government develop clearly defined and enforceable access rules based on within-valley and downstream flow triggers based on minimum flow targets needed to maintain or improve outcomes for environmental, cultural and basic landholder requirements, with floodplain harvesting take only permitted under the access rules when these targets are met, and that these access rules must be implemented before any floodplain harvesting licences or entitlements are allocated.
- Recommendation 18** 91
That the NSW Government work urgently to engage First Nations communities to ensure that cultural flow targets are established and met as part of the regulatory framework on floodplain harvesting.

- Recommendation 19** **107**
 That the Department of Planning, Industry and Environment only issue floodplain harvesting licences at such a time as it is satisfied that the recommendations of this report will be met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, the independent oversight of the Natural Resources Commission has been established and that mandated environmental and other downstream outcomes are being achieved.
- Recommendation 20** **108**
 That, if the NSW Government grants floodplain harvesting licences or entitlements, these should be strictly non-compensable and subject to Parliamentary oversight.
- Recommendation 21** **109**
 That the NSW Government, through the National Federation Reform Council, make representations to remove the surface water trading requirement from the Murray-Darling Basin Plan.
- Recommendation 22** **109**
 That, in the absence of the surface water trading requirement being removed from the Murray-Darling Basin Plan, the Minister for Water, Property and Housing ensure that water trading be restricted and subject to a robust environmental and social impact assessment process prior to each trade, and that trading is restricted to within catchment trading only.
- Recommendation 23** **109**
 That the NSW Government:
- institute a clearly defined enforcement and compliance regime for floodplain harvesting take and floodplain harvesting works
 - ensure that the Natural Resources Access Regulator is sufficiently funded to undertake its enforcement and compliance functions.
- Recommendation 24** **110**
 That the NSW Government abolish the NSW Healthy Floodplains Review Committee and future appeals be dealt with by the proposed independent expert panel, referred to in Recommendation 4, and the outcomes be reported publicly.
- Recommendation 25** **110**
 That the Department of Planning, Industry and Environment ensure that all decisions made by the NSW Healthy Floodplains Review Committee be audited by the proposed independent expert panel, referred to in Recommendation 4.

Conduct of inquiry

The terms of reference for the inquiry were referred to the committee by the Legislative Council on 23 June 2021.

The committee received 289 submissions and 5 supplementary submissions.

The committee held four public hearings via videoconference.

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

Chapter 1 Background

This chapter provides an overview of the practice of floodplain harvesting in New South Wales, including the history of floodplain harvesting policy in the state as well as the current regulatory and policy framework. The chapter also discusses more recent developments in the lead up to this inquiry, including the disallowance of a series of floodplain harvesting regulations by the New South Wales Legislative Council.

Floodplain harvesting in New South Wales

- 1.1 The term 'floodplain harvesting' is defined by the NSW Government as the collection, extraction and impoundment of water flowing across floodplains, including rainfall run-off and overbank flow. This definition excludes water taken under certain conditions, including the taking of:
- water under a water access licence that is not a floodplain harvesting access licence
 - water under a basic landholder right
 - water under an applicable water access licence exemption, and
 - used irrigation water.²
- 1.2 Floodplain harvesting is practised on all floodplains across the Murray-Darling Basin, although it is more prevalent and significant on the northern basin floodplains.³ It is estimated that floodplain harvesting comprises approximately 25 per cent of irrigation water that can be taken under legal limits in the northern basin valleys over the long term.⁴
- 1.3 Figure 1 illustrates the northern and southern basins comprising the Murray-Darling Basin. As shown in the figure, the Murray-Darling Basin spans across New South Wales and includes areas in Queensland, South Australia, Victoria and the ACT.
- 1.4 The NSW Floodplain Harvesting Policy identifies five northern basin valleys in particular where floodplain harvesting is most prominent – the Border Rivers, Gwydir, Namoi, Barwon-Darling and Macquarie.⁵

² NSW Department of Planning, Industry and Environment, *NSW Floodplain Harvesting Policy*, September 2018, p 4.

³ Submission 84, NSW Government, p 1. See also Submission 50, NSW Irrigators' Council, p 8.

⁴ Submission 84, NSW Government, p 2.

⁵ NSW Department of Planning, Industry and Environment, *NSW Floodplain Harvesting Policy*, September 2018, p 2.

Figure 1 The Murray-Darling Basin⁶



Significant milestones and reports

- 1.5 This section identifies key milestones in the development of floodplain harvesting policy and regulation in New South Wales, up until the start of the 57th NSW Parliament in 2019. Developments after this time, including the disallowance of regulations pertaining to floodplain harvesting, are discussed later in the chapter. This section also outlines key reports on water management relevant to this inquiry.

History of floodplain harvesting policy and regulation in New South Wales

- 1.6 The need to regulate and manage the Murray-Darling Basin has long been recognised since the federation drought in the early 20th century. However, the significance of floodplain harvesting, and the need for government policy and regulation specific to it, only came to the fore in the early 1990s.

⁶ Murray-Darling Basin Authority, *Where is the Murray-Darling Basin*, 29 September 2020, <https://www.mdba.gov.au/importance-murray-darling-basin/where-basin>

- 1.7 Mr Peter Millington, former Chief Executive Officer and Director General of the Department of Water Resources and former Commissioner of the Murray-Darling Basin Commission, advised that, up until this time, water flowing across a property – whether from general rainfall or overflow from streams – was 'not controlled or allocated in any way at all'. He explained: '...[T]his was just 'free water' as it was believed that taking this water ... had no significant impact on other users or the environment'.⁷ In fact, according to Mr Millington, northern basin valley irrigators were generally encouraged by the NSW Government to take what was then deemed as 'surplus' water, given the less reliable annual supply of the northern basin.⁸
- 1.8 By 1992, however, there was growing recognition for the need to better plan and manage the Murray-Darling Basin. Subsequently, the Murray-Darling Basin Ministerial Council (Ministerial Council), Murray-Darling Basin Commission (MDBC) and the Community Advisory Committee were established.
- 1.9 In 1993, the MDBC, under the direction of the Ministerial Council, conducted an audit of water diversions in the Murray-Darling Basin. The audit found a significant increase in water diversion over time and concluded that an appropriate balance between consumptive use and environmental considerations needed to be reached.⁹
- 1.10 In response to the findings, the Ministerial Council introduced an interim cap on diversions of water from the Basin (the Cap). The Cap, which was later made permanent, was defined as 'the volume of water that would have been diverted under 1993/94 levels of development'.¹⁰
- 1.11 While the audit did not specifically identify floodplain harvesting as an issue, subsequent reviews by the Independent Audit Group in 1997 and the MDBC in 2000 recognised the need to address floodplain harvesting within the context of managing the Murray-Darling Basin. In particular, the MDBC review supported the Independent Audit Group's recommendation that these diversions be measured and included in the relevant cap accounting arrangements, and that there be a statutory basis for the management of this water.¹¹
- 1.12 In 2000, the *Water Management Act 2000* (WMA) was proclaimed in New South Wales to provide better ways of ensuring the equitable sharing and management of the state's water.¹² The WMA as made established Water Management Committees for the purpose of developing water sharing plans, and included provisions for the development of a State Water Management Outcomes Plan.

⁷ Submission 22, Mr Peter Millington, p 1.

⁸ Submission 22, Mr Peter Millington, p 2.

⁹ Murray-Darling Basin Ministerial Council, *An Audit of Water Use in the Murray-Darling Basin*, June 1995, p 5.

¹⁰ Murray-Darling Basin Commission, *the Cap*, 2004, p 2.

¹¹ Murray-Darling Basin Ministerial Council, *Review of the Operation of the Cap: Overview Report of the Murray-Darling Basin Commission*, August 2000, pp 25-26.

¹² *Hansard*, NSW Legislative Assembly, 22 June 2000, p 7498.

- 1.13** In 2001, the Department of Land and Water Conservation Council issued advice to the Water Management Committees advising that floodplain harvesting would not be a component of individual water sharing plans, and that instead a separate category of water access licence for it would be introduced.¹³
- 1.14** A new schedule 12 was later inserted into the WMA through the *Water Management Amendment Act 2005* allowing the relevant Minister to amend the water sources to which the water sharing plans apply. This meant that the Minister could include floodplain harvesting as a water source. According to the second reading speech, the amendments were made in such a way as to avoid invoking the compensation provisions of the WMA.¹⁴
- 1.15** In 2007, the Commonwealth *Water Act 2007* was enacted. The Act, designed to address the deteriorating environmental condition of the Murray-Darling Basin, contains provisions relating to the Murray-Darling Basin Agreement, which sets out rules and plans for dividing the water in the River Murray among the basin jurisdictions. The Act also introduced new governance arrangements for the management of water in the Basin, including a new Commonwealth agency responsible for water planning and management, namely, the Murray-Darling Basin Authority (MDBA).¹⁵
- 1.16** The *Water Act 2007* (Cth) further defined the Cap as the 'baseline conditions' being:
- (a) in the case of New South Wales and Victoria, means the level of water resource development for rivers within the Murray Darling Basin as at 30 June 1994 determined by reference to:
- (i) the infrastructure supplying water; and
 - (ii) the rules for allocating water and for operating water management systems applying; and
 - (iii) the operating efficiency of water management systems; and
 - (iv) existing entitlements to take and use water and the extent to which those entitlements were used; and
 - (v) the trend in the level of demand for water within and from the Murray Darling Basin at that date.¹⁶
- 1.17** Soon after, in 2008, the Ministerial Council adopted a new schedule F of the Murray-Darling Basin Agreement. The schedule included an elaboration of the purpose clause to enable all forms of consumptive surface water use, including floodplain harvesting, to be included in the Cap.¹⁷

¹³ Submission 29, Murray Regional Strategy Group, pp 11-13.

¹⁴ *Hansard*, NSW Legislative Assembly, 17 November 2005, p 20017.

¹⁵ NSW Parliamentary Library Research Service, *Water: Regulatory Framework in Rural NSW*, Briefing Paper 4/2010, p 37.

¹⁶ *Water Act 2007* (Cth), Schedule E – Cap on Diversions.

¹⁷ Murray-Darling Basin Commission, *Annual Report 2007 – 2008*, October 2008, p 42.

- 1.18** Meanwhile, the NSW Government announced its draft floodplain harvesting policy that same year.¹⁸ Following consultation, the NSW Floodplain Harvesting Policy was formalised in May 2013. The policy was later updated in 2018, providing the basis for the current framework within which floodplain harvesting operates in New South Wales. This policy is discussed in further detail later in the chapter.
- 1.19** In September 2014, several floodplain harvesting related amendments were made to the WMA through the *Water Management Amendment Act 2014*. This included two floodplain harvesting water licence categories, a new section 57A allowing for regulations to be made with respect to the conversion of actual or proposed floodplain water usage by landholders into these licences, and amendments to section 87AA which extended compensation rights to the holders of the licences.¹⁹
- 1.20** In 2017, the NSW Government published its Water Reform Action Plan which stated as one of its goals the development of a compliance and enforcement regime 'that ensures strong and certain regulation'.²⁰ An initiative under the Water Reform Action Plan included the establishment of the Natural Resources Access Regulator (NRAR) as an independent agency responsible for detecting, preventing and stopping illegal water activities.
- 1.21** In 2018, the *Water Management Amendment Act 2018* was passed to allow the imposition of mandatory conditions on access licences and approvals, including the mandatory condition for holders of approvals for water management works to install, use and maintain metering equipment.

Key reports on water management

- 1.22** Acknowledging that water management has been well documented in the literature over the years, this section outlines a number of recent reports relevant to the issues raised in this inquiry.

Independent Investigation into NSW Water Management and Compliance

- 1.23** In 2017, allegations of widespread non-compliance with New South Wales water law were aired in the media. Following this, Mr Ken Matthews AO was appointed to lead the Independent Investigation into NSW Water Management and Compliance. The investigation produced two reports.
- 1.24** The interim report found the overall standard of compliance and enforcement work to be poor, and arrangements for metering, monitoring and measurement of water extraction, especially in the Barwon-Darling river system, below the expected standard. The interim report also found a need for greater public transparency regarding water regulation in New South Wales.²¹

¹⁸ NSW Department of Water and Energy, *Media Release: Floodplain Harvesting Policy to Provide Security for NSW Rivers and Communities*, 3 July 2008

¹⁹ *Water Management Amendment Act (2014) Sch 1*.

²⁰ NSW Government, *Securing our water: NSW Government water reform action plan*, December 2017, p 1.

²¹ Ken Mathews AO, *Independent investigation into NSW Water Management and Compliance – Interim Report*, NSW Department of Industry, 8 September 2017, pp 3-6.

- 1.25 The final report, delivered in November 2017, assessed the NSW Government's progress in implementing the prescriptions offered in the interim report, and found that the government had been 'quick out-of-the-blocks to accept the diagnosis and adopt the prescription'. However, Mr Matthews also found elements of the total reform package to be at risk of delay, and identified key risks to continued momentum. The key risks identified included:
- risks associated with planning the implementation of the reforms
 - risks in not allocating the necessary financial and staff resources to the tasks
 - the challenges in translating the NSW Government's desired high-level reform outcomes into specific and practical measures on the ground
 - increasing pressure from certain stakeholders to 'water down' key reforms, including reforms to water metering and improving transparency of information about water usage
 - the risk of uncooperative relationships between government agencies and the risks associated with a new round of restructuring of staff involved in compliance and enforcement.²²

Murray-Darling Basin Water Compliance Review

- 1.26 Concurrently, the MDBA undertook the Murray-Darling Basin Water Compliance Review which made findings that were broadly consistent with the independent investigation conducted in New South Wales.
- 1.27 While acknowledging that New South Wales faced the unique challenges of having the largest number of licences, volume of take and extensive geographic area to manage, the MDBA review found that in New South Wales, there was an 'absence of a culture of compliance, organisational instability and limited resourcing' and explained:

Although the task [of measuring unregulated water and floodplain harvesting] is difficult, tackling it has been a low priority in the 20 water agencies that have been responsible for compliance in the past 20 years. 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.²³

- 1.28 Accordingly, the review recommended that New South Wales include an updated assessment of water take by floodplain harvesting in their annual water accounts and set a target date by which 95 per cent of take by non-metered floodplain harvesting needed to be accurately measured.²⁴

²² Ken Mathews AO, *Independent investigation into NSW Water Management and Compliance – Final Report*, NSW Department of Industry, 8 September 2017, p 1.

²³ Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p 13.

²⁴ Murray-Darling Basin Authority, *The Murray-Darling Basin Water Compliance Review*, November 2017, p 19.

Murray-Darling Basin Royal Commission Report

- 1.29** On 29 January 2019, Bret Walker AO SC submitted the South Australian Murray-Darling Basin Royal Commission final report to the Governor of South Australia. The terms of reference included investigation into whether the Murray-Darling Basin Plan and its implementation were likely to achieve the objects and purposes of the *Water Act 2007* (Cth) and Plan, as well as investigation into matters related to illegal take, non-compliance, enforcement and monitoring.
- 1.30** The report made an extensive set of findings and recommendations, including a number relevant to New South Wales. These include:
- a finding that the 2012 changes made to the NSW Barwon-Darling water sharing plan have almost certainly contributed to decreasing flows south of Bourke and an increase in no-flow events and their duration.
 - a finding that New South Wales' efforts to improve the protection of environmental water, metering and real-time monitoring of extractions and account balances have stalled.
 - a finding that there is a need for a licensing and metering regime for floodplain diversions in New South Wales.
 - a recommendation that the Murray-Darling Basin Authority must not rely only upon any changes to Baseline Diversion Limits as a basis to increase Sustainable Diversion Limits.²⁵

Reports into fish kills

- 1.31** In the summer of 2018-19, three large fish kills occurred on the same 45 kilometre stretch of the Darling River, between Menindee Main Weir and Weir 32, on Barkandji land in the Lower Darling. While over 1,600 fish kills events have been recorded since the 1980s, the 2018-19 events were exceptional in their severity, association with low flows, and their effect on the populations of Silver Perch, Golden Perch and Murray Cod.²⁶
- 1.32** A number of reports were commissioned in response to these unprecedented events.
- 1.33** In January 2019, DPIE – Water released the *Fish Death Interim Investigation Report* and the MDBA released *Response to recent fish death events: Recommended action plan*. In February 2019, the Australian Academy of Science (AAS) published a report commissioned by the federal opposition. The Australian Government also appointed its own independent panel to investigate, with an interim report released on in February 2019 and a final report in March 2019 (the Vertessy Report).²⁷

²⁵ South Australia, Royal Commission into the Murray-Darling Basin, *Report*, 29 January 2019, pp 66, 68 and 74.

²⁶ NSW Parliamentary Library Research Service, *Murray Darling Basin: fish kills and current conditions*, Issues Backgrounder, 2/2019, p 2.

²⁷ NSW Parliamentary Library Research Service, *Murray Darling Basin: fish kills and current conditions*, Issues Backgrounder, 2/2019, p 2..

- 1.34** All four reports agreed on the immediate cause of the fish kills: stratification and the mixing of oxygen-depleted bottom water with oxygenated surface water.²⁸ In other words, the combination of low water levels from drought and prolonged heat followed by a sudden drop in temperature ultimately led to an excessive drop in oxygen levels in the water, thereby drowning the fish.²⁹
- 1.35** Regarding long-term causes, the AAS and Vertessy reports made broadly similar findings, identifying drought, water management policies and climate change as factors resulting in such large fish kills.
- 1.36** The two reports found that the ongoing drought – a natural cause of fish kills – was exacerbated by two human-induced causes in climate change and the increased 'cease to flow' and 'low flow' days caused by water management policies.³⁰ The AAS report, in particular, emphasised the governance and management of water in the Murray-Darling Basin as a contributing factor, stating:
- The root cause of the fish kills is that there is not enough water in the Darling system to avoid catastrophic decline of condition through dry periods. This is despite a substantial body of scientific research that points to the need for appropriate flow regimes. Similarly, engagement with local residents, Indigenous and non-Indigenous, has been cursory at best, resulting in insufficient use of their knowledge and engagement around how the system is best managed.³¹
- 1.37** The Vertessy Report, on the other hand, placed greater emphasis on the drought, noting the decreased inflow volumes into the Menindee Lakes.³² The Vertessy report also found the MDBA had been operating the Menindee Lakes relatively conservatively around the time of the fish kills due to the unfavourable water availability outlook in the northern basin.³³

²⁸ NSW Parliamentary Library Research Service, *Murray Darling Basin: fish kills and current conditions*, Issues Backgrounder, 2/2019, p 5

²⁹ Murray-Darling Basin Authority, *Why did the Menindee fish deaths happen?*, 19 February 2021, <https://www.mdba.gov.au/community-updates/why-did-menindee-fish-deaths-happen>; and Nick Kilvert, 'Drought, climate change and mismanagement': what experts think caused the death of a million Menindee fish, 16 January 2019, ABC Science, <https://www.abc.net.au/news/science/2019-01-16/what-caused-menindee-fish-kill-drought-water-mismanagement/10716080>

³⁰ NSW Parliamentary Library Research Service, *Murray Darling Basin: fish kills and current conditions*, Issues Backgrounder, 2/2019, pp 6-7.

³¹ Australian Academy of Science, *Investigation of the causes of mass fish kills in the Menindee region NSW over the summer of 2018-2019*, February 2019, p 2.

³² NSW Parliamentary Library Research Service, *Murray Darling Basin: fish kills and current conditions*, Issues Backgrounder, 2/2019, p 7.

³³ Professor Robert Vertessy et al., *Final report of the Independent Assessment of the 2018-19 fish deaths in the lower Darling*, 29 March 2019, p 12.

Independent Commission Against Corruption investigation into complaints of corruption and systemic non-compliance under the Water Management Act 2000

- 1.38** In November 2020, the Independent Commission Against Corruption released its report entitled *Investigation into complaints of corruption in the management of water in NSW and systemic non-compliance with the Water Management Act 2000*. The report presented ICAC's examination of complaints of corruption involving the management of water, particularly in the Barwon-Darling area of the Murray-Darling Basin.
- 1.39** While the Commission did not find that any person had engaged in corrupt conduct in the matters it had investigated, it did find that 'certain decisions and approaches taken by the NSW Government department with responsibility for water management over the last decade were inconsistent with the object, principles and duties of the *Water Management Act 2000*'.³⁴
- 1.40** Specifically, the report noted that the development and implementation of the 2012 Barwon-Darling water sharing plan did not adhere to the priorities set out in the *Water Management Act*, and that administrative failures created an atmosphere that was favourable to irrigators over other stakeholders. Accordingly, the Commission made a number of recommendations to address the issues.³⁵

Current regulatory and policy framework

- 1.41** In New South Wales, floodplain harvesting operates within a complex regulatory and policy framework which sits within a broader Commonwealth context, governed by relevant legislation and the operation of the Murray-Darling Basin Plan. This framework, including the applicable legislation, policy and the role of key agencies, is briefly outlined in this section.

Water Management Act 2000

- 1.42** The key legislation providing for the management of water in NSW is the *Water Management Act 2000* (WMA). The WMA provides the legislative framework for:
- water ownership, rights and trading
 - environmental water
 - water management plans, including water sharing plans and floodplain management plans
 - Water Access Licences

³⁴ Independent Commission Against Corruption, *ICAC recommends changes to government water management in NSW after years of focus on irrigation industry interests*, 27 November 2020, <https://www.icac.nsw.gov.au/media-centre/media-releases/2020-media-releases/icac-recommends-changes-to-government-water-management-in-nsw-after-years-of-focus-on-irrigation-industry-interests>.

³⁵ Independent Commission Against Corruption, *ICAC recommends changes to government water management in NSW after years of focus on irrigation industry interests*, 27 November 2020, <https://www.icac.nsw.gov.au/media-centre/media-releases/2020-media-releases/icac-recommends-changes-to-government-water-management-in-nsw-after-years-of-focus-on-irrigation-industry-interests>.

- compensation relating to Water Access Licences
- available water determinations
- approval for works, such as water supply work approvals
- the keeping of a Water Access Licence Register.

1.43 Key sections of the WMA relevant to floodplain harvesting include:

- Section 392, which vests all water rights in the Crown
- Section 392(1)(c), which specifically includes 'overland flow water flowing over or lying there for the time being' within the water rights vested in the Crown
- Section 393, which abolishes common law riparian rights
- Section 4A, which defines 'overland flow water' as:
 - (1) ... water (including floodwater, rainfall run-off and urban stormwater) that is flowing over or lying on the ground as a result of –
 - a. rain or any other kinds of precipitation, or
 - b. rising to the surface from underground, or
 - c. any other process or action of a kind prescribed by the regulations.
 - (2) Water is flowing over the ground for the purposes of subsection (1) even if it flows over the ground by means of artificial structures such as roads, canals and road gutters.³⁶
- Chapter 3 Part 2 of the WMA, which states that the right to use water is only allowed under possession of a Water Access Licence (three exceptions are established under Chapter 3 Part 1 of the WMA, collectively known as basic landholder rights.)
- Section 57, which provides for 13 categories of Water Access Licences, including two floodplain harvesting specific licences
- Section 57A, which provides that the NSW Government, through regulation, may convert actual or proposed floodplain water usage into a replacement floodplain harvesting access licence.

1.44 For the purposes of the WMA, a floodplain is land declared to be a floodplain in the *Water Management (General) Regulation 2018*. As noted earlier, six floodplains are currently declared under Schedule 6 of the regulation, namely the floodplains in the valleys of the Barwon-Darling, the Border Rivers, the Gwydir, the Lower Namoi, the Macquarie, and the Upper Namoi.

³⁶ According to the Second Reading speech for the *Water Management Amendment Bill 2014*, the definition was added to the WMA in order 'to have clear and consistent terminology for overland flow water to facilitate the licensing of flood plain harvesting' (*Hansard*, NSW Legislative Assembly, 29 May 2014, p 29,464).

- 1.45 Under the transitional provisions of Schedule 9 of the WMA, a floodplain may also be a designated floodplain if it had been designated under Part 8 of the *Water Act 1912* prior to its repeal.

NSW Floodplain Harvesting Policy

- 1.46 The NSW Floodplain Harvesting Policy was adopted in May 2013 and revised in 2018. According to the NSW Government, the policy aims to 'control, reduce, measure and enforce regulatory requirements for floodplain harvesting, bringing the practice back within legal limits'.³⁷
- 1.47 To this end, the policy sets out the process for capturing floodplain harvesting into the water licensing framework provided by the *Water Management Act*, and involves the creation of new work approvals, licences, rules and floodplain harvesting measurement.
- 1.48 Roll out of the policy in the northern basin valleys, including floodplain harvesting licences and approvals, was intended to be in place from July 2021.³⁸ However, with the disallowance of the floodplain harvesting regulations to give effect to the policy, implementation is now 'uncertain'.³⁹ These floodplain harvesting regulations are discussed in detail later in the chapter.

Independent peer review

- 1.49 In 2018, as part of efforts to build public confidence and trust in the policy and its initiatives, the NSW Government, together with the Murray-Darling Basin Authority, commissioned an independent peer review of the implementation of the policy in northern New South Wales.
- 1.50 The independent review was conducted by Alluvium Consulting, who delivered its final report in July 2019. The report acknowledged the progress made by the NSW Government and the significant resources invested in implementing the policy. The report also found areas for improvement regarding the policy's modelling approaches, documentation, stakeholder engagement as well as water planning and management.⁴⁰

Key agencies in New South Wales

- 1.51 There are a number of agencies with water and floodplain harvesting related roles and responsibilities in New South Wales. Key agencies discussed in this section include the Department of Planning, Industry and Environment (DPIE) – Water, WaterNSW and the Natural Resources Access Regulator.⁴¹

³⁷ Submission 84, NSW Government, p 2.

³⁸ Department of Planning, Industry and Environment, Water, *NSW Floodplain Harvesting Policy*

³⁹ Department of Planning, Industry and Environment, Water, *About the Healthy Floodplains Project*, <https://www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project/about>

⁴⁰ Alluvium, *Independent Review of NSW Floodplain Harvesting Policy Implementation*, July 2019, pp 4-9.

⁴¹ NSW Department of Planning, Industry and Environment, *Roles and Responsibilities Agreement*, 30 June 2021, pp 25 - 85.

Department of Planning, Industry and Environment – Water

- 1.52** DPIE-Water is responsible for the management of water resources and services in New South Wales, including planning, policy and regulation related to the state's surface and groundwater resources; regional water security; leading negotiations with the Commonwealth, the Murray-Darling Basin Authority (MDBA) and other jurisdictions; and managing local water utilities.
- 1.53** In relation to floodplain harvesting, DPIE-Water is responsible for:
- implementing floodplain harvesting policies
 - managing floodplain harvesting water diversions
 - modelling floodplain harvesting taken
 - managing the floodplain management program, including providing expert advice on flood modelling, risk assessment, management options, planning and environmental considerations, and community engagement.

WaterNSW

- 1.54** WaterNSW is a state-owned corporation responsible for managing the state's rivers and water supply systems, including dams, in accordance with the rules set by regulators.
- 1.55** WaterNSW is responsible for the issue of water access licences and work approvals for rural landholders and industries, as well as for non-state-significant developments and industries. WaterNSW is also generally responsible for all financial accounting and billing associated with use of water.

Natural Resources Access Regulator

- 1.56** As the state's independent regulator, the Natural Resources Access Regulator (NRAR) is responsible for the enforcement of water laws in New South Wales through licensing, monitoring compliance and education.
- 1.57** NRAR issues water access licences and work approvals for organisations such as government agencies, state-owned corporations, major water utilities and irrigations corporations. NRAR is also responsible for the issuing of controlled activity approvals; ensuring compliance with water laws; and collaborating with other agencies, such as the MDBA, for the purpose of joint compliance monitoring and enforcement activities.
- 1.58** In relation to floodplain harvesting, NRAR is responsible for ensuring compliance with the Floodplain Harvesting Measurement Strategy and undertaking compliance activities associated with unapproved flood works.

Water Act 2007 (Cth)

- 1.59** The *Water Act 2007* (Cth) provides the national legislative framework for managing the Murray-Darling Basin. It is the key Commonwealth legislation of relevance to floodplain harvesting in NSW.
- 1.60** The *Water Act* aims to improve water security for all users of water resources in the Basin and promote the use and management of the Basin's water resources in a way that optimises economic, social and environmental outcomes. To this end, the *Water Act* provides for a number of key instruments and authorities, including the Murray-Darling Basin Agreement, the Murray-Darling Basin Authority and the Murray-Darling Basin Plan.

Murray-Darling Basin Plan

- 1.61** The Murray-Darling Basin Plan (Basin Plan) is a statutory instrument that manages water quality and allocation in the Murray-Darling Basin. The mandatory requirements for the Basin Plan under the *Water Act* (Cth) include:
- limits on the amount of water that can be taken from the Basin's water resources on a sustainable basis (the Sustainable Diversion Limit)
 - identifying risks to the Basin's water resources and strategies to manage them
 - requirements for state water resource plans
 - an environmental watering plan to optimise environmental outcomes for the Basin
 - a water quality and salinity management plan
 - rules about trading of water rights in relation to the Basin's water resources.⁴²
- 1.62** New South Wales is a signatory of the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin. Under the agreement, all parties, including the NSW Government, agree to use their best endeavours to implement the Basin Plan.⁴³

Compliance with the Sustainable Diversion Limit

- 1.63** Among its functions, the Basin Plan shares surface and groundwater between human and environmental needs in accordance with the Sustainable Diversion Limits (SDL). That is, the Basin Plan limits how much water can be taken from the Basin for irrigation, drinking water, industry or other purposes.⁴⁴

⁴² Murray-Darling Basin Authority, *The Water Act*, 1 June 2021, <https://www.mdba.gov.au/about-us/governance/water-act>

⁴³ Department of Agriculture, Water and the Environment, *National Partnership Agreement on Implementing Water Reform in the Murray–Darling Basin: milestone assessment reports*, 1 October 2020, <https://www.awe.gov.au/water/policy/mdb/npa-water-reform-mdb-milestone-reports>

⁴⁴ Murray-Darling Basin Authority, *Sustainable diversion limits*, 2 August 2021, <https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits>

- 1.64** Compliance with the SDL is reviewed regularly by the MDBA. In August 2021, the annual SDL compliance report found New South Wales' water use to be above the allowable limits in three areas: the Barwon-Darling Watercourse, Upper Macquarie Alluvium and the Lower Murrumbidgee Deep Groundwater catchments.⁴⁵
- 1.65** While New South Wales' claims for reasonable excuse were accepted for the Upper Macquarie Alluvium and Lower Murrumbidgee Deep Groundwater exceedance areas, the MDBA found one of the state's claims for reasonable excuse in relation to the Barwon-Darling Watercourse to be invalid. According to the report, 'NSW did not operate in a manner fully consistent with the submitted water resource plan in the 2019–20 water year'.⁴⁶
- 1.66** The report noted and agreed with New South Wales' commitment to updating its models in relation to the Barwon-Darling, and noted its commitment to actions, though not yet fully implemented, that would prevent future exceedances – namely, the accreditation of the water resource plan, implementation of modelling upgrades, roll-out of meters that meet Australian Standards and regulation of floodplain harvesting.⁴⁷

Recent developments

- 1.67** Since the commencement of the 57th NSW Parliament, there have been a number of regulations made by the NSW Government pertaining to floodplain harvesting. The Legislative Council's response to the regulations have culminated in the establishment of this inquiry. This section outlines these developments.

Disallowance of the Exemptions for Floodplain Harvesting Regulation 2020

- 1.68** On 6 February 2020, the NSW Government made the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020. The effect of the regulation was to permit floodplain water to be harvested through eligible works without a water supply work approval or an access licence. For the purpose of the regulation, eligible works were:
- those that are located on a floodplain, and
 - were constructed on or before 3 July 2008, or were constructed after 3 July 2008 in accordance with an approval under the *Water Management Act 2000* or a licence or approval under Part 2 or Part 8 of the *Water Act 1912* for which an application was pending at 3 July 2008.⁴⁸

⁴⁵ Murray-Darling Basin Authority, *Murray-Darling Basin sustainable diversion limit compliance outcomes 2019-20*, August 2021, pp 10 - 15.

⁴⁶ Murray-Darling Basin Authority, *Murray-Darling Basin sustainable diversion limit compliance outcomes 2019-20*, August 2021, p 11.

⁴⁷ Murray-Darling Basin Authority, *Murray-Darling Basin sustainable diversion limit compliance outcomes 2019-20*, August 2021, p 12.

⁴⁸ Regulation Committee, NSW Legislative Council, *Impact and implementation of the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020*, September 2020, p 2.

- 1.69** On 27 February 2020, the Legislative Council Regulation Committee resolved to hold an inquiry into the regulation. During the inquiry, the Regulation Committee unsuccessfully sought a copy of any legal advice received by the Hon Melinda Pavey MP, Minister for Water, Property and Housing, on the legality of floodplain harvesting. Ultimately, the Regulation Committee recommended that the Legislative Council proceed to debate the disallowance of the regulation, noting in particular the uncertainty surrounding both the historical and contemporary regulation for floodplain harvesting and the inadequate communication surrounding the implementation of the regulation.⁴⁹ On 22 September 2020, the Legislative Council debated the motion and voted to disallow the exemption regulation.⁵⁰
- 1.70** On 10 November 2020, the NSW Government released two pieces of advice received from the Crown Solicitor on the lawfulness of floodplain harvesting, dated 4 November 2020 and 9 November 2020. These advices are discussed in the next chapter.
- 1.71** In light of the advice obtained, the NSW Government moved a motion in the Legislative Council to rescind the disallowance of the regulation, contending that it was, in fact, the disallowance that subjected floodplain harvesting 'to a great deal of uncertainty'. The Legislative Council voted against the motion.⁵¹

Disallowance of the Floodplain Harvesting Access Licences, Measurement and Exemption for Rainfall Run-off Collection Regulations

- 1.72** On 30 April 2021, the NSW Government made three new regulations:
- The Water Management (General) Amendment (Floodplain Harvesting Access Licences) Regulation 2021, which was made under section 57A of the WMA and allowed the Minister for Water, Property and Housing to determine eligibility and issue Floodplain Harvesting Access Licences in accordance with the NSW Government's Floodplain Harvesting Policy
 - The Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2021, which sought to impose mandatory conditions on water supply works used for capturing or storing water under a floodplain harvesting access licence
 - The Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2021, which sought to provide exemptions from holding a water supply work approval or water access licence for the purpose of taking water from a tailwater drain to collect rainfall run-off from an irrigated field.

⁴⁹ Regulation Committee, NSW Legislative Council, *Impact and implementation of the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020*, September 2020, pp 25-27.

⁵⁰ *Hansard*, NSW Legislative Council, 22 September 2020, p 3665.

⁵¹ *Hansard*, NSW Legislative Council, 22 September 2020, pp 4257 - 4266.

1.73 On 6 May 2021, Mr Justin Field, MLC moved a disallowance motion for all three regulations, arguing that they would:

... enable the issuing of billions of dollars of floodplain harvesting licences providing access to billions of litres of water yet will offer no guarantee that the needs of downstream communities and the environment will be met.⁵²

1.74 In response, the Government maintained that the benefits of the regulations were twofold: '[F]irst, the right to farm implications and, second, the environmental benefits of regulating this activity'. The House voted in favour of the disallowance motion.⁵³

1.75 Following the disallowance, the Legislative Council agreed to establish the current inquiry into floodplain harvesting on 23 June 2021.⁵⁴

⁵² *Hansard*, NSW Legislative Council, 6 May 2021, p 6.

⁵³ *Hansard*, NSW Legislative Council, 6 May 2021, p 42.

⁵⁴ *Hansard*, NSW Legislative Council, 23 June 2021, pp 12 - 15.

Chapter 2 Floodplain harvesting legality

Central to this inquiry has been the highly contentious question of floodplain harvesting legality. In acknowledgment of the inherent legal complexities involved, this chapter does not seek to provide an exhaustive analysis of water management legislation as it pertains to floodplain harvesting. Rather, this chapter presents the advice of legal experts as received by the committee and the range of views put forward by inquiry participants on the question of floodplain harvesting legality.

Introduction

- 2.1** As outlined in chapter 1, the use of water in the Murray-Darling Basin operates within a complex legislative and policy framework under both state and federal oversight.
- 2.2** While there have been multiple expressions of intent by New South Wales authorities to regulate the historical practice of floodplain harvesting within this context, a licence scheme incorporating floodplain harvesting into the legislative framework had not been introduced in New South Wales until April 2021 through a series of regulations proposed by the NSW Government. These regulations were to give legal effect to the NSW Floodplain Harvesting Policy but were disallowed in May 2021.
- 2.3** A factor in the motion was the polarised views regarding the legality of floodplain harvesting.⁵⁵ The following sections detail the various positions by different stakeholders on the issue as well as the legal advice obtained by the committee during this inquiry.

The NSW Government's position

- 2.4** Before considering the range of views on floodplain harvesting legality offered by stakeholders across the inquiry, this section discusses the position of the NSW Government.
- 2.5** According to the NSW Government, the legality of floodplain harvesting has 'changed through time as a result of legislative changes' based on the shift from the repealed *Water Act 1912* to the *Water Management Act 2000*.⁵⁶ It is this transition, the NSW Government asserted, that has resulted in the 'current legal uncertainty' around floodplain harvesting:

The current legal uncertainty exists because floodplain harvesting that occurred and was considered lawful under the *Water Act 1912* has not yet been fully transitioned into the current regulatory framework under the *Water Management Act 2000*.⁵⁷

- 2.6** Indeed, the NSW Government has maintained that floodplain harvesting is 'a historically legitimate practice' authorised under the *Water Act* but not yet fully transitioned into the licensing framework provided by the *Water Management Act*.⁵⁸

⁵⁵ Select Committee on Floodplain Harvesting, *Media Release: New parliamentary inquiry into floodplain harvesting*, 9 July 2021.

⁵⁶ Submission 84, NSW Government, p 3.

⁵⁷ Submission 84, NSW Government, p 3.

⁵⁸ Submission 84, NSW Government, p 3.

2.7 As outlined in chapter 1, the NSW Government introduced a number of floodplain regulations 'in order to provide an enforceable legal framework' for licensing, enforcement and measurement.⁵⁹ The regulations were ultimately disallowed by the Legislative Council.

2.8 According to the NSW Government, the intent and effect of the regulations was to 'convert water taken as floodplain harvesting into licensed entitlements which limit take to within the legal limits' established by New South Wales water sharing plans, the Commonwealth *Water Act 2007*, and the Murray-Darling Basin Plan 2012. With the transition process being only partially complete, the NSW Government stated that, while 'historic floodplain harvesting has already been reflected in legal limits, ... there are no licences and approvals in place to manage it, nor is there a licensing exemption'.⁶⁰

2.9 The NSW Government added that the disallowance had not only resulted in uncertain obligations and outcomes for stakeholders, but that the management and measurement of floodplain harvesting 'will not improve' moving forward:

This incomplete legislative framework is difficult to enforce and has resulted in uncertain obligations and outcomes for all stakeholders. Until there is a clear licensing, measurement and enforcement framework, the current situation will likely persist, although this is contingent on water use behaviour and the actions of the independent Natural Resources Access Regulator.

For clarity, the current situation means that the management and measurement of floodplain harvesting will not improve, and reduced allocations to supplementary licences will continue to be used to offset where growth in floodplain harvesting has resulted in overall extraction from a water source now being above legal limits.⁶¹

2.10 The NSW Government's position on floodplain harvesting is presented within the context of a number of legal advices obtained by the Department of Planning, Industry and Environment (DPIE). These advices are discussed in the following section as background to the independent legal advice obtained by the committee to be examined later in the chapter.

Legal advices obtained by the Department of Planning, Industry and Environment (DPIE)

2.11 During the course of the inquiry, a number of legal advices obtained by DPIE were identified for the committee's consideration. These include internal advice prepared by the Department itself as well as advice prepared for the Department by the Crown Solicitor.

DPIE internal advice

2.12 In October 2020, advice on the legality of floodplain harvesting was prepared for the Department by its legal team. The advice was requested following the disallowance of the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020 (the Exemptions Regulation).

⁵⁹ Submission 84, NSW Government, Attachment A - 'Frequent Asked Questions', p 1.

⁶⁰ Submission 84, NSW Government, p 3.

⁶¹ Submission 84, NSW Government, p 3.

- 2.13** The advice focused on two key questions, the first of these being whether, in the absence of the Exemptions Regulation, and with no water supply works approvals or no specific access licences, floodplain harvesting would be in breach of the *Water Management Act 2000* (the Act).⁶²
- 2.14** In response, the advice recognised two ways in which floodplain harvesting could breach the *Water Management Act* (the Act) – (i) the taking of water without a Water Access Licence (in breach of s 60A), and (ii) the use of a water supply work without a water supply work approval to capture and store water (in breach of s 91B).
- 2.15** With regard to the taking of water without an access licence, the advice highlighted the water source from which water was being taken – that is, a water source to which Part 2, Chapter 3 of the Act applies.
- 2.16** According to the internal advice, 'floodplain harvesting does not constitute taking of water from a regulated river source' and would therefore not breach the Act, on the basis of the water on land adjacent to a regulated river water source – a floodplain – not constituting a water source to which Part 2 of Chapter 3 of the Act applies.⁶³
- 2.17** However, in the case of unregulated river water sources, the internal advice asserted that the taking of water through floodplain harvesting without an access licence would breach the Act, explaining that while there may be available defences, these are unlikely:

On balance, and while not without doubt, we think the better view is that generally, the taking of water in the course of floodplain harvesting, without an access licence, from an unregulated river water source that is covered by a water sharing plan would constitute an offence under s 60A of the *Water Management Act 2000* (WM Act).

...

A number of defences are available to a s 60A offence. In some limited circumstances, some of those defences may apply but it appears unlikely in practice.

- 2.18** In the same way, the internal advice posited that the use of a water supply work without a water supply work approval, for the purpose of floodplain harvesting in an unregulated river water source that is covered by a water sharing plan, would also constitute an offence under the Act:

Similarly, while not free from doubt, we think the better view is that the use of a water supply work without a water supply work approval for the purpose of floodplain harvesting in an unregulated river water source that is covered by a water sharing plan would constitute an offence under s 91 B of the WM Act. Again, there is some uncertainty about whether passive take would be unlawful, although we think the better view is that it would be.

⁶² Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 1.

⁶³ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 4.

⁶³ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 2.

Again, there are a number of defences available, but it appears unlikely that any of those defences would apply in the case of floodplain harvesting...⁶⁴

- 2.19** The advice also examined 'passive take' in its considerations and concluded that '[a]lthough we acknowledge the uncertainty, our position is ... that the better view is that passive take constitutes 'take' within the meaning of the WM Act'. The advice explained:

In our view there is a strong argument that in those circumstances, a landholder is in fact taking water for the purposes of s 60A. In those circumstances, water has been removed from a water source and has been impounded in a storage under the control of the landholder. The water will not be returned to the water source, but rather, will be used by the landholder ...

...[W]hile not without doubt, in our view there is a strong argument that the use of a work for passive take without a water supply work approval may also constitute an offence.

- 2.20** The second question considered by the internal advice was whether there are any circumstances floodplain harvesting would be allowed under the *Water Act 1912*.⁶⁵ To this, the advice concluded that there are 'no circumstances where floodplain harvesting would be permitted under the *Water Act 1912* (the 1912 Act)'.⁶⁶ The advice explained:

... [T]he 1912 Act did not require authorisation for floodplain harvesting ...

Given that there was no authorisation required to take water in the course of floodplain harvesting under the 1912 Act, there was no conversion to an access licence under the WM Act.

There are no savings and transitional provisions in the WM Act which operate to authorise floodplain harvesting that was lawful under the 1912 Act ...

... We cannot identify anything in the 1912 Act that would authorise the taking of water for floodplain harvesting or constitute a defence to the S 60a and 91B offences.⁶⁷

- 2.21** Throughout the inquiry, numerous stakeholders referred to this advice in questioning the legality of floodplain harvesting.⁶⁸ The views of these inquiry participants are discussed later in the chapter.

⁶⁴ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 1

⁶⁵ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 2.

⁶⁶ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 1

⁶⁷ Department of Planning, Industry and Environment, *Legal advice – prepared for Department of Planning, Industry and Environment – Water*, 9 October 2020, p 13.

⁶⁸ For example, see Submission 261, Name Suppressed, p 1; Submission 66, the Australia Institute; Submission 227, Name Suppressed, p 1; Submission 143, Mrs Helen Dalton, p 4; Submission 102, Nature Conservation Council of NSW, p 11; Submission 149, Southern Riverina Irrigators; Submission 285, Fenner School of Environment and Society ANU and Slattery and Johnson, p 3.

Crown Solicitor's advice

- 2.22** In November 2020, DPIE sought legal advice from the Crown Solicitor following the disallowance of the Exemptions Regulation. The request sought advice concerning the clarity of the lawfulness of floodplain harvesting without a relevant water access licence, water supply work approval or basic landholder right under the *Water Management Act 2000*.⁶⁹
- 2.23** Two pieces of advice were received which collectively addressed four questions. Among these were questions about whether there was ambiguity, prior to the Exemptions Regulation, about whether a person could carry out floodplain harvesting, both in the instance they did not hold a water access licence, water supply work approval or basic landholder right, and in the instance that they did.
- 2.24** To the question of if, before the Exemptions Regulation, there was ambiguity as to whether a person could carry out floodplain harvesting if they *did not* hold a water access licence, water supply work approval or basic landholder right, the Crown Solicitor advised that there was ambiguity. The Crown Solicitor noted, however, that this ambiguity depended on the circumstances.
- 2.25** Two areas of ambiguity were identified in the advice – the definition of a declared water source as it relates to a floodplain and whether floodplain harvesting constitutes a 'take' of water:

First, there is potentially some doubt as to whether “water flowing across a floodplain” is, or forms part of, a declared water source, that is, a water source the subject of a proclamation under ss. 55A or 88A of the WM Act. This depends on the language used in each proclamation and in the water sharing plans to which they refer. Secondly, depending on the circumstances in which it is undertaken, there is a question as to whether floodplain harvesting constitutes a “take” of water from a water source for the purposes of s. 60A of the WM Act.⁷⁰

- 2.26** To the question of if, before the Exemptions Regulation, there was ambiguity as to whether a person could carry out floodplain harvesting if they *did* hold a water access licence, water supply work approval or basic landholder right, the Crown Solicitor concluded that generally there was no ambiguity, subject to certain assumptions. The advice explained:

Prior to the making of the exemption regulation, a person could carry out floodplain harvesting using a water supply work without breaching the WM Act provided that the person:

- (a) held both a water access licence (which authorised the relevant take of water) and a water supply work approval (which authorised the relevant use of a water supply work), and complied with the terms and conditions of these; or

⁶⁹ State Crown Solicitor's Office advice, *Clarity of Lawfulness of floodplain Harvesting Under the Water Management Act 2000*, 10 November 2020; State Crown Solicitor's Office advice, *Clarity of Lawfulness of floodplain Harvesting Under the Water Management Act 2000 (Advice No. 2)*, 10 November 2020

⁷⁰ State Crown Solicitor's Office advice, *Clarity of Lawfulness of floodplain Harvesting Under the Water Management Act 2000*, 10 November 2020, p 1.

- (b) had a basic landholder right (that is, an entitlement referred to in Pt 1 of Ch.3 to the WM Act) which entitled the person to the relevant take of water and use of a water supply work, and complied with any limitations of this.⁷¹

2.27 The Crown Solicitor was also asked the question of whether, while the Exemptions Regulation was in force, the degree of ambiguity was reduced, and it was lawful for a person to carry out floodplain harvesting in the circumstances set out in the Exemptions Regulation, without a licence, water supply work approval or basic landholder right.

2.28 The Crown Solicitor responded 'yes' to both questions 'in relation to the class of persons and activities falling within the scope of the regulation'. The advice explained:

The exemption regulation could be said to reduce 'ambiguity' for the class of persons and activities falling within its scope in the sense that, prior to its making, those persons may have been uncertain as to whether they were required to hold an access licence or approval to undertake floodplain harvesting by means of an "eligible work" as defined in the regulation ... After its making, those persons could assume that, were such licences or approvals required, the exemption regulation had the effect that this was no longer the case and that they could lawfully carry out floodplain harvesting in the circumstances set out in the regulation.⁷²

Independent legal advice to the committee

2.29 At the start of the inquiry, the committee sought independent legal advice regarding floodplain harvesting legality. Mr Bret Walker AO SC was subsequently engaged to respond to a series of questions from the committee, including whether floodplain harvesting constituted an offence under the *Water Management Act* (the Act). Mr Walker was provided with the legal advices obtained by DPIE discussed in the previous section for his consideration. This section considers Mr Walker's advice in detail, together with evidence provided by Mr Walker in his subsequent appearance before the committee.

Is floodplain harvesting an offence under the *Water Management Act 2000*?

2.30 Among the questions asked of Mr Walker was the key question of whether floodplain harvesting, without a water access licence, constitutes an offence under the *Water Management Act* following the disallowance of Exemptions Regulation.

2.31 To this, Mr Walker advised that floodplain harvesting without a water access licence did not constitute an offence under the Act following the disallowance of the regulation. He told the committee:

The offence under sec 60A WMA involves the essential element that a person takes water "from a water source to which [Part 2 of Chapter 3] applies". That depends on the operation of sec 55A WMA, which provides for such applications by means of a proclamation to that effect. It appears that no apt proclamation has included as a water

⁷¹ State Crown Solicitor's Office advice, *Clarity of Lawfulness of floodplain Harvesting Under the Water Management Act 2000*, 10 November 2020, p 1.

⁷² State Crown Solicitor's Office advice, *Clarity of Lawfulness of floodplain Harvesting Under the Water Management Act 2000*, 10 November 2020, p 2.

source for the purposes of Part 2 of Chapter 3 (and thus the offence provision within it of sec 60A) a description that would encompass the source of water that could be regarded as possibly taken by means of so-called floodplain harvesting. "So-called" because it is not a term of art, or defined within WMA.

...

It follows that no offence against sec 60A WMA is committed by floodplain harvesting with respect to the taking of such water in valleys for which the form of sec 55A applications discussed in 5 and 6 above has been proclaimed by gazettal.⁷³

2.32 Further, Mr Walker did not consider floodplain harvesting in unregulated rivers to constitute an offence, contrary to the internal advice by DPIE. Mr Walker stated:

In my opinion, given the history, it prevents these offence provisions applying to conduct that would be an offence because of a lack of (or, in theory, a contravention of) a floodplain harvesting access licence. That history, of course, must include the long-held, and probably correct, government view that activities before WMA commenced, eg those governable by the repealed Water Act 1912 (NSW), in the nature of floodplain harvesting, were unregulated in the sense that they were not unlawful.

It follows that the sec 60A WMA offences do not presently apply in the case of unregulated rivers (to borrow the statutory label) where the sec 55A proclamation was in the representative form. I appreciate that this analysis concludes oppositely from the DPIE advice briefed to me. Simply, I strongly favour the view that previously apparently lawful conduct did not cease to be so by the absence of a para 57(1)(kl) or (k2) access licence, when sec 60A did not apply to those categories of licence.⁷⁴

2.33 In his evidence to the committee, Mr Walker confirmed that, in his view, section 60A of the WMA did not apply to floodplain harvesting because the requisite section 55A proclamation has not been made, adding: 'I would go further and say I suspect... it was actually intended to ensure that it did not apply. I am not suggesting that is sinister. I wish it could have been more direct'.⁷⁵

2.34 A further question asked of Mr Walker as part of his legal advice was whether floodplain harvesting, without a water access licence, was an offence under the Act prior to the exemptions introduced by the Exemptions Regulation.

2.35 Consistent with his line of reasoning in response to the previous question, Mr Walker believed that it was not an offence, in cases governed by the representative proclamations, to carry out floodplain harvesting without a water access – specifically a floodplain harvesting – licence, prior to the exemptions.⁷⁶

2.36 Likewise, Mr Walker did not deem it an offence for the construction of 'so-called floodplain harvesting works without approval' under s 91B of the Act.⁷⁷

⁷³ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 2

⁷⁴ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, pp 1-2

⁷⁵ Evidence, Mr Bret Walker AO SC, 24 September 2021, pp 2-3.

⁷⁶ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 3.

⁷⁷ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 4.

Is floodplain harvesting a legal activity under the *Water Act 1912*?

- 2.37** In response to whether the take of water through floodplain harvesting is a legal activity under the *Water Act 1912*, Mr Walker advised 'it is no longer meaningful' to consider the *Water Act* as a source of law in relation to floodplain harvesting as it has been repealed.
- 2.38** Mr Walker did make the point, however, that 'it could not be clearer that generations of governmental attitudes to floodplain harvesting, while the *Water Act 1912* governed, were uniform to the effect that it was not an unlawful activity'. As such, Mr Walker concluded that 'yes, it appears floodplain harvesting was a not unlawful (ie. it was a lawful) activity while the *Water Act 1912* governed the position'.⁷⁸
- 2.39** Mr Walker qualified the lawfulness of floodplain harvesting under the *Water Act 1912* to circumstances where works can be lawfully used. In the absence of a lawful right to take water, floodplain harvesting would indirectly offend the *Water Act 1912*:

There is an indirect possibility of an effect on the use of so-called works which could give rise in a relatively indirect fashion to the possibility of offences having been committed with respect to what we would call floodplain harvesting—that is, offences with respect to the 1912 Act. However, that will depend entirely upon a case-by-case factual determination of the use of works—and I stress the use of works. Where works can be lawfully used, there will be a very important question as to whether what I will call an incidental or intermittent use in terms of flood would amount to an offence. That is not a matter that I can possibly advise on in the absence of particular facts. It needs to be understood that the 1912 Act is, in my view, both obscure and indirect in any possible effect it may have upon historical floodplain harvesting.⁷⁹

Consideration of floodplain harvesting as a legal activity

- 2.40** Mr Walker was also asked the question of whether there are any circumstances under which the take of water through floodplain harvesting could be considered a legal activity, to which he responded:

The circumstances that have obtained for generations are, it turns out, circumstances under which the take of water through floodplain harvesting should be considered (not merely 'could be considered') a legal activity.⁸⁰

- 2.41** Mr Walker added that, with respect to the notion of 'passive take', he would 'respectfully deprecate any continued worry about the idea of "passive taking" as a problem of the applicable criminal law'.⁸¹

⁷⁸ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 3.

⁷⁹ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

⁸⁰ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, pp 4-5.

⁸¹ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 5.

The effect of the NSW Floodplain Harvesting Policy

- 2.42 The effect of the NSW Government's Floodplain Harvesting Policy on the legality of floodplain harvesting was also asked of Mr Walker, to which he responded there was no effect at all: 'Unless and until a policy becomes law, it cannot, and therefore will not, have any effect on the legality of floodplain harvesting'.⁸²

Further clarification of the independent legal advice

- 2.43 Following his legal advice, Mr Walker appeared before the committee where he further clarified his position.
- 2.44 In confirming that floodplain harvesting does not constitute an offence under the penalty provisions of the Act, Mr Walker explained that 'conduct can be unlawful without being an offence', and that 'it can be unlawful both by statute and also at common law'.⁸³
- 2.45 Mr Walker clarified that there may be circumstances under which an injunction under equity may apply:

... [T]he unlawfulness—if it be unlawfulness—of floodplain harvesting in the sense of one person detaining and using water which is part of the public resource is probably not something which gives rise to any legal recourse for the past—damages et cetera. But it might of course give rise to the possibility of what I will call an administrative law injunction—that is, equity's jurisdiction to assist the law in this case declared by the statute. That would be a very clumsy and expensive way. I cannot imagine a more expensive way of regulating floodplain harvesting than leaving it to one-off ad hoc injunction applications in the equity division of the Supreme Court to regulate people's conduct with respect to floodplain harvesting.⁸⁴

- 2.46 Mr Walker nevertheless maintained that the practice of floodplain harvesting is not 'against the Act', but he did observe that it might be seen to be at odds with the 'political program' of all water legislation since colonial times:

I think I have got to be really careful about saying it would offend against the Water Management Act. It would be conduct that sits most oddly with the general provision and provisions of the Water Management Act that make water a publicly owned and controlled resource. But that does not mean it is contrary to the Act because naturally enough a Parliament could, in certain circumstances, save a public resource. You, the people, may treat it as, if you like, the commons. So it can be owned by the State for the people without needing regulation that would prevent particular individuals from having recourse to it. That is the centuries-old notion of the commons.

So no, it does not follow that it is against the Act, but I have to say it is against what might be seen to be the political program of all the water acts of which I am aware from colonial times and for the last century or more. It is against the notion that there ought to be control. It does not mean there is an offence. It does not mean there is unlawfulness that it would be sensible to go to court to remedy. It does mean there is a

⁸² Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 3.

⁸³ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 3.

⁸⁴ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 3.

crying need for the legislators to consider what to do. I myself think floodplain harvesting being treated as an aspect of the commons—that is, a public resource that anybody can help themselves to as they like—is absurd and totally at odds with the intergovernmental agreements that culminate, for example, in the basin plan.⁸⁵

- 2.47** In discussing the 1912 *Water Act*, Mr Walker also spoke of the 'continuing effect' in the areas still regulated by the *Water Act*. He clarified the assumption he made in responding to the committee's question of floodplain harvesting as a legal activity under the *Water Act* but maintained that the Act does not 'in terms' address floodplain harvesting. He explained:

I probably have made an assumption in the way I have written my opinion. The assumption being that I was asked to address those matters that are regulated by the provisions that I was asked to address of the Water Management Act and thus understood the questions about the 1912 Act to be, as it were, inquiring about a possible overlap. There are of course areas where the Water Management Act does not reach, so to speak, and the 1912 Act has continued effect. However, I should make it clear that the 1912 Act does not in terms—I stress in terms—address floodplain harvesting.⁸⁶

- 2.48** Mr Walker went on to note the 'indirect' possibility of offences having been committed under the *Water Act* arising from the use of floodplain harvesting works. However, Mr Walker stressed that this would be entirely dependent on a case-by-case consideration of the use of works:

The assumption being that I was asked to address those matters that are regulated by the provisions that I was asked to address of the Water Management Act and thus understood the questions about the 1912 Act to be, as it were, inquiring about a possible overlap. There are of course areas where the Water Management Act does not reach, so to speak, and the 1912 Act has continued effect. However, I should make it clear that the 1912 Act does not in terms—I stress in terms—address floodplain harvesting.⁸⁷

- 2.49** When asked by the committee what the legal implications would be should New South Wales' licensing framework cause the state to exceed the limits set under Commonwealth legislation and the Murray-Darling Basin Plan, Mr Walker unequivocally confirmed that this would be unlawful and lead to action under the *Water Act 2007* (Cth):

It would be unlawful and can lead to action under the Commonwealth Water Act, which ultimately would remove from the State its regulation through water sharing plans, water regulation plans and water resource plans—control over matters within the State. That would be, I would have thought in Federal terms, a very bad outcome. It could also lead to more direct legal consequences, such as injunctions. Yes, it would be unlawful.⁸⁸

⁸⁵ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 4.

⁸⁶ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

⁸⁷ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

⁸⁸ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 4.

Stakeholder perspectives on the legality of floodplain harvesting

2.50 Beyond the legal advices obtained by DPIE and from Mr Walker, many stakeholders offered their perspective on the legality of floodplain harvesting, including other legal advice presented for the committee's consideration. There were those who supported the position that floodplain harvesting was not illegal, while others questioned the lawfulness of the practice. Others still highlighted the Indigenous perspective on floodplain harvesting and more broadly the significance of water to First Nations peoples. This section explores these perspectives in detail.

Floodplain harvesting is not illegal

2.51 The committee received evidence from numerous stakeholders, in particular irrigators, who strongly maintained floodplain harvesting as a legal practice. In supporting the licensing of floodplain harvesting, these inquiry participants insisted that floodplain harvesting is not and never has been illegal. As the NSW Irrigators' Council stated: 'FPH is not illegal. There has never been an intent for FPH to be illegal'.⁸⁹

2.52 Maintaining that the legality of floodplain harvesting 'is a matter for government and the courts of law, not the court of public opinion', the NSW Irrigators Council referred to legal advice it had sought on the implications of the disallowance of the floodplain harvesting regulations introduced in April 2021 to demonstrate the legality of the practice.⁹⁰

2.53 Holding Redlich, engaged by the NSW Irrigators Council, advised the following implications of the disallowance:

- it will not be possible to issue access licences to authorise and regulate the extraction of water from the floodplain
- extraction of water from the floodplain will continue to occur under the present arrangements, that is without the need for an access licence or a works approval and without any water sharing rules within the relevant watering sharing plan to ensure that the extraction of water from the floodplain can be carried out below the long-term average annual extraction limit set by the relevant plan
- those landholders who constructed works after 3 July 2008 that may capture and detain water from the floodplain will be able to continue to use those works despite them not being eligible works under the NSW Floodplain Harvesting Policy
- the disallowance of the Measurement Regulation will also mean that there is no mandatory metering framework in place for existing approvals that may collect and store water from the floodplain.⁹¹

2.54 Similarly, previous advice from Holding Redlich provided to Macquarie River Food and Fibre following the disallowance of the Exemptions Regulation on 22 September 2020 also maintained that, for most landholders in the Macquarie River area, the disallowance of the

⁸⁹ Submission 50, NSW Irrigators' Council, p 26.

⁹⁰ Holding Redlich, *Request for advice: disallowance of Floodplain Harvesting Regulation*, 4 May 2021, p 1.

⁹¹ Holding Redlich, *Request for advice: disallowance of Floodplain Harvesting Regulation*, 4 May 2021, p 3.

Exemptions Regulation would not impact their ability to floodplain harvest, as there is no requirement for an extraction licence to take water from a floodplain.⁹²

- 2.55** The NSW Irrigators' Council made the particular point that, while floodplain harvesting may not be subject to regulation at present, an inference of illegality would be erroneous:

It is correct that FPH is not currently regulated within the water management regulatory framework in NSW, but it is highly erroneous (and oversimplified) to conclude that this makes FPH 'illegal' by default. Simply, it means the practice is not subject to such regulation.⁹³

Historical context

- 2.56** In asserting floodplain harvesting as a legitimate practice, several inquiry participants pointed to the history of floodplain harvesting in New South Wales.

- 2.57** For example, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, asserted that in New South Wales successive governments saw floodplain harvesting as a solution to flooding in the northern valleys, which was then considered to be a major problem that damaged crops and livestock, cut roads and damaged infrastructure. Mr Napier submitted:

It is for this reason that when NSW governments were encouraging the development of irrigation industries in the 1970's and 80's, they promoted the building of large on-farm storages and made available for extraction water that occurred instream and across the floodplain from the episodic storms and other rainfall events that are typical of the northern basin. Floodplain Harvesting became the norm as it reduced a problem and created a valuable resource at the same time...⁹⁴

- 2.58** Likewise, the NSW Irrigators' Council noted that it must be remembered that the private on-farm storage infrastructure in the northern Basin was encouraged by Governments to store floodwater (because of the lack of public water infrastructure). Since that time, there has been no change of government policy to criminalise the practice, nor has there been communication from Government to cease the practice. Simply, there has never been an intent of any government in NSW history to make floodplain harvesting illegal.⁹⁵

- 2.59** The inquiry also received numerous submissions that – sharing the views expressed by Border Rivers Food and Fibre and the NSW Irrigators' Council – acknowledged floodplain harvesting as a legitimate 'historical practice'.⁹⁶

⁹² Submission 62, Macquarie River Food and Fibre, Attachment 1, p 7.

⁹³ Submission 50, NSW Irrigators' Council, p 27.

⁹⁴ Submission 50, NSW Irrigators' Council, p 51.

⁹⁵ Submission 50, NSW Irrigators' Council, p 29.

⁹⁶ For example, see Submission 172, Nicole Dallimore; Submission 209; Mr Robert Tuck; Submission 243, Mr Jim Cush; Submission 225. Name Suppressed; Submission 226, Name Suppressed; Submission 249. Name Suppressed; Submission 267, Mr Peter Gil.

Floodplain harvesting as part of broader water reform

- 2.60** Following on from its acknowledgement of the historical context of floodplain harvesting, the NSW Irrigators' Council contended that the regulation of floodplain harvesting must be considered as part of a broader legislative transition for all forms of water take:

Context here is critical. This reform is part of a larger transition for all forms of water take and water sources to be regulated within the new contemporary framework. This transition has already occurred for regulating surface water (rivers) and groundwater take, and floodwater remains the final step. This transition is thus nothing new, but simply the next form of water to undergo this transition.⁹⁷

- 2.61** Mr Peter Holt, Special Counsel, Holding Redlich and NSW Irrigators' Council, added that the NSW Government's attempt to license floodplain harvesting was in effect shifting a common law right to a statutory licence:

We are seeing a residual common law right become a statutory licence. There is an acceptance on the part of the Government that rights come with entitlements, and that entitlement is to use and take, for the purposes authorised by that licence, the water under the terms of that licence. I see this as a State in transition.⁹⁸

- 2.62** However, with the disallowance of the regulations giving legal effect to the licensing framework, Mr Holt described New South Wales as being 'stuck in transition'. Moreover, he noted that apart from the regulations, a number of other actions are required to fully implement floodplain harvesting licences:

Part of the reason why we are stuck in transition is of course because the Legislative Council disallowed the regulation. But there are a number of things that the Government, in my opinion, needs to do to fully implement the licensing framework. Mr Walker, in his opinion, referred to the fact that certain proclamations operate within the bed and banks in regulated river systems. There are the provisions in the Act for those proclamations to be amended. There is the requirement to make the necessary transitional regulations to allow the granting of the replacement floodplain harvesting licences, and, of course, the water sharing plans in the New South Wales context also need to be amended to make provision for the water sharing rules, if you like, and allow an allocation to be used for floodplain harvesting and then ultimately licences need to be granted to licence holders.⁹⁹

The legality of floodplain harvesting is questionable

- 2.63** In contrast to the position that floodplain harvesting is not illegal, the committee received evidence from many stakeholders who questioned the legality of floodplain harvesting. Inquiry participants who advocated this view commonly pointed to the absence of a regulatory framework and asserted that storage capacities in the northern valleys demonstrated a level of take that exceeds the legal limits, amongst other arguments. This section examines these views.

⁹⁷ Submission 50, NSW Irrigators' Council, p 29.

⁹⁸ Evidence, Mr Peter Holt, Special Counsel, Holding Redlich and NSW Irrigators' Council, 24 September 2021, pp 25 - 26.

⁹⁹ Evidence, Mr Peter Holt, Special Counsel, Holding Redlich and NSW Irrigators' Council, 24 September 2021, p 26.

The absence of a regulatory framework

2.64 A number of stakeholders observed an absence of express permission to floodplain harvest in New South Wales and used this to question the legal validity of floodplain harvesting.

2.65 For example, the Inland River Network submitted that, following the disallowance of the floodplain harvesting regulations, a licence to floodplain harvest did not exist in the state thereby rendering the legality of floodplain harvesting unclear. In arguing this position, the Inland River Network cited a DPIE document which stated:

Because the transitional exemption was disallowed, the lawfulness of floodplain harvesting once again becomes unclear ...

... The department acknowledges that since the transitional exemption was disallowed, there is continuing need to clarify the legal nature of floodplain harvesting in this period before licensing begins.¹⁰⁰

2.66 Likewise, Mrs Helen Dalton, MP, Member for Murray, also cited a document which recorded a DPIE executive stating that 'if you don't have basic rights or an exemption, there is no ability to legally take water'.¹⁰¹

2.67 The Murray Regional Strategy Group's shared this view, arguing that:

- the *Water Act 2007* (Cth) and the Murray-Darling Basin Plan do not permit take in a water resource plan area without the required licence and metering arrangements in place
- NSW Government resources publicly acknowledge the need for a licensing regime and the fact that this has not yet been achieved
- it, therefore, follows that '... floodplain harvesting in the state's north has not been legalised'.¹⁰²

Qualifications on the independent legal advice

2.68 While the Hon. Melinda Pavey MP, Minister for Water, Property and Housing, described the independent legal advice of Mr Walker as a 'seminal moment' providing her hope to 'put the concerns about legality behind ... and get on with the job of licensing and metering floodplain harvesting',¹⁰³ some stakeholders suggested that Mr Walker's advice must be considered on the terms it was requested.

2.69 For example, Mr Tim Horne, Principal of Horne Legal who appeared as a representative of Southern Riverina Irrigators, suggested that there is a 'nuance' to Mr Walker's advice regarding offences under the *Water Management Act*.¹⁰⁴ While agreeing with Mr Walker's advice, Mr Horne

¹⁰⁰ Submission 55, Inland Rivers Network, p 11; for another example, see Submission 29, Murray Regional Strategy Group, pp 1-2.

¹⁰¹ Submission 143, Mrs Helen Dalton, p 3.

¹⁰² Submission 29, Murray Regional Strategy Group, pp 3-4.

¹⁰³ Evidence, the hon. Melinda Pavey, Minister for Water, Property and Housing, 24 September 2021, p 39.

¹⁰⁴ Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 21.

qualified his agreement by asserting that the 'narrow' advice was reflective of the specific questions that were asked of Mr Walker:

The Hon. ADAM SEARLE: ... [T]he Committee essentially asked Mr Walker about whether offences had been or might have been committed but that is not the same as Mr Walker agreeing that floodplain harvesting is otherwise lawful, authorised or permitted?

Mr HORNE: That is correct. There is a nuance to what he has given to the Committee in his opinion. Floodplain harvesting per se is a legal act. However, if you combine that with a work or if you do not have a right to take that basic landholder right, or some other right or exemption, then it is an unlawful activity, that is correct.

The Hon. ADAM SEARLE: So is that the way we should understand Mr Walker's advice to this Committee: that he was asked a series of important but very narrow questions about whether certain activities would lead to the commission of certain offences?

Mr HORNE: That is correct ... I guess his advice is quite narrow. It is correct. However, it does not tell the complete story because he was not asked to elaborate upon that.¹⁰⁵

- 2.70** Mr Horne's view was shared by the Environmental Defenders Office, who stated: "The EDO agrees with the legal opinion furnished to the Committee by Mr Bret Walker SC. However, the EDO notes that the written advice sought by the Committee was limited in its scope".¹⁰⁶
- 2.71** In response to the suggestion that the questions asked of Mr Walker were too narrow, Mr Holt of Holding Redlich told the committee that 'those were the right questions to ask'.¹⁰⁷

Potential breaches under the Water Act 1912

- 2.72** Further to the clarification provided by Mr Walker to his legal advice at paragraph 2.43-2.49, the issue of potential breaches under the *Water Act 1912* was also acknowledged by other stakeholders.
- 2.73** For example, Mr Horne and Southern Riverina Irrigators agreed with Mr Walker's advice, with Mr Horne stating: '... [W]hat Walker says in his advice is correct. You could floodplain harvest but you needed a right, an authorisation, a licence to use a work if you were going to impound that water and use it later on for irrigation'.¹⁰⁸

¹⁰⁵ Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 21.

¹⁰⁶ Answers to questions on notice, Dr Emma Carmody – Managing Lawyer, Freshwater, Environmental Defenders Office, 29 October 2021, p 1.

¹⁰⁷ Evidence, Mr Peter Holt, Special Counsel, Holding Redlich, NSW Irrigators' Council, 24 September 2021, p 27.

¹⁰⁸ Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 22; see also Answers to questions on notice and supplementary submission, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, received 2 November 2021, p 8.

- 2.74** Moreover, Southern Riverina Irrigators concurred with Mr Walker's view that it is not possible to fully explore the legality of floodplain harvesting under the 1912 Act without having the specific facts and circumstances of each case, indicating a need for a case-by-case analysis.¹⁰⁹
- 2.75** Notably, the issue was also recognised by Mr Holt in Holding Redlich's advice to Macquarie River Food and Fibre.¹¹⁰ That advice identified two categories of landholders – with works constructed before 3 July 2008 – who may potentially be in breach of the *Water Management Act*, depending on their specific circumstances.¹¹¹

Potential breaches under the Water Act 2007 (Cth) and Murray-Darling Basin Plan

- 2.76** Southern Riverina Irrigators also identified a potential legal issue stemming from a reliance on the Sustainable Diversion Limits (SDLs) as articulated by the Murray-Darling Basin Authority.
- 2.77** In September 2021, Southern Riverina Irrigators engaged the services of Mr Walker and Mr Sebastian Hartford-Davis to provide advice on the Murray-Darling Basin Authority's intention to increase the Baseline Diversion Limits (BDL) and Sustainable Diversion Limits (SDL) without making an amendment to the Murray-Darling Basin Plan.
- 2.78** In their advice, Mr Walker and Mr Hartford-Davis asserted that this would be unlawful, and that the BDLs and the SDLs 'cannot be adjusted otherwise than by following the prescribed processes for amendment in the Water Act and Basin Plan'.¹¹²
- 2.79** Further, the advice concluded that any licence scheme relying on the unlawful calculation of SDLs may be 'vulnerable to challenge on the basis of inconsistency under s 109 of the Constitution (Cth), with the Basin Plan or the *Water Act 2007 (Cth)*'.¹¹³
- 2.80** This issue is discussed in further detail in chapter 4.

Current floodplain harvesting exceeding limits

- 2.81** Other stakeholders who challenged the legality of floodplain harvesting pointed to the exceedance of legal limits under current floodplain harvesting practices.
- 2.82** For example, Ms Suzanna Sheed, Member of the Victorian Parliament, submitted:

... the legality and the extent of floodplain harvesting development must be regarded as doubtful. Given that all states signed up to the Murray Darling Basin Cap, it is apparent that the rampant development since 1995 across the northern basin, and the ongoing floodplain harvesting is in breach of the Murray Darling Basin and possibly the NSW Water Management Act 2000.¹¹⁴

¹⁰⁹ Answers to questions on notice and supplementary submission, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, received 2 November 2021, p 8.

¹¹⁰ Submission 62, Macquarie River Food and Fibre, Attachment 1, p 8.

¹¹¹ Submission 62, Macquarie River Food and Fibre, Attachment 1, p 8.

¹¹² Supplementary Submission 149a, Southern Riverina Irrigators, Reference, p 1.

¹¹³ Supplementary Submission 149a, Southern Riverina Irrigators, Reference, p 1..

¹¹⁴ Submission 281, Suzanna Sheed MP, p 9.

- 2.83** Ms Sheed's position was supported by Ms Ali Cupper, another Member of the Victorian Parliament, who submitted that the status quo would mean that New South Wales would not be compliant with the Sustainable Diversion Limits under the Murray-Darling Basin Plan.¹¹⁵
- 2.84** Some stakeholders drew particular attention to the growth of storage infrastructure in the northern basin. Specifically, the concern related to the fact that storage capacity in the northern basin is greater than the limits set on water take, leading stakeholders to conclude that floodplain harvesting must in breach of the relevant legislation, the 1994 cap or the sustainable diversion limit.¹¹⁶
- 2.85** The growth of water storages is discussed further in chapter 4.

First Nations' perspectives

- 2.86** Beyond the question of floodplain harvesting legality, the committee also received evidence from Indigenous and First Nations people who questioned the fundamental underpinnings of the approach to water law in New South Wales. As Mr Grant Rigney, Chair and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations, declared:

It is an absolute farce that me, as a sovereign person of my landscapes and a citizen of my nation, need to prove to a colonial system of my connection to country. You prove to me who the hell you are and why you have the right to embed your laws over my people, which have been here for hundreds of thousands of years. It is an absolute farce.

... It says that you have rights under common law. Whose common law? It is not my common law. I have had the right to that water forever. So I think we need to get things in a bit of perspective around that.¹¹⁷

- 2.87** Similarly, Mr Alfred Priestley, a Murri man from Kamilaroi, spoke in particular of his deep connection to the water, describing it as being in his 'DNA':

I am 50 years old. I have swum those rivers. I know my songline; I know my songline from the top to the bottom of them ... it is here; it is written in here: Look, my veins. The same DNA is running in those rivers: my DNA. Everyone's DNA is from the top that sings a song to me through those waters.¹¹⁸

- 2.88** Mr Priestley urged that his nation and others be given a 'seat at the table' to be able to negotiate the fate of unallocated water 'coming from the sky'. He commented on the need for genuine consultation with First Nations people, an issue discussed further in chapter 3. Mr Priestley stated:

If you are going to license this, come on, give us some of them licences too, because it is coming from the sky; it is ours. It is unallocated at the moment...

¹¹⁵ Submission 284, Ms Ali Cupper MP, p 4.

¹¹⁶ For example, see Submission 57, Southern Connected Basin Communities, p 4; Sub 268, Name Suppressed, p 2.

¹¹⁷ Evidence, Mr Grant Rigney, Chari and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations, 22 September 2021, p 45.

¹¹⁸ Evidence, Mr Alfred Priestley, Private Individual, 7 October 2021, p 2.

... If you are going to license it, let us be at the negotiation table and let us see what these licences bring for us... That unallocated water needs to go into the cultural bucket now ...

... We just want to be at the table. We want to be there. We want these things to be met properly. If the label is gone, then you are really talking to the people.¹¹⁹

2.89 Indeed, for the Euahlayi People's Republic, the proposed licensing framework represents what they believed to be an overemphasis of the '...demands of farmers, irrigators, mining and other industries' over others.¹²⁰

2.90 This evidence was echoed by Ms Virginia Robinson, Secretary of the Dharriwaa Elders Group, who felt it unfair that the needs of the river people were being overlooked in favour the irrigators: 'We just feel that New South Wales DPIE Water was putting irrigators before the needs of the river and its river people... It is unjust, it is unfair to do this, to take water this way'.¹²¹

2.91 Mr Rigney shared these sentiments and pointed to the fact that water ownership by Indigenous people in New South Wales comprised approximately 0.02 per cent of total entitlements.¹²² Mr Rigney added that there has been a lack of government initiative in correcting this imbalance:

... When we talk about processes and programs and projects around the sustainable diversion limit adjustment mechanisms, for instance, it is a \$1.8 billion program. There is not one drop of water as an offset from those water savings to First Nations peoples—at all. Everything will go to the 605 downwater that they are trying to actually appease so they do not have to do water buyback from irrigators, farmers—cotton, rice, citrus, almonds, whatever it may be. But there is never, ever offset of water savings dedicated for First Nation groups from a State perspective or from a Federal perspective for that matter.¹²³

2.92 The impact of floodplain harvesting on Indigenous and First Nations peoples is discussed further in chapter 3.

The call for legislative clarity

2.93 As reflected by the plethora of legal questions and uncertainties raised by stakeholders during the course of the inquiry, a call for legislative clarity was expressed by Mr Walker. When asked how the practice of floodplain harvesting could best be legislated, Mr Walker referred simply to 'clarity, justice and workability'.¹²⁴

¹¹⁹ Evidence, Mr Alfred Priestley, Private Individual, 7 October 2021, p 4.

¹²⁰ Submission 101, Euahlayi Peoples Republic, p 9.

¹²¹ Evidence, Ms Virginia Robinson, Secretary, Dharriwaa Elders Group, 22 September 2021, p 43.

¹²² Evidence, Mr Grant Rigney, Chair and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations, 22 September 2021, p 42.

¹²³ Evidence, Mr Grant Rigney, Chari and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations, 22 September 2021, p 43.

¹²⁴ Bret Walker AO SC, *Legality of Floodplain Harvesting Practices*, 15 September 2021, p 6.

- 2.94** Indeed, Mr Walker argued that the sheer complexity of the law with regard to floodplain harvesting – such that legal experts have been required to dissect it – reflects its inadequacy and 'failure':

It does seem to me that one symbolic way of indicating today the gross inadequacy of the social and governmental history with respect to floodplain harvesting in New South Wales is to reflect on the obscurity to lawyers of the interrelation between the Water Act 1912, insofar as it survives as to what I will call its unrepealed effect or portions, and the Water Management Act, which of course contains, in theory, the State's latest governmental intentions with respect to, among many other things, floodplain harvesting.¹²⁵

As a lawyer, and I mean this very seriously, I think it is a failure of our system if you need to be a full-time lawyer to understand law such as the Water Management Act. I have a perhaps naive but strongly held view that law is defective to the extent that you need to be a silk, as I am, in order to find your way around its provisions. I think that is a really serious aspect.¹²⁶

- 2.95** As such, Mr Walker called for clarity in the regulation of floodplain harvesting so as to improve its accessibility and understanding by everyday users:

When I urged that regulation of floodplain harvesting should be set about so as to be achieved with clarity, I should have added to that, that it should also be intelligible to people who are not silks. I am not suggesting that it is particularly intelligible to me as a silk, and I really dislike ... the puzzle-making approach to legislative drafting of which the Water Management Act is not a particularly egregious example, but is still a bad example. I do not understand why statute cannot be written in such a way that farmers, graziers, regulators, parliamentarians and people concerned with the environmental effect cannot, without a single law degree among them, understand how it is that the public resource which is water has been regulated—I hope for the common good. I would urge ... that the law be intelligible according to the standards of well-meaning but not legally qualified persons.¹²⁷

Committee comment

- 2.96** For years, the management of floodplain harvesting has consistently evoked equally passionate yet disparate perspectives from a wide array of stakeholders. This inquiry has continued in that spirit, particularly with respect to the legal validity of the practice.
- 2.97** It is clear that the question of floodplain harvesting legality is complex and vexed. The committee unreservedly acknowledges this, and in doing so has closely considered the advice of legal experts in its deliberations.
- 2.98** The committee notes with gratitude the legal advice received from Mr Bret Walker AO SC, who on request of the committee, responded to questions on offences under the relevant water management legislation. The committee also acknowledges other legal advice it received during

¹²⁵ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

¹²⁶ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

¹²⁷ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 2.

the course of the inquiry as well as the expertise shared by other legal professionals who appeared before the committee.

- 2.99** The committee appreciates the nuances to every aspect of the legal questions raised in this inquiry. In this regard, on balance, the committee is satisfied that the practice of floodplain harvesting itself is not an offence under section 60A and section 91B of the *Water Management Act 2000*. However, the committee also notes that, notwithstanding this, issues of lawfulness arise in the practice of floodplain harvesting when a work is used, and this must be examined on a case by case basis, as suggested by the evidence received.

Finding 1

That under the *Water Management Act 2000*:

- floodplain harvesting is not an offence under section 60A
- floodplain harvesting works constructed without approvals are not an offence under section 91B.

Finding 2

That, notwithstanding Finding 1, issues of lawfulness arise in the practice of floodplain harvesting when a work is used, and this must be examined on a case by case basis.

- 2.100** The committee also acknowledges the unequivocal understanding that, should a New South Wales floodplain harvesting licensing framework result in a level of extraction above the legal limits, this would constitute a breach of the *Water Act 2007* (Cth).

Finding 3

That, should a New South Wales floodplain harvesting licensing framework cause the state to exceed the legal limits of surface water extraction set under the Commonwealth framework, this would constitute a breach of the *Water Act 2007* (Cth).

- 2.101** Separately, the committee notes the concerns raised about the adjustment of Sustainable Diversions Limits in accordance with revisions of the Baseline Diversion Limit. This will be discussed further in chapter 4.
- 2.102** Indeed, the committee grappled with the wide range of evidence received by all inquiry participants on the question of floodplain harvesting legality, including the views of those who see the government's proposals as a way of formalising a historically legitimate practice as well as those who consider it a legally dubious practice. In particular, the committee acknowledges the perspectives shared by First Nations peoples on water management, and notes that this will be explored further in chapter 3.
- 2.103** Ultimately, what was most apparent in this exercise was the level of uncertainty generated by the many different opinions – legal or otherwise – over various aspects of the relevant legislation and its application in practice. To the committee, this reflects the degree of complexity of the law.

- 2.104** The committee thus agrees with the evidence of Mr Walker, who reflected on the inherent inaccessibility of the law to all water users alike, and called for greater legislative clarity so that anyone can understand it. To this end, the committee notes that navigating current water management legislation as it pertains to floodplain harvesting is indeed both challenging and highly complex.

Chapter 3 The impacts of floodplain harvesting

In addressing the terms of reference for this inquiry, stakeholders highlighted the wide ranging impacts of floodplain harvesting. This chapter examines these as presented by various inquiry participants, from the benefits of the practice for irrigators and local communities, to its deleterious environmental, economic, social and cultural impacts, particularly on the Darling Baaka River and Menindee Lakes.

Views on the benefits of floodplain harvesting

3.1 During the inquiry, many stakeholders espoused the benefits of floodplain harvesting. Indeed, irrigators and local communities in the northern basin valleys, in particular, spoke of the value of floodplain harvesting despite the volumes drawn and its irregularity within the broader context of water take. These stakeholders maintained that such is the importance of floodplain harvesting that the practice needs to be licensed, modelled and metered to align with sustainable diversion limits of the Murray-Darling Basin Plan as a matter of priority. This section outlines the basis of these views.

A water source for agriculture, industry and community

3.2 The inquiry received evidence from stakeholders who highlighted the practice of floodplain harvesting as vitally important to many industries and communities in New South Wales.

3.3 For example, the NSW Irrigators' Council, a peak industry body representing the irrigation farming industry, stated that floodplain harvesting is a 'small but important form of water for communities'.¹²⁸ Likewise, the Gwydir Valley Irrigators Association (GVIA), representing water entitlement holders in the Gwydir Valley, shared this view, explaining that the historical access to overland flows and the ability to harvest floodplain water is an irregular but important source of water for many industries, accounting for up to a third of the long-term water used.¹²⁹

3.4 Indeed, many irrigators in the northern valleys and peak advocacy bodies representing the irrigation industry detailed to the committee the importance of irrigation and all forms of water take, including floodplain harvesting, to the overall economic prosperity of local regions and communities. For example, AGB Farming, local farmers in the NSW Borders Rivers Valley, explained that without floodplain harvesting irrigation production would be cut by 60 per cent: '[W]e'd have to put people off...we'd lose farmgate value of more than 33 million per year, a loss of more than 75 million to the local economy per year; losses of up to 250 jobs, which means 250 less families, fewer children, and decreased services'.¹³⁰

¹²⁸ Submission 50, NSW Irrigators' Council, p 5.

¹²⁹ Submission 65, Gwydir Valley Irrigators Association (GVIA), pp 8-9.

¹³⁰ Submission 270, AGB Farming Pty Ltd ATF AGB Farming Trust (AGB Farming), p 5.

- 3.5** While the focus of much of this inquiry has been the practice of floodplain harvesting in the northern basin, some inquiry participants acknowledged the practice in the southern basin, also to the benefit of those local communities. For example, the NSW Irrigators' Council confirmed the practice in the southern valleys albeit on a significantly smaller scale.¹³¹

A water source during drought

- 3.6** Many local farmers and irrigators in the northern valleys described how floodplain harvesting is vital to the prosperity of their businesses and communities, especially during times of drought. For instance, Mr Andrew Watson, Board Member, Namoi Water, detailed to the committee the importance of this practice:

...These events are few and far between. But the importance that they have for our businesses, our staff, the businesses that rely on us and our communities in surviving and recovering from the dry times in between cannot be understated.¹³²

- 3.7** Others shared this view, with the NSW Irrigators' Council stating that floodplain harvesting 'helps farmers to continue growing crops, employing workers and supporting local service industries when dry conditions and drought inevitably return'.¹³³ Similarly, AGB Farming submitted their only crop grown in 2020-21 was grown from floodwater from the 2020 flood event. This was their first source of income received in just under two years due to the severe drought.¹³⁴

Negligible contributions to downstream flows

- 3.8** Following on from this, numerous inquiry participants in the northern basin highlighted the fact that floodplain harvesting only occurs in times of flood, when the rivers and floodplains are at full capacity and overflowing.¹³⁵ As such, they argued that the practice of floodplain harvesting has minimal impact on flows downstream and to the southern basin.
- 3.9** For example, the GVIA provided an analysis of historical flood events to demonstrate that floodplain harvesting has a 'negligible impact' on downstream flows for irrigators and the environment. The GVIA suggested that 'when valley-wide floodplain harvesting opportunity is available, Menindee Lakes fills or near fills, subsequently just after' and 'that is because floodplain harvesting take is a small portion of total flows available at a time'.¹³⁶

¹³¹ Submission 50, NSW Irrigators' Council, p 8 and Evidence, Ms Christine Freak, Policy Manager, NSW Irrigators' Council, 24 September 2021, pp 27-28.

¹³² Evidence, Mr Andrew Watson, Board Member, Namoi Water, 20 September 2021, p 23.

¹³³ Submission 50, NSW Irrigators' Council, p 15.

¹³⁴ Submission 270, AGB Farming, p 2.

¹³⁵ See for example, Mr Andrew Watson, Board Member, Namoi Water, 20 September 2021, p 22; Submission 50, NSW Irrigators' Council, p 23; Submission 72, Jonathan Mulligan, p 2; Submission 270, AGB Farming, p 1; Submission 59, Border Rivers Food and Fibre Inc, pp 6 and 8; Submission 243, Mr Jim Cush, pp 2-3; Submission 172, Nicole Dallimore, pp 1-3; Submission 272, Murrumbidgee Private Irrigators Incorporated (MPII), p 1.

¹³⁶ Submission 64, GVIA, pp 13-18.

3.10 Indeed, the NSW Irrigators Council told the committee that 'current annual average floodplain harvesting take in northern NSW makes up just 3% of the MDBA modelled total water in the Northern Basin'.¹³⁷

3.11 The NSW Government shared this position, asserting that 'only modest contributions' are provided by the northern basin to southern basin flows. The NSW Government explained:

The northern basin provides only modest contributions to southern basin flows: 14% on average. Due to the unregulated nature of these flows, annual flow contributions from the north to the south vary significantly in response to rainfall, ranging from almost zero during the driest years to more than 10 times the average during the largest flood years. Analysis shows that restricting floodplain harvesting to legal limits in the northern basin will result in undetectable changes to the NSW Murray system. In fact, even completely removing floodplain harvesting from the northern basin is not likely to improve average annual water availability in the NSW Murray by more than 1%.¹³⁸

Views on the adverse impacts of floodplain harvesting

3.12 In contrast, the committee received evidence from numerous individuals, organisations, academics and scientists, who argued that floodplain harvesting significantly reduces flows downstream which has resulted in adverse economic, social, cultural and environmental impacts to industry, local communities and ecosystems, particularly to the Darling Baaka and Menindee Lakes. Additionally, in discussing the impacts of this practice, inquiry participants argued there has been a lack of assessment of environmental impacts or engagement with diverse stakeholders in the implementation of the NSW Floodplain Harvesting Policy and regulations. This section will outline some of these views.

Significantly reduced downstream flows

3.13 Numerous participants to the inquiry argued that the historical practice of floodplain harvesting in the northern basin has significantly reduced flows downstream. As the Southern Riverina Irrigators declared: 'It is a hydrological reality that increased extraction upstream will reduce flows downstream.'¹³⁹

3.14 Indeed, the Inland Rivers Network stated that the diversion and capture of flood waters from the northern basin has had a 'significant impact' on flows in the Darling Baaka to Menindee Lakes, the Lower Darling and connectivity to the Murray River and South Australia for a period of thirty years.¹⁴⁰ Likewise, the Fenner School of Environment and Society, Australian National University and Slattery and Johnson argued that the main impact of floodplain harvesting in the northern basin has been reduced flows in the Darling River, south of Bourke, where there is a greater frequency of no flow or very low flow events.¹⁴¹

¹³⁷ Submission 50, NSW Irrigators' Council, p 5.

¹³⁸ Submission 84, NSW Government, p 6.

¹³⁹ Submission 149, Southern Riverina Irrigators, p 2.

¹⁴⁰ Submission 55, Inland Rivers Network, p. 1.

¹⁴¹ Submission 285, Fenner School of Environment and Society, ANU and Slattery and Johnson, p. 13.

- 3.15** Cr Phillip O'Connor, Mayor of Brewarrina Shire, emphasised that water flow was being diverted to such an extent that floods are now occurring in new places. Cr O'Connor, a strident critic of floodplain harvesting, noted that such diversions significantly impact the environment and downstream communities.¹⁴²
- 3.16** Others argued that reduced flows downstream are directly related to a growth in water storages from floodplain harvesting. For example, Ms Virginia Robinson, Secretary of the Dharrivaa Elders Group, observed:
- ...[W]hen the river was dry at Walgett for so long in 2018-2019 we suspected that water was being taken illegally upstream from us. We actually saw storages were being filled and we knew that something was wrong. We saw water on farms all around Walgett, Wee Waa, Narrabri, Moree and Mungindi.¹⁴³
- 3.17** The correlation between water storage and reduced flows is discussed further in chapter 4.
- 3.18** Stakeholders also discussed the role of climate change in contributing to reduced flows downstream.
- 3.19** Many inquiry participants in the northern basin pointed towards climate change as primary cause for reduced flows downstream, not floodplain harvesting. The NSW Irrigators' Council, for example, maintained that separate from floodplain harvesting 'there are other factors driving reduced flows throughout the system. Climate change is evidently a problem that needs to be confronted'.¹⁴⁴
- 3.20** Other stakeholders acknowledged climate change plays a part, however argued the practice of floodplain harvesting has aggravated this issue. For instance, Mid to Lower Murray Horticulture in their submission accepted studies that show there has been an impact on the availability of water due to a large reduction of inflows caused by less rainfall. However, they argued 'floodplain harvesting of water previously destined for the Darling River system is exacerbating this situation'.¹⁴⁵
- 3.21** The committee heard that the effect of reduced flows downstream from floodplain harvesting has been immense. For example, the Inland Rivers Network asserted that reduced flows have impacted on the 'viability of downstream communities, industry, cultural values and environment health',¹⁴⁶ a view also shared by the Darling River Action Group:

Illegal floodplain harvesting that occurs in the northern basin has an adverse effect on the social, environmental, economic and cultural aspects of all entities downstream from point of diversion.¹⁴⁷

¹⁴² Evidence, Cr Philip O'Connor, Mayor, Brewarrina Shire Council, 24 September 2021, p 32.

¹⁴³ Evidence, Ms Virginia Robinson, Secretary, Dharrivaa Elders Group, 22 September 2021, p 43.

¹⁴⁴ Submission 50, NSW Irrigators' Council, pp 15-16.

¹⁴⁵ Submission 74, Mid to Lower Murray Horticulture, pp 1-2.

¹⁴⁶ Submission 55, Inland Rivers Network, p 1.

¹⁴⁷ Submission 38, Darling River Action Group, p 2.

- 3.22** Ahead of exploring the various economic, social, cultural, and environmental impacts of floodplain harvesting, the following case study shares the personal experience of Mr Rob McBride, a farmer from the Menindee Lakes.

Case Study – Mr Rob McBride, Owner of Tolarno Station

Rob McBride owns three properties totalling 500,000 acres on the Lower Darling, south of the Menindee Lakes. Given his family's long history in agriculture, he thought he had a bright future in farming. However, over the past 10 years, he has seen first-hand the declining water quality and availability from over-extraction in the north which he states has changed his business, killed his stock and destroyed the river flows and access to clean water.

Rob and his family have faced emotional and financial distress as result of reduced flows and water quality downstream, reporting 'a loss of 15,000 sheep has cost somewhere in the order of \$6 million over the 10 year period in lost income'. Rob described this as 'heartbreaking', as he saw 'sheep walk away from the troughs. They chose to die rather than drink the water that I could provide them.'

Rob described himself as a 'broken man' when discussing the long-term impacts of floodplain harvesting on his mental health and personal relationships, especially in regards to the 2018-2019 fish kills at Menindee: 'I was one of these dead fish guys holding up one of millions of dead fish, when you know it has got nothing to do with nature. There is a term called post-traumatic stress syndrome apparently and your fight-or-flight type mentality, and that is what I have become over the last four or five years. It has affected me as an individual, probably destroyed my marriage, and I am a very different person than I was probably five or 10 years ago, and I am not proud of it. And it is not to do with drought.'

* Source: Submission 287, Tolarno Station 1851 Pty Ltd, and Evidence, Mr Rob McBride, Station Owner, Tolarno Station 1851 Pty Ltd, 22 September 2021, pp 31-32.

Economic impact

- 3.23** The economic impact of floodplain harvesting on downstream communities was of key concern to participants throughout the inquiry. Individuals and organisations expressed frustration at the lack of consideration given to the economic impact of this practice, specifically to the agricultural industry in the southern basin.
- 3.24** For example, the Southern Connected Basin Communities, wrote that due to the drying of the Darling Baaka, the Murray system has had to 'make up for the delivery of this shortfall' and water is taken from the productive irrigation pool of both New South Wales and Victorian irrigators – water which would normally be used to grow food'. They argue that the \$24 billion agricultural industry which produces food products like dairy, wheat, horticulture and livestock, and supports tens of thousands of people has been placed under threat to support the cotton industry.¹⁴⁸
- 3.25** In evidence, Mr Terry Smith, Chair of the Menindee Lakes Stakeholder Advisory Group, discussed the economic impact to his community. He explained with predictions of climate change expecting to further reduce flows, this will be a 'cold comfort for industry at Menindee' which has already seen '1,000 part-time jobs and 150 full-time jobs lost out of that community alone in the last 10 years' due to unreliable flows partially caused by extraction in the north.¹⁴⁹

¹⁴⁸ Submission 57, Southern Connected Basin Communities, pp 5 and 8.

¹⁴⁹ Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 30.

3.26 More broadly, the Australia Institute provided a comparative analysis of economic output between the southern basin and northern basin, with particular focus on the cotton industry, to demonstrate how 'reducing floodplain harvesting in the north could increase water use in the south where its use is likely to be more jobs-intensive due to the greater level of value-adding that occurs.'¹⁵⁰ In their research, and in evidence to the committee, the following points were made:

- Floodplain harvesting operations are largely aimed at producing cotton, with intensive use of capital (water storages and machinery) and minimal use of labour. Cotton growers account for less than half a per cent of total employment in the Murray-Darling Basin.
- Far more processing of agricultural output is conducted in the south, on a range of food, fibre and wine products, compared to the cotton dominant north. The north has a slightly larger share of employment in agriculture, the south has a food processing and manufacturing sector nearly twice as large. Reducing floodplain harvesting could increase overall employment across the Basin.
- The pattern of an agriculture-heavy north and a manufacturing-heavy south increased between the 2011 and 2016 censuses. The south saw manufacturing employment increase by around 140 [people] between 2011 and 2016 while manufacturing employment declined by 240 [people] in the north.¹⁵¹

3.27 Mr Alfred Priestley, Murri Man from the Kamilaroi Nation, also brought up the economic disadvantage experienced by First Nations and pointed to relevant sections of the *Water Management Act 2000*:

Facilitating greater opportunity to enjoy economic access to water will be an important factor in addressing issues of social justice and socio-economic disadvantage, and for improving the economic prosperity of aboriginal people. This is consistent with section 3 (iv) of the Water Management Act 2000 that recognises the benefits of Aboriginal people in relation to their spiritual, social, customary and economic use of land and water.¹⁵²

Social impact

3.28 Also of significant concern to inquiry participants was the social impact on downstream communities, with stakeholders detailing how floodplain harvesting in the northern basin and subsequent reduced flows and loss of connectivity has adversely impacted the health and well-being of individuals and families.

3.29 For example, local councils highlighted to the committee the effect of floodplain harvesting on the health of their communities. Wentworth Shire Council explained insufficient flows along the river meant poor water quality for their communities, resulting in many severe skin

¹⁵⁰ Evidence, Ms Kate McBride, Anne Kantor Fellow, The Australia Institute, 22 September 2021, p 2.

¹⁵¹ Submission 66, The Australia Institute, pp 3 – 4, 9 and 15; and Answers to questions on notice, The Australia Institute, 23 September 2021, p 1.

¹⁵² Submission 78, Mr Alfred Priestley, p 6.

infections.¹⁵³ In evidence to the committee, Cr Jane MacAllister, Wentworth Shire Council, expanded on these impacts:

It has had a deleterious and compounded impact on our community over a very long period of time. Trauma can be a compound and vicarious beast. As well as having continued experience of the trauma of not having not only the amenity but also the industry and the community togetherness that healthy flowing rivers bring, it also can be something that when spoken about those who hear are also traumatised and re-traumatised in the telling, to the extent that certain people...have mentioned that they can no longer speak about the impact on their industry and on their personal mental health because their family will no longer allow it. Such has been the level of deep depression over a...period of time...

...

[T]here is an eight year old child...who cannot swim because the river has either been too low or running dangerously high that it will not permit children to swim.¹⁵⁴

- 3.30** The health impacts of floodplain harvesting on First Nations peoples were also discussed. For example, the NSW Aboriginal Land Council raised concerns that the poor water quality and dire health of the river, as result of this practice and other forms of water take, has contributed to poor health outcomes for indigenous communities, in particular in Wilcannia, where the community has experienced a dry riverbed and unreliable drinking water.¹⁵⁵
- 3.31** Mr Alfred Priestley shared this view, making reference to the low life expectancy of First Nations people in Wilcannia and the fact that 'in 2019, bottled water had to be trucked into our communities including Wilcannia, as there was no drinking water available'.¹⁵⁶
- 3.32** Cr O'Connor, Mayor of Brewarrina Shire Council, told the committee about experiences in his own community: '[T]here were that many people, when the rivers weren't running, fighting; families arguing that never argued before. It just affected so many people'.¹⁵⁷
- 3.33** Meanwhile, Mr Ross Leddra, President, Darling River Action Group, reflected on the community that once existed at Lake Menindee but had since disappeared due to long periods of reduced flow and increased floodplain harvesting:

....[T]he lawns and whatever were kept alive by pumps from the river, it looked like the front of Sunset Strip was one lawn; it was maintained for two or three kilometres—however long the Sunset Strip is...People would group together for evening barbecues with kids running around...Later on there was a hall built which got a social club up and running. But the retirees, they had paid for it over their working life, they were still with friends, it was safe, relaxed, casual, a typical bush scene.¹⁵⁸

¹⁵³ Submission 30, Wentworth Shire Council, p 4.

¹⁵⁴ Evidence, Cr Jane MacAllister, Wentworth Shire Council, 24 September 2021, p 33.

¹⁵⁵ Submission 148, NSW Aboriginal Land Council, pp 3-4.

¹⁵⁶ Submission 78, Mr Alfred Priestley, p 1.

¹⁵⁷ Evidence, Cr O'Connor, Mayor, Brewarrina Shire Council, 24 September 2021, p 33.

¹⁵⁸ Evidence, Mr Ross Leddra, President, Darling River Action Group, 22 September 2021, p 33.

Cultural impact

- 3.34** Among the perspectives shared in this inquiry has been that of the diverse First Nations communities, who reflected on the significance of water to their communities and the impact of floodplain harvesting. The following section explores the issues they raised, beginning with a case study featuring Mr Alfred Priestley, a Murri man from the Kamilaroi Nation.

Case study – Alfred Priestley, Kamilaroi Nation

Alfred Priestley is a Murri man from the Kamilaroi Nation and traditionally known as Wirrijin Murri.

Alfred spoke of the cultural significance of water for Murri people by telling the story of Daramulum:

'When Daramulum was born, he was born in the black soil. His birth went through the soil into the water tables and out through the water tables into all the riparian zones and all the creeks and rivers and streams and swamps and everything that carried water... And everything that carried water carried his memory. All the animals, the birds, the trees, the sky, everyone knew who he was ... In that memory, he made us. ... [T]hat flood, that water is our song and our memory. Everyone that lives and breathes and drinks and touches that water, that memory, all remember his birth. Through his birth he gave birth to all the management of all the system itself, because our people knew when it dried out, we had to have a place for all of us to go... That is why it is important to us.'

With a deep history and connection to water, Alfred believes that all First Nations have a vital interest in managing the rivers and streams for the benefit of every living thing, not just a very small number of very wealthy and powerful irrigators who benefit from the practice of floodplain harvesting.

He said that instead of discussing of the impacts of floodplain harvesting in the north versus the south, this unallocated water should be placed in the 'cultural bucket' for First Nations peoples to be 'at the table as equals'.

Access to this form of water will mean 'we have a way to trade water and all these sort of things to be able to build economy; enable our people to be able to run programs, work in unison with government and farmers and all that, to have cultural ecotourism'.

Alfred asked that his people be acknowledged: 'We are real, we are human beings, and we need to be up there too. We have got some good things that we can bring to help all this integrate together'.

* Source: Evidence, Mr Alfred Priestley, Private Individual, 7 October 2021 and Submission 78, Alfred Priestley.

Ownership of water and cultural significance

- 3.35** Further to the points raised in chapter 2 regarding indigenous perspectives on floodplain harvesting, the committee received particular evidence regarding water ownership and access to cultural water and flows. First Nations peoples asserted that they have a lack of control and ownership, and highlighted the impact of this dispossession.

- 3.36** For example, Ghillar Michael Eckford, President of the Euahlayi Peoples Republic, explained how his ancestors, who had traditional custodianship of the water and initially retained access to it after European settlement, were arbitrarily cut off it:

Right along the river system, our old people when the colonials first came out here when they were droving ... they showed them where all those big water holes were. Quite frankly, the Government back then made it so they were accessible for stock watering points. It was these points, at these big water holes and river reaches, that our old people used to always have free access to.

Then the New South Wales Government leased these lands to the nearest farmer or irrigation farmer and they have actually fenced these areas off and we don't have access to it. Mate, seeing a locked gate is a real shock to our people. The mental harm that is done to our people is quite significant because they complain and they always talk about these white fellas always locking gates on us that at one time we used to have free access down there. What's wrong? What happened? How come the Government never told us they were going to stop all that?¹⁵⁹

- 3.37** With a cultural focus on the rivers, riparian zones and associated wetlands, billabongs and lagoons, the committee learnt of how the Euahlayi People's anguish had been amplified over the years leading to deep spiritual, emotional and psychological ramifications for the nation.¹⁶⁰ Mr Eckford maintained that this 'shock' is continuing to this day, with his people considering current irrigation practices as a mismanagement of the water system with significant impacts on cultural sites and ecosystems:

... where the bunding levees hold back the water, the roots of plants are flooded for extended periods, and can drown many species. On the downstream side of the bunding levees the floodplains are deprived of regular flows, which kills native species and soil micro-organisms dependent on regular inundation ...

Further, the bunding levees divert the water that would normally replenish the floodplains ... The over extraction of the so-called 'sustainable diversions' is so out of balance with the natural hydrology that drastic steps have to be taken to ensure the water-dependent cultural sites and ecosystems receive the necessary flows.

... the degree of the water mismanagement, both by State and Commonwealth, has been so extreme that our rivers no longer had a base flow and were reduced to disconnected pools during the dry years.¹⁶¹

- 3.38** According to Ms Tanya Kirkegaard, Executive Officer, Northern Basin Aboriginal Nations, cultural water has tended to be compartmentalised by governments. However, she argued that cultural water is about looking at water holistically:

Cultural water is not just about achieving any targets or aspirations for First Nations, in a sense. First Nations look at water holistically and it is all cultural, and it has spiritual connotations as well. I think this is where the disconnect between water management and the involvement or inclusion of First Nations' rights and interests becomes a contentious subject.¹⁶²

¹⁵⁹ Evidence, Mr Ghillar Michael Eckford, President, Euahlayi Peoples Republic, 22 September 2021, p 54.

¹⁶⁰ Submission 101, Euahlayi Peoples Republic, p 7.

¹⁶¹ Submission 101, Euahlayi Peoples Republic, pp 6-7.

¹⁶² Evidence, Ms Tanya Kirkegaard, Ms Tanya Kirkegaard, Executive Officer, Northern Basin Aboriginal Nations, p 51.

- 3.39 To Ms Kirkegaard, it follows that 'floodplain harvesting greatly impacts the results of what that cultural water would naturally do'.¹⁶³

Impact on cultural and spiritual connection

- 3.40 Indeed, numerous Indigenous stakeholders gave evidence about how floodplain harvesting has impacted their cultural and spiritual connection to land, water and native wildlife. For example, Ms Robinson described the cultural significance of water - the river being 'like our heart' – and the native animals and plants that thrive from it. She spoke of the impact of no water:

...[T]hat is important for us because our native animals, a lot of them, the animals and plants are our totems. We call them meat, our dhingгаа, and it determines who we are, our marriage systems, who we can marry and who we do not, and other aspects of our culture. We see bird habitats, galah habitats destroyed because there is no water. Our totem animals are no longer around. I do not know where they have gone. Are they dead, died from lack of water? The river supplied them with the food. We have no fish any more. We cannot go fishing. Fishing was a very important part of our daily lives. The river was like our heart, if you like—the heart of our country. Our country is our heart, the river more so.¹⁶⁴

- 3.41 Mr Leon Winters, member of the blood group clan Mirri-yhar-burrah, Euahlayi Peoples Republic, also spoke about importance of the floodplain ecosystem to the native fauna and fauna, describing to the committee a system that once existed but is disappearing:

The plants, seeds and medicines are still used by our people today and they can be used in the greater community in the future, but they are getting harder to source because of the impacts such as the dwindling supply of water and the cease of natural flooding due to changes like capping of bores, damming and creating diversions such as bunding levels.

Our totemic and spiritual fauna and flora have been severely reduced due to the impact of blocking of natural water flows. My spirit and thoughts have been saddened and hurt at the sight and state of our country as we are connected as one.¹⁶⁵

- 3.42 Amelia and Kathalka Whyman from the Barkandji Nation, spoke of the enduring cultural connection and correlation between healthy river and healthy community:

The Government needs to listen to our voice, it may be small but it is loud. As the next generation, people must understand that [it] is not just our elders who feel the connection to the river, but our youth as well. When the river is up, we have things to do. When there is no water, our young people have nothing to do, and that is when young people turn to things like crime.¹⁶⁶

¹⁶³ Evidence, Ms Tanya Kirkegaard, Ms Tanya Kirkegaard, Executive Officer, Northern Basin Aboriginal Nations, p 51.

¹⁶⁴ Evidence, Ms Virginia Robinson, Secretary, Dhariwaa Elders Group, 22 September 2021, p 42.

¹⁶⁵ Evidence, Mr Leon Winters, member of the blood group Mirri-yhar-burrah clan, Euahlayi Peoples Republic, 22 September 2021, p 49.

¹⁶⁶ Submission 253, Amelia and Kathalka Whyman, p 2.

- 3.43 Dr Martin Mallen-Cooper, Adjunct Research Professor for the Institute for Land, Water and Society, Charles Sturt University, asserted that the NSW Government is presently not meeting one of the objects of the *Water Management Act* which is 'to foster . . . benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water'.¹⁶⁷

Environmental impact

- 3.44 In addition to the various economic, social and cultural impacts of floodplain harvesting are the environmental impacts that have given rise to these effects. This section discusses in particular the impacts of floodplain harvesting practices on native flora, fish, bird species and the wetlands, the significance of first flush events and drought management.

Native fish, bird species and the wetlands

- 3.45 Many inquiry participants acknowledged that water flowing across the floodplain is vitally important for overall river health and asserted that floodplain harvesting in any form adversely affects the environment. Indeed, the Wentworth Group of Concerned Scientists and Environmental Defenders Office stated, without floodplain harvesting:

... [M]uch of this water would have nourished floodplain and wetland habitats, contributed to clean water for downstream communities and ecosystems, or soaked into the ground to recharge aquifers.¹⁶⁸

- 3.46 Dr Martin Mallen-Cooper, in his submission, discussed the importance of 'baseline flows' and 'flow pulses' following large flood events across the basin that are crucial for river productivity and relied upon by many native fish species, birds and other wildlife. According to Dr Mallen-Cooper, floodplain harvesting traps fish species like Golden Perch and Murray Cod that have larvae that drift with the current, and as a result these fish populations decline.¹⁶⁹
- 3.47 Similarly, the Recreational Fishing Alliance suggested that ongoing floodplain harvesting has allowed for 'significant extractions of water from critically stressed river systems and the fish they support'.¹⁷⁰ In evidence to the committee, Mr Stan Konstantaras, President of the Alliance reported many fishers in or visiting the basin have witnessed first-hand the 'significant decline' in health to waterways and the 'impacts to wetlands and to the abundance of our native fish species'.¹⁷¹
- 3.48 Stakeholders referred in particular to the fish kills of 2018-19 reported in chapter 1. Dr Stuart Rowland, retired Principal Research Scientist for NSW Fisheries, for example, attributed the over-extraction of water by the irrigation industry since the 1990's as a major factor leading to the disaster. In comparing the ecosystems that once existed in the Darling Baaka, Dr Rowland advised that species like Trout Cod, Macquarie Perch and Darling Snail have been lost, others

¹⁶⁷ Submission 238, Dr Martin Mallen-Cooper, p 10.

¹⁶⁸ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 1.

¹⁶⁹ Submission 238, Dr Martin Mallen-Cooper, p 9.

¹⁷⁰ Submission 145, The Recreational Fishing Alliance of NSW, p 6.

¹⁷¹ Evidence, Mr Stan Konstantaras, President, The Recreational Fishing Alliance of NSW, 22 September 2021, p 11.

like Silver Perch, Catfish and Mussels have become rare, and key species like Murray Cod have shown decreased signs of productivity.¹⁷² In evidence before the committee, Dr Rowland concluded that the ecosystem that once existed in the Darling Baaka and Menindee is now 'extinct'.¹⁷³

3.49 Individuals, researchers and conservation groups also expressed concerns about floodplain harvesting in respect to its impact on water birds, migratory birds and wetlands. For example, The Centre for Ecosystem Science, University of New South Wales, referenced research which indicated the regulation of rivers and the developments on floodplains have affected the breeding of waterbirds and woodland birds, as well as vegetation health and other species across the basin, especially on wetlands that are already under considerable pressure.¹⁷⁴

3.50 The Euahlayi Peoples' Republic expressed concern about medicinal and culturally important plants and trees being in decline:

...River Red Gums, *Eucalyptus camaldulensis*, have shallow and deep roots and need to receive watering events at the required regular intervals, which also ensure the survival of saplings after seed establishment.¹⁷⁵

3.51 Mr Garry Hall, President of the Macquarie Marshes Environmental Landholders Association, shared this view, stating 'floodplain harvesting has detrimental impacts' on large scale bird-breeding events in the Macquarie Marshes. He explained environmental flows alone are unable to achieve the bird-breeding events that the Macquarie Marshes are known for, and that floodplain inundation and water levels are critical in providing the specific conditions that trigger these events.¹⁷⁶

3.52 Mr Dugald Bucknell, Member, Macquarie Marshes Environmental Landholders Association, and Owner, Quambone Pastoral Company agreed, demonstrating the impact through a historical analysis of breeding events and life expectancy for the Ibis bird, a dominant colonial nesting bird in the Macquarie Marshes. He explained:

In 2020 all the adults and chicks from 2010 and 2011 are dead (old age). The only birds that remain are the chicks from 2016 and are now 5 years old, over half way through their life...these birds would have attempted to breed if the water had not been prevented or slowed down from getting to their nesting colonies.¹⁷⁷

¹⁷² Submission 90, Dr Stuart Rowland, pp 1-2.

¹⁷³ Evidence, Dr Stuart Rowland, Retired Principal Research Scientist, NSW Fisheries, 22 September 2021, pp 11-12.

¹⁷⁴ Submission 73, The Centre for Ecosystem Science, University of New South Wales Sydney, p 3.

¹⁷⁵ Submission 101, The Euahlayi Peoples' Republic, p 10.

¹⁷⁶ Evidence, Mr Garry Hall, President, Macquarie Marshes Environmental Landholders Association, and Landholder in the Macquarie Marshes, 7 October 2021, p 2

¹⁷⁷ Evidence, Mr Dugald Bucknell, Member, Macquarie Marshes Environmental Landholders Association, and Owner, Quambone Pastoral Company, 7 October 2021, p 4; Submission 289, Mr Dugald Bucknell, p 2.

- 3.53** The Inland Rivers Network also mentioned the Macquarie Marshes, in pointing out the ongoing decline of Ramsar wetlands, in contravention of international agreements:

The majority of floodplain harvesting extraction in the Macquarie occurs directly upstream of the Marshes in critical flow paths that supply floodwaters to the wetlands, eg Bulgeraga Creek. The NSW and Commonwealth Governments agreed and committed to protect the values of this and other Ramsar wetlands when they were nominated, yet the values have been declining. Substantial reduction of the level of diversions would enable at least partial recovery and is essential to limit or prevent further loss of values and to meet our international obligations.¹⁷⁸

First flush events, the management of flows downstream and drought management

- 3.54** The importance of first flush events and the management of flows downstream were also raised throughout the inquiry.
- 3.55** Numerous stakeholders discussed how first flush events and downstream flow targets are critically important to the environment, First Nations peoples, communities and industry across the basin. These inquiry participants expressed concerns about floodplain harvesting impacting river connectivity and health of the Murray-Darling Basin.
- 3.56** According to Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, flushes in the first flow events are crucial for the health of the river as they flush the weir pools and 'give everything a chance to have a bit of respite and breed and feed'.¹⁷⁹ In acknowledging the significance of these events, Mr Smith called for the protection of these first flush and low-flow events when considering the practice of floodplain harvesting:

...[T]here must be stringent and enforceable laws to protect first flush and low-flow events in dry periods. There must be science-based flow targets all along the river that dictate when and how much water can be extracted under any new licensing regime, and every effort must be made to prevent the environmental disasters we have seen along the Lower Darling and at Menindee, particularly over the last five years. New rules safeguarding these flows need to be in addition to existing water sharing plan measures, which are failing dismally to protect the Lower Darling.¹⁸⁰

- 3.57** Indeed, some argued that the importance of first flush events had not been given proper consideration in proposed regulations as they did not guarantee protection from floodplain harvesting during these events. For example, the Wentworth Group of Concerned Scientists and the Environmental Defenders Office argued that without rules to ensure floodplain harvesting doesn't occur during these events it could pose 'significant risk':

... [A] significant risk to water supply for people and stock, water quality, environmental health and cultural values within each valley and in downstream connected valleys.

¹⁷⁸ Submission 55, Inland Rivers Network, p 4.

¹⁷⁹ Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 31.

¹⁸⁰ Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 30.

These risks will be amplified under climate change. Specifically, and according to NSW Government's latest climate modelling.¹⁸¹

3.58 The significance of first flush and flows was discussed in the context of the recent 2020 northern basin first flush event. Many inquiry participants expressed frustration at the management of this event, and what appeared to be priority given to floodplain harvesting in the northern valleys.

3.59 For example, Mr Smith stated that during the 2020 event, the allocation to water extraction in the northern basin was given at a time when people in the Lower Darling Baaka had not had access to high-security water and the township of Pooncarie was still struggling to get water.¹⁸²

3.60 More broadly, the South Western Water Users Association submitted that floodplain harvesting must only be accessed once downstream river flow targets and Menindee Lakes storage targets are met. During her appearance before the committee, Ms Rachel Strachan, Vice Chair, South Western Water Users Association, elaborated on some of the issues with the current flow targets:

We need adequate measurement for the whole length of the river systems to know exactly what is going on and where the water is. At the moment we have the biggest problem where the northern Basin and the southern Basin are basically broken in two where they have separated the Darling River at Wilcannia, where we have minimal flow targets at Wilcannia of 10 days, 400 megalitres, which does not actually make it to Menindee at all. We feel that the storage targets at Menindee and flow targets the length of the Barwon-Darling and the northern tributaries should provide critical needs right through to the Murray-Darling junction, not just to Wilcannia, which is not where the Darling River finishes.¹⁸³

3.61 In response to these environmental concerns, the NSW Irrigators' Council submitted that there are already measures in place to manage and restrict upstream extraction in the interest of downstream communities and that these include downstream flow targets and a broader suite of connectivity mechanisms.¹⁸⁴ Moreover, the NSW Irrigators' Council argued that many of the issues raised fall under the broader remit of drought management and are beyond floodplain harvesting regulation.¹⁸⁵

¹⁸¹ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 7.

¹⁸² Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 31.

¹⁸³ Evidence, Ms Rachel Strachan, Vice Chair, South Western Water Users Association, 22 September 2021, p 22.

¹⁸⁴ Submission 50, NSW Irrigators' Council, p 34.

¹⁸⁵ Submission 50, NSW Irrigators' Council, p 35.

3.62 Other inquiry participants from the northern basin agreed with this view, acknowledging that separate to floodplain harvesting reforms, there is work to be done in relation to drought management that reduces flows downstream, connectivity across the basin and water availability.¹⁸⁶ For example, Border Rivers Food and Fibre Inc. raised concerns with the management of Menindee Lakes during the recent drought:

Our members rightly question some of the management when the system is drained quickly with no foresight to drought and climate change. When we have given up large chunks of our water resource already for the benefit of downstream requirements, it is unacceptable that so much of it is then managed in a profligate fashion and wasted, lost to all uses through evaporation, with little attempt to maximise efficiency of storage and use.¹⁸⁷

Assessment of cumulative impacts

3.63 In evidence to the inquiry, numerous stakeholders argued there had been inadequate assessment of the cumulative environmental effects caused by floodplain harvesting over time.¹⁸⁸

3.64 For example, the Inland Rivers Network stated that environmental and downstream impacts in the five valleys appear to be an 'afterthought' and there has been 'no systematic review of scientific literature or input from local ecologists, no input from local trad losses'.¹⁸⁹

3.65 In particular, the Inland Rivers Network commented 'there has not been the same level of attention given to assessing the environmental condition and needs of floodplain environments and connectivity' in the five northern valleys central to the proposed NSW Floodplain Harvesting Policy. Rather, they contended, the focus of the NSW Government has been to assess the level of floodplain harvesting take by developing a property level model through 'intensive engagement with the irrigation industry and individual property owners'.¹⁹⁰

3.66 The Recreational Fishing Alliance held a similar view while broadening their concern that the collective impact of floodplain harvesting on environmental, cultural and social assets has not occurred 'under any meaningful or transparent process':

It is vital that the full impact of floodplain harvesting on environmental assets and function, on cultural values and on downstream social assets is rigorously assessed prior to granting new, compensable private property rights in the form of Floodplain Harvesting Licenses.¹⁹¹

¹⁸⁶ See for example Submission 65, GVIA, pp 34-35, Submission 60, Namoi Water, p 2 and Submission 71, Barwon-Darling Water, p 3.

¹⁸⁷ Submission 59, Border Rivers Food & Fibre Inc., p 7.

¹⁸⁸ See for example Submission 33, Australian Floodplain Association, p 1; Submission 47, Dubbo Environment Group, p 1 and Submission 55, Inland Rivers Network, pp 3-4.

¹⁸⁹ Submission 55, Inland Rivers Network, p 4.

¹⁹⁰ Submission 55, Inland Rivers Network, p 3.

¹⁹¹ Submission 145, The Recreational Fishing Alliance, p. 2; see also Submission 148; NSW Aboriginal Land Council; Submission 147, Murray Lower Darling Rivers Indigenous Nations (MLDRIN), Submission 63, Mudgee District Environment Group, p 1.

- 3.67** Wentworth Shire Council echoed a similar sentiment and expressed their reservations with approved floodplain harvesting structures under the regulations and whether they have been assessed against cumulative downstream impacts as well as local environmental damage. Even further, the local council argued that 'no public information about approved floodplain harvesting structures is available' or has 'been provided to reassure communities'.¹⁹²
- 3.68** On the other hand, numerous inquiry participants in the northern basin referred to environmental outcome reports they believed addressed the environmental impacts of floodplain harvesting, with the NSW Irrigators' Council sharing the NSW Government position that more water will be returned to the environment following implementation of the proposed licensing framework.¹⁹³
- 3.69** Further, the NSW Government, in their submission, advised that options for restricting floodplain harvesting in situations that could impact downstream critical human and environmental needs would be considered as part of the development of regional water strategies and incorporated into the water sharing plan for the Barwon-Darling.¹⁹⁴

Engagement and consultation

- 3.70** According to the NSW Government, there has been significant engagement with all stakeholders about floodplain harvesting practice, policy and implementation over the past 20 years.¹⁹⁵ In regards to the proposed regulations, they advised that:

The department consulted with the public on the proposed amendments between 23 November and 20 December 2020. The department received 236 submissions, many supported the changes and focused on the opportunity for improved clarity and certainty. Those that did not support the proposed changes disagreed with the existing policy or legislative settings. Making changes to these settings was clearly communicated as being outside the scope of the submission process, which was focussed on seeking comments on the drafting of the regulations.¹⁹⁶

- 3.71** However, many inquiry participants disagreed with the NSW Government's view there had been adequate engagement with all stakeholders throughout the implementation of the NSW Floodplain Harvesting Policy. For instance, the Murray Darling Association commented:

Community consultation on floodplain harvesting has often been characterised by frustration, lack of relevant information, inundation...of technical information, hostility, and defensiveness. This approach to consultation and engagement has undermined confidence in the proposed policy and created a combative sense of them and us between government, floodplain harvesting licence holders and down-stream communities.¹⁹⁷

¹⁹² Submission 30, Wentworth Shire Council, p 2.

¹⁹³ Submission 50, NSW Irrigators' Council, pp 13-14; Evidence, the hon. Melinda Pavey MP, Minister for Water, Property and Housing, 24 September 2021, p 39.

¹⁹⁴ Submission 84, NSW Government, p 6.

¹⁹⁵ Submission 84, NSW Government, p 3.

¹⁹⁶ Submission 84, NSW Government, p 4.

¹⁹⁷ Submission 49, Murray Darling Association, p 4.

3.72 Indeed, Alluvium Consulting Australia, independent reviewers for the implementation of the NSW Floodplain Harvesting Policy, stated that the current engagement with stakeholders regarding floodplain harvesting is 'less than adequate' and 'urgently needs to be changed'. They observed:

Our observations of the stakeholder engagement process regarding floodplain harvesting is that the methods used for that engagement have been, as noted previously, very much applying a 'top-down' approach. This has been through using town hall style meetings with stakeholders where presenters deliver PowerPoint slides from the front of a meeting and tell people what has been done and no interactive or consultative component is included, other than to provide time for questions to be asked.¹⁹⁸

3.73 Significantly, Murray Lower Darling Indigenous Nations (MLDRIN) in their submission stated that they had not witnessed strong engagement with downstream First Nations on the issue of floodplain harvesting.¹⁹⁹ The Aboriginal Land Council held a similar view, noting that the Department of Planning, Industry and Environment are reported to have said that the NSW Floodplain Harvesting Policy will 'improve cultural outcomes' for First Nations and yet 'there is no mention of outcomes relating to Aboriginal people, communities or culture' within the policy or its implementation plan.²⁰⁰

3.74 Indeed, the Euahlayi Peoples' Republic repeatedly expressed similar experiences and spoke of the need for culturally appropriate training:

At present, the NSW government's environmental planning and water strategies for floodplain harvesting fail and are void of any real input and or consideration of First Nations rights and interests. [We] recommend that NSW water planners and managers do a course on understanding Native Title rights and interests under federal law and become much more familiar with First Nations' cultural teachings around water, spirituality, biodiversity and environmental factors.²⁰¹

Committee comment

3.75 The committee appreciates that water access is integral to the lives and livelihoods of many communities, and that floodplain harvesting as a form of water take has in turn played a role in exacerbating broader water security issues. In particular, the committee notes that floodplain harvesting has impacted economically, socially, culturally and environmentally, in many significant and diverse ways.

3.76 The committee acknowledges that the practice of floodplain harvesting includes various benefits to agriculture, industry and community, particularly during times of drought. The committee notes especially the views of irrigators and others in the northern basin valleys who stress the importance of floodplain harvesting to their industries.

¹⁹⁸ Submission 35, Alluvium Consulting Australia, p. 1 and 6.

¹⁹⁹ Submission 147, MLDRIN, p 2.

²⁰⁰ Submission 148, NSW Aboriginal Land Council, p 3.

²⁰¹ Submission 101, Euahlayi Peoples' Republic, p 10.

- 3.77** However, the committee is compelled by the overwhelming evidence demonstrating reduced downstream flows, particularly in the Darling Baaka and Menindee, commensurate to the growth of floodplain harvesting storage capacity, and the significant adverse impact this has had on those communities. The committee especially notes the powerful stories of individuals who have been personally impacted.
- 3.78** As such, the committee finds that floodplain harvesting has had a significant impact on downstream flows and river health, particularly to the Darling Baaka, Menindee Lakes, and Ramsar listed wetlands, leading to numerous economic, social, cultural and environmental impacts, and that to properly understand any and all impacts improvement in real time monitoring through increased river gauges is required.

Finding 4

That floodplain harvesting has had a significant impact on downstream flows and river health, particularly to the Darling Baaka River, Menindee Lakes and Ramsar listed wetlands, leading to numerous economic, social, cultural and environmental impacts, and that to properly understand any and all impacts improvement in real time monitoring through increased river gauges is required.

- 3.79** Given the impact of these reduced flows, the committee believes it is imperative that an analysis of these flows be conducted to determine any action needed to protect them from floodplain harvesting.
- 3.80** The economic loss, cost to health and wellbeing, impact on cultural and spiritual connection to the land, as well as the many environmental effects of floodplain harvesting have given the committee cause for concern. Moreover, the committee understands that assessment of these impacts has been disparate and that there is a lack of data about low and cease-to-flow events as well as how impacts may become compounded over successive years.
- 3.81** The committee believes it is important to consider these impacts locally and collectively but notes the evidence suggesting there has been insufficient assessment of the cumulative impacts of less water, including reduced flooding, on downstream communities to date. The committee considers that such an assessment would give clarity to the long-term effects of floodplain harvesting. It would also provide certainty to affected stakeholders and opportunity for the NSW Government to address these impacts.
- 3.82** As such, the committee finds that there has been insufficient assessment of the cumulative impacts of floodplain harvesting to date, and that the only way to further improve assessments of the cumulative impacts of floodplain harvesting is through accurate metering of take during floodplain harvesting events. To this end, recommends that the NSW Government conduct a thorough review of low and cease-to-flow data, as well as an assessment of both local and downstream economic, environmental, cultural and social needs prior to finalising the volume of floodplain harvesting entitlements in each valley identified in the NSW Floodplain Harvesting Policy, and this includes detailed locations of any proposed new river gauges and real time monitoring infrastructure.

Finding 5

That there has been insufficient assessment of the cumulative impacts of floodplain harvesting to date, and that the only way to further improve assessments of the cumulative impacts of floodplain harvesting is through accurate metering of take during floodplain harvesting events.

Recommendation 1

That the NSW Government conduct a thorough review of low and cease-to-flow data, as well as an assessment of downstream economic, social, cultural and environmental impacts and needs prior to finalising the volume of floodplain harvesting entitlements in each valley identified in the NSW Floodplain Harvesting Policy, and this includes detailed locations of any proposed new river gauges and real time monitoring infrastructure.

- 3.83** With particular regard to the evidence of indigenous stakeholders, the committee acknowledges and values the insights provided to the inquiry by First Nations witnesses on the cultural significance of water including the rivers, wetlands, and floodplains. From this, the committee finds that floodplain harvesting has contributed to a reduction in downstream flows which has had a profound impact on the culture and traditions of First Nations peoples.
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Finding 6

Floodplain harvesting has contributed to a reduction in downstream flows which has had a profound impact on the culture and traditions of First Nations peoples.

- 3.84** Indeed, the committee was very moved by the evidence of First Nations witnesses. The committee believes that theirs is an important voice, given their profound cultural and spiritual connection to land, water and wildlife. The committee was therefore disappointed to hear that diverse First Nations communities have had limited engagement in the development of floodplain harvesting policy and regulation, resulting in a perception that the needs of other stakeholders have been prioritised over theirs. The committee finds that engagement with First Nations peoples on the development of floodplain harvesting policy has been inadequate and, at times, culturally inappropriate. The committee urges the NSW Government to address this as a matter of priority and consult with First Nations peoples on the management of floodplain harvesting and water management more broadly.
- 3.85** The committee therefore recommends that the NSW Government urgently prioritise regular and genuine involvement of First Nations peoples in the management of floodplain harvesting, including cultural flows.
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Finding 7

That engagement with First Nations peoples on the development of floodplain harvesting policy has been inadequate and, at times, culturally inappropriate.

Recommendation 2

That the NSW Government urgently prioritise regular and genuine involvement of First Nations peoples in the management of floodplain harvesting, including cultural flows.

Chapter 4 Determining floodplain harvesting volume

Among the key questions of this inquiry is whether a floodplain harvesting licence, as proposed by the NSW Government, would translate to extraction at a level that is sustainable and within the required legal limits. This chapter examines how this volume is determined. It begins with an overview of the legal limits for water take, followed by an examination of the modelling framework, the Cap and diversion limits. The chapter also considers other issues such as storages and works, water accounting and exemptions.

Legal limits for water take

- 4.1** This section outlines the legal limits for water take as a precursor to discussions raised in the inquiry about the various aspects of floodplain harvesting volume. It also outlines how these legal limits would be enforced under proposed licensing.
- 4.2** As noted in chapter 1, New South Wales is a signatory of the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin. Under the agreement, the NSW Government is required to use its best endeavours to implement the Murray-Darling Basin Plan (Basin Plan), which aims to bring the Basin back to a healthier and sustainable level while continuing to support the communities and industries that rely on it.²⁰²
- 4.3** In effect, the Basin Plan provides for the amount of water that can be taken each year. The local rules and licensing under which this is executed is the responsibility of state governments, while the Commonwealth's role, through the Murray-Darling Basin Authority, is to oversee each jurisdiction's compliance. Ultimately, the NSW Government is responsible for ensuring the state complies with the legal limits for water take.²⁰³
- 4.4** According to a submission by Dr Matthew Colloff, Honorary Senior Lecturer, Australian National University and Slattery and Johnson:
- The Basin Plan allows for a long-term average take of 46.3 GL yr⁻¹ from floodplain harvesting in the northern NSW catchments (NSW Border Rivers, Gwydir, Namoi, Macquarie, Barwon-Darling) (MDBA 2020b). In most catchments, floodplain harvesting considerably exceeds the legal limits of diversions (DPIE 2021a).²⁰⁴
- 4.5** Legal limits apply to all types of surface water take within a water source. A number of legal limits have been introduced over time. These include:
- The Murray-Darling Basin 'Cap' – the Cap limits average long-term take to the volume of water that could have been taken with the infrastructure and rules as applied in 1993-1994.²⁰⁵

²⁰² Murray-Darling Basin Authority, *A plan for the Murray-Darling Basin*, 24 December 2020, <https://www.mdba.gov.au/basin-plan/plan-murray-darling-basin>

²⁰³ Murray-Darling Basin Authority, *Sustainable diversion Limit Reporting and Compliance Framework*, 3 November 2021, <https://www.mdba.gov.au/basin-plan/compliance-enforcement/action-compliance-review/sustainable-diversion-limit-reporting>

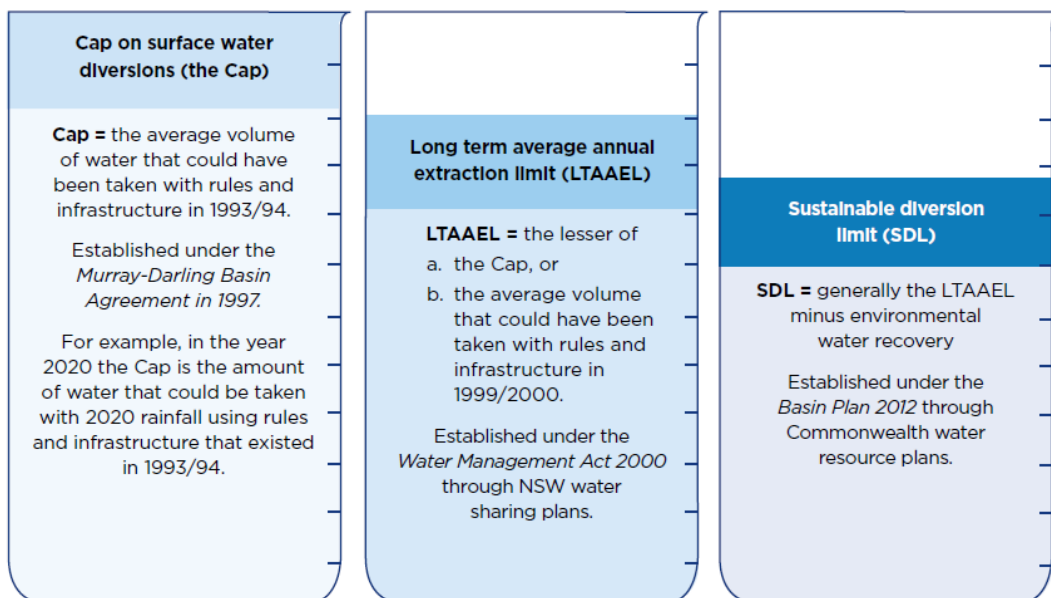
²⁰⁴ Submission 285, Fenner School of Environment and Society, ANU and Slattery and Johnson, p 4.

²⁰⁵ Department of Planning, Industry and Environment, *An overview of legal limits*, August 2021, p 1.

- the 'Long Term Average Annual Extraction Limit' (LTAAEL) – the LTAAEL is the lesser of the Cap or the average volume of water that could have been taken with the rules and infrastructure that existed in 1999-2000. The LTAAEL is thus, by definition, either the same as or smaller than the Cap. It provides rules regarding minimum daily releases, flow sharing and environmental water allowances.²⁰⁶
- the 'Sustainable Diversion Limit' (SDL) – the SDL is calculated as the LTAAEL less environmental water, which is recovered by the Commonwealth to ensure that consumptive take is sustainable.²⁰⁷ The SDL replaced the Cap system in 2019 and applies to all basin states.²⁰⁸ In New South Wales, processes are underway to transition to a complete replacement of the Cap with the SDL under the Basin Plan.²⁰⁹

4.6 Figure 2 explains these surface water legal limits and the authorities under which they were established.

Figure 2 Surface water legal limits²¹⁰



4.7 Relevant to these surface water legal limits is the Baseline Diversion Limit (BDL). The BDL is an estimate of the long-term average water-use limits in place for consumptive purposes in a valley, before the Murray-Darling Basin Plan (Basin Plan) was introduced in 2012.²¹¹

²⁰⁶ Department of Planning, Industry and Environment, *An overview of legal limits*, August 2021, p 2.

²⁰⁷ Murray-Darling Basin Authority, *Sustainable diversion limits*, 2 August 2021, <https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits>

²⁰⁸ Murray-Darling Basin Authority, *Sustainable diversion limits*, 2 August 2021, <https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits>

²⁰⁹ Evidence, Mr Dan Connor, Director, Healthy Floodplains Project, Department of Planning, Industry and Environment, 24 September 2021, p 45.

²¹⁰ Department of Planning, Industry and Environment, *How Surface Water Legal Limits on Water Take are Defined*, August 2021

²¹¹ Murray-Darling Basin Authority, *Current diversion limits for the Basin*, 15 November 2021, <https://www.mdba.gov.au/basin-plan/sustainable-diversion-limits/current-diversion-limits-basin>

4.8 The BDLs are defined in Schedule 3 of the Basin Plan. Effectively, the BDLs in New South Wales are the LTAAELs in water sharing plans:

Schedule 3 of the Basin Plan states that the NSW BDL is generally the state water management law in mid-2009, for surface water regulated river and floodplain harvesting take. In NSW, state water management law in mid-2009 were LTAAELs in WSPs [water sharing plans]. This means that the SDL is linked to the LTAAEL.²¹²

4.9 The NSW Floodplain Harvesting Policy sets out upper limits to long-term average floodplain harvesting diversions based on these statutory limits in state and Commonwealth legislation. Where these limits are being exceeded, the policy sets out an accounting framework to bring the long-term average diversions under these limits. The limits are estimated using the NSW Government's modelling framework, and the accounting framework is then implemented to meet these limits.²¹³ These frameworks are discussed in greater detail later in the chapter.

4.10 It is the Department of Planning, Industry and Environment's (DPIE) view that the legal limits described above represent a set of conditions at a particular point in time. As such, there is no hard volume that applies as a limit. Notably, while the formulas themselves cannot be changed without legislative amendment, the limits are volumetrically estimated from models using the best available information and can thus be updated as better data becomes available.²¹⁴

4.11 This view was disputed by a number of witnesses to the inquiry who held the view that the legal limits were not floating volumes that could simply be updated on the basis of new modelling including evidence from Mr Bret Walker AO SC, Slattery and Johnson and Dr Martin Mallen-Cooper raised later in this chapter.

Regulating Floodplain Harvesting take in New South Wales through proposed licensing

4.12 As discussed in chapter 2, floodplain harvesting is currently not subject to limits for individuals because a regulatory framework for one does not exist.²¹⁵ Accordingly, the NSW Government spoke of its intentions to introduce such a framework through a floodplain harvesting licence scheme – such as the one that was introduced under the Water Management (General) Amendment (Floodplain Harvesting Access Licences) Regulation 2021 – that will stipulate limits for how much water an individual can take. The individual licence limit would ensure the volume of total diversions stays within the legal limits set for each of the northern valleys. The NSW Government explained:

When the regulatory framework commences, irrigators will be issued with a licensed entitlement and accompanying rules that will determine their individual limits. These individual limits will be set to only authorise take so that the existing legal limit of overall take at a water source scale will be met over the long term.²¹⁶

²¹² Department of Planning, Industry and Environment, *Extraction Limits – How the extraction limits work and differences*, August 2021, p 3.

²¹³ Department of Planning, Industry and Environment, *Modelling and data collection for implementing floodplain harvesting*, October 2018, p 1.

²¹⁴ Department of Planning, Industry and Environment, *An overview of legal limits*, August 2021, p 2.

²¹⁵ Submission 84, NSW Government, p 2.

²¹⁶ Submission 84, NSW Government, p 2.

4.13 In her appearance before the committee, the Hon. Melinda Pavey MP, Minister for Water, maintained that licensing would deliver positive outcomes for the environment and downstream communities by ensuring floodplain harvesting is within limits:

... [L]icensing will transition the historically legitimate take into the modern water licensing framework within sustainable levels, significantly improving the environmental protections for water resources and their dependent ecosystems. It is the only way to ensure more water will stay in the system to support downstream communities and the environment...

Stopping floodplain harvesting would not lead to a reduction in the amount of water that could be legally taken in the northern Basin; these limits are set through water-sharing plans and the Basin plan, and it would take legislative change to amend them. However, licensing floodplain harvesting will allow us to restrict the practice where this is necessary to comply with water source legal limits and improve its measurement.²¹⁷

4.14 As outlined in chapter 1, three regulations seeking to introduce a proposed licensing framework were disallowed in May 2021. The NSW Government contended that, had the regulations not been disallowed, a licensing framework would be currently in place to deliver a range of outcomes, including:

- installation of measurement equipment on all on-farm water storages greater than 1000ML used for floodplain harvesting would have been made mandatory, with data on water take supplied in near real time
- 30 per cent reduction in floodplain harvesting in the Gwydir Valley
- improvement of around 140 per cent in some of the environmental water requirements for waterbirds in the Ramsar-listed Gwydir wetlands.²¹⁸

Determining floodplain harvesting volume

4.15 During the inquiry, stakeholders spoke of a range of issues in relation to how floodplain harvesting volume is determined. This section will examine these issues as presented in the contrasting evidence received by the committee. In particular, the modelling used by the NSW Government to calculate water availability and permitted extraction, the 'Cap scenario' used by the Department of Planning, Industry and Environment and adjustments to the baseline diversion limit and sustainable diversion limit will be discussed.

Modelling framework

4.16 Fundamental to establishing floodplain harvesting volumes is the modelling framework used to determine it. In promoting the merits of its proposed floodplain harvesting licence, the NSW Government asserted that its models are 'the most accurate representation of floodplain and associated waterway conditions that have ever existed for these valleys', drawing attention to the significant investment that had been made in them:

²¹⁷ Evidence, the Hon. Melinda Pavey MP, Minister for Water, Property and Housing, 24 September 2021, p 39.

²¹⁸ Submission 84, NSW Government, p 1.

As part of the floodplain harvesting reform, the department has invested significant resources into updating the existing models, and in some cases, building new models that not only accurately reflect regulated river flows and diversions but also floodplain harvesting diversions. These new and updated models are the most accurate representation of floodplain and associated waterway conditions that have ever existed for these valleys.²¹⁹

4.17 The NSW Government asserted that its modelling is not only fit-for-purpose but adopts the best available technology and data, enabling the government to understand diversions at historical reference dates to calculate extraction limits. In addition, further work will be undertaken to consider paleoclimatic data and future predicted climate scenarios. The NSW Government also advised that reviews have been conducted by independent experts on its models.²²⁰

4.18 A number of stakeholders commented on the NSW Government's modelling and were supportive of it. For example, Alluvium Consulting Australia, who was engaged by the NSW Government to independently review the implementation of the NSW Floodplain Harvesting Policy, submitted that the models constituted an essential component of the government's policy:

Overall, we believe that these models are an essential component in ensuring how floodplain harvesting can be licensed, regulated, metered and monitored so that it is sustainable and meets the objectives of the Water Management Act 2000 and the Murray Darling Basin Plan. Without the models, it would be extremely challenging to understand the complexity present in the various river valley water networks and how the relationships between consumptive use, environmental and essential human needs and downstream impacts can be equitably evaluated.²²¹

4.19 Further, Alluvium Consulting Australia noted the NSW Government's investment in various data sets and evidence, and found its approaches to have demonstrated 'robustness and consistency' across the valleys where modelling has been completed.²²²

4.20 Similarly, Mr Michael Murray, General Manager, Cotton Australia, acknowledged that, while models may never be 'good enough' with scope for further refinement, the significant work and resources directed at the current model has provided the wealth of data available today:

I do not think you can overstate just how much work has gone into this process compared to any other process if it was a State-based process around licensing. Yes, modelling is never good enough. Gauging is never good enough. Data is never good enough. But there is far, far more available today after spending—and I am not sure whether the number is \$17 million, \$20 million or \$57 million on this process ... But there has been a huge amount of work done.²²³

4.21 Mr Tim Napier, Executive Officer of Border Rivers Food and Fibre, Mr Brendan Griffiths, Vice Chair of Border Rivers Food and Fibre and Ms Christine Freak, Policy Manager of the

²¹⁹ Submission 84, NSW Government, p 6.

²²⁰ Submission 84, NSW Government, p 6.

²²¹ Submission 35, Alluvium Consulting Australia, p 5.

²²² Submission 35, Alluvium Consulting Australia, p 5.

²²³ Evidence, Mr Michael Murray, General Manager, Cotton Australia, 24 September 2021, p 29.

NSW Irrigators' Council expressed a similar point, recognising that the available models provide a starting point for actuals to be gathered for refinement.²²⁴

- 4.22** Others raised concerns about the transparency and accuracy of the NSW Government's modelling framework. In his submission, Professor Richard Kingsford from the Centre for Ecosystem Science at the University of NSW, wrote of the importance of accurate and transparent modelling:

The management of rivers and restricting diversions to Murray-Darling Basin Cap levels is achieved by using a model and updating the model with new information. An important element is how such data is used to manage and inform the modelling resulting in changes to access to flows if diversions exceed a Basin Diversion Limit and requirements of the floodplain where this water floods, including servicing users on the extremities of floodplains. Currently these relationships are not transparent or clear in relation to what data is currently used to make decisions about basin diversion limits.²²⁵

- 4.23** Professor Kingsford provided an example in his submission of widely divergent estimates for the extent of floodplain harvesting and storages in the Gwydir Valley, ranging from 17,700 megalitres per year as estimated in 2012 by the Murray-Darling Basin Authority to 80,000 megalitres per year in the NSW water sharing plan. He explained why this is an issue:

These differences matter. The disparity between estimates erodes public confidence and rigour. These are also the type of estimates that are being used to determine the diversion limits for a river valley and could be used to identify the volume of water to be provided to irrigators in their floodplain licences. It underlines the importance of transparency and the need for good information for water resources, a public resource, before they are provided to users.²²⁶

- 4.24** The Wentworth Group of Concerned Scientists and Environmental Defenders Office asserted that a number of factors cast doubt on the accuracy of model estimates for entitlement volumes and extraction limits. Uncertainties raised by them include:

- the model's lack of account for return flows²²⁷
- limited input data including lack of historically measured floodplain harvesting take and incomplete information of floodplain structures in 1994²²⁸
- lack of sensitivity analysis to enable an understanding of the impacts of climate change²²⁹

²²⁴ Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre and Mr Brendan Griffiths, Vice Chair, Border Rivers Food and Fibre, 20 September 2021, p 15.

²²⁵ Submission 73, Centre for Ecosystem Science UNSW Sydney, p 11.

²²⁶ Submission 73, Centre for Ecosystem Science UNSW Sydney, p 12.

²²⁷ Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, p 4.

²²⁸ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 6.

²²⁹ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 6.

- limited independent peer review of the model.²³⁰

4.25 In particular, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Scientists, suggested that the models had a consistent overestimation of flow. Dr Rocheta acknowledged that all models contain error but argued that this was all the more reason for regular validation of the models:

... after the model gets validated and accredited by an accrediting authority, there is no additional public transparency or reporting on annual model errors ...

We are of the opinion that annual validation of the model—so comparing how the model simulates river flows against observed river flows and a few other validations of outputs from the model—will provide significant transparency and accountability of the modelling to make sure that they are simulating reasonably.²³¹

4.26 The committee received evidence that the Wentworth Group of Concerned Scientists had requested access to the models and that DPIE declined this request. The Wentworth Group was offered a meeting with DPIE modellers instead, at which the group's concerns were substantiated, according to Dr Rocheta.²³²

4.27 In their submission Slattery and Johnson raised concerns that new water sharing plans would not include a gazetted model run, the volume of the plan or the volume of the sustainable diversion limit resulting in no legislated, quantified limit to extractions in NSW legislation.²³³

4.28 Mr Grant Rigney, Chair and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations (MLDRIN) informed the committee that MILDRIN's executive board had a presentation by DPIE on the modelling where the board expressed major concerns, including that climate change had not been factored into the modelling:

One of the key questions that was asked from our board was: Where was the climate adaptation processes incorporated into the modelling? We were told categorically that they had not done that and they were not looking to do that. The modelling around climate adaptation was going to be processed through the regional water strategies, which we found was a bit of a difficult process, considering that they had not incorporated into the floodplain harvesting itself, and how that might equate down the track if they were going to do that process through the regional water strategies themselves—how would that actually feed back into the floodplain harvesting itself? So we found some real discrepancies in that space.²³⁴

4.29 Ms Beverley Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and a member of the Inland Rivers Network, also identified what she

²³⁰ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 6.

²³¹ Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, p 4.

²³² Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, p 10.

²³³ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 24.

²³⁴ Evidence, Mr Grant Rigney, Chair and Citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations, 22 September 2021, p 40.

considered weaknesses in the NSW Government's modelling. For example, Ms Smiles believed that the hydraulic modelling had been seemingly developed separately from the floodplain management plans, resulting in two processes appearing to be 'separate and disconnected'.²³⁵

- 4.30** Of particular concern to Ms Smiles was her contention that the modelling process – and broader NSW Floodplain Harvesting Policy – favoured the interest of irrigators. According to Ms Smiles, the modellers engaged with the irrigation industry significantly more than the Nature Conservation Council, who had limited consultation with the peer reviewer and departmental officials.²³⁶
- 4.31** In its independent review, Alluvium Consulting Australia also commented on areas for improvement in the modelling framework, particularly in relation to transparency and community engagement. Alluvium found that stakeholder engagement regarding the modelling was largely top-down, leading to 'distrust of the development process' and the inability of stakeholders to 'understand the choices made by the modellers...'.²³⁷ Alluvium subsequently recommended that the NSW Government provide more open access to its models, with 'greater transparency about the science, the methods, the data and the assumptions used and the corresponding uncertainties'.²³⁸

Cap vs cap scenario

- 4.32** As outlined previously, the Murray-Darling Basin 'Cap' limits average long-term take to the volume of water that could have been taken with the infrastructure and rules as applied in 1993-1994. The baseline conditions for the Cap are represented in a hydrological model for each valley developed through a formal process under the *Murray-Darling Basin Agreement and the Water Act 2007* (Cth). This model is known as the 'official cap'.²³⁹
- 4.33** An important issue that was closely examined during the inquiry was the use by the Department of Planning, Industry and Environment (DPIE) of what it termed a 'cap scenario' in its modelling framework rather than the official Cap model described above.
- 4.34** Slattery and Johnson contended that DPIE's use of the cap scenario model was highly problematic for two reasons. Firstly, that the cap scenario constitutes a change to the Murray-Darling Basin Plan outside the agreed process, and secondly that by using the cap scenario which was higher than the Cap, levels of extraction appear within the legal limit, when it in fact exceeds it.²⁴⁰

²³⁵ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 3.

²³⁶ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 3.

²³⁷ Submission 35, Alluvium Consulting Australia, p 4.

²³⁸ Submission 35, Alluvium Consulting Australia, p 5.

²³⁹ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 15.

²⁴⁰ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 16.

- 4.35** Mr Dan Connor, Director – Healthy Floodplains Project, DPIE, described the cap scenario as a 'revised modelling process' developed in response to the 'dated Cap'. He asserted that the expected levels of extraction under the cap scenario are significantly smaller than the diversions under the original Cap:

The cap is the oldest, the first and the least stringent of all of the legal limits that are in place across the State at the moment... since cap accounting started in 1995 we have taken across New South Wales 10,000 gigalitres less water than what those limits intended would be delivered according to the accredited cap models at that time.²⁴¹

... [A]ccredited cap models give diversion volumes that are nearly 100 gigalitres larger than the models that we are putting forward as part of this process—the revised modelling process.²⁴²

- 4.36** Mr Connor acknowledged that the cap scenario model has not yet been accredited but advised it is the NSW Government's intention to include this as part of its submission of the Water Resource Plans.²⁴³

- 4.37** Several inquiry participants expressed support for the DPIE's cap scenario model. For example, Ms Zara Lowien, a member of Barwon-Darling Water, stated that, in her view, 'there is no difference between the cap and the cap scenario' other than the date of the data relied upon. Further, Ms Lowien argued that the approach is consistent with other jurisdictions, and responded to concerns that the cap scenario is an attempt to mislead by stating that 'no one is trying to hoodwink anyone':

The cap ... is a scenario which is determined through a required set of inputs into a hydrological model and that outcome ... [T]heir modelling results have not been updated. In fact, some of those numbers from 2012 are the current estimates of floodplain harvesting take. But that new information is due to come for both the Namoi and the Barwon-Darling shortly, in the next few months. Where we have seen those model outputs change in some of those valleys, like for Gwydir, it does not mean that there is more water. No-one is trying to hoodwink anyone. Every State has updated their cap and their BDL since 2012—every State.

My question is do you want New South Wales to lock in information set in 2012 and ignore the Commonwealth investment in the Healthy Floodplains program, or do you want to take on that new information and make the best decisions you can with it?

... What we have seen here is an investment in the northern basin to have that reflected ... and we need to take that on board and take that on board consistently.²⁴⁴

- 4.38** This view that the cap scenario constitutes an update of the latest data was supported by representatives of the NSW Irrigators' Council, who pointed out the expectation that modelling

²⁴¹ Evidence, Mr Dan Connor, Director, Healthy Floodplain Project, Department of Planning, Industry and Environment, 24 September 2021, p 45.

²⁴² Evidence, Mr Dan Connor, Director, Healthy Floodplain Project, Department of Planning, Industry and Environment, 24 September 2021, p 45.

²⁴³ Evidence, Mr Dan Connor, Director, Healthy Floodplain Project, Department of Planning, Industry and Environment, 24 September 2021, p 45.

²⁴⁴ Evidence, Ms Zara Lowien, Member, Barwon-Darling Water, 20 September 2021, pp 25-26.

outputs would change with better information becoming available, hence the significant investment.²⁴⁵

- 4.39** When asked to confirm if the cap scenario model would result in extraction above the legal limit, Ms Maryanne Slattery, Director of Slattery and Johnson, unequivocally stated that this would be the case:

Yes, that is correct. It is certainly the case for the Gwydir—the cap scenario is much higher than the cap. DPIE—the New South Wales department—have said, 'We have this high level of floodplain harvesting, we are bringing it back to cap', when actually they are increasing cap by quite a substantial amount.²⁴⁶

- 4.40** Indeed Slattery and Johnson disputed DPIE's proposition that the official cap is higher than what the Department is proposing in their cap scenario,²⁴⁷ with Ms Slattery contending that the approach has no integrity and is being used to mislead:

I do not think it has any integrity and it is clearly the Government's intent to mislead this process to state that we are within cap—that they are bringing licensing back within cap—when it is clearly not. I think it has absolutely no integrity.²⁴⁸

- 4.41** In addition, Ms Slattery believed there is concern and division within DPIE over the use of the cap scenario model in a public context.²⁴⁹ She was also not aware of any other states pursuing an alternative model akin to the cap scenario model.²⁵⁰

Adjustment to the Baseline Diversion Limit and the Sustainable Diversion Limit

- 4.42** As noted earlier in the chapter, the Sustainable Diversion Limit (SDL) replaced the Murray-Darling Basin Cap system in 2019, with processes underway in New South Wales to transition to a complete replacement of the Cap with the SDL under the Basin Plan.
- 4.43** Under Schedule 2 of the Murray-Darling Basin Plan, a fixed relationship exists between the Baseline Diversion Limit (BDL) and the SDL, as demonstrated in Figure 2.

Figure 3 Formula expressing the SDL for a particular surface water SDL resource unit²⁵¹

$$SDL = BDL - \left(\frac{\text{local reduction amount}}{\text{reduction amount}} \right) - \left(\frac{\text{SDL resource unit shared}}{\text{reduction amount}} \right) + \left(\frac{\text{SDL adjustment amount}}{\text{reduction amount}} \right)$$

²⁴⁵ Evidence, Ms Christine Freak, Policy Manager, NSW Irrigators' Council, 24 September 2021, p 24.

²⁴⁶ Evidence, Ms Maryanne Slattery, Director, Slattery and Johnson, 20 September 2021, p 34.

²⁴⁷ Answers to supplementary questions, Slattery and Johnson, 2 November 2021, pp 3-5.

²⁴⁸ Evidence, Ms Maryanne Slattery, Director, Slattery and Johnson, 20 September 2021, p 34.

²⁴⁹ Answers to supplementary questions, Slattery and Johnson, 20 September 2021, p 3.

²⁵⁰ Evidence, Ms Maryanne Slattery, Director, Slattery and Johnson, 20 September 2021, p 35.

²⁵¹ Schedule 2, Murray Darling Basin Plan

- 4.44** In 2019, the Murray-Darling Basin Authority (MDBA) released its Floodplain Harvesting Position Statement. According to the position statement, it is expected that the BDL for valleys where floodplain harvesting occurs may change as new information becomes available. The statement explains:
- Better measurement of floodplain harvesting will enable more precise quantification of the volume of water diverted by existing structures. When a new and better understanding of the volume of floodplain harvesting is determined it is likely that the baseline diversion limit for valleys where floodplain harvesting is occurring will change. Where this results in an increase this does not mean that there has been growth in floodplain harvesting. A change in the estimates of the baseline diversion limit simply reflects a more precise and certain volume of what was already legally being taken.²⁵²
- 4.45** The position statement further advises that where this change results in an increase 'this does not mean that there has been growth in floodplain harvesting', rather a change in the estimates of BDL 'simply reflects a more precise and certain volume of what was already legally being taken'.²⁵³
- 4.46** During the inquiry, numerous stakeholders commented on the commensurate shift in the SDL as a result of changes to the BDL, expressing strong objection to the MDBA's position of a fixed relationship between the two whereby an increase in the BDL could result in an increase in the SDL. These stakeholders saw the MDBA's position as an abrogation of the original intention of the SDL, which is to reflect an environmentally sustainable level of take.²⁵⁴
- 4.47** For example, Dr Martin Mallen-Cooper, Adjunct Research Professor of Charles Sturt University, explained that the SDL was developed as an independent concept that represented 'what the environmentally sustainable level of take is'.²⁵⁵ In his submission, Dr Mallen-Cooper explained that the BDL 'is not ... an estimate of available water for diversions', but an estimate of diversions at a point in time, which is applied to calculate the volume of water recovery required to reach the Sustainable Diversion Limit.²⁵⁶
- 4.48** Similarly, Mr William Johnson, Director, Slattery and Johnson contended that the SDL was intended to be a reflection of the environmental needs of rivers and wetlands and not fixed to the BDL. He argued that 'they were two completely different processes'.²⁵⁷
- 4.49** Dr Emma Carmody, Managing Lawyer – Freshwater, Environmental Defenders Office, also questioned this relationship between the BDL and SDL, stating: 'My view is that an SDL must

²⁵² Submission 32, Murray-Darling basin Authority, p 10.

²⁵³ Submission 32, Murray-Darling basin Authority, p 10.

²⁵⁴ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 19.

²⁵⁵ Evidence, Dr Martin Mallen-Cooper, Adjunct Research Professor, Institute for Land, Water and Society, Charles Sturt University, 22 September 2021, p 13.

²⁵⁶ Evidence, Dr Martin Mallen-Cooper, Adjunct Research Professor, Institute for Land, Water and Society, Charles Sturt University, 22 September 2021, p 13.

²⁵⁷ Evidence, Mr William Johnson, Director, Slattery and Johnson, 20 September 2021, p 38.

always reflect an environmentally sustainable level of take ... if we simply increase it, how can that be reflective of an environmentally sustainable level of take?'.²⁵⁸

4.50 When asked about the ramifications of a fixed SDL-BDL relationship, Slattery and Johnson argued that there are significant environmental and legal principles at stake:

The idea that it is best available information, there is no criteria for what that best available information is. There is no arbiter on who gets to decide what information is better or not... I also think it is a misinterpretation of the Water Act ... That means that a requirement for the water resource plan would effectively be overriding the requirement of the Water Act, which seems to contradict legal principles.²⁵⁹

4.51 Slattery and Johnson raised concerns over changing baseline diversion limits on the basis of 'best available information' in a Water Resource Plan as these plans would override the legislative description of baseline diversion limits in Schedule 2 of the Basin Plan despite the plans themselves not being a legislative instrument.²⁶⁰

4.52 Slattery and Johnson also raised concerns about the test of what constitutes 'best available information' quoting a Senior Department of Planning, Industry and Environment officer's email to a colleague:

You might have a list of 10 things you know are wrong with the model, fix one of them and it is still an improved model even with 9 other things you know are wrong still. A model doesn't even have to qualify to be fit for purpose to qualify as best available information.²⁶¹

4.53 Slattery and Johnson's report also queried whether including floodplain harvesting volumes within baseline diversion limits would be consistent with the method for calculating those limits as defined in the Basin Plan:

The Basin Plan describes the method for calculating baseline diversion limits for regulated rivers and floodplain water harvesting as:

- a) summing the quantity of water that would have been taken by those forms of take for each year of the historical climate conditions under State water management law as at 30 June 2009; and
- b) dividing that quantity by all of the years of the historical climate conditions.

As at 30 June 2009 (or 1 July 2010 in the Namoi):

- there were no floodplain water harvesting shares in the Water Sharing Plans, and

²⁵⁸ Evidence, Dr Emma Carmody, Managing Lawyer – Freshwater, Environmental Defenders Office, 20 September 2021, p 6.

²⁵⁹ Evidence, Ms Maryanne Slattery, Director, Slattery and Johnson, 20 September 2021, p 36.

²⁶⁰ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 18

²⁶¹ Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 18

- there were no floodplain water harvesting licences.²⁶²

4.54 In an exchange with the Hon Adam Searle MLC, Mr Tim Horne – representing Horne Legal and Southern Riverina Irrigators – argued that while floodplain harvesting without a licence does not constitute an offence under the *Water Management Act 2000*, the use of a work to floodplain harvest was unlawful on the dates the Murray-Darling Basin Cap and the Baseline Diversion Limits were respectively established and therefore cannot be legally incorporated into either of those limits:

The Hon. ADAM SEARLE: Section 393 of the Water Management Act 2000, in New South Wales, essentially abolishes all common law rights to water and vests them in the State. That is correct, isn't it?

Mr HORNE: That is correct, Mr Searle.

The Hon. ADAM SEARLE: So unless there is an express authorisation by the State, you are not permitted to take water, for example, in the way that floodplain harvesting is occurring. That is correct, isn't it?

Mr HORNE: That is correct. And all water vests in the State under section 392 (2) of the Water Management Act.

The Hon. ADAM SEARLE: So if it is not authorised or permitted or licensed, it may not be an offence under section 60A but, nevertheless, it is not lawful in your view?

Mr HORNE: That is correct.

The Hon. ADAM SEARLE: Under the Water Act 1912 it was possible to be licensed to engage in floodplain harvesting. Is that correct?

Mr HORNE: That is correct. The licensing provision—

The Hon. ADAM SEARLE: Yes, but no licences were ever issued to your knowledge. Is that correct?

Mr HORNE: With respect to floodplain harvesting, no.

The Hon. ADAM SEARLE: And under that Act it was simply an offence to engage in floodplain harvesting without a licence, wasn't it?

Mr HORNE: That is correct. It was an offence. It was not an offence to receive water but if you used a work to impound water for use later for something such as irrigation, that was an offence under section 21B (1) (a) of the Water Act.

The Hon. ADAM SEARLE: But that Act is no longer in place, is it?

Mr HORNE: That Act still continues in part two of that Act.

The Hon. ADAM SEARLE: It does. Okay. But as at 30 June 2009, which is the time at which the cap under the Murray-Darling Basin Plan kicks in, to your knowledge there

²⁶² Submission 146, Slattery and Johnson, Attachment B – 'Licensing floodplain harvesting in Northern NSW: analysis and implications', p 18

was no licence or authorisation or legal permission to expressly allow floodplain harvesting in New South Wales?

Mr HORNE: That is correct, Mr Searle.

The Hon. ADAM SEARLE: So that means that the volumes of water that are authorised under the Murray-Darling Basin Plan cannot include floodplain harvesting amounts?

Mr HORNE: Not in its current form, no, unless there is an equal offsetting of volume or reduction in another form of take such as general security or high security.

The Hon. ADAM SEARLE: But absent that, floodplain harvesting simply cannot be counted within the cap in the Murray-Darling Basin Plan.

Mr HORNE: That is correct.

The Hon. ADAM SEARLE: And any action by the New South Wales Government to legislate to authorise that in some way would be contrary to the Murray-Darling Basin Plan and the Federal Water Act.

Mr HORNE: That is correct.

The Hon. ADAM SEARLE: And therefore, in that sense, would be unlawful.

Mr HORNE: That is correct, Mr Searle, yes.²⁶³

4.55 Doubts about the legal basis of the MDBA's position were also raised by Mr Bret Walker AO SC. When asked about the MDBA's Floodplain Harvesting Position Statement which says:

When a new and better understanding of the volume of floodplain harvesting is determined it is likely that the baseline diversion limit for valleys where floodplain harvesting is occurring will change. Where this results in an increase this does not mean that there has been growth in floodplain harvesting. A change in the estimates of the baseline diversion limit simply reflects a more precise and certain volume of what was already legally being taken.²⁶⁴

4.56 Mr Walker responded:

They dodge the central question, which has to do with the allocation between the protection or rehabilitation of the hydrological system against the historical consensus among governments that we—that is, the people—have been taking too much.

The MDBA, not for the first time, does not explain the legal reasoning by which the statement you have read would have any effect in terms of administration. If it means that the SDL floats around by reason of better intelligence being found, then that is simply wrong. The law stipulates otherwise concerning the adjustment of an SDL.²⁶⁵

²⁶³ Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 20.

²⁶⁴ Submission 32, Murray-Darling Basin Authority, p 10.

²⁶⁵ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 5.

- 4.57** Indeed, in his report as Commissioner of the South Australian Murray-Darling Basin Royal Commission, Mr Walker had found that the MDBA's proposal to increase SDLs by reference to increases to BDLs was ultimately 'unjustifiable':

The Water Act intrinsically links SDLs to the ESLTs [environmentally sustainable level of take] for each water resource area (SDLs must reflect an ESLT). The Water Act does not mention BDLs at all...The ESLT must be established independently from consumptive use, not because of it.²⁶⁶

- 4.58** The committee heard that the Southern Riverina Irrigators (SRI) received legal advice on this issue, which was obtained from Mr Walker and Mr Sebastian Hartford-Davis. Commenting on the MDBA's position on the adjustability of the BDL, the advice determined that increasing the BDLs and SDLs without making an amendment to the Murray-Darling Basin Plan 'is unlawful':

The BDLs and the SDLs (being volumes calculated in accordance with the formulae in the Basin Plan) cannot be adjusted otherwise than by following the prescribed processes for amendment in the Water Act and Basin Plan.

...

The BDL, which is not a concept that appears in the Water Act, is being put to a purpose (calculating the SDL) which is the subject of specific statutory proscription by the Water Act. Accordingly, the BDL's role in the formula for calculating the SDL will only be legally valid to the extent that it operates to produce the statutorily mandated outcome for the SDL. That is, it must operate so as to produce a "limit on take", which is "environmentally sustainable". It could not, consistently with the Water Act, operate otherwise than as a "limit", or in a way that was not "environmentally sustainable". For these reasons, in our opinion, it should not be interpreted as a figure able to be adjusted by States from time to time, without amending the Basin Plan, because this would otherwise produce the result (in the calculation of the SDL formula) that the SDL would no longer be taken to reflect the "environmentally sustainable level of take".²⁶⁷

- 4.59** The advice thus concluded that, with respect to a proposed licensing framework, any regulation seeking to license floodplain harvesting inconsistently with the current SDLs may be vulnerable to legal challenge:

To the extent that the NSW Department of Planning, Industry and Environment (DPIE), by regulation or other legislative instrument, purports to license floodplain harvesting inconsistently with the SDLs as currently calculated, then that regulation may be vulnerable to challenge on the basis of inconsistency under s 109 of the Constitution (Cth), with the Basin Plan or the Water Act 2007 (Cth).²⁶⁸

...

A State licensing regime that was inconsistent with (because it purported unlawfully to increase, or assumed an unlawful increase) the SDL established in the Basin Plan would arguably be inconsistent with the Basin Plan under s 109 of the Constitution.²⁶⁹

²⁶⁶ Commissioner Bret Walker SC, *Murray-Darling Basin Royal Commission* Report, 29 January 2019, p 605.

²⁶⁷ Supplementary Submission 149a, Southern Riverina Irrigators, pp 1 and 6.

²⁶⁸ Supplementary Submission 149a, Southern Riverina Irrigators, p 1.

²⁶⁹ Supplementary Submission 149a, Southern Riverina Irrigators, p 7.

- 4.60** Moreover, the advice stated that section 35(1) of the *Water Act 2007* (Cth) prohibits agencies of a Basin State (including DPIE) from 'doing an act in relation to Basin water resources if it is inconsistent with the Basin Plan, or fail to do an act in relation to Basin water resources if the failure to that act is inconsistent with the Basin Plan'. The advice noted that to amend the SDL inconsistently with the Basin Plan would 'infringe this prohibition'.²⁷⁰
- 4.61** When asked about the findings of the South Australian Murray-Darling Basin Royal Commission, Ms Claire Miller, Chief Executive Officer of the NSW Irrigators' Council, asserted that it opened a 'very labyrinthine and deep legal argument', but that ultimately the formula for the BDLs and SDLs under the Basin Plan was 'an agreed process that is nearly 10 years old that all States and the Commonwealth signed up to' and no state has 'walked away from'.²⁷¹
- 4.62** Mr Connor of DPIE acknowledged that the Basin Plan describes a fixed relation between BDLs and SDLs but maintained that the setting of these limits is outside the remit of the NSW Government:

To the extent that the basin plan, as it is currently written, describes a fixed relationship between BDLs and SDLs, that is the process that we understand will happen at the Commonwealth's end. It is not a process for New South Wales. To be really clear, we do not have the remit to revise SDLs. That is in the ballpark of the Commonwealth.²⁷²

- 4.63** In February 2019, the Murray-Darling Basin Authority published a formal response to the South Australia Royal Commission. In its response, the Murray-Darling Basin Authority disagreed with the Royal Commission's findings in relation to the fixed relationship between the BDL and SDL, stating:

The SDL is set out in Schedule 2 of the Basin Plan for each SDL resource unit and is expressed as the BDL less the specified amount of water recovery. The BDL is an estimate of how much water was used in the Basin before the Basin Plan. It is described in Schedule 3 of the Basin Plan for each SDL resource unit, and generally represents the level of water use allowed under state law in 2009...

As the SDLs and BDLs are linked, any change to the BDL will result in a change to the SDL.²⁷³

Floodplain harvesting structures and works

- 4.64** Another significant issue raised in relation to water extraction levels under a licensing regime was the capacity to floodplain harvest in northern New South Wales catchments.²⁷⁴ While the NSW Government and representative irrigators maintained that a growth in storage capacity does not equate to growth in take, others insisted that the significant growth in water storage capacity in the Northern Basin since 1994 led to a correlated growth in extraction.

²⁷⁰ Supplementary Submission 149a, Southern Riverina Irrigators, pp 7-8.

²⁷¹ Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 24 September 2021, p 24.

²⁷² Evidence, Mr Dan Connor, 24 September 2021 p 52.

²⁷³ Murray-Darling Basin Authority, *MDBA response to the South Australian Royal Commission*, February 2019, pp 43-44

²⁷⁴ Submission 295, Fenner School of Environment and Society, ANU and Slattery and Johnson, p 1.

4.65 According to Mr Tim Napier, Border Rivers Food and Fibre, there are many reasons other than floodplain harvesting for people to develop storages.²⁷⁵ For example, Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre, advised that he had a storage facility built on his property 'way of out of the floodplains' stating: 'It has got nothing to do with floodplain harvesting; it is simply there as a management buffer for us'. He explained:

Remember, a lot of us have to order our irrigation water 10 days ahead of when we expect to use it. So if we cop a storm, a rainfall event, whatever, we are still expected to take that water. The reverse is if we are running late on an order, if a heatwave comes through and the crop needs more water or earlier than we thought, we also need to have water on hand to be able to satisfy those crop demands. So most of the storages in the Macquarie are actually used as buffer storages for irrigation management, and a lot of them are not big enough to be of particular use for floodplain harvesting.²⁷⁶

4.66 Indeed, these inquiry participants argued that storages have multiple uses, noting that these uses are managed by their licences rather than the size of infrastructure and the expense to pump water through the storages.²⁷⁷ Mr Daniel Kahl, Board Member of Namoi Water, echoed this point and emphasised that storages have been encouraged as a way to improve on-farm efficiency.²⁷⁸

4.67 Dr Matthew Colloff of the Fenner School of Environment and Society, ANU, however, maintained there was indeed a correlation between growth in storage and floodplain harvesting. To demonstrate, Dr Colloff referred to a study he had conducted which found that storage capacity in the catchments had risen from 557 gigalitres in 1993-94 to 1,067 in 1999-2000, 1,225 in 2008-09 and then to 1,393 gigalitres in 2019-20. Dr Colloff also provided an estimate of annual floodplain harvesting to be around 778 gigalitres per annum over the same period.²⁷⁹ Dr Colloff's estimate was amongst a number of estimates provided to the committee on annual floodplain harvesting take.²⁸⁰

4.68 Based on these findings, Dr Colloff argued that the volume of floodplain harvesting in New South Wales is not compliant with the Cap, and that the magnitude of floodplain harvesting appears to have been underestimated by the agencies responsible for the Murray-Darling Basin Plan.²⁸¹

²⁷⁵ Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, 20 September 2021, p 15.

²⁷⁶ Evidence, Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre, 20 September 2021, p 15.

²⁷⁷ Evidence, Mr Michael Drum, Executive Officer, Macquarie Food and Fibre 20 September 2021, p. 16; Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre Inc, 20 September 2021, pp. 13 and 16; see also Submission 50, NSW Irrigators' Council, p. 16.

²⁷⁸ Evidence, Mr Daniel Kahl, Board Member, Namoi Water, 20 September 2021, pp 24-25

²⁷⁹ Submission 285, Fenner School of Environment and Society, ANU and Slattery and Johnson, p 1.

²⁸⁰ For other examples, see: Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 23; Answers to Supplementary Questions, Department of Planning, Industry and Environment, 1 November 2021, p 2.

²⁸¹ Submission 285, Fenner School of Environment and Society, ANU and Slattery and Johnson, p 11.

4.69 Dr Colloff supported his findings with a further study that found a 'direct correlation between on-farm storage development and decreased inflows and catchment water yield'.²⁸² Others also referred to Dr Colloff's work or supported the view that the long term increase in storage capacity for floodplain harvesting had led to reduced flows downstream and connectivity across the Murray-Darling Basin.²⁸³

4.70 Ms Slattery also added that DPIE had used storage capacity to determine floodplain harvesting entitlements:

The other reason we were looking at storages is because at that time DPIE was using the amount of storages as a way to determine the shares of how floodplain harvesting licences would be apportioned. So it was very close to the logic that the department was using. There is 20 years' worth of documentation about the relationship between the capacity to take floodplain harvesting water and the size of storages.²⁸⁴

4.71 In addition to the correlation between storage capacity and take, the committee also received evidence raising other concerns regarding floodplain harvesting structures.

4.72 For example, Dr Rocheta, Wentworth Group of Concerned Scientists, identified four areas of concern with respect to floodplain structures which he contended the licensing regime did not address:

- the failure to consider passive take
- the fact that there are a range of unlawful structures which continue to be present on floodplains
- the need to consider flow diversion by structures and its implications
- structures which fall outside of the NSW Floodplain Harvesting Policy also intercept and corral water flowing across flood plains.²⁸⁵

4.73 Ms Smiles from the Inland Rivers Network also raised concerns about floodplain harvesting structures and the absence of any assessment of their impact on natural flows. She explained:

One of the three main flood flows into the Macquarie Marshes has quite a significant amount of floodplain harvesting structure on it. There has been no assessment of how those structures actually impede natural flows into the marshes. That is the issue with floods. The actual natural flows, with all the nutrients and all the requirements that fish breeding needs, getting that water to the wetlands that tend to be at the bottom of the system, we have already had major capture in the storages.²⁸⁶

²⁸² Submission 285, Fenner School of Environment and Society, ANU and Slattery and Johnson, pp 12-13.

²⁸³ See for example Submission 30, Wentworth Shire Council, pp 3 and 4; Submission 33, Australian Floodplains Association, p 1; Submission 57, Southern Connected Basin Communities, p 4; The Australia Institute, p 6; Submission 60, Wentworth Group of Concerned Scientists and Environmental Defenders Office, p 1; Submission 149, Southern Riverina Irrigators, pp 2 - 3.

²⁸⁴ Evidence, Ms Maryanne Slattery, Director, Slattery and Johnson, 20 September 2021, p 34.

²⁸⁵ Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, pp 4-5.

²⁸⁶ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 5.

- 4.74** In regard to illegal structures, the inquiry found there was agreement among all stakeholders – irrespective of their position on the practice and licensing of floodplain harvesting – that they should be removed or decommissioned. For example, Mr Cole of Barwon-Darling Water and Mr Kahl of Namoi Water shared the view of the Wentworth Group of Concerned Scientists that any illegal structure should be decommissioned and noted that there are precedents of this.²⁸⁷
- 4.75** Ms Smiles also outlined in her evidence how some floodplain harvesting entitlements were being granted on the basis of unapproved works:
- I outlined my concerns in regard to illegal works in a report to the deputy secretary... I asked, "Were unapproved works included in the model?", the project manager, responded, "Yes, used in the model if they meet the three criteria for eligible works in the Floodplain Harvesting Policy. Where the works are not approved by NRAR, they may need to be modified or decommissioned. The landholder then has the option of trading their floodplain harvesting rights." It is clear that entitlement will be granted for works that should be removed. I feel this is entirely unsatisfactory and it must be addressed before the process can proceed to granting new licences.²⁸⁸
- 4.76** The NSW Government also confirmed this as an area of priority for the Natural Resources Access Regulator, with work underway to secure funding to help deliver an accelerated compliance program for unapproved flood works in the northern basin. The NSW Government submission stated that the program would remove or modify floodplain structures so that they are compliant with floodplain management plans and approval conditions to improve hydraulic connectivity to flood-dependent environmental and cultural assets. The inquiry received evidence that the NSW Government is hoping to commence this program in late 2021.²⁸⁹

Metering and measuring floodplain harvesting activity

- 4.77** Relevant to determining water volumes is the issue of metering and measuring floodplain harvesting activity, which was also raised by stakeholders during the inquiry. The following section discusses this issue, with particular reference to some concerns about approach and delivery.
- 4.78** According to Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator (NRAR), NRAR possesses the capacity to detect 'the movement of water, the extraction of water, the storage of water and the use of water' with a high degree of accuracy, as demonstrated in NRAR's monitoring of temporary water restrictions as the drought began to break.²⁹⁰

²⁸⁷ Evidence, Mr Ian Cole, Executive Officer, Barwon-Darling Water, 20 September 2021, p 25; Evidence, Mr Daniel Kahl, Board Member, Namoi Water, 20 September 2021, pp 24-25.

²⁸⁸ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 5.

²⁸⁹ Submission 84, NSW Government, p 7.

²⁹⁰ Evidence, Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator, 24 September 2021, p 9.

- 4.79** DPIE supported NRAR's capacity to meter and measure, confirming that NRAR could employ a range of technologies to detect water in a storage and collect 'real-time, accurate, reliable, verifiable data being supplied back that is within a centimetre accuracy'.²⁹¹
- 4.80** Others also shared this confidence in current measurement approaches, with Mr Andrew Watson, Board Member of Namoi Water, stating that recent reform has introduced a very high standard of measurement.²⁹² Similarly, several irrigators associations believed that the modelling and measurement approaches had reached a point where they could only be further be improved and refined through actual data.²⁹³
- 4.81** The committee also received evidence, however, of various issues raised by water users with the metering and measurement. For example, a common concern was the need for better measurement of the water system.
- 4.82** Ms Strachan of the South West Water Users, for example, maintained that farmers in general know 'exactly how much diesel, fertiliser, fuel, water they are putting on per hectare', while the government 'cannot be as accurate in all of their measurement of take or transporting water through the river'.²⁹⁴
- 4.83** Professor Richard Kingsford stressed that all floodplain harvesting works need to be licensed and metered stating:
- The NSW Water Reform Action Plan needs to have a 'no meter, no pump' rule as recommended by the Matthew's report (Matthews 2017). This includes diversions of flows from the floodplain, capture of flows down creeks and 10 rainfall capture. This can be done using meters on pumps into storages (part of the NSW policy, ie point of intake). However, flows could still be diverted to bypass these storages if timed for when a particular crop requires water. There is a need to measure this volume which could be possible by estimating water use by crops or monitoring with Sentinel satellite imagery.²⁹⁵
- 4.84** Similarly, Mr Napier, Border Rivers Food and Fibre, noted that gauges were only installed on main trunk streams on the Barwon and the Darling. He argued that while this arrangement may have been considered adequate in the past, this could no longer be the case given the sophistication of the technology available today and the objectives of the Basin Plan.²⁹⁶
- 4.85** Mr Napier also referred to the lack of coherence in ownership of measuring and metering equipment, with some gauges in his local area being owned by the Bureau of Meteorology, while

²⁹¹ Evidence, Mr Dan Connor, Director, Healthy Floodplains Project, Department of Planning, Industry and Environment, p 46.

²⁹² Evidence, Mr Andrew Watson, Board Member, Namoi Water, 20 September 2021, p 24.

²⁹³ Evidence, Ms Zara Lowien, Members, Barwon-Darling Water, 20 September 2021, p 24, Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 24 September 2021, pp 21-22.

²⁹⁴ Evidence, Ms Rachel Strachan, Vice Chair, South Western Water Users Association, 22 September 2021, p 22.

²⁹⁵ Submission 73, Centre for Ecosystem Science UNSW Sydney, pp 9-10.

²⁹⁶ Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, 20 September 2021, p 14.

others were owned by the local councils or the state authority. The committee received evidence that this often translated to different standards of measure.²⁹⁷

- 4.86** Furthermore, Mr Quigley, Macquarie River Food and Fibre, advised that procuring and installing measurement equipment is a resource and time intensive process.²⁹⁸ Mr Kahl, Namoi Water, shared this view, noting the challenges with sourcing equipment and then engaging qualified people for installation.²⁹⁹

Water accounting method

- 4.87** Another relevant aspect to floodplain harvesting volume is the proposed water accounting method, in particular the 500 per cent carry over rule, which was discussed by numerous stakeholders.

500 per cent carry over rule

- 4.88** The NSW Government proposes using five-year accounting rules for floodplain harvesting under the draft water sharing plan rules. In essence, a five year accounting period means that any entitlement not used in a year can be rolled over to the next, with the ability to accrue a total maximum annual volume of 500 per cent or 5 ML per unit share.³⁰⁰
- 4.89** DPIE explained the rationale behind the arrangement, advising that the size of modelled entitlements for floodplain harvesting is directly linked to the accounting period and that an annual accounting arrangement (with no ability to carry over water to successive years), would, in fact, lead to licence holders' entitlements 'almost three times larger than what is currently proposed under five-year accounting'.³⁰¹ DPIE also referred the committee to its comparison of annual accounting and five-yearly accounting with regard to entitlement size and environmental outcomes in the Border Rivers, which found 'both scenarios [annual accounting and five-yearly accounting] provide similar predicted hydrological and environmental outcomes with no substantial differences'.³⁰²
- 4.90** Numerous stakeholders expressed concern about the proposed carry-over rule, highlighting potential ramifications should licence holders all choose to extract the 500 per cent they are

²⁹⁷ Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, 20 September 2021, p 14.

²⁹⁸ Evidence, Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre, 20 September 2021, p 13.

²⁹⁹ Evidence, Mr Daniel Kahl, Board Member, Namoi Water, 30 September 2021, p 28. See also Evidence, Mr Andrew Watson, Board Member, Namoi Water, 20 September 2021, p 28.

³⁰⁰ NSW Department of Planning, Industry and Environment, *Frequently Asked Questions – Rules for Water Sharing Plans*, <https://www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project/faqs>

³⁰¹ Answers to supplementary questions, Department of Planning, Industry and Environment, 1 November 2021, p 4

³⁰² Answers to supplementary questions, Department of Planning, Industry and Environment, 1 November 2021, p 4; NSW Government, *NSW Floodplain Harvesting Policy – NSW Border Rivers account management comparison*, April 2021, p 1.

entitled to over a similar time period.³⁰³ For example, Ms Jan Beer contended that the 500 per cent carry over would simply be 'unworkable':

The regulations put forward, supported a significant increase above the legislated legal 1994 Cap level and included a 500 per cent carryover, which would have effectively stopped the Darling from flowing and would have permanently taken 721,000ML of water from Victorian and NSW agriculture, our irrigation dependent businesses, communities, and environment.

The 500% carryover proposal would mean that the northern rivers and catchments would owe irrigators in this region water - a ridiculous, unworkable proposal.³⁰⁴

4.91 Others also considered the potential take to be excessive. In particular, Mr Horne disputed the claim that an annual accounting arrangement would lead to significantly larger entitlements than the carry over proposal, noting that the figures represent a level of take that was not possible in 1994. In response to the position that an absence of the 500 per cent carry over rule would result in the licensing of 3.2 times the current proposed floodplain harvesting volume annually, Mr Horne stated:

So 3.2 times 346 gegalitres is 1,107 gegalitres—more than two times what was the storage as at 30 June 1994. The statement that this is what was being floodplain harvested back in 1994, there was no actual way—they had less than half the storage capacity to even capture that much water back in 1994, let alone all the other licence entitlement that they had from their storages.

...

We have this situation where there is a proposal to licence what was once a minimal amount of water. Somehow the models have produced and justify something that, in a practical sense, was not even possible to have been captured and stored back in 1994. I guess that just shows how far out of whack everything has become.³⁰⁵

4.92 The Southern Riverina Irrigators noted in their submission that the 500 per cent carryover rule would allow a total of 1,729 gegalitres of floodplain harvesting in the Northern NSW valleys in a single year even though those valleys only had a total storage capacity of 600 gegalitres in 1994.³⁰⁶

³⁰³ For example, see Submission 23, Ms Jan Beer; Submission 30, Wentworth Shire Council; Submission 31, Environmentally Concerned Citizens of Orange; Submission 37, Menindee Lakes Stakeholder Advisory Group; Submission 56, Central Murray Environmental Floodplains Group Inc; Submission 57, Southern Connected Basin Communities; Submission 77, Mr Robert McClland; Submission 150, Victorian Farmers Federation; Submission 207, Mr Jeremy Morton; Submission 262, Name Suppressed; Submission 282, Murray Valley Private Diverters; Submission 288, The Pastoralists' Association of West Darling.

³⁰⁴ Submission 23, Ms Jan Beer, pp 2-3.

³⁰⁵ Evidence, Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 23.

³⁰⁶ Submission 149, Southern Riverina Irrigators, p 3.

- 4.93** For some, the concerns stem from a lack of faith in the modelling. For example, noting that DPIE's modelling does not take into account climate change, Healthy Rivers Dubbo expressed doubt whether the five-year accounting model would be accurately reflected in practice.³⁰⁷
- 4.94** Others, such as Slattery and Johnson, took exception to the fact that the model starts with '500 per cent in the bank'. Ms Slattery informed the committee that the Barwon-Darling water sharing plan, which has similar accounting rules, breached its sustainable diversion limit despite no individuals exceeding their water licence or accounting rules.³⁰⁸

Rainfall run-off exemption

- 4.95** The inquiry also received evidence in relation to the exemption proposed by the Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2021 (rainfall run-off exemption regulation), which was among the regulations disallowed.
- 4.96** The rainfall run-off exemption regulation provided for exemptions from requirements under the *Water Management Act 2000* (WMA) for a landholder to hold a water supply work approval or water access licence to take water from a tailwater drain for the purpose of collecting rainfall run-off from an irrigated field that is part of the land.³⁰⁹
- 4.97** Many stakeholders argued that the rainfall run-off exemption was pivotal in landholders being able to meet their obligations set out in the *Protection of Environment Operations Act 1997* (POEO Act).³¹⁰ Under the POEO Act, landholders are required to capture rainfall runoff and tailwater to prevent contaminants, such as fertiliser, from entering waterways.
- 4.98** Several stakeholders stated that their obligations under the POEO Act and the WMA could not be concurrently fulfilled unless the rainfall run-off exemption was permitted. This was particularly the case for water users located outside floodplains, as they would not ordinarily be floodplain harvesters and, therefore, licence holders. Mr Quigley noted that this circumstance applied to him and sought to explain the issue to the committee:

I am an irrigator in the Macquarie Valley. I am not a floodplain harvester and many of my constituents in the Macquarie aren't because we are outside the floodplain. But we are caught up under this legislation and regulations because of the need for the rainfall run-off exemption to be passed so that we are not breaking either one of two laws—that exemption or the conditions that are on our licence to hold all of our run-off on farm and not run it onto any public land or other people's farms. That is really important with us because many of our members are outside the flood plain.³¹¹

³⁰⁷ Submission 258, Healthy Rivers Dubbo, p 9.

³⁰⁸ Evidence, Ms Maryanne Slattery, 20 September 2021, p 35.

³⁰⁹ Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2021

³¹⁰ For example, see Submission 50, NSW Irrigators' Council; submission 60, Namoi Water; submission 62, Macquarie River Food and Fibre; Submission 64, Cotton Australia, Submission 67, Lachlan Valley Water Inc; Submission 91, Name Suppressed; Submission 172, Nicole Dallimore; Submission 209; Mr Robert Tuck; Submission 243, Mr Jim Cush; Submission 235, Warren Shire council.

³¹¹ Evidence, Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre, 20 September 2021, p 12.

- 4.99** Supporting this view, the NSW Irrigators' Council submitted that it received legal advice to the effect that, without the rainfall run-off exemption, anyone without a floodplain harvesting access licence would potentially breach the WMA by taking water by means of a tailwater drain from an irrigated field. The legal advice also found that, conversely, not taking the rainfall run-off water contaminated by fertiliser, herbicides and pesticides used in farms and releasing it may constitute an offence under the POEO act.³¹²
- 4.100** On the other hand, other stakeholders were critical of the rainfall run-off exemption and pointed to the large volume of water that would be taken away from the water system under the proposed arrangement.
- 4.101** For example, Mr Garry Hall, President, Macquarie Marshes Environmental Landholders Association, contended that the exemption would effectively translate to an additional 50,000 hectares of floodplain harvesting in the Macquarie Marshes:
- 50,000 hectares of the Macquarie catchment has those irrigators, who are mainly general security irrigators that also have access to supplementary access licences ... that could possibly now be harvesting the total volume of water from that irrigable area under this rainfall run-off exemption. It is staggering, the total volume of megalitres that will be unavailable to the environment—to the marshes and to the longitudinal connectivity of the Macquarie to the Barwon-Darling—without that water in the system.³¹³
- 4.102** Mr Dugald Bucknell, a member of the Macquarie Marshes Environmental Landholders Association, emphasised to the committee that the volume of rainfall run-off on 50,000 additional hectares would be substantial:
- If you are talking 50,000 hectares, the average rainfall at Auscott at Warren, which is the lower end—Dubbo is the higher end—is about 500 millilitres a year average. Dubbo is about 600 millilitres a year average. If you catch all that water on 50,000 hectares, that is 250,000 megalitres on an average rainfall. Of course some of that is going to be soakage, but it is an enormous amount of water that needs to be taken account of.³¹⁴
- 4.103** The Southern Riverina Irrigators argued that floodplain harvesting is not confined to flood events and 'occurs after rain events' as 'rainfall runoff harvesting is defined as a component of overland flow'. They also argued that 'significant land-forming and developments' over the last three decades now allow landholders to capture the majority of water that flows over their lands and that the rainfall run-off exemption will see less rainfall persist through the valleys.³¹⁵
- 4.104** The Southern Riverina Irrigators also made the point that those with storages greater than 500 megalitres are both most likely to abuse the exemption and have the capacity to monitor and meter rainfall runoff harvesting. On this basis they argued that the exemption should at least be limited to landholders with storages under 500 megalitres, and that additional reporting requirements could be created for those taking advantage of the exemption.³¹⁶

³¹² Submission 50, NSW Irrigators' Council, p 42.

³¹³ Evidence, Mr Garry Hall, President, Macquarie Marshes Environmental Landholders Association, and Landholder in the Macquarie Marshes, 7 October 2021, p 4.

³¹⁴ Mr Dugald Bucknell, Member, Macquarie Marshes Environmental Landholders Association, and Owner, Quambone Pastoral Company, 7 October 2021, p 5.

³¹⁵ Submission 149, Southern Riverina Irrigators, p 11.

³¹⁶ Submission 149, Southern Riverina Irrigators, p 11.

- 4.105** Professor Richard Kingsford also stressed the importance of including rainfall run-off in the licensing framework, stating in his submission:

given this water would have flowed into rivers and floodplains. This should be included in the licencing framework, including where there are distributary creek systems that flow across floodplains and where water can be intercepted. This volume also needs to be consistent with the Murray-Darling Basin Cap and the volume of water diverted at each location at 1993/1994 levels of development.³¹⁷

- 4.106** Ms Smiles presented evidence to the committee that a policy change had resulted in rainfall run-off volumes being included in floodplain harvesting entitlements.

Changes to the original 2013 policy were made in 2018 in regard to rainfall run-off and this has resulted in much larger floodplain harvesting entitlements. The policy in regard to assessment of unregulated and groundwater properties changed mid decision-making...

The addition of rainfall run-off above the 10 per cent harvestable rights rule has caused the modelled entitlements to increase dramatically. In some places, such as the Barwon-Darling, the bulk of floodplain harvesting is now from rainfall run-off rather than overbank flow. This is licensing the capture of water before it even enters the river.³¹⁸

...

Well rainfall run-off, in some places, is a substantive volume now of what will be given a private property right entitlement. In some places, like the Barwon-Darling, it is the larger extent of what is now being called floodplain harvesting. While earlier this morning there was a lot of emphasis on what your pumping capacity was, there are quite a few properties that just get rainfall run-off coming into their works and into their structures from undeveloped land around their irrigated paddocks, and that has been included in the model for licensing.³¹⁹

- 4.107** When the committee conveyed some of these concerns to the NSW Government as part of the supplementary questions process, the NSW Government responded that limiting the size of storages may create a perverse incentive to build new infrastructure over time. The NSW Government also emphasised that the aim of the regulation was to ensure that farmers are not forced or encouraged to discharge contaminated water into creeks and rivers.³²⁰

³¹⁷ Submission 73, Centre for Ecosystem Science UNSW Sydney, p 10.

³¹⁸ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 3.

³¹⁹ Evidence, Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 5.

³²⁰ Answers to supplementary questions, Department of Planning, Industry and Environment, 1 November 2021, p 7.

Downstream flow targets

- 4.108** Many stakeholders stressed the importance of downstream flow targets in any floodplain harvesting licensing framework.³²¹ For example, Dr Emma Carmody, from the Environmental Defenders Office, stated that any floodplain harvesting licensing framework must ‘comply with the overarching legal obligations contained within the Water Management Act, which in our view requires the implementation of downstream flow targets’.³²²
- 4.109** This view was shared by the Australian Floodplain Association, who stated: ‘Downstream flow targets must be introduced based on environmental, cultural and basic landholder needs, and in strict compliance with the priority of water use principles as set out in the NSW *Water Management Act 2000*’.³²³

First Nations' right to water and cultural flows

- 4.110** With regard to First Nations' right to water and cultural flows, the Murray Lower Darling River Indigenous Nations (MLDRIN) in their submission pointed out that:

... [T]he objects of the NSW Water Management Act 2000 include to recognise and foster the “benefits to the State that result from the sustainable and efficient use of water, including...(iii) benefits to culture and heritage, and...(iv) benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water.” We are concerned that floodplain harvesting contradicts and makes achieving these objects near impossible.³²⁴

- 4.111** MLDRIN continued:

... healthy water must be allowed to flow in, through, and around Country; we all have a responsibility to make sure that the water we pass on downstream is of good quality so that it can support, restore and sustain Country and people... MLDRIN is concerned that floodplain harvesting does not leave enough water in the system to sustain rivers' survival or meet our cultural needs.³²⁵

- 4.112** As such, Dr Carmody stated that any floodplain harvesting must:

...be undertaken in a manner that acknowledges and seeks to reverse Aboriginal water dispossession. This will necessarily involve an equitable portion of any floodplain harvesting licences being reallocated to Aboriginal nations. Some 30 years post-Mabo, it is entirely unacceptable for Aboriginal people in the New South Wales part of the MDB to own a mere 0.2 per cent of available surface water licences.³²⁶

³²¹ For example, Submission 24, River Lakes and Coorong Action Group; Submission 31, Environmentally Concerned Citizens of Orange; Submission 33, Australian Floodplain Association.

³²² Evidence, Dr Emma Carmody, Managing Lawyer – Freshwater, Environmental Defenders Office, 20 September 2021, p 2.

³²³ Submission 33, Australian Floodplain Association.

³²⁴ Submission 147, Murray Lower Darling River Indigenous Nations, p 1.

³²⁵ Submission 147, Murray Lower Darling River Indigenous Nations, p 1.

³²⁶ Evidence, Dr Emma Carmody, Managing Lawyer – Freshwater, Environmental Defenders Office, 20 September 2021, p 2.

- 4.113** Indeed, in evidence to the committee, Mr Grant Rigney, Chair of MLDRIN and citizen of the Ngarrindjeri Nation, expressed a similar point, stating:

There are cultural licences that are available for individuals, up to 10 megalitres of water, but I have no idea of how many individuals have actually tapped into that because there are so many caveats attached to it at the same time. There is no equitable process in that area and there is no equilibrium at all from a First Nations perspective at all in that water ownership.³²⁷

Committee comment

- 4.114** In order to ascertain how much water should be extracted through floodplain harvesting, one must first accurately measure how much water there is in the river system, and how it connects and flows through the Murray-Darling Basin. The committee learned that the NSW Government has invested significant resources in recent years to answer these key questions. The committee also understands that this work is still ongoing, with New South Wales' Water Resource Plans yet to be accredited by the Murray-Darling Basin Authority.
- 4.115** While the committee acknowledges the work completed to date, it also agrees with the many stakeholders who felt that significant improvements could be made to the ways in which the NSW Government is determining and measuring floodplain harvesting volume. The committee notes that these concerns either came from, or were supported by, stakeholders from the communities who have and will continue to live with the impact of licensed floodplain harvesting volumes. The committee is of the view that these concerns must be appropriately addressed before floodplain harvesting is licensed.
- 4.116** In this regard, the committee finds that the modelling used by the NSW Government to determine floodplain harvesting volumes lacks transparency and accountability, does not provide for validation against actual flows and does not have the public's confidence.

Finding 8

That the modelling used by the NSW Government to determine floodplain harvesting volumes lacks transparency and accountability, does not provide for validation against actual flows and does not have the public's confidence.

- 4.117** The committee also notes the need for a transparent, public process for the modelling to be reviewed and refined on an ongoing basis. It is the committee's view that this review process should be coordinated by the NSW Natural Resources Commission, to instil greater public confidence in the robustness of the modelling. The committee also believes that the formal mechanism for independent oversight would assist with the licence determinations keeping within the legal limits.

³²⁷ Evidence, Mr Grant Rigney, Chair and Citizen of the Ngarrindjerri Nation, Murray Lower Darling Rivers Indigenous Nations, 22 September 2021, p. 41.

- 4.118** The committee is concerned by the lack of consideration of climate change in the Department of Planning, Industry and Environment's (DPIE) modelling considering the devastating impacts of low flows during the most recent drought. If modelling does not account for lower rainfall and inflows into the Basin as a result of climate change it could result in similarly poor environmental, social and cultural outcomes in the next drought.
- 4.119** The committee is unclear why the DPIE has decided to remove information from new water sharing plans including the gazetted model run, the volume of the plan or the volume of the sustainable diversion limit. The committee believes that the NSW Government needs to be more transparent with the modelling and data underpinning the decisions it is making, including in the new water sharing plans, in order to regain the public's confidence.
- 4.120** The committee therefore recommends that water sharing plans contain information on the model run and limits. Further, the committee recommends that the NSW Government's modelling of floodplain harvesting volumes use the best available projections to evaluate the impact of climate change on entitlement reliability, downstream outcomes and environmental impacts. Moreover, the committee also recommends that the NSW Government establish an independent expert panel coordinated by the Natural Resources Commission.

Recommendation 3

That the NSW Government's modelling of floodplain harvesting volumes use the best available projections to evaluate the impact of climate change on entitlement reliability, downstream outcomes and environmental impacts.

Recommendation 4

That the NSW Government establish an independent expert panel coordinated by the Natural Resources Commission to:

- assess and accredit the models used in Water Sharing Plans and produce a public report on the accreditation that includes the standard and mean error of models
- assess the floodplain harvesting 'Cap Scenario' reports for compliance with the Murray-Darling Basin Cap and publish assessment reports
- annually audit the Sustainable Diversion Limit and Murray-Darling Basin Plan Limit, publishing audit reports that separately identifies the annual Cap or Sustainable Diversion Limit target, and diversions for licence and extraction type.

Recommendation 5

That the Department of Planning, Industry and Environment ensure that model run number and long-term average extraction limits for the Baseline Diversion Limit, the Murray-Darling Basin Cap, and the Plan Limits must be included in water sharing plans for each valley.

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- 4.121** Of particular concern to the committee was the evidence from stakeholders regarding the Government's plan to amend the Baseline Diversion Limits (BDLs) and its consequential impact on the Sustainable Diversion Limits (SDLs). Mr Bret Walker SC's evidence that the MDBA's proposal to increase SDLs by reference to increases to BDLs was ultimately

'unjustifiable', and that the law stipulates the SDL cannot be adjusted, was particularly compelling.

- 4.122** The committee notes the questions raised by the South Australian Royal Commission into the Murray-Darling Basin Plan over the legal basis of the fixed relationship between the SDL and BDL relied upon by the Murray-Darling Basin Authority, and by extension, the NSW Government. The committee also acknowledges that the Murray-Darling Basin Authority has disagreed with the Royal Commission's findings.
- 4.123** The committee therefore finds that it is unclear there was a legal right to floodplain harvest at the dates upon which the Murray-Darling Basin Cap and the Baseline Diversion Limits are based and it is therefore unclear on what legal basis the Government intends to amend the basin plan to incorporate historic floodplain harvesting volumes. Further, the committee finds that the process the NSW Government is undertaking to amend the Sustainable Diversion Limit, as described by NSW Department of Planning, Industry and Environment, has the potential to be unlawful.

Finding 9

That it is unclear there was a legal right to floodplain harvest at the dates upon which the Murray-Darling Basin Cap and the Baseline Diversion Limits are based and it is therefore unclear on what legal basis the Government intends to amend the Basin Plan to incorporate historic floodplain harvesting volumes.

Finding 10

That the process the NSW Government is undertaking to amend the Sustainable Diversion Limit as described by the NSW Department of Planning, Industry and Environment has the potential to be unlawful.

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- 4.124** To this end, the committee believes the NSW Government must ensure that any changes to the SDLs are in accordance with what is permissible under the *Water Act 2007* (Cth), through representations to the Murray-Darling Basin Authority.
- 4.125** The committee therefore recommends that, if the NSW Government intends to amend the Sustainable Diversion Limits, they must specify the legal pathway through which they intend to do so, and ensure that any allocation of floodplain harvesting volumes and entitlements must be within existing Sustainable Diversion Limits.
- 4.126** The committee also recommends that the Minister for Water, Property and Housing make representations to the Murray-Darling Basin Authority to ensure that the Sustainable Diversion Limits are reflective of an environmentally sustainable level of take under the *Water Act 2007* (Cth), regardless of any adjustments to the Baseline Diversion Limits.

Recommendation 6

That, if the NSW Government intends to amend the Sustainable Diversion Limits, the NSW Government must specify the legal pathway through which they intend to do so.

Recommendation 7

That the NSW Government ensure that any allocation of floodplain harvesting volumes and entitlements must be within existing Sustainable Diversion Limits.

Recommendation 8

That, if Sustainable Diversion Limits are to be amended, the Minister for Water, Property and Housing make representations to the Murray-Darling Basin Authority to ensure that the Sustainable Diversion Limits are reflective of an environmentally sustainable level of take under the *Water Act 2007* (Cth), regardless of any adjustments to the Baseline Diversion Limits.

- 4.127** The committee was referred to varying and wide-ranging figures on the estimated floodplain harvesting volume during the conduct of this inquiry, without real clarity of defined volumes.
- 4.128** Acknowledging that the Murray-Darling Basin Cap identified the volume of water that would have been diverted under 1993-1994 levels of development, the committee recognises the clear intention that water diversion should not exceed the levels from that point in time. The committee acknowledges, however, that according to some estimates presented during this inquiry, the current volume of floodplain harvesting is already at a level that the northern valleys did not have the capacity to store in 1993-94.
- 4.129** The committee thus finds that the NSW Government has failed to meet its obligations under the Murray-Darling Basin Agreement by allowing the unchecked growth of unregulated floodplain harvesting extraction to volumes well in excess of the 1994 Murray-Darling Basin Cap.
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Finding 11

That the NSW Government has failed to meet its obligations under the Murray-Darling Basin Agreement by allowing the unchecked growth of unregulated floodplain harvesting extraction to volumes well in excess of the 1994 Murray-Darling Basin Cap.

- 4.130** To the committee, a lack of clarity over the volume of floodplain harvesting highlights the need for robust metering and measurement to be in place before any floodplain harvesting licences are issued. This will not only help to determine entitlements, but also enable the collection of more accurate data to better inform future adjustments.
- 4.131** As such, the committee recommends that the NSW Government urgently ensure all floodplain harvesting is metered and measured, including flows that enter and bypass storages, before issuing floodplain harvesting licences to ensure the accuracy of volumes and long-term extraction limits.
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Further, the committee notes that this was recommended by the Independent Investigation into NSW Water Management and Compliance led by Mr Ken Mathews AO, as outlined in chapter 1, and as such recommends that the NSW Water Reform Action Plan include a ‘no meter, no pump’ rule.

Recommendation 9

That the NSW Government urgently ensure all floodplain harvesting is metered and measured, including flows that enter and bypass storages, before issuing floodplain harvesting licences to ensure the accuracy of volumes and long-term extraction limits.

Recommendation 10

That the NSW Water Reform Action Plan include a ‘no meter, no pump’ rule, as recommended by the Independent Investigation into NSW Water Management and Compliance.

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- 4.132** An area of general consensus was the need for assessment of all floodplain harvesting works and for any illegal structures to be identified and decommissioned. The committee was alarmed to learn that some of these structures – unregistered and prohibited – may not only continue to extract water but disrupt flow to the significant detriment of the environment and marine life.
- 4.133** The Committee understands that the Department of Planning, Industry and Environment and the Natural Resource Access Regulator are looking to launch a program to address this issue, which the committee supports and urges for immediate action.
- 4.134** In the meantime, the committee believes that greater transparency regarding these structures is needed together with assurances that they will be removed as a matter of priority. To this end, the committee recommends that the NSW Government ensure that the NSW Water Register includes information regarding structures on floodplains, including their location, volume, ownership, approvals and licence conditions. In addition, the committee recommends that, excluding structures that have been assessed as protecting infrastructure, the NSW Government ensure floodplain structures do not alter natural flood flows at times when extraction is not permitted, and decommission or remove these structures and publish a time frame for this initiative within 6 months. The committee also recommends that the NSW Government ensure that no floodplain harvesting licences are granted on the basis of illegal works.

Finding 12

The NSW Government’s Floodplain Harvesting Policy could result in entitlements being granted to landholders for unapproved or illegal works which will need to be modified or decommissioned.

Recommendation 11

That the NSW Government ensure that the NSW Water Register includes information regarding structures on floodplains, including their location, volume, ownership, approvals and licence conditions.

Recommendation 12

Excluding structures that have been assessed as protecting infrastructure, that the NSW government ensure floodplain structures do not alter the natural flood flows at times when extraction is not permitted.

Recommendation 13

That the NSW Government decommission or remove unlawful structures and publish a time frame for this initiative within 6 months.

Recommendation 14

That the NSW Government ensure that no floodplain harvesting licences are granted on the basis of illegal works.

4.135 The committee was concerned by the evidence that the 500 per cent carryover rule could allow up to 1,729 gegalitres of floodplain harvesting in a single year, despite there being less than 600 gegalitres of total storage capacity for all forms of take in the Northern NSW valleys in 1994. The committee considers that a maximum annual extraction limit of this volume is in opposition to the NSW Government's obligation to bring floodplain harvesting down to the levels of extraction that were occurring in 1994.

4.136 Therefore, the committee finds that the 500 per cent carry-over rule would allow significantly more floodplain harvesting to occur in a single year than was possible in 1994, and thus recommends that the NSW Government ensures that any carry-over rule included in floodplain harvesting licences to provide flexibility in accessing floodplain harvesting entitlements does not allocate more than 100 per cent of entitlements in the first year of the accounting period.

Finding 13

The 500 per cent carry-over rule would allow significantly more floodplain harvesting to occur in a single year than was possible in 1994.

Recommendation 15

That the NSW Government ensures that any carry-over rule included in floodplain harvesting licences to provide flexibility in accessing floodplain harvesting entitlements does not allocate more than 100 per cent of entitlements in the first year of the accounting period.

- 4.137** The committee is concerned by the Government's proposed blanket exemption for rainfall runoff harvesting. The committee believes that the inclusion of rainfall runoff volumes in floodplain harvesting entitlements would be significant and should be measured and accounted for rather than handed out freely.
- 4.138** Therefore, the committee recommends that the NSW Government ensure that rainfall run-off is measured, metered and reported as part of extraction limits, and if exemptions are to be granted, they should be limited to landholders with less than 500 megalitres of storage capacity.

Recommendation 16

That the NSW Government ensure that rainfall run-off is measured, metered and reported as part of extraction limits, and if exemptions are to be granted, they should be limited to landholders with less than 500 megalitres of storage capacity.

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- 4.139** The committee notes the evidence received regarding downstream flow targets and First Nations' right to water and cultural flows. In considering stakeholder views, the committee recommends that the NSW Government develop clearly defined and enforceable access rules based on within-valley and downstream flow triggers based on minimum flow targets needed to maintain or improve outcomes for environmental, cultural and basic landholder requirements with floodplain harvesting take only permitted under the access rules when these targets are met and that these access rules must be implemented before any floodplain harvesting licences or entitlements are allocated.
- 4.140** In addition, the committee recommends that the NSW Government work urgently to engage First Nations communities to ensure that cultural flow targets are established and met as part of the regulatory framework on floodplain harvesting.

Recommendation 17

That the NSW Government develop clearly defined and enforceable access rules based on within-valley and downstream flow triggers based on minimum flow targets needed to maintain or improve outcomes for environmental, cultural and basic landholder requirements, with floodplain harvesting take only permitted under the access rules when these targets are met, and that these access rules must be implemented before any floodplain harvesting licences or entitlements are allocated.

Recommendation 18

That the NSW Government work urgently to engage First Nations communities to ensure that cultural flow targets are established and met as part of the regulatory framework on floodplain harvesting.

Chapter 5 The licensing and governance of floodplain harvesting

In considering the NSW Government's proposed licensing framework for floodplain harvesting, inquiry participants discussed various aspects of the licence design, including permanency, tradability and compensability. These are examined in this chapter in addition to issues relating to the governance and oversight of floodplain harvesting licences. As part of water governance more broadly, the management of the Menindee Lakes is also discussed in this chapter.

Floodplain harvesting licence design

- 5.1** As noted in chapter 1, the NSW Government made the Water Management (General) Amendment (Floodplain Harvesting Access Licences) Regulation 2021 on 30 April 2021 (Floodplain Harvesting Access Licences Regulation). The regulation was made under section 57A of the *Water Management Act 2000* (WMA), which provides for the conversion of actual or proposed floodplain water usage by landholders into floodplain harvesting access licences.³²⁸
- 5.2** Even though the Floodplain Harvesting Access Licences Regulation was disallowed by the Legislative Council on 6 May 2021, it provided a platform for debate on aspects of licence scheme design. Particularly contested areas of debate were the licence scheme's permanency, tradability and compensability, as discussed below.

A permanent or temporary floodplain harvesting licence?

- 5.3** Many stakeholders considered the Floodplain Harvesting Access Licences Regulation as a credible way forward in permanently licensing and regulating floodplain harvesting. For example, the Gwydir Cottons Association was of the view that the proposed licence would formalise a historical form of take and embed a 'clear and transparent process' into the regulatory framework.³²⁹
- 5.4** The NSW Irrigators' Council also supported the licensing framework that was introduced under the Floodplain Harvesting Access Licences Regulation, on the basis that it satisfied a key principle – that floodplain harvesting must be reduced to the 1993-94 Cap through licensing requirements. The NSW Irrigators' Council asserted that this principle is commonly supported by various stakeholders, irrespective of their position on the merits of the floodplain harvesting.³³⁰
- 5.5** Similarly, other stakeholders such as the Murrumbidgee Private Irrigators Incorporated, Mr Jeremy Morton, Barwon-Darling Water, Coleambally Irrigation Cooperative Limited, AGB Farming Pty Ltd, Gwydir Valley Irrigators Association and Cotton Australia all expressed

³²⁸ Holding Redlich, *Request for advice: disallowance of Floodplain Harvesting Regulation*, 4 May 2021, p 2.

³²⁹ Submission 273, Gwydir Cottons Association, pp 6 and 8.

³³⁰ Submission 50, NSW Irrigators' Council, p 32.

support for licensing identical or similar to what was introduced via the Floodplain Harvesting Access Licences Regulation.³³¹

- 5.6** On the other hand, the committee also received evidence from some that urged greater caution in introducing a permanent licensing framework, contending that there were still too many unresolved issues for such a scheme to be introduced. For example, the Australian Floodplains Association stated that it supports the issuing of temporary floodplain licences 'until there is evidence that expected, legally mandated environmental and other downstream outcomes are being achieved under the licensing framework'.³³²
- 5.7** Likewise, the Wentworth Group of Concerned Scientists and the Environmental Defenders Office (EDO) recommended that temporary licences be issued 'until there is evidence the modelling and policy is effective at delivering expected outcomes to communities and the environment'.³³³ In its view, the recommended temporary licence would serve as a stage where substantive improvements could be made before transition to a permanent licence, as it would allow, as stated by Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, '... time for gathering the data, improving the modelling, incorporating return flows, building trust in the system, as well as implementing a number of other recommendations we put forward before the final permanent licences could be issued'.³³⁴
- 5.8** In building on its criticisms of the NSW Government's proposed modelling approach discussed in chapter 4, the Wentworth Group and EDO questioned whether it would be sensible to 'lock in compensable property rights' through a permanent licence. Further, it noted that the NSW Parliament has not had the opportunity to consider the full suite of reforms, including the proposed amendments to the water sharing plans and water resource plans, prior to the introduction of the Floodplain Harvesting Access Licences Regulation.³³⁵
- 5.9** Along similar lines, Professor Richard Kingsford, Director – Centre for Ecosystem Science, University of New South Wales, asserted that there remained a range of important initiatives that needed to be completed before a permanent licence scheme could be considered:

I do believe that there is a lot that we have not quite nailed down in terms of the policy and regulation of floodplain harvesting and ... the Government has admitted that. So, there is a whole range of very important initiatives that the Government has listed that it will get onto in terms of managing this issue. I think we need to do that before we provide that permanent licence access to water.

³³¹ Submission 272, Murrumbidgee Private Irrigators Incorporated, p 3; Submission 207, Mr Jeremy Morton, p 1; Submission 71, Barwon-Darling Water, pp 1-2; Submission 41, Coleambally Irrigation C-operative Limited, p 1; Submission 270, AGB Farming Pty Ltd ATF AGB Farming Trust, p 1; Submission 65, Gwydir Valley Irrigators Association, p 29; Submission 64, Cotton Australia, p 7.

³³² Submission 33, Australian Floodplains Association, p 4; see also Submission 49, Murray Darling Association, p 4.

³³³ Evidence, Dr Fran Sheldon, Member, Wentworth Group of Concerned Scientists, 20 September 2021, p 2.

³³⁴ Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, p 4.

³³⁵ Submission 61, Wentworth Group of Concerned Scientists and Environmental Defenders Office, pp 10-11.

... I am not convinced we have enough evidence to say how much water there is in the floodplain harvesting bucket to be able to provide permanent licences.³³⁶

- 5.10** In response to the suggestion of a temporary licence rather than a permanent scheme at this point in time, water users groups generally expressed reluctance. For example, to Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, the temporary licence represented a prolonging of regulatory uncertainty and 'another layer of complexity'.³³⁷
- 5.11** Mr Tony Quigley, Executive Committee Chair of Macquarie River Food and Fibre, argued that 'successive government have kicked the can down the road, and we just do not want to see that continue',³³⁸ with Mr Daniel Kahl, Board Member, Namoi Water, adding that 'this can ... has been rolling down this road for nearly 20 years already'. Mr Kahl maintained: '... I do not see that as an outcome that would benefit anyone and it is certainly not one that we support'.³³⁹
- 5.12** The NSW Irrigators' Council argued that mechanisms to adjust harvesting volume already exist, so there would be no benefit in instating a temporary licence. It asserted that water extracted could be adjusted through the available water determinations, and that there are regular reviews of water sharing plans conducted by the Natural Resources Commission. In particular, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, observed that floodplain harvesting only occurs in certain years over dry and wet spells, and thus contended that there would be no guarantee the temporary period would fall at the right time to offer useful learnings. The NSW Irrigators' Council concluded that, on balance, there was little merit to a temporary licence compared with a permanent one.³⁴⁰
- 5.13** When asked whether its issuing of floodplain harvesting licences was premature, the NSW Government reiterated that the licensing framework as proposed in its April 2021 regulations would address a range of issues through its scheme design and constituted the final stages of a highly invested process:

We have spent more than 8 years and \$17million improving our understanding of current and historical floodplain harvesting. This analysis indicates that in some areas, growth in floodplain harvesting has caused the water source legal limits to be exceeded. Licensing will allow us to reduce floodplain harvesting where necessary to comply with these water source limits, rather than needing to reduce supplementary licences to offset this growth, as is currently the case in the Gwydir and NSW Border Rivers valleys. The proposed water sharing rules will allow allocations to floodplain harvesting licences to be adjusted in response to improved model estimates of the water source legal limits, without triggering compensation under the Water Management Act 2000.³⁴¹

³³⁶ Evidence, Professor Richard Kingsford, Director, Centre for Ecosystem Science, School of Biological, Earth and Environmental Sciences, University of New South Wales, 22 September 2021, p 4; See also Submission 49, Murray Darling Association, p 4.

³³⁷ Evidence, Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre, 20 September 2021, p 19.

³³⁸ Evidence, Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre, 20 September 2021, pp 19-20.

³³⁹ Evidence, Mr Daniel Kahl, Board Member, Namoi Water, 20 September 2021, p 29.

³⁴⁰ Evidence, Ms Claire Miller, Chief Executive Officer and Ms Christine Freak, Policy Manager, NSW Irrigators' Council, 24 September 2021, p 27.

³⁴¹ Answers to supplementary questions, Department of Planning, Industry and Environment, 1 November 2021, pp 4-5.

The tradability of floodplain harvesting licences

- 5.14** An area of particular concern for many stakeholders was the trading arrangements for floodplain harvesting licences. Under the NSW Floodplain Harvesting Policy, trading of floodplain harvesting access licences 'will be permitted subject to the development of an appropriate trading framework that defines the types of trades permitted and any relevant trading restrictions'.³⁴²
- 5.15** The committee received evidence from numerous inquiry participants objecting to the tradability of a floodplain harvesting licence. For example, the Nature Conservation Council opposed trading licences noting that 'trading of other types of water licences within and between catchments has had perverse negative ecological and economic effects'.³⁴³
- 5.16** Similarly, Cr Philip O'Connor, Mayor of Brewarrina Shire Council, and Cr Jane MacAllister, Wentworth Shire Council, reflected on their experience with water trading under extraction licences to oppose a similar arrangement under floodplain harvesting licences.³⁴⁴ In particular, Cr MacAllister argued that water trading can lead to adverse outcomes for the environment and downstream communities, and questioned whether market forces should be used to determine access to a resource such as water:

We have already seen the market result in a concentration of licences to very few owners of high-class licences. We have seen industry move upstream to access more regular flows. The lower Darling used to be the highest-security water in the Murray-Darling Basin—sadly, not the case ... Moving the financial resource around does not work for a resource like water, which is connected to the land; it must pass through the land, not only across the top of the land but also through the groundwater. There are considerable concerns around letting the market decide the need or the availability of a resource which is a critical human right, in actual fact—a survival need.³⁴⁵

- 5.17** Ms Emma Bradbury, Chief Executive Officer of the Murray-Darling Association, shared this view, contending that water's unique properties mean that trading should not be allowed:

... [W]ater is quite unique as a natural resource, in that its fundamental requirement to deliver any benefit at all is in location. There are other natural resources where we can have regulatory frameworks that enable them to be traded and shifted et cetera, and they will still continue to deliver value inherent in what that trade represents. Fresh water is absolutely unique;... it has to be at its location for it to add value to businesses, communities, economies and commodities in that space.³⁴⁶

³⁴² NSW Government, *NSW Floodplain Harvesting Policy*, September 2018, p 14.

³⁴³ Submission 102, Nature Conservation Council of NSW, p 16.

³⁴⁴ Evidence, Cr Philip O'Connor, Mayor, Brewarrina Shire Council and Cr Jane MacAllister, Wentworth Shire Council, 24 September 2021, pp 33-34.

³⁴⁵ Evidence, Cr Jane MacAllister, Wentworth Shire Council, 24 September 2021, pp 33-34.

³⁴⁶ Evidence, Ms Emma Bradbury, Chief Executive Officer, Murray Darling Association, 24 September 2021, p 34.

- 5.18** Likewise, Professor Richard Kingsford noted that trading of floodplain harvesting extraction volumes would not only negatively impact volumes in certain locations, but also the connectivity of the water system:

So there are all those complex idiosyncrasies of a river system which make the trading of floodplain licences a major issue, I believe, both in terms of what it does to the river and the volumes diverted but also what it would actually do in terms of disrupting those connectivities—building more channels and levees without doing the restoration that you might have to do where those were originally taken. There are lots of, I guess, externalities that also occur in terms of trading floodplain harvesting licences.³⁴⁷

- 5.19** Reflecting on these concerns, the Hon. Melinda Pavey MP, Minister for Water, Property and Housing, acknowledged that there is policy work left to be done in terms of trading, but noted that trading is a requirement under the National Water Initiative.³⁴⁸ Mr Dan Connor, Director, Healthy Floodplains Project, Department of Planning, Industry and Environment (DPIE), also confirmed that there are trade requirements under the Murray-Darling Basin Plan, but likewise acknowledged the concerns raised and explained that the NSW Government has proposed 'the most constrained trading regime that exists for surface water entitlements' accordingly. Mr Connor also added that a trading market would serve a useful function given that the floodplain harvesting reform will be reducing overall water take.³⁴⁹

Compensable rights

- 5.20** Another area of concern raised during the inquiry was whether a floodplain harvesting licence would create a compensable right. The NSW Floodplain Harvesting Policy states:

The WM Act makes compensation payable in certain circumstances consistent with the National Water Initiative. During the life of the first management plan, licence holders (other than supplementary access licence holders), including holders of floodplain harvesting access licences, whose water allocations are reduced by changes to the bulk access regime have the right to lodge a claim for compensation if the plan is amended and the amendment is not provided for in the plan. The Minister for Water has discretion over whether or not compensation should be paid.

After the first water sharing plan, the holders of specified access licences, including regulated river (floodplain harvesting) and unregulated river (floodplain harvesting) access licences, have a right to be paid compensation in the circumstances set out in section 87AA of the WM Act.³⁵⁰

- 5.21** When asked about their thoughts on the issue of compensability, Cotton Australia, for example, expressed a clear support for it, asserting that compensability of water licences is recognised under legislation. Cotton Australia, therefore, contended that the range of conditions under

³⁴⁷ Evidence, Professor Richard Kingsford, Director, Centre for Ecosystem Science, School of Biological, Earth and Environmental Sciences, University of New South Wales, 22 September 2021, p 4.

³⁴⁸ Evidence, the hon. Melinda Pavey MP, Minister for Water, Property and Housing, 24 September 2021, p 49.

³⁴⁹ Evidence, Mr Dan Connor, Director – Healthy Floodplain Review Project, 24 September 2021, p 49.

³⁵⁰ NSW Government, *NSW Floodplain Harvesting Policy*, September 2018, p 14.

which compensation becomes payable under the WMA should apply equally to floodplain harvesting licences.³⁵¹

5.22 However, several other stakeholders challenged the licence scheme's compensability. For example, the Menindee Lakes Stakeholder Advisory Group, the Nature Conservation Council, Australian Floodplain Association and Macquarie Marshes Environmental Landholders Association all objected to or expressed concern regarding the potential compensable rights created through the licensing of floodplain harvesting. These stakeholders based their objection on the premise that the legality of floodplain harvesting is questionable and that the issue of unlawful structures has not been fully addressed.³⁵² For example, Mr Stuart Le Lievre, Vice-President, Australian Floodplain Association, contended:

As far as the compensation goes, with the AFA, there is no compensation of those works that are illegal, and we do not believe the licences should be compensable until, and if, we would be able to get it right. So whatever licences are handed out, we have got no idea, without having at least 10 years, whether that number is right or not. In that case, we do not believe there should be compensable licences either.³⁵³

5.23 A related point raised by the Southern Riverina Irrigators was that its members had experienced and accepted significant reductions in water rights in 2008 with 'little to no compensation'. The Southern Riverina Irrigators asserted that its members' experiences seemed to be in contrast with the more 'benevolent position NSW has adopted with its policies around floodplain harvesting', questioning the fairness of the position.³⁵⁴

5.24 Further, in expressing scepticism of the licence design, the Southern Riverina Irrigators argued that 'it is inevitable that if there has been an over-allocation of licences for this form of take, the water sharing plans will need to be re-worked and licences cancelled'.³⁵⁵ The Southern Riverina Irrigators contended that should such a scenario eventuate, there should either be no compensation for a reduction in floodplain harvesting licence volumes, or retrospective compensation should be given to all other licence holders who have lost access to volumes of water as a result of government policy or rules since 1 July 1994.³⁵⁶

5.25 Murray Lower Darling Rivers Indigenous Nations (MLDRIN) were strongly opposed to any floodplain harvesting licences being compensable while First Nations people were still dispossessed of their water rights:

... [A]s a result of colonisation and a lack of state reparative action, First Nations remain deprived of the right to access water and to participate in the water economy, should

³⁵¹ Answers to supplementary questions, Cotton Australia, 2 November 2021, p 5.

³⁵² Evidence, Mr Chris Gambian, Chief Executive, Nature Conservation Council of NSW, 20 September 2021, p 8; Evidence, Mr Garry Hall, President, Macquarie Marshes environmental Landholders Association, 7 October 2021, p 5; Evidence, Mr Stuart Le Lievre, Vice-President, Australian Floodplain Association, 7 October 2021, pp 5-6; Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 34

³⁵³ Evidence, Mr Stuart Le Lievre, Vice-President, Australian Floodplain Association, 7 October 2021, pp 5-6.

³⁵⁴ Supplementary Submission 149a, Southern Riverina Irrigators, p 13.

³⁵⁵ Supplementary Submission 149a, Southern Riverina Irrigators, p 13.

³⁵⁶ Supplementary Submission 149a, Southern Riverina Irrigators, p 14.

they wish. Creating and distributing new, compensable water property rights to a public good for private landholders only further entrenches these water injustices. Adjustments to permitted floodplain harvesting volumes must not be compensable while First Nations are still dispossessed of their water rights.³⁵⁷

Water reductions under Available Water Determinations

- 5.26** In discussing the issue of compensability, Ms Christine Freak, Policy Manager, NSW Irrigators' Council, claimed that she could not foresee a scenario when compensation would be triggered, given that any reduction in water extraction would be undertaken through the Available Water Determinations. Ms Freak added that the Available Water Determinations are a process that is familiar to all water users and that any reductions under it are not compensable:

Generally, when water is reduced from these licences that is known as an available water determination, or AWD. Water users for all types of water licences are very familiar with having the AWD or the water allocation adjusted based on how much water is available in the system. That is not compensable. We have seen a significant decrease in general security reliability, for example, where irrigators only get access to, say, 50 per cent of an entitlement, or we have recently seen the reductions to the AWDs for supplementary water access. That is not compensable, no.³⁵⁸

- 5.27** Indeed, Mr Andrew Brown, Principal Modeller, DPIE, explained to the committee that there is no risk associated with compensability:

It is not clear to me why anybody thinks that there is a compensation risk here. Water sharing plans have a growth-in-use provision. If it turns out that we have issued too much licence, then the growth-in-use provisions will cut in. There is one for cap and there is also one for SDL compliance. Making an AWD adjustment for those rules is never compensable.³⁵⁹

- 5.28** Notwithstanding this evidence, at present section 87AA of the *Water Management Act 2000* makes compensation payable to holders of flood plain harvesting licences if 'water allocations are reduced because of a change to provisions of the relevant management plan dealing with water sharing'.³⁶⁰ The licence holder 'is entitled to compensation as assessed by the Minister in accordance with subsections (5) and (6)'. These provisions, together with compensation for holders of supplementary water access licences (see s87AA(1)(f3)) were inserted into the legislation in the *Water Management Amendment Act 2014* (NSW).

Work approvals under the Water Act 1912

- 5.29** Looking beyond the issue of compensability rights created by a licence scheme, Mr Bret Walker AO SC, provided evidence on whether or not Part 8 works approvals under the *Water Act 1912* constituted a compensable property right. According to Mr Walker, while there is historical

³⁵⁷ Submission 147, Murray Lower Darling Rivers Indigenous Nations (MLDRIN), p 3.

³⁵⁸ Evidence, Ms Christine Freak, Policy Manager, NSW Irrigators' Council, 24 September 2021, p 22.

³⁵⁹ Evidence, Mr Andrew Brown, Principal Modeller, Department of Planning, Industry and Environment, 24 September 2021, p 49.

³⁶⁰ Sections 87AA(1)(f1), 87AA(1)(f2) and 87AA(2), *Water Management Act 2000*

material that supports the intention for such a right to be created, 'there is no existing right of that kind' and such a right would be one that 'Parliament would have to provide for...'.³⁶¹

Governance and oversight of floodplain harvesting

5.30 During the inquiry, several stakeholders raised concerns over the governance and oversight of floodplain harvesting. Specifically, this included questions over the Natural Resource Access Regulator's (NRAR) independence and enforcement capacity, as well as the operations of the NSW Healthy Floodplain Review Committee.

Independence of the Natural Resource Access Regulator

5.31 As outlined in chapter 1, NRAR is the state's independent regulator responsible for the enforcement of water laws in New South Wales through licensing and monitoring compliance.

5.32 In discussing NRAR's role, numerous inquiry participants asserted that NRAR lacks the independence needed for proper carriage of its functions. According to Mr Alfred Priestley, a Murri man from Kamilaroi: 'NRAR is controlled by the DPIE [Department of Planning, Industry and Environment]'.³⁶²

5.33 Indeed, stakeholders, such as the Southern Riverina Irrigators and Mrs Helen Dalton MP, Member for Murray, contended that NRAR was beholden to the office of the Minister for Water, Property and Housing and DPIE for its direction, and that the intended independence of the regulator was not borne out in practice.³⁶³

5.34 Referring to email correspondence within DPIE conveying a need for a common policy position between DPIE and NRAR, the Southern Riverina Irrigators contended that the email demonstrated cohesion between the two agencies, 'as evidenced in grouping "DPIE-W/NRAR"' and describing the combined entity as "we".³⁶⁴

5.35 Similarly, Mrs Dalton argued that email correspondence between NRAR and DPIE – where approval was seemingly sought for the Chief Regulatory Officer, Mr Grant Barnes' opinion piece in *The Land* newspaper – demonstrated a lack of NRAR's independence such that it called for explanation by the NSW Government.³⁶⁵

5.36 When asked about NRAR's independence, Mr Barnes acknowledged the close working relationship between the two agencies, noting that DPIE was responsible for making the rules that NRAR is required to enforce. However, Mr Barnes strongly defended NRAR's independence in the delivery of its core compliance and enforcement functions, and 'absolutely' refuted claims questioning this. He informed the committee that these concerns have in fact

³⁶¹ Evidence, Mr Bret Walker AO SC, 24 September 2021, p 6.

³⁶² Submission 78, Alfred Priestley, p 3.

³⁶³ Submission 149, Southern Riverina Irrigators, pp 6- 7; Submission 143, Mrs Helen Dalton MP, pp 5-7.

³⁶⁴ Submission 149, Southern Riverina Irrigators, pp 6-7

³⁶⁵ Submission 143, Mrs Helen Dalton MP, pp 5-7.

already been referred to the Independent Commission Against Corruption by NRAR itself for their adjudication.

5.37 When asked to describe how he saw NRAR's relationship with DPIE, Mr Barnes said:

Quite simply, the department is the agency that makes the rules. We are reliant on them to do so in a robust manner, in a credible manner and in a means by which we can then perform our task to enforce those rules... In addition, my staff and I are employees of the department. We rely on the department for human resources advice, financial advice, information and communications technology support and otherwise.

But in terms of the work that we do in compliance and enforcement, that is absolutely independent of the department. The decisions that the board and I make about what actions we take in enforcing the law are ours and ours only.³⁶⁶

5.38 Mr Barnes' evidence was supported by Minister Pavey and DPIE representatives. Minister Pavey strongly defended NRAR's leadership,³⁶⁷ and Mr Jim Bentley, Deputy Secretary, Water, DPIE, maintained that no approval has ever been sought for any decisions regarding compliance and enforcement:

... I have been in this job two years and three months and never on one occasion has Grant Barnes ever asked my approval for any decision of his that is related to a regulatory or compliance or enforcement matter. He has never asked me and, even if he did, I would not give that approval because it is not my job and it is not his job.

5.39 Mr Bentley also insisted that 'the Minister's office does not approve media releases and announcements that NRAR make', and explained that the email seeking approval for Mr Barnes' opinion piece reflected a 'human error':

... [T]hat did not go to the Minister's office for approval. The Minister's office does not approve, does not expect to approve and is not asked to approve those things, but sometimes there is human error in what gets written into an email. They were just wrong in that case. And as the individual who you were quoting said, "This is my first op-ed." So they were seeking a comms professional's advice about how to do an op-ed and all that sort of thing. It is perfectly reasonable to say, "It is my first op-ed, can you help me with this?" That is not saying, "Can you improve the message that NRAR wants to put out?" That is an entirely different thing.³⁶⁸

5.40 Minister Pavey confirmed: 'We do not see NRAR press releases; we do not approve them. That is just a matter of fact. It is not the protocol'.³⁶⁹

³⁶⁶ Evidence, Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator, 24 September 2021, p 10.

³⁶⁷ Evidence, the Hon. Melinda Pavey MP, Minister for Water, Property and Housing, 24 September 2021, p 43.

³⁶⁸ Evidence, Mr Jim Bentley, Deputy Secretary, Water, DPIE, 24 September 2021, p 44.

³⁶⁹ Evidence, the Hon. Melinda Pavey MP, Minister for Water, Property and Housing, 24 September 2021, p 44.

Enforcement activity undertaken by the Natural Resource Access Regulator

- 5.41** Relevant to concerns over NRAR's independence are questions raised by inquiry participants over the level of enforcement activity currently being undertaken by the regulator. For example, Southern Riverina Irrigators argued that NRAR has exercised its discretion so as not to prosecute any floodplain harvesting breaches despite it being, according to Southern Riverina Irrigators, an illegal activity:

To date we understand that NRAR has used its discretion to not prosecute any floodplain harvesting breaches. We are not aware of any prosecutions that are ongoing. We have seen the board papers, thanks to a Standing Order 52, where they determined, following the disallowance of the floodplain harvesting exemption last year, to follow that path of least resistance and not enforce these. We have seen statements from NRAR that they will only prosecute serious and wilful misconduct. We do not know what they determine as being that standard, but certainly there has not been much activity from NRAR to date on this illegal activity.³⁷⁰

- 5.42** Mr Chris Brooks, Chair of Southern Riverina Irrigators, went further to say that he believed NRAR has indeed taken instruction from DPIE regarding enforcement:

My concern with regard to NRAR's performance actually goes one step further. There are copies of communication and boardroom notes from within NRAR where they are taking instructions from DPIE about what they can and cannot do with regard to enforcing floodplain harvesting, and that was after the disallowance motion to remove an exemption for these people against prosecution.³⁷¹

- 5.43** Separately, Mr Garry Hall, President of Macquarie Marshes Environmental Landholders Association, reflected on his personal experience to observe that NRAR's lack of resources and high staff turnover may be translating into ineffective enforcement:

I think those of us who have been involved in the Murray-Darling Basin Plan and water policy development and the development of water strategies really need a good, solid compliance department. It appears to me, from personal experience, that NRAR are not getting enough information. I am extremely concerned that they are not well enough funded and I do believe that there is a high turnover of staff. If this agency is going to be effective, we need reassuring that NRAR is going to be capable of doing the job, and it is a big job with a lot of unapproved works in the mid-catchment in the Macquarie.³⁷²

- 5.44** This sentiment was shared by the Australian Floodplain Association who called for 'secure on-going funding' for the NRAR.³⁷³

- 5.45** In response to these concerns, Mr Barnes expressed confidence in NRAR's work, stating: 'I can assure the Committee that we take very seriously our role to enforce the law. We do so

³⁷⁰ Evidence, Mr Tim Horne, Principal of Horne Legal, Southern Riverina Irrigators, 22 September 2021, p 23

³⁷¹ Evidence, Mr Chris Brooks, Chair, Southern Riverina Irrigators, 22 September 2021, pp 23-24.

³⁷² Evidence, Mr Garry Hall, President, Macquarie Marshes Environmental Landholders Association, and Landholder in the Macquarie Marshes, 7 October 2021, p 5.

³⁷³ Submission 33, Australian Floodplain Association, p 3.

credibly, we do so on the basis of the evidence and we do so in a manner that holds ourselves accountable and transparent'.³⁷⁴

5.46 Mr Barnes explained that NRAR 'actively monitor and surveil flood events using a combination of boots on the ground and our eyes in the sky program'. As a result, NRAR is able to 'detect with a high degree of accuracy the movement of water, the abstraction of water, the storage of water and the use of water'. Mr Barnes maintained that, using that technology, NRAR have taken considerable action over the years in relation to the use of the infrastructure and water in floodplain harvesting.³⁷⁵

5.47 Indeed, Mr Barnes reported NRAR's activity to date, including investigations and determinations of breaches:

With respect to infrastructure, this has been a focus for us since our inception. We have undertaken 852 investigations regarding the unauthorised construction or use of a flood work or water supply work; 338 investigations have been finalised with a determination that a breach of the Water Management Act has occurred. Those relate to unauthorised levees, channels and banks on the flood plain; 200 of them relate to unauthorised flood works. Of those 338 matters where we finalised a determination of a breach, we have issued 205 directions, 155 formal warnings, 149 penalty infringement notices and we have undertaken eight prosecutions.

I could go on to describe the work that we have undertaken with respect to water allegedly taken without a water access licence. Similarly, 714 allegations have been made. We have finalised investigations with a determination of a breach in 232 instances. We have applied 286 sanctions. Those are 122 formal warnings, 75 penalty infringement notices, one financial sanction under section 60G, two enforcement undertakings and 12 prosecutions.³⁷⁶

Operation of the NSW Healthy Floodplains Review Committee

5.48 Another issue raised during the inquiry regarding the governance and oversight of floodplain harvesting was the operation of the NSW Healthy Floodplains Review Committee.

5.49 As noted in chapter 1, the NSW Floodplain Harvesting Policy provides for a review process to consider issues raised by landholders who have registered to participate in the roll out of floodplain harvesting access licences. These issues can pertain to DPIE's preliminary determination on the landholder's eligibility for a licence or the proposed volumetric entitlements.³⁷⁷

³⁷⁴ Evidence, Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator, 24 September 2021, pp 9 – 10.

³⁷⁵ Evidence, Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator, 24 September 2021, pp 9 – 10.

³⁷⁶ Evidence, Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator, 24 September 2021, pp 9 – 10.

³⁷⁷ Department of Planning, Industry and Environment, *NSW Healthy Floodplains Review Committee – Terms of Reference*, 13 October 2021, p 1.

5.50 The function of the Review Committee, according to the NSW Government, is to analyse issues raised by applicants, to ensure procedural fairness through the 'consistent and equitable application of the NSW Floodplain Harvesting Policy', and to provide appropriate advice and recommendations to the Director of the Healthy Floodplains Project, DPIE, on these issues.³⁷⁸

5.51 Ms Beverly Smiles, who is the Nature Conservation Council's representative on the Review Committee, the other organisations represented being the NSW Irrigators' Council and NSW Farmers, told the inquiry what she had observed the functions of the committee being:

The Healthy Floodplains project has nothing to do with health of flood plains. It is giving retrospective approval to structures and works while granting new floodplain harvesting entitlements that are far too large. The only focus of the project has been to assess floodplain harvesting capability at the property level with the purpose of licensing works and volume of take to lock in history of use as much as possible and identify individual property entitlements that will become a compensable, tradable, private property right. The remit of the committee was to make sure that government policy was being implemented fairly; however, the policy kept changing over time. This made the decision-making task more difficult. The assessment and review process became very rushed, putting significant pressure on staff, modellers and committee members. The aim to have everything licensed by 30 June 2021 has proven to be unrealistic. As the process wore on, more and more property owners appealed the on-ground assessments, particularly around pump rates, temporary storage volumes and modelling. Changes made to parameters in the models generally resulted in larger entitlements.³⁷⁹

5.52 In her submission, Mrs Dalton MP, Member for Murray, contended that there are 'question marks' over the administration of the Review Committee, with no published details of any conflicts of interests the members may have, 'including whether they or their family will benefit from the granting of floodplain harvesting licences'.³⁸⁰

5.53 Mrs Dalton's evidence was supported by the Nature Conservation Council (NCC) who, under the terms of reference for the Review Committee, have had representation on the committee since 2015. The NCC raised a number of concerns over the operation of the Review Committee, including:

- the transparency of the committee, with each representative being required to sign a deed of confidentiality
- significant increases in workload resulting in the committee being unable to provide meaningful and timely review and analysis
- a lack of application of the precautionary principle for unregulated and groundwater only properties
- changes to the decision making processes under pressure from irrigators and landholders
- changes to assessment processes leading to increases in entitlements awarded.³⁸¹

³⁷⁸ Department of Planning, Industry and Environment, *NSW Healthy Floodplains Review Committee – Terms of Reference*, 13 October 2021, p 2.

³⁷⁹ Evidence, Ms Beverly Smiles, Nature Conservation Council on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 2.

³⁸⁰ Submission 143, Mrs Helen Dalton MP, p 7.

³⁸¹ Submission 102, Nature Conservation Council of NSW, pp 21-22.

- 5.54** Ms Smiles explained these concerns in her evidence to the committee, noting in particular the 'lack of transparency, lack of environmental assessment and changes to policy throughout the assessment and modelling process'.³⁸²
- 5.55** When asked about changes to the policy that have impacted the assessment and modelling process, Ms Smiles pointed to the addition of rainfall run-off above the 10 per cent harvestable rights rule and the policy for assessing properties with unregulated licences. Ms Smiles contended that the changes have ultimately resulted in significant increases to water diversion, stating: '[M]ore often than not the outcome of the process was larger entitlements'.³⁸³
- 5.56** Ms Smiles also asserted that, while the Review Committee was required to come to consensus decisions, there were many issues on which she could not 'agree to a decision with the information that we were supplied...', resulting in her lodging a number of dissenting reports with Mr Bentley, DPIE.³⁸⁴
- 5.57** Another point of concern for Ms Smiles was the confidentiality requirement, which she regarded as particularly unusual and indicated a 'significant lack of transparency around the process of accessing floodplain harvesting capability and the ensuing entitlement'.³⁸⁵
- 5.58** In contrast, the committee also heard from Mr Conrad Bolton, Chair of the Healthy Floodplain Review Committee, who asserted that the workings of the Review Committee are fundamentally sound. Mr Bolton emphasised the limited remit of the committee, noting that it is not a forum for policy advice or advocacy:
- The committee is a forum secured by a confidential deed poll for registrants that disagree with the department's preliminary determinations to seek amendments as there are no other appeal mechanisms available to them. We are not a policy advisory forum or a forum that provides a voice to members' organisation groups.³⁸⁶
- 5.59** Further, Mr Bolton explained that the committee has come to a consensus decision on the majority of submissions that have been assessed to date:
- To date we have dealt with over 400 submissions with thousands of issues embedded within those submissions with farm scale validation being a large percentage of those. Only 25 submissions have not reached a consensus and this was a result of a representative organisation not agreeing with Government policy.³⁸⁷
- 5.60** When asked about the Review Committee's workload, Mr Bolton confirmed that it had indeed increased significantly in recent years, following Alluvium's recommendations that water users

³⁸² Evidence, Ms Beverly Smiles, Nature Conservation Council on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 2.

³⁸³ Evidence, Ms Beverly Smiles, Nature Conservation Council on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 4.

³⁸⁴ Evidence, Ms Beverly Smiles, Nature Conservation Council on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 5.

³⁸⁵ Evidence, Ms Beverly Smiles, Nature Conservation Council on the Healthy Floodplains Review Committee and Inland Rivers Network, 20 September 2021, p 6.

³⁸⁶ Evidence, Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, 7 October 2021, p 1.

³⁸⁷ Evidence, Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, 7 October 2021, p 1.

be given an opportunity to ask for or seek amendments. Mr Bolton stated that the additional work was within the original remit and did not require a revision of the terms of reference.³⁸⁸

Management of the Menindee Lakes

5.61 Relevant to water governance more broadly, the management of the Menindee Lakes was also discussed during the inquiry. Under the Murray-Darling Basin Plan, the Murray-Darling Basin Authority can use the water in the Menindee Lakes when volumes are above 640 gigalitres. Once the volumes fall below 460 gigalitres, the management of the water is then transferred back to New South Wales for management. The arrangement was commonly referred to as the '640/460 gigalitre rule' during the inquiry.

5.62 When asked by the committee whether the 640/460 gigalitre rule was delivering good outcomes, all stakeholders – irrespective of their position on the merits of floodplain harvesting – expressed varying degrees of criticism, with none supporting the rule:

- Mr Justin McClure, President of the Australian Floodplain Association, stated that the rule is 'not working for the lower Darling community, 100 per cent'.³⁸⁹
- Professor Richard Kingsford noted that the Menindee Lakes is 'managed for the whole of the River Murray for the southern part of the Murray-Darling Basin' and that the local environment at Menindee is rendered secondary as a result.³⁹⁰
- Ms Rachel Strachan, Vice Chair of South Western Water Users Association, confirmed that she agreed with the Central Darling Shire Council's view that the 640/480 gigalitre rule has not delivered good outcomes for the lower Darling communities.³⁹¹
- Mr Robert McBride of Tolarno Station described the rule as 'catastrophic' for the Menindee Lakes.³⁹²
- Mr Terry Smith, Chair of Menindee Lakes Stakeholder Advisory Group described the effect of the rule as 'quite devastating' for Menindee. Mr Smith also noted that the rules applied prior to the fish kills have not changed and contended that the event will happen again.³⁹³
- Ms Claire Miller, Chief Executive Officer of NSW Irrigators' Council, stated that the management of the Menindee Lakes is something that 'does need to be looked at'.³⁹⁴

³⁸⁸ Evidence, Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, 7 October 2021, p 3.

³⁸⁹ Evidence, Mr Justin McClure, President, Australian Floodplain Association, 7 October 2021, p 6.

³⁹⁰ Evidence, Professor Richard Kingsford, Director, Centre for Ecosystem Science, School of Biological, Earth and Environmental Sciences, University of New South Wales, 22 September 2021, p 8.

³⁹¹ Evidence, Ms Rachel Strachan, Vice Chair, South Western Water User Association, 22 September 2021, p 25.

³⁹² Evidence, Mr Robert McBride, Station Owner, Tolarno Station, 22 September 2021, p 37.

³⁹³ Evidence, Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group, 22 September 2021, p 37.

³⁹⁴ Evidence, Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council, 24 September 2021, p 29.

- 5.63** Dr Martin Mallen-Cooper suggested a variety of management options in relation to the Menindee Lakes, but stressed the important factor was enabling passage of native fish out of the vital nursery provided by Lake Cawndilla:

I talk about a vision for the Darling. Menindee Lakes is absolutely part of that vision. I think it was such an extraordinary—and still is very productive in terms of native fish. As you said, how do those fish get out? I think that is absolutely a key to how the system must work, so that fish can get back out and up the Darling.³⁹⁵

Committee comment

- 5.64** The committee notes the evidence received on floodplain harvesting licence design and the governance and oversight of floodplain harvesting licensing.
- 5.65** While the committee acknowledges that the introduction of a licence scheme has been a long time coming and the intention of successive governments, it is important that the scheme provides confidence to all stakeholders affected by it. Through this inquiry it has become apparent that many elements are still subject to contention, including whether permanent licences should be issued in the first instance, whether tradability issues have been adequately addressed and whether it is the intention to issue compensable licences.
- 5.66** The committee notes in particular the views of inquiry participants over the merit of introducing a permanent licensing scheme or whether there is benefit in issuing temporary licences until floodplain harvesting volumes are more clearly modelled from current data and remain within legal limits, and expected outcomes have been achieved, including no adverse cumulative downstream impact.
- 5.67** The committee therefore recommends that the Department of Planning, Industry and Environment only issue floodplain harvesting licences at such a time as it is satisfied that the recommendations of this report will be met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, the independent oversight of the Natural Resources Commission has been established and that mandated environmental and other downstream outcomes are being achieved.

Recommendation 19

That the Department of Planning, Industry and Environment only issue floodplain harvesting licences at such a time as it is satisfied that the recommendations of this report will be met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, the independent oversight of the Natural Resources Commission has been established and that mandated environmental and other downstream outcomes are being achieved.

³⁹⁵ Evidence, Adjunct Research Professor Martin Mallen-Cooper, Institute for Land Water and Society, Charles Sturt University, 22 September 2021, p 18.

- 5.68** With regard to compensability, the committee notes the expectation established by the NSW Floodplain Harvesting Policy on compensation rights, while acknowledging the evidence received purporting the compensation risk arising from a floodplain harvesting licence to be minimal.
- 5.69** However, the committee recognises the concerns of stakeholders who question compensability and its application through a floodplain harvesting licence, particularly as it relates to unlawful structures and works.
- 5.70** As discussed above at 5.69, the legislation currently provides that a floodplain harvesting licence holder, or a supplementary water access licence holder, 'is entitled to compensation' if 'water allocations are reduced because of a change to provisions of the relevant management plan dealing with water sharing' (Sections 87AA(1)(f1) – (f3) and 87AA(2), *Water Management Act 2000*).
- 5.71** As such, the committee recommends that, if the NSW Government grants floodplain harvesting licences or entitlements, these should be strictly non-compensable and subject to Parliamentary oversight.

Recommendation 20

That, if the NSW Government grants floodplain harvesting licences or entitlements, these should be strictly non-compensable and subject to Parliamentary oversight.

- 5.72** The committee understands that water trading is a requirement for the basin states under the Murray-Darling Basin Plan. However, the committee identifies with the concerns raised during the inquiry regarding the potential adverse impact of water trading under these circumstances on the environment and downstream and First Nations communities.
- 5.73** The committee therefore recommends that the NSW Government, through the National Federation Reform Council, make representations to remove the surface water trading requirement from the Murray-Darling Basin Plan.
- 5.74** The committee is encouraged by the Department's undertaking to propose a 'most constrained trading regime' but seeks assurance that this will include robust assessment processes prior to each trade. The committee thus recommends that, in the absence of the surface water trading requirement being removed from the Murray-Darling Basin Plan, the Minister for Water, Property and Housing ensure that water trading be restricted and subject to a robust environmental and social impact assessment process prior to each trade, and that trading is restricted to within catchment trading only.

Recommendation 21

That the NSW Government, through the National Federation Reform Council, make representations to remove the surface water trading requirement from the Murray-Darling Basin Plan.

Recommendation 22

That, in the absence of the surface water trading requirement being removed from the Murray-Darling Basin Plan, the Minister for Water, Property and Housing ensure that water trading be restricted and subject to a robust environmental and social impact assessment process prior to each trade, and that trading is restricted to within catchment trading only.

- 5.75** While the committee acknowledges the evidence of the Natural Resource Access Regulator (NRAR) in relation to its operations and independence from DPIE, the committee notes with concern the assertions made by some stakeholders questioning this. The committee believes that confidence in NRAR's capacity to undertake its enforcement and compliance functions with independence and vigour is paramount.
- 5.76** The committee also recognises the assertions around NRAR's enforcement activity, particularly in relation to prosecuting floodplain harvesting breaches at its discretion. The committee notes NRAR's evidence with respect to its activity and accepts that investigations and determinations of breaches have been made. Nevertheless, the committee seeks confidence that a clearly defined regime is in place for floodplain harvesting. In also noting observations regarding NRAR's resourcing, the committee acknowledges that NRAR should be well-resourced to perform its functions independently of other departments and without constraint.
- 5.77** The committee therefore recommends that the NSW Government should institute a clearly defined enforcement and compliance regime for floodplain harvesting take, and floodplain harvesting works. Moreover, the NSW Government should ensure that the Natural Resources Access Regulator is sufficiently funded to undertake its enforcement and compliance functions.

Recommendation 23

That the NSW Government:

- institute a clearly defined enforcement and compliance regime for floodplain harvesting take and floodplain harvesting works
- ensure that the Natural Resources Access Regulator is sufficiently funded to undertake its enforcement and compliance functions.

- 5.78** The committee appreciates the evidence of those members of the NSW Healthy Floodplains Review Committee (HFRC) who participated in the inquiry. The committee notes the evidence by some witnesses that the HFRC plays an important role in providing procedural fairness to

those seeking floodplain harvesting licences. However, the committee was alarmed by other evidence regarding its operation, including potential conflicts of interest, the capacity of HFRC members to adequately and objectively assess the hundreds of appeals lodged with the committee, and the nature in which dissenting views were dealt with. The obligation by HFRC members to sign confidentiality agreements was criticised by some stakeholders and greatly hindered the ability of the committee to publicly examine the workings of the HFRC. From the evidence provided the committee does not believe that the HFRC is operating with optimal effectiveness or fairness, particularly given the concerns around transparency, assessment capacity and workload.

- 5.79** The committee was also concerned to hear that approvals were being granted for floodplain structures without any assessment of the environmental impact of each structure, including on downstream flows. It was also alarming to hear that the policy kept changing over time, including parameters around models which generally resulted in larger entitlements.
- 5.80** To this end, the committee finds that the non-transparent manner in which the NSW Healthy Floodplains Review Committee undertakes its work, including assessing appeals and deciding whether to grant retrospective approval to floodplain structures, is concerning and inappropriate. On this basis, the committee therefore recommends that the NSW Government abolish the NSW Healthy Floodplains Review Committee and future appeals be dealt with by the proposed independent expert panel, referred to in Recommendation 4 of this report, and the outcomes be reported publicly.
- 5.81** Moreover, the committee recommends that the Department of Planning, Industry and Environment ensure that all decisions made by the NSW Healthy Floodplains Review Committee be audited by the proposed independent expert panel.
-

Finding 14

That the non-transparent manner in which the NSW Healthy Floodplains Review Committee undertakes its work, including assessing appeals and deciding whether to grant retrospective approval to floodplain structures, is concerning and inappropriate.

Recommendation 24

That the NSW Government abolish the NSW Healthy Floodplains Review Committee and future appeals be dealt with by the proposed independent expert panel, referred to in Recommendation 4, and the outcomes be reported publicly.

Recommendation 25

That the Department of Planning, Industry and Environment ensure that all decisions made by the NSW Healthy Floodplains Review Committee be audited by the proposed independent expert panel, referred to in Recommendation 4.

- 5.82** A common theme throughout this inquiry has been the sense of uncertainty expressed by stakeholders – uncertainty over the legal ramifications of the proposed floodplain harvesting regulations being disallowed, uncertainty over extraction volumes and subsequent impacts to communities and the environment, and now uncertainty over the full implications of the licensing scheme as proposed by the NSW Government.
- 5.83** The culmination of this uncertainty leads the committee to believe that there is benefit in pausing until there can be greater confidence and clarity around the issues raised in this inquiry.

Appendix 1 Submissions

No.	Author
1	Name suppressed
2	Name suppressed
3	Mr Anthony Beer
4	Name suppressed
5	Mr Matthew Hopkins
6	Ms Fiona Baker
7	Name suppressed
8	Name suppressed
9	Mr Mackenzie Bradford
10	Name suppressed
11	Brendan Paniagua
12	Name suppressed
13	Name suppressed
14	Name suppressed
15	Mr Connor Quigley
16	Mr Patrick Macken
17	Name suppressed
18	Name suppressed
19	Mr Matthew Robson
20	Confidential
21	Name suppressed
22	Mr Peter Millington
23	Ms Jan Beer
24	River Lakes and Coorong Action Group Inc.
25	Mr Robert Bosch
26	Name suppressed
27	South Western Water Users Association
28	Ricegrowers' Association of Australia Inc
29	Murray Regional Strategy Group (MRSG)
30	Wentworth Shire Council
31	Environmentally Concerned Citizens of Orange (ECCO)

No.	Author
32	Murray-Darling Basin Authority
33	Australian Floodplain Association
34	Justin and Julie McClure
35	Alluvium Consulting Australia
36	Brewarrina Shire Council
37	MenindeeLakes Stakeholder Advisory Group
38	Darling River Action Group Inc
39	Name suppressed
40	Merced Farming Pty Ltd
41	Coleambally Irrigation Co-operative Limited
41a	Coleambally Irrigation Co-operative Limited
42	Name suppressed
43	Name suppressed
44	Confidential
45	National Farmers' Federation (NFF)
46	Murray Irrigation Limited
47	Dubbo Environment Group
48	JAS AG
49	Murray Darling Association
50	NSW Irrigators' Council (NSWIC)
50a	Confidential
50b	NSW Irrigators' Council (NSWIC)
51	Name suppressed
52	Murrumbidgee Valley Food and Fibre Association (MVFFA)
53	Narrabri Shire Council
54	Macquarie Marshes Environmental Landholders association
55	Inland Rivers Network
56	Central Murray Environmental Floodplains Group Inc
57	Southern Connected Basin Communities
58	Name suppressed
59	Border Rivers Food & Fibre Inc.
60	Namoi Water
61	Wentworth Group of Concerned Scientists and Environmental Defenders Office
62	Macquarie River Food and Fibre
63	Mudgee District Environment Group

No.	Author
64	Cotton Australia
65	Gwydir Valley Irrigators Association (GVIA)
66	The Australia Institute
67	Lachlan Valley Water Inc
68	Commonwealth Environmental Water Office
69	Dharriwaa Elders Group
70	NSW Farmers Association
71	Barwon-Darling Water
72	Jonathan Mulligan
73	Centre for Ecosystem Science UNSW Sydney
74	Mid to Lower Murray Horticulture
75	Name suppressed
76	Cr Ron Campbell
77	Mr Robert Mclellan
78	Alfred Priestley
78a	Alfred Priestley
79	Mr Callum O'Donnell
80	Mr Charles Brookes
81	Mr Cody-Keith Moran
82	Mr Benjamin Lucas
83	Mr Aidan Potts
84	NSW Government
85	Name suppressed
86	Cathy Merchant
87	Confidential
88	Geoff Davies and Fiona Lander
89	Name suppressed
90	Dr Stuart Rowland
91	Name suppressed
92	Mr David Infante Sousa
93	Ms Rebecca Ward
94	Mr Marcus West
95	Miss Zahlia Hamer
96	Name suppressed
97	Mr Codie Burke

No.	Author
98	Name suppressed
99	Mr Mitchell Oates
100	Name suppressed
101	Euahlayi Peoples Republic
102	Nature Conservation Council of NSW
102a	Nature Conservation Council of NSW
103	Name suppressed
104	Name suppressed
105	Name suppressed
106	Name suppressed
107	Name suppressed
108	Name suppressed
109	Name suppressed
110	Name suppressed
111	Name suppressed
112	Mr Kyle Booth
113	Mr Matthew Bockman
114	Joshua Powell
115	Mr Liam Clerke
116	Mr Jayden Tapper
117	Mr Victor Pernet
118	Mr Matthew Shirvington
119	Mr Robert Maxwell
120	Mr Hugo Webster
121	Mr Kye Easton
122	Mr Anton Boski
123	Miss Danielle Marke
124	Mr Shiva Reddy
125	Mr Taison Pelman
126	Mr Kitt Forbes
127	Mr Angus Forbes
128	Mr Steve Goyne
129	Mr Quin Brozic
130	Mr Ryan McDonald
131	Mr Alexander Popovic

No.	Author
132	Mr Timothy Maxwell
133	Mr Daniel Giezekamp
134	Name suppressed
135	Name suppressed
136	Name suppressed
137	Name suppressed
138	Name suppressed
139	Name suppressed
140	Name suppressed
141	Name suppressed
142	Name suppressed
143	Mrs Helen Dalton MP
144	Victorian Government
145	The Recreational Fishing Alliance of NSW
146	Slattery & Johnson
146a	Slattery & Johnson
147	Murray Lower Darling Rivers Indigenous Nations (MLDRIN)
148	NSW Aboriginal Land Council
149	Southern Riverina Irrigators
149a	Southern Riverina Irrigators
150	Victorian Farmers Federation
151	Mr Samuel Denton
152	Mr Tim Bell
153	Mr Declan Caruso
154	Mr Thomas Smith
155	Mr Kyle Johnson
156	Mr Luca Thomas
157	Mr Benjamin Nuttall
158	Mr Jonathon Ward
159	Mr William De Geer
160	Mr Brett Meldrum
161	Anderson Christie
162	Mr Riley Keogh
163	Miss Emily Pritchard
164	Mr Oliver Griffin-Danby

No.	Author
165	Mr Nathan Orenstein
166	Mr Nils Hobiger
167	Mr Louis Stanton
168	Mr Anthony Paull
169	Mr Anthony Kypreos
170	Dr Matthew Elliott
171	Miss Amanda Barnes
172	Nicole Dallimore
173	Name suppressed
174	Name suppressed
175	Name suppressed
176	Name suppressed
177	Name suppressed
178	Name suppressed
179	Confidential
180	Confidential
181	Name suppressed
182	Name suppressed
183	Name suppressed
184	Name suppressed
185	Name suppressed
186	Watershed AllianceAU
187	Name suppressed
188	Name suppressed
189	Name suppressed
190	Name suppressed
191	Name suppressed
192	Name suppressed
193	Mr Sam Hughes
194	Mr Oliver Elliot
195	Mr Darko Mikic
196	Mr Colin Sharman
197	Dr Annie Truong
198	Mr Guy Cameron
199	Ms Michelle Cavenett

No.	Author
200	Ms Christine Cocks
201	Mr Stephen Allen
202	Ms Janet Thompson
203	Mr Brendan Crozier
204	Penny Auburn
205	Mrs Jan Beer
206	Mr Paul Pierotti
207	Mr Jeremy Morton
208	Mrs Justine Bucknell
209	Mr Robert Tuck
210	Ms Kathryn Baines
211	Terry Ingram
212	Name suppressed
213	Ms Rebecca Carr
214	Name suppressed
215	Confidential
216	Name suppressed
217	Confidential
218	Name suppressed
219	Name suppressed
219a	Name suppressed
220	Name suppressed
221	Name suppressed
222	Name suppressed
223	Name suppressed
224	Name suppressed
225	Name suppressed
226	Name suppressed
227	Name suppressed
228	Name suppressed
229	Name suppressed
230	Confidential
231	Confidential
232	Confidential
233	Ms Bronwyn Vost

No.	Author
234	Mr David Hilton
235	Warren Shire Council
236	Stephen McGrath
237	Ms Erica Stecher
238	Dr Martin Mallen-Cooper
239	Mr Robert South
240	Greater Shepparton City Council
241	Confidential
242	Mr Barry-Allan Stone
243	Mr Jim Cush
244	Mr Christopher Rawlins
245	Mr Robert Keyzer
246	Mr Peter McLellan
247	Mr Benjamin Coulton
248	Ms Frances Pietroboni
249	Name suppressed
250	Name suppressed
251	Name suppressed
252	Name suppressed
253	Amelia and Kathalka Whyman
254	Name suppressed
255	Name suppressed
256	Mr Garry Hall
257	Name suppressed
258	Healthy Rivers Dubbo
259	Mr Brendon Warnock
260	Name suppressed
261	Name suppressed
262	Name suppressed
263	Name suppressed
264	Name suppressed
265	Mr Ron Perry
266	Confidential
267	Mr Peter Gill
268	Name suppressed

No.	Author
269	Name suppressed
270	AGB Farming Pty Ltd ATF AGB Farming Trust
271	Name suppressed
272	Murrumbidgee Private Irrigators Incorporated (MPII)
273	Gwydir Cotton Growers Association (CGA)
274	Name suppressed
275	Confidential
276	Nicole Dallimore
277	Confidential
278	Name suppressed
279	The Koondrook–Barham Bridge Newspaper and the Southern Riverina Irrigators
280	Guy Boland
281	Suzanna Sheed MP
282	Murray Valley Private Diverters (MVPD)
283	Friends of Nyah Vinifera Park Inc.
284	Ali Cupper MP
285	Fenner School of Environment and Society ANU and Slattery and Johnson
285a	Fenner School of Environment and Society ANU and Slattery and Johnson
286	Mr Andrew Knop
287	Tolarno Station 1851 Pty Ltd
288	The Pastoralists' Association of West Darling (PAWD)
289	Mr Dugald Bucknell

Appendix 2 Witnesses at hearings

Date	Name	Position and Organisation
Monday 20 September 2021 Via videoconference	Professor Fran Sheldon	Member Wentworth Group of Concerned Scientists
	Dr Eytan Rocheta	Policy Analyst Wentworth Group of Concerned Scientists
	Dr Emma Carmody	Managing Lawyer – Freshwater Environmental Defenders Office
	Mr Chris Gambian	Chief Executive Nature Conservation Council
	Mr Tim Napier	Executive Officer Border River Food and Fibre Inc
	Mr Brendan Griffiths	NSW Vice Chair Border River Food and Fibre Inc
	Mr Michael Drum	Executive Officer Macquarie River Food and Fibre
	Mr Tony Quigley	Executive Officer Macquarie River Food and Fibre
	Mr Ian Coles	Executive Officer Barwon-Darling Water
	Ms Zara Lowien	Member Barwon-Darling Water
	Mr Andrew Watson	Board member Namoi Water
	Mr Daniel Kahl	Board member Namoi Water
	Ms Maryanne Slattery	Director Slattery and Johnson
	Mr William Johnson	Director Slattery and Johnson
Dr Matthew Colloff	Fenner School of Environment and Society, ANU and Slattery and Johnson	

Date	Name	Position and Organisation
	Ms Beverley Smiles	Nature Conservation Council Representative on the Healthy Floodplains Review Committee – Inland Rivers Network
Wednesday 22 September 2021 Via videoconference	Professor Richard Kingsford	Director Centre for Ecosystem, Science, University of New South Wales, Sydney
	Ms Kate McBride	Anne Kantor Fellow The Australia Institute
	Mr Roderick Campbell	Research Director The Australia Institute
	Dr Martin Mallen-Cooper	Adjunct Research Professor, Institute for Land Water and Society, Charles Sturt University
	Dr Stuart Rowland	Former Principal Research Scientist NSW Fisheries
	Mr Stan Konstantaras	President, Recreational Fishing Alliance of NSW
	Ms Rachel Strachan	Vice Chairman, South Western Water Users Association
	Mr Chris Brooks	Chair, Southern Riverina Irrigators
	Mr Tim Horne	Principal Horne Legal, Southern Riverina Irrigators
	Mr Terry Smith	Menindee Lakes Stakeholder Advisory Group
	Mr Ross Leddra	President Darling River Action Group Inc
	Mr Robert McBride	Station Owner Tolarno Station
	Mr Grant Rigney	Chair and citizen Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations

Date	Name	Position and Organisation
	Ms Virginia Robinson	Secretary Dharriwaa Elders Group
	Ms Wendy Spencer	Project Manager Dharriwaa Elders Group
	Ghillar Michael Eckford	President, Euahlayi Peoples Republic
	Mr Leon Winters	Spokesperson Mirri-yhar-burrah clan, Euahlayi Peoples Republic
	Ms Tanya Kirkegaard	Executive Officer Northern Basin Aboriginal Nations
	Mr Jason Ford	Operations Manager Northern Basin Aboriginal Nations
Friday 24 September 2021 Via videoconference	Mr Bret Walker AO SC	Barrister, Fifth Floor St James' Hall
	Mr Grant Barnes	Chief Regulatory Officer Natural Resources Access Regulator
	Ms Claire Miller	Chief Executive Officer NSW Irrigators' Council
	Ms Christine Freak	Policy Manager NSW Irrigators' Council
	Mr Peter Holt	Special Counsel Holding Redlich, NSW Irrigators' Council
	Mr Michael Murray	General Manager Cotton Australia
	Ms Emma Bradbury	Chief Executive Officer Murray Darling Association
	Cr Jane MacAllister	Wentworth Shire Council
	Cr Phillip O'Connor	Mayor, Brewarrina Shire Council

Date	Name	Position and Organisation
	Honourable Melinda Pavey	Minister for Water, Property and Housing
	Mr Jim Bentley	Deputy Secretary Water, Department of Planning, Industry and Environment
	Mr Dan Connor	Director Healthy Floodplains Project, Department of Planning, Industry and Environment
	Mr Andrew Brown	Principal Modeller Department of Planning, Industry and Environment
Thursday 7 October 2021 Via videoconference	Mr Alfred Priestley	Private Individual
	Mr Conrad Bolton	Chair Healthy Floodplains Review Committee
	Mr Justin McClure	President Australian Floodplain Association and local irrigator, Killara Station
	Mr Stuart Le Lievre	Vice President Australian Floodplain Association
	Mr Garry Hall	President, Macquarie Marshes Environmental Landholders Association and landholder in the Macquarie Marshes
	Mr Dugald Bucknell	Member Macquarie Marshes Environmental Landholders Association and Owner, Quambone Pastoral Company

Appendix 3 Minutes

Minutes no. 1

Friday 9 July 2021

Select Committee on Floodplain Harvesting

WebEx at 10.01 am

1. Members present

Ms Faehrmann, *Chair*

Mr Banasiak, *Deputy Chair*

Mr Amato

Mr Farraway

Mr Franklin

Mr Searle (substituting for Ms Jackson)

Ms Sharpe

Mr Veitch

2. Tabling of resolution establishing the committee

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

- (1) That a select committee be established to inquire into and report on the Government's management of floodplain harvesting, including:
 - a) the legality of floodplain harvesting practices,
 - b) the water regulations published on 30 April 2021,
 - c) how floodplain harvesting can be licensed, regulated, metered and monitored so that it is sustainable and meets the objectives of the Water Management Act 2000 and the Murray Darling Basin Plan and,
 - d) any other related matter.
- (2) That, notwithstanding anything to the contrary in the standing orders, the committee consist of eight members comprising:
 - a) three government members, being nominated by the Leader of the Government,
 - b) three opposition members, being nominated by the Leader of the Opposition and
 - c) two members crossbench members, being Ms Cate Faehrmann and the Hon Mark Banasiak.
- (3) That the chair of the committee be Ms Cate Faehrmann and the Deputy Chair Mr Mark Banasiak.
- (4) That, notwithstanding anything to the contrary in the standing orders, at any meeting of the committee, any four members of the committee will constitute a quorum.
- (5) That, unless the committee decides otherwise:
 - a) submissions to inquiries are to be published, subject to the Committee Clerk checking for confidentiality and adverse mention and, where those issues arise, bringing them to the attention of the committee for consideration,
 - b) the Chair's proposed witness list is to be circulated to provide members with an opportunity to amend the list, with the witness list agreed to by email, unless a member requests the Chair to convene a meeting to resolve any disagreement,
 - c) the sequence of questions to be asked at hearings is to alternate between government, opposition and crossbench members, in order determined by the committee, with equal time allocated to each,

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

(6) That the committee report by 30 November 2021.

3. Election of Chair

The committee noted that, as per the resolution establishing the committee, the Chair of the committee is Ms Cate Faehrmann MLC.

4. Election of Deputy Chair

The committee noted that, as per the resolution establishing the committee, the Deputy Chair of the committee is Mr Mark Banasiak MLC.

5. Conduct of committee proceedings – media

Resolved, on the motion of Mr Veitch: That unless the committee decides otherwise, the following procedures are to apply for the life of the committee:

- the committee authorise the filming, broadcasting, webcasting and still photography of its public proceedings, in accordance with the resolution of the Legislative Council of 18 October 2007
- the committee webcast its public proceedings via the Parliament's website, where technically possible
- the committee adopt the interim guidelines on the use of social media and electronic devices for committee proceedings, as developed by the Chair's Committee in May 2013
- media statements on behalf of the committee be made only by the Chair.

6. Correspondence

The committee noted the following items of correspondence:

Received:

- 2 July 2021 – Email from Ms Zara Lowien, Executive Officer, Gwydir Valley Irrigators Association to secretariat, inviting the committee to tour a farm in the Gwydir valley to discuss issues relevant to the floodplain harvesting inquiry.
- 6 July 2021 – Email from Ms Cara Punch, Office of the Opposition Whip to secretariat, advising that the Hon Adam Searle MLC will be substituting for the Hon Rose Jackson MLC for the Select Committee on Floodplain Harvesting meeting on Friday 9 July 2021.
- 8 July 2021 – Email from Ms Cara Punch, Office of the Opposition Whip to secretariat, advising that the Hon Adam Searle MLC will be participating for the remainder of the inquiry into floodplain harvesting following the meeting on Friday 9 July 2021.

7. Conduct of the inquiry into floodplain harvesting

7.1 Proposed timeline

Resolved, on the motion of Ms Sharpe: That the committee adopt the following timeline for the administration of the inquiry:

- Submission closing date: Sunday 13 August 2021
- Information session and hearings: four days in August and September 2021 in the following order:

- Information session (a briefing from the Department of Planning, Industry and Environment)
- First Sydney hearing
- Regional site visit / hearing – Moree / Gwydir
- Second Sydney hearing
- Report deliberative: mid to late November 2021
- Table report: End of November 2021

Resolved, on the motion of Ms Sharpe: That the committee accept the invitation from the Gwydir Valley Irrigators Association to tour a farm in the Gwydir valley to discuss issues relevant to the floodplain harvesting inquiry.

7.2 Stakeholder list

Resolved, on the motion of Mr Banasiak: That members agree to the proposed stakeholder list and have 48 hours to make any further suggestions.

7.3 Advertising

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

7.4 Advice on the legality of floodplain harvesting

Resolved, on the motion of Banasiak: That the Chair, on behalf of the committee, write to the Clerk of the Parliaments requesting that he seek independent legal advice on the legality of floodplain harvesting with the precise brief to be developed by the secretariat in consultation with the Chair, and to be distributed to members of the committee for comment prior to submission to the Clerk.

8. Other Business

Resolved, on the motion of Ms Sharpe: That the Hon Adam Searle MLC, who has advised the committee that he intends to participate for the duration of the inquiry into floodplain harvesting, be provided with copies of all inquiry related documents, including meeting papers and unpublished submissions.

Resolved, on the motion of Ms Sharpe: That the committee utilise the September committee activity free dates for floodplain harvesting inquiry activities if required.

9. Adjournment

The committee adjourned at 10.29 am, *sine die*.

Joseph Cho
Committee Clerk

Minutes no. 2

Thursday 12 August 2021
Select Committee on Floodplain Harvesting
WebEx at 1.46 pm

1. Members present

Ms Faehrmann, *Chair*
Mr Banasiak, *Deputy Chair (until 3.07 pm)*
Mr Amato
Mr Farraway
Mr Franklin
Ms Jackson
Ms Sharpe (*from 1.48 pm*)
Mr Veitch (*from 1.54 pm, until 3.07 pm*)

2. Apologies

Mr Searle (participating)

3. Inquiry into Floodplain Harvesting

3.1 Information session – additional attendee

The committee noted that it had agreed via email on 10 August 2021 for Mr Angus Mackie, Advisor – Office of the Hon Melinda Pavey MP to observe the information session.

3.2 Recording of the information session

Resolved, on the motion of Mr Banasiak: That the information session be recorded for secretariat's information only.

3.3 Scheduled inquiry activity on 22 September 2021

Resolved, on the motion of Mr Franklin: That, due to the COVID-19 pandemic, the committee hold a WebEx hearing on 22 September 2021 instead of travelling to Moree / Gwydir for a regional hearing and site visit.

3.4 Information session: Department of Planning, Industry and Environment (DPIE)

The following DPIE representatives presented to the committee on floodplain harvesting:

- Amanda Jones, Chief Strategy Officer
- Dan Connor, Director; Healthy Floodplain Delivery Project
- Jim Bentley, Deputy Secretary, Water
- Kaia Hodge, Executive Director; Regional Water Strategies
- Kristanne Andersen, Manager, Healthy Floodplains Project Coordination
- Mitchell Isaacs, Chief Knowledge Officer
- Richard Beecham, Manager, Water Modelling
- Vanessa O'Keefe, Executive Director Water Policy and Planning

Mr Angus Mackie, Advisor – Office of the Hon Melinda Pavey MP, also attended the session as an observer.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 11 July 2021 – Email from David Burton, a licensed water user on the Mulwala canal system, to secretariat, explaining the negative impact of current floodplain harvesting practices and recommending change.
- 16 July 2021 – Email from Caitlin May to secretariat, asking the Select Committee on Floodplain Harvesting to be mindful of its responsibilities to the people, environment and ancestors of the land in conducting the inquiry into floodplain harvesting.
- 24 July 2021 – Email from Kay and Graham Douglas to secretariat, expressing concern over the amount of water that is being taken from floodplains without measurement.

5. Adjournment

The committee adjourned at 3.09 pm, *sine die*.

Joseph Cho
Committee Clerk

Minutes no. 3

Monday 20 September 2021

Select Committee on Floodplain Harvesting

WebEx at 9.02 am

6. Members presentMs Faehrmann, *Chair*Mr Banasiak, *Deputy Chair*

Mr Amato (from 9.06 am)

Mr Farraway

Mr Franklin

Ms Jackson

Mr Searle (participating) (from 9.08 am)

Ms Sharpe

Mr Veitch (from 9.06 am)

7. Draft minutes

Resolved, on the motion of Ms Sharpe: That draft minutes nos. 1 and 2 be confirmed.

8. Correspondence

The committee noted the following items of correspondence:

Received:

- 26 August 2021 – Email from Ms Zara Lowien, Executive Officer, Gwydir Valley Irrigators Association to secretariat, offering the committee a virtual alternative to the visit that was cancelled due to the COVID-19 pandemic.
- 10 September 2021 – Email from Mr Hilton Taylor, Interim Commonwealth Environmental Water Holder to secretariat, declining the committee's invitation to appear at the hearing on 20 September 2021.
- 13 September 2021 – Email from Ms Linda Christesen, Water Policy Manager, Rice Growers' Association of Australia to secretariat, declining the committee's invitation to appear at the hearing on 22 September 2021.
- 13 September 2021 – Email from Mr Ian Cole, Barwon-Darling Water to secretariat, requesting an invitation from the committee to appear at a hearing.
- 14 September 2021 – Email from Mr Andrew Reynolds, Acting Chief Executive, Murray-Darling Basin Authority to secretariat, declining the committee's invitation to appear at the hearing on 20 September 2021.

Sent:

- 9 August 2021 – Letter from Chair to Clerk of the Parliaments, requesting that a suitably qualified legal advisor be engaged to seek legal advice on the committee's questions regarding the legality of floodplain harvesting.
- 13 September 2021 – Email from secretariat to Mr Brendan Warnock, Namoi Water, confirming the telephone conversation declining the committee's invitation to appear at a hearing.
- 14 September 2021 – Email from secretariat to Mr Andrew Reynolds, Acting Chief Executive, Murray-Darling Basin Authority, asking Mr Reynolds to reconsider the committee's invitation.

9. Inquiry into Floodplain Harvesting**9.1 Public submissions**

The following submissions were published by the committee clerk under the authorisation of the resolution appointing the committee: submission nos. 3, 5-6, 9, 11, 15-16, 19, 22-25, 27-38, 40-41, 45-50, 52-57, 59-74, 76-84, 86, 88, 90, 92-95, 97, 99, 101-102, 112-133, 143-172, 186, 193-204, 206-211, 213, 233-240, 242-248, 253, 256, 258-259, 265, 267, 270, 272, 273, 276, 279-286.

9.2 Partially confidential submissions

Name suppressed submissions

Resolved, on the motion of Mr Banasiak: That the committee keep the name of the author confidential, as per the request of the author in submission nos. 1-2, 4, 7-8, 10, 12-14, 17-18, 21, 26, 39, 42-43, 51, 58, 75, 85, 89, 91, 98, 100, 103-111, 134-142, 163-174, 177-178, 181-185, 187-192, 213, 216, 218-219, 220, 222-229, 249-252, 254-255, 257, 260-264, 268-269, 271, 274 and 278.

Partially confidential submissions – as identified by the secretariat

Resolved, on the motion of Mr Banasiak: That the committee authorise the publication of submission nos. 221 and 287, with the exception of the names of third parties, which are to remain confidential, as per the recommendation of the secretariat.

9.3 Confidential submissions

Resolved, on the motion of Mr Banasiak: That the committee keep submission nos. 20, 44, 50a, 87, 179, 180, 215, 217, 230, 231, 232, 241, 266, 275 and 277 confidential, as per the request of the author.

9.4 Slattery and Johnson submission – attachment B

Resolved, on the motion of Ms Sharpe: That the committee publish attachment B to Slattery and Johnson's submission, as per the request of the author.

9.5 Legal advice from Mr Bret Walker

Resolved, on the motion of Ms Jackson: That the committee authorise the publication of the legal advice from Mr Bret Walker AO SC, dated 15 September 2021, and that the advice be published on the inquiry webpage.

9.6 Floodplain harvesting background paper

Resolved, on the motion of Mr Banasiak: That the background paper provided by the parliamentary research service be kept confidential, as per the request of the author.

9.7 Allocation of questioning

As per the resolution establishing the committee, the sequence of questions to be asked at hearings is to alternate between opposition, crossbench and government members, in that order, with equal time allocated to each, unless the committee decides otherwise.

9.8 Briefing on virtual hearing proceedings

The Chair briefed members on virtual hearing arrangements. Key points included:

- turning off the microphone if not speaking to remove background noise
- turning off the video or leaving and re-joining if connection issues
- try to avoid talking at the same time
- be clear on which witness your questions are directed to, or which witness should respond first
- a short break will follow each session, allowing the next witnesses to join the meeting and test their connection
- members should stay connected during these breaks but turn off their video and microphone, noting that witnesses will be able to hear any discussions between members during this time
- there is a time lag when people enter and leave the lobby and when coming on and off mute.

9.9 Livestream and recording of hearings

Resolved, on the motion of Mr Banasiak: That the committee agree to record the hearings on 20, 22 and 24 September, and that these recordings be placed on Parliament's YouTube channel as soon as practicable after the hearings.

The committee noted that the livestream will be on from the commencement of the hearing until the conclusion of the hearing, including during the lunch break. Members are reminded to place themselves on mute and turn their video off during this break.

9.10 Photo of committee for social media

Resolved, on the motion of Ms Sharpe: That the secretariat take a screenshot of the committee during its deliberative for the purposes of publishing on social media.

9.11 Virtual committee guidelines and procedural fairness

The committee noted that, to help ensure that Hansard can transcribe the hearing, witnesses and/or members should avoid speaking over each other.

The committee considered an approach in the event of disorder and/or inaudibility during the proceedings of the hearing.

9.12 *In camera* evidence

Resolved, on the motion of Mr Banasiak: That the evidence of the following witnesses be heard *in camera*:

- Ms Beverley Smiles
- Witness B
- Witness C.

Public hearing

Witnesses, the public and media were admitted via video link.

The Chair made an opening statement regarding the broadcasting of proceedings, virtual hearing etiquette and other matters.

The following witnesses were admitted, sworn and examined:

- Professor Fran Sheldon, Member, Wentworth Group of Concerned Scientists
- Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists
- Dr Emma Carmody, Managing Lawyer – Freshwater, Environmental Defenders Office
- Mr Chris Gambian, Chief Executive, Nature Conservation Council.

Mr Faraway tabled the following documents:

- News article, 'Wentworth Group of Concerned Scientists chair buys up Duxton Water shares', The Weekly Times
- Journal article, Matthew J Colloff, R Quentin-Grafton and John Williams, 'Scientific integrity, public policy and water governance in the Murray-Darling Basin', Australasian Journal of Water Resources, published online 26 April 2021.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Mr Tim Napier, Executive Officer, Border Rivers Food and Fibre Inc
- Mr Brendan Griffiths, NSW Vice Chair, Border Rivers Food and Fibre Inc
- Mr Michael Drum, Executive Officer, Macquarie River Food and Fibre
- Mr Tony Quigley, Executive Committee Chair, Macquarie River Food and Fibre.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Mr Ian Cole, Executive Officer, Barwon-Darling Water
- Ms Zara Lowien, Member, Barwon-Darling Water
- Mr Andrew Watson, Board Member, Namoi Water
- Mr Daniel Kahl, Board Members, Namoi Water.

Mr Faraway tabled the following document:

- News article, 'Southern Murray Darling Basin irrigators are floodplain harvesting', The Weekly Times.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Ms Maryanne Slattery, Slattery and Johnson
- Mr William Johnson, Slattery and Johnson
- Dr Matthew Colloff, Fenner School of Environment and Society, ANU and Slattery and Johnson.

Mr Banasiak tabled the following document:

- Water Allocation Statement, 'NSW Murray and Lower Darling: Water Allocation Update', NSW Department of Planning, Industry and Environment, dated 1 September 2021.

Mr Franklin tabled the following document:

- News article, 'Letter to the editor: levy helps with floodplain fight', Deniliquin Pastoral Times.

The evidence concluded and the witnesses withdrew.

The public virtual hearing concluded at 2.24 pm.

The public and media withdrew.

9.13 *In camera* hearing

The committee proceeded to take evidence *in camera* via video link.

Persons present other than the committee: Rhia Victorino, Joseph Cho, Lauren Evans and Irene Penfold.

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

The following witness was admitted, sworn and examined:

- Ms Beverley Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee – Inland Rivers Network.

The evidence concluded and the witness withdrew.

The following witnesses were admitted, sworn and admitted:

- Witness B.
- Witness C.

The evidence concluded and the witnesses withdrew.

The *in camera* virtual hearing concluded at 3.52 pm.

10. Tabled documents

Resolved, on the motion of Mr Franklin: That the committee accept and publish the following documents tabled during the public hearing:

- News article, 'Wentworth Group of Concerned Scientists chair buys up Duxton Water shares', The Weekly Times, tabled by Mr Farraway
- Journal article, Matthew J Colloff, R Quentin-Grafton and John Williams, 'Scientific integrity, public policy and water governance in the Murray-Darling Basin', Australasian Journal of Water Resources, published online 26 April 2021, tabled by Mr Farraway
- News article, 'Southern Murray Darling Basin irrigators are floodplain harvesting', The Weekly Times, tabled by Mr Farraway
- Screenshot of Water Allocation Statement, 'NSW Murray and Lower Darling: Water Allocation Update', NSW Department of Planning, Industry and Environment, dated 1 September 2021, tabled by Mr Banasiak
- News article, 'Letter to the editor: levy helps with floodplain fight', Deniliquin Pastoral Times, tabled by Mr Franklin.

11. Publication of letter from Chair to Clerk of the Parliaments

Resolved, on the motion of Mr Farraway: That the committee authorise the publication of the letter from the Chair to the Clerk of the Parliaments, dated 9 August 2021, requesting that a suitably qualified legal advisor be engaged to seek legal advice on the committee's questions regarding the legality of floodplain harvesting, and that the letter be published on the inquiry webpage.

12. Next meeting

The committee adjourned 3.55 pm, until 9 am, Wednesday 22 September 2021 (virtual hearing for the inquiry into floodplain harvesting)

Joseph Cho
Committee Clerk

Minutes no. 4

Wednesday 22 September 2021

Select Committee on Floodplain Harvesting

Webex at 9.03 am

1. Members present

Ms Faehrmann, *Chair*
Mr Banasiak, *Deputy Chair*
Mr Amato
Mr Farraway
Mr Franklin
Ms Jackson
Mr Searle (participating)
Ms Sharpe
Mr Veitch

2. Correspondence

The committee noted the following items of correspondence:

Received

- 16 September 2021 – Email from Ms Rebecca Mathias, Senior Policy Officer, NSW Aboriginal Land Council to secretariat, declining the committee's invitation to appear at a hearing due to competing priorities and demands of the COVID pandemic.
- 17 September 2021 – Email from Ms Rhonda Wolens, Executive Assistant to the Acting Chief Executive to secretariat, reiterating the Murray-Darling Basin Authority's decision to decline the committee's invitation to appear at the 20 September 2021 hearing.

3. Public Hearing

Witnesses, the public and media were admitted via video link.

The Chair made an opening statement regarding the broadcast of proceedings, virtual hearing etiquette and other matters.

The following witnesses were admitted, sworn and examined:

- Professor Richard Kingsford, Director, Centre for Ecosystem Science, University of New South Wales, Sydney
- Ms Kate McBride, Anne Kantor Fellow, The Australia Institute
- Mr Roderick Campbell, Research Director, The Australia Institute.

Mr Banasiak tabled the following document:

- Report, Northern Valley Irrigators Alliance (NVIA), 'Irrigation industry economic benefits: Murray Darling Basin Authority', dated September 2021.

Mr Faraway tabled the following document:

- News article, 'It's on at Menindee: influx of wildlife expected as lakes exceed capacity', The Guardian.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Dr Martin Mallen-Cooper, Adjunct Research Professor, Institute for Land Water and Society, Charles Sturt University
- Dr Stuart Rowland, Formerly Principal Research Scientist for NSW Fisheries for 33 years
- Mr Stan Konstantaras, President, Recreational Fishing Alliance of NSW.

Mr Banasiak tabled the following document:

- Water Allocation Statement, 'NSW Murray and Lower Darling: Water Allocation Update', NSW Department of Planning, Industry and Environment, dated 1 September 2021.

Dr Mallen-Cooper tendered the following documents:

- Diagram, 'Native fish and Floodplain Harvesting', dated 22 September 2021
- Research report, Martin Mallen-Cooper and Brenton P Zampatti, 'Restoring the ecological integrity of a dryland river: Why low flows in the Barwon–Darling River must flow', Ecological Society of Australia and John Wiley & Sons Australia Ltd.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Ms Rachel Strachan, Vice Chairman, South Western Water Users Association
- Mr Chris Brooks, Chair, Southern Riverina Irrigators
- Mr Tim Horne, Principal, Horne Legal, Southern Riverina Irrigators.

Mr Banasiak tabled the following document:

- Water Allocation Statement, 'NSW Murray and Lower Darling: Water Allocation Update', NSW Department of Planning, Industry and Environment, dated 1 September 2021.

Mr Faraway tendered the following document:

- News article, 'Letter to the Editor: Levy helps with floodplain fight', Deniliquin Pastoral Times

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Mr Terry Smith, Chair, Menindee Lakes Stakeholder Advisory Group
- Mr Ross Leddra, President, Darling River Action Group Inc.
- Mr Robert McBride, Station Owner, Tolarno Station.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Mr Grant Rigney, Chair and citizen of the Ngarrindjeri Nation, Murray Lower Darling Rivers Indigenous Nations
- Ms Virginia Robinson, Secretary, Dharriwaa Elders Group
- Ms Wendy Spencer, Project Manager, Dharriwaa Elders Group.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Ghillar Michael Eckford, President, Euahlayi Peoples Republic
- Mr Leon Winters, Spokesperson from the Mirri-yhar-burrah clan, Euahlayi Peoples Republic
- Ms Tanya Kirkegaard, Executive Officer, Northern Basin Aboriginal Nations
- Mr Jason Ford, Operations Manager, Northern Basin Aboriginal Nations.

The evidence concluded and the witnesses withdrew.

The public virtual hearing concluded at 3.30 pm.

The public and media withdrew.

4. **Tendered documents**

Resolved on the motion of Mr Franklin: That the committee accept and publish the following documents tendered during the public hearing:

- Report, Northern Valley Irrigators Alliance (NVIA), 'Irrigation industry economic benefits: Murray Darling Basin Authority', dated September 2021, tabled by Mr Banasiak
- News article, 'It's on at Menindee: influx of wildlife expected as lakes exceed capacity', The Guardian, tabled by Mr Faraway
- Diagram, 'Native fish and Floodplain Harvesting', dated 22 September 2021, tendered by Dr Mallen-Cooper
- Research report, Dr Martin Mallen-Cooper and Brenton P Zampatti, 'Restoring the ecological integrity of a dryland river: Why low flows in the Barwon–Darling River must flow', Ecological Society of Australia and John Wiley & Sons Australia Ltd, tendered by Dr Mallen-Cooper.

5. **Further *in camera* hearing**

Resolved, on the motion of Mr Franklin: That the committee conduct a further *in camera* hearing with the two remaining members of the Healthy Floodplains Review Committee on a date to be canvassed by the committee secretariat.

6. **Further invitation to the Murray Darling Basin Authority**

Resolved, on the motion of Ms Jackson: That the committee seek advice from the Clerk in relation to the committee's power to summon Commonwealth public officials and, subject to this advice, issue a further invitation to employees of the Murray Darling Basin Authority residing in New South Wales to appear at a hearing, noting the committee's power to issue a summons should they decline the invitation.

7. **Adjournment**

The committee adjourned at 3.50 pm, until 10 am, Thursday 23 September 2021 (private meeting with the Gwydir Valley Irrigators Association and landowners)

Joseph Cho

Committee Clerk

Minutes no. 5

Thursday 23 September 2021

Select Committee on Floodplain Harvesting

Webex at 10.02 am

1. **Members present**

Ms Faehrmann, *Chair*

Mr Banasiak, *Deputy Chair*

Mr Amato
Mr Farraway
Mr Franklin
Ms Jackson
Mr Searle (participating)
Ms Sharpe
Mr Veitch

2. Inquiry into Floodplain Harvesting

2.1 Virtual meeting with the Gwydir Valley Irrigators Association (GVIA) and landowners

The committee met with the following GVIA representative and landowners:

- Ms Zara Lowien, Executive Officer, Gwydir Valley Irrigators Association
- local landowner on the Gwydir and Border Rivers systems
- local landowner on the Lower Gwydir.

The virtual meeting concluded at 11.01 am.

3. Public hearing on Thursday 24 September 2021

Resolved, on the motion of Mr Farraway: That the session time allocated to the Minister for Water and the Department of Planning, Industry and Environment at the hearing on 24 September 2021 be extended to two hours, with the first 1 ½ hours divided equally between opposition and crossbench members, and the last ½ hour reserved for government questions.

4. Adjournment

The committee adjourned at 11.05 am, until 9.00 am, Friday 24 September 2021 (virtual hearing for the inquiry into floodplain harvesting)

Joseph Cho
Committee Clerk

Minutes no. 6

Friday 24 September 2021

Select Committee on Floodplain Harvesting

Webex at 9.01 am

1. Members present

Ms Faehrmann, *Chair*
Mr Banasiak, *Deputy Chair*
Mr Amato
Mr Farraway
Mr Franklin
Ms Jackson
Mr Searle (participating)
Ms Sharpe
Mr Veitch

2. Public hearing

Witnesses, the public and media were admitted via video link.

The Chair made an opening statement regarding the broadcast of proceedings, virtual hearing etiquette and other matters.

The following witness was admitted, sworn and examined:

- Mr Bret Walker AO SC, Fifth Floor St James' Hall.

The evidence concluded and the witness withdrew.

The following witness was admitted, sworn and examined:

- Mr Grant Barnes, Chief Regulatory Officer, Natural Resources Access Regulator.

Mr Barnes tendered the following documents:

- PDF slideshow on spatial monitoring, 'The Northern Basin floodplain harvesting monitoring dashboard', Natural Resources Access Regulator, dated 24 September 2021
- Video presentation on spatial monitoring, Natural Resources Access Regulator.

Mr Searle tabled the following document:

- Document, 'NRAR Annexures'.

The evidence concluded and the witness withdrew.

The following witnesses were admitted, sworn and examined:

- Ms Claire Miller, Chief Executive Officer, NSW Irrigators' Council
- Ms Christine Freak, Policy Manager, NSW Irrigators' Council
- Mr Peter Holt, Special Counsel, Holding Redlich, NSW Irrigators' Council
- Mr Michael Murray, General Manager, Cotton Australia.

The evidence concluded and the witnesses withdrew.

The following witnesses were admitted, sworn and examined:

- Ms Emma Bradbury, Chief Executive Officer, Murray Darling Association
- Cr Jane MacAllister, Wentworth Shire Council
- Cr Phillip O'Connor, Mayor, Brewarrina Shire Council.

Cr MacAllister tendered the following document:

- Journal article, S. Jackson and L. Head, 'The politics of evaporation and the making of atmospheric territory in Australia's Murray-Darling Basin', EPE: Nature and Space, Sage Publications, published 17 August 2021.

The evidence concluded and the witnesses withdrew.

The Honourable Melinda Pavey MP, Minister for Water, Property and Housing was admitted.

The chair noted that members of Parliament swear an oath to their office, and therefore do not need to be sworn prior to giving evidence before a committee.

The following witnesses were sworn:

- Mr Jim Bentley, Deputy Secretary Water, Department of Planning, Industry and Environment
- Mr Dan Connor, Director - Healthy Floodplains Project, Department of Planning, Industry and Environment
- Mr Andrew Brown, Principal Modeller, Department of Planning, Industry and Environment.

The Minister and departmental witnesses were examined by the committee.

Ms Faehrmann tabled the following documents:

- DPIE.WM.1178 – Current conditions water use (including HEW) v Plan limit
- DPIE.WM.1330 – FPH – final modelling results for Border Rivers and consultation approvals process
- DPIE.WM.1549 – Post FPH program – WRPs & LTAAELs
- DPIE.WM.1909 – Gwydir Cap v WSP Scenario

- DPIE.WM.2357 – Bilateral Agreement progress report
- DPIE.WM.2401 – BDL definition
- DPIE.WM.2740 – Draft words re models
- DPIE.WM.3261 – BDL models and Floodplain Harvesting
- DPIE.WM.3852 – BDL, SDL discussion 3pm
- DPIE.WM.4596 – FW: MDBA SDL Reporting and Compliance framework – third draft – for review COB by 12 October 2018.

Mr Banasiak tabled the following document:

- Report, NSW Irrigators' Council, 'Investigation into Compliance Barriers: Implementation of the NSW Non-Urban Water Metering Framework Trance 1', dated August 2021.

The evidence concluded and the Minister and witnesses withdrew.

The public virtual hearing concluded at 3.42 pm.

The public and media withdrew.

3. **Tendered documents**

Resolved on the motion of Ms Sharpe: That the committee accept and publish the following documents tendered during the public hearing, with the exception of personal contact details, which are to be kept confidential:

- PDF slideshow on spatial monitoring, 'The Northern Basin floodplain harvesting monitoring dashboard', Natural Resources Access Regulator, dated 24 September 2021, tendered by Mr Barnes
- Video presentation on spatial monitoring, Natural Resources Access Regulator, tendered by Mr Barnes
- Document, 'NRAR Annexures', tabled by Mr Searle
- Journal article, S. Jackson and L. Head, 'The politics of evaporation and the making of atmospheric territory in Australia's Murray-Darling Basin', EPE: Nature and Space, Sage Publications, published 17 August 2021, tendered by Cr MacAllister
- Document, 'DPIE.WM.1178 – Current conditions water use (including HEW) v Plan limit', tabled by Ms Faehrmann
- Document, 'DPIE.WM.1330 – FPH – final modelling results for Border Rivers and consultation approvals process, tabled by Ms Faehrmann
- Document, 'DPIE.WM.1549 – Post FPH program – WRPs & LTAAELs', tabled by Ms Faehrmann
- Document, 'DPIE.WM.1909 – Gwydir Cap v WSP Scenario', tabled by Ms Faehrmann
- Document, 'DPIE.WM.2357 – Bilateral Agreement progress report', tabled by Ms Faehrmann
- Document, 'DPIE.WM.2401 – BDL definition', tabled by Ms Faehrmann
- Document, 'DPIE.WM.2740 – Draft words re models', tabled by Ms Faehrmann
- Document, 'DPIE.WM.3261 – BDL models and Floodplain Harvesting', tabled by Ms Faehrmann
- Document, 'DPIE.WM.3852 – BDL, SDL discussion 3pm', tabled by Ms Faehrmann
- Document, 'DPIE.WM.4596 – FW: MDBA SDL Reporting and Compliance framework – third draft – for review COB by 12 October 2018', tabled by Ms Faehrmann
- Report, NSW Irrigators' Council, 'Investigation into Compliance Barriers: Implementation of the NSW Non-Urban Water Metering Framework Trance 1', dated August 2021, tabled by Mr Banasiak.

4. **Letter from the Chair to the Minister for Water, Property and Housing**

Resolved, on the motion of Ms Jackson: That the Chair, on behalf of the committee, write a letter to the Minister for Water, Property and Housing requesting that the issuing of licences for floodplain harvesting be withheld until such time the committee has handed down its report.

5. **Adjournment**

The committee adjourned at 3.47 pm, *sine die*

Joseph Cho
Committee Clerk

Minutes no. 7

Thursday 7 October 2021
Select Committee on Floodplain Harvesting
WebEx at 1.16 pm

1. Members present

Ms Faehrmann, *Chair*
Mr Banasiak, *Deputy Chair*
Mr Amato
Mr Farraway (until 4.17pm)
Mr Franklin
Ms Jackson
Mr Searle (participating) (until 3.45 pm)
Ms Sharpe (until 4.27 pm)
Mr Veitch

2. Draft minutes

Resolved, on the motion of Ms Sharpe: That draft minutes nos. 3, 4, 5 and 6 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 23 September 2021 – Email from local landholder to secretariat, thanking the committee for the meeting held 24 September 2021 and asking that floodplain harvesting be considered as a drought management issue.

Sent:

- 5 October 2021 – Letter from Chair to the Hon. Melinda Pavey, MP, Minister for Water, Property and Housing, requesting on behalf of the committee that the Minister withhold the issuing of licences for floodplain harvesting until the committee has handed down its report.

Resolved on the motion of Ms Sharpe: That the correspondence from local landholder, received 23 September 2021, be kept confidential.

Resolved on the motion of Ms Sharpe: That the letter from Chair to the Hon. Melinda Pavey MP, Minister for Water, Property and Housing be published and placed on the inquiry webpage.

4. Inquiry into Floodplain Harvesting

4.1 Public submissions

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

- authorise the publication of submission nos. 288 and 289
- authorise the publication of revised submission no. 90.

4.2 Answers to questions on notice

Resolved, on the motion of Mr Veitch: That the committee authorise the publication of the answers to questions on notice provided by the following witnesses:

- Mr Roderick Campbell, Research Director, the Australia Institute
- Dr Stuart Rowland, Former Principal Research Scientist, NSW Fisheries.

4.3 Answers to questions on notice and supplementary questions

Resolved, on the motion of Ms Jackson: That witnesses from the hearing on Thursday 7 October 2021 be requested to return answers to questions on notice and/or supplementary questions from members within 14 days of the date on which questions are forwarded to the witnesses by the committee clerk.

4.4 Extension of inquiry timeline

Resolved, on the motion of Ms Sharpe: That:

- the committee authorise the Chair to seek an extension to the reporting date from the House to 15 December 2021.
- the report deliberative take place on 8 December 2021, subject to members' availability.

4.5 *In camera* evidence

Resolved, on the motion of Mr Veitch: That the evidence of Mr Alfred Priestley on 7 October 2021 be heard in camera.

4.6 Consideration of potential unauthorised disclosure

Committee noted that under standing order 244:

The evidence taken by a committee and documents presented to it, which have not been reported to the House, may not, unless authorised by the House or committee, be disclosed to any person other than a member or officer of the committee.

Committee noted that, with respect to *in camera* proceedings, a breach of standing order 224 would constitute a contempt of Parliament.

Committee considered the potential unauthorised disclosure of the identity of in camera witnesses who appeared before the committee at the hearing on 20 September 2021.

4.7 *In camera* hearing

The committee proceeded to take evidence *in camera* via video link.

Persons present other than the committee: Rhia Victorino, Joseph Cho, Lauren Evans and Irene Penfold.

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

The following witness was admitted, sworn and examined:

- Witness D.

The evidence concluded and the witness withdrew.

The following witnesses were admitted, sworn and admitted:

- Mr Conrad Bolton, Chair of the Healthy Floodplains Review Committee.

The evidence concluded and the witness withdrew.

The following witnesses were admitted, sworn and admitted:

- Mr Alfred Priestley, Wirrijin Murri.

The evidence concluded and the witnesses withdrew.

The *in camera* virtual hearing concluded at 3.45 pm.

Mr Searle left the meeting.

4.8 Public hearing

Witnesses, the public and media were admitted via video link.

The Chair made an opening statement regarding the broadcasting of proceedings, virtual hearing etiquette and other matters.

The following witnesses were admitted, sworn and examined:

- Mr Justin McClure, President, Australian Floodplain Association and local irrigator, Killara Station
- Mr Stuart Le Lievre, Vice President, Australian Floodplains Association
- Mr Garry Hall, President, Macquarie Marshes Environmental Landholders Association and landholder in the Macquarie Marshes
- Mr Dugald Bucknell, Member, Macquarie Marshes Environmental Landholders Association and Owner, Quambone Pastoral Company.

Mr Faraway left the meeting .

Ms Sharpe left the meeting.

The evidence concluded and the witnesses withdrew.

The public virtual hearing concluded at 4.45 pm.

The public and media withdrew.

5. Next meeting

The committee adjourned 4.46 pm, *sine die*

Joseph Cho
Committee Clerk

Draft minutes no. 8

Wednesday 8 December 2021

Select Committee on Floodplain Harvesting

Room 1254, NSW Parliament at 9.32 am

1. Members present

Ms Faehrmann, *Chair*
Mr Banasiak, *Deputy Chair* (via videoconference)
Mr Amato (via videoconference)
Mr Faraway (via videoconference)
Mr Franklin
Ms Jackson
Ms Sharpe (via videoconference)
Mr Veitch (via videoconference)

2. Apologies

Mr Searle (participating)

3. Draft minutes

Resolved, on the motion of Ms Jackson: That draft minutes no. 7 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received

- 25 October 2021 – Email from Ms Beverley Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and President, Inland Rivers Network, to secretariat, agreeing to partial publication of in camera evidence given on 20 September 2021 and requesting additional information attached be kept confidential.

- 27 October 2021 – Email from Witness B requesting that in camera evidence given on 20 September 2021 by themselves and Witness C, to secretariat, be kept confidential.
- 29 October 2021 – Letter from Ms Claire Miller, Chief Executive Officer and Mr Jim Cush, NSW Chair, NSW Irrigators' Council to the committee, regarding climate change being factored into regulation of floodplain harvesting.
- 29 October 2021 – Letter from Ms Claire Miller, Chief Executive Officer and Mr Jim Cush, NSW Chair, NSW Irrigators' Council to the committee, clarifying industry support for floodplain harvesting.
- 5 November 2021 – Email from Mr Alfred Priestley, Private Individual, to secretariat, agreeing to publication of in camera evidence given on 7 October 2021.
- 5 November 2021 – Email from Witness D to secretariat requesting that in camera evidence given on 7 October 2021 remain confidential.
- 10 November 2021 – Email from Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, to secretariat, agreeing to publication of in camera evidence given on 7 October 2021 and answers to questions on notice.
- 23 November 2021 – Letter from Ms Claire Miller, Chief Executive Officer and Mr Jim Cush, NSW Chair, NSW Irrigators' Council to the committee, responding to joint memorandum of advice provided to the committee by Southern Riverina Irrigators.
- 26 November 2021 - Letter from Ms Claire Miller, Chief Executive Officer and Mr Jim Cush, NSW Chair, NSW Irrigators' Council to the committee, responding to evidence submitted to the inquiry.
- 7 December 2021 – Letter from Mr Mick Coffey, Executive Officer, Namoi Water; Ms Zara Lowien, Executive Officer, Gwydir Valley Irrigators Association; Mr Ian Cole, Executive Officer, Barwon-Darling Water; Mr Tim Napier, Executive Officer, Border River Food and Fibre; Mr Michael Drum, Executive Officer, Macquarie River Food and Fibre; and Mr Michael Murray, General Manager, Cotton Australia to secretariat, providing further information on the Healthy Floodplains Review Committee.

Resolved, on the motion of Mr Franklin: That the committee authorise the publication of correspondence from:

- Ms Claire Miller and Mr Jim Cush, NSW Irrigators' Council to the committee, regarding climate change being factored into regulation of floodplain harvesting, dated 29 October 2021
- Ms Claire Miller and Mr Jim Cush, NSW Irrigators' Council to the committee, clarifying industry support for floodplain harvesting, dated 29 October 2021
- Ms Claire Miller and Mr Jim Cush, NSW Irrigators' Council to the committee, responding to joint memorandum of advice provided to the committee by Southern Riverina Irrigators, dated 23 November 2021
- Ms Claire Miller and Mr Jim Cush, NSW Irrigators' Council to the committee, responding to evidence submitted to the inquiry, dated 26 November 2021.

Resolved, on the motion of Mr Franklin: That the committee keep confidential the following correspondence:

- Email from Witness B, requesting that in camera evidence given on 20 September 2021 by themselves and Witness C, be kept confidential, dated 27 October 2021
- Email from Witness D to committee, requesting that in camera evidence given on 7 October 2021 remain confidential, dated 5 November 2021.

Resolved, on the motion of Ms Jackson: That:

- the Chair, on behalf of the committee, write to Mr Jim Bentley, Deputy Secretary, Water, Department of Planning, Industry and Environment, requesting that:
 - the confidentiality agreements signed by members of the NSW Health Floodplains Review Committee be waived in relation to any evidence they may have given to the inquiry

- that there be no adverse impact or action taken against members of the NSW Health Floodplains Review Committee in relation to any evidence they may have given to the inquiry
- that a response be returned as soon as possible, noting that the committee is due to table its report on 15 December 2021
- any response from Mr Bentley be forwarded to all members of the NSW Health Floodplains Review Committee for their consideration and confirmation of the requested publication status of their evidence
- notwithstanding the response from Mr Bentley, should any *in camera* witnesses wish to keep their evidence confidential, that it remain confidential.

Sent

- 9 September 2021 – Letter from Chair to the Hon. Melinda Pavey, MP, Minister for Water, Property and Housing, inviting the Minister as a witness for the 24 September 2021 hearing.
- 25 October 2021 – Letter from Chair to the Hon. Melinda Pavey, MP, Minister for Water, Property and Housing, informing the Minister of the revised reporting date for the floodplain harvesting inquiry.

5. Inquiry into Floodplain Harvesting

5.1 Public submission

Committee noted the publication of submission no 149a. by the committee clerk under the authorisation of the resolution appointing the committee.

5.2 Attachment to submission no. 62

Resolved, on the motion of Ms Jackson: That the committee authorise the publication of the attachment to submission no. 62: 'Attachment 1 – Legal Advice'.

5.3 Answers to questions on notice, supplementary questions and additional information

Committee noted the following answers to questions on notice, supplementary questions and additional information were published by the committee clerk under the authorisation of the resolution appointing the committee:

- Answers to questions on notice, Murray Lower Darling Rivers Indigenous Nations, received 24 September 2021
- Answers to supplementary questions, Barwon-Darling Water, received 12 October 2021
- Answers to questions on notice, Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, received 22 October 2021
- Answers to questions on notice, Nature Conservation Council, received 26 October 2021
- Answers to questions on notice and supplementary questions, NSW Irrigators' Council, received 27 October 2021
- Answers to supplementary questions, Namoi Water, received 27 October 2021
- Answers to supplementary questions, Border Rivers Food and Fibre Inc, received 28 October 2021
- Answers to questions on notice, Environmental Defenders Office, received 29 October 2021
- Answers to questions on notice and supplementary questions, Natural Resources Access Regulator, received 29 October 2021
- Answers to questions on notice, Recreational Fishing Alliance of NSW, received 1 November 2021
- Additional information, Mr Dugald Bucknell, Macquarie Marshes Environmental Landholders Association, received 1 November 2021
- Answers to questions on notice and supplementary questions, Department of Planning, Industry and Environment, received 1 November 2021
- Answers to questions on notice and supplementary questions, Slattery & Johnson, received 2 November 2021
- Answers to questions on notice and supplementary questions, Southern Riverina Irrigators, received 2 November 2021

- Answers to supplementary questions, Dharriwaa Elders Group, received 2 November 2021
- Answers to supplementary questions, Cotton Australia, received 2 November 2021
- Answers to questions on notice and supplementary questions, the Hon. Melinda Pavey, Minister for Water, Property and Housing, received 3 November 2021
- Answers to questions on notice, Dr Martin Mallen-Cooper, received 5 November 2021
- Answers to supplementary questions, Macquarie Rivers Food and Fibre Inc, received 8 November 2021.

5.4 Additional information from Ms Beverley Smiles

Resolved, on the motion of Ms Sharpe: That the committee keep confidential the additional information provided by Ms Beverley Smiles, dated 25 October 2021, as per the request of the author.

5.5 Publication of opening statement

Resolved, on the motion of Ms Jackson: That the committee publish the opening statement of Ms Rachel Strachan, South Western Water Users Association, on the inquiry webpage.

5.6 Publication of *in camera* transcripts

Resolved, on the motion of Mr Franklin: That the committee authorise the publication of the following in camera transcripts:

- Ms Beverly Smiles, Nature Conservation Council Representative on the Healthy Floodplains Review Committee and President, Inland Rivers Network, from 20 September 2021, with the exception of sensitive information which is to be kept confidential, at the request of the author
- Mr Alfred Priestley, Private Individual, from 7 October 2021
- Mr Conrad Bolton, Chair, Healthy Floodplains Review Committee, from 7 October 2021.

5.7 Consideration of the Chair's Draft Report

The Chair submitted her draft report entitled *Floodplain harvesting*, which, having been previously circulated was taken as being read.

Chapter 1

Resolved, on the motion of Ms Jackson: That the following new paragraph be inserted after paragraph 1.15:

'The Water Act 2007 further defined the Cap as the 'baseline conditions' being:

(a) in the case of New South Wales and Victoria, means the level of water resource development for rivers within the Murray Darling Basin as at 30 June 1994 determined by reference to:

- (i) the infrastructure supplying water; and
 - (ii) the rules for allocating water and for operating water management systems applying; and
 - (iii) the operating efficiency of water management systems; and
 - (iv) existing entitlements to take and use water and the extent to which those entitlements were used; and
 - (v) the trend in the level of demand for water within and from the Murray Darling Basin at that date.'
- [FOOTNOTE: Schedule E – Cap on Diversions, *Water Act 2007* (Cth)]

Chapter 2

Resolved, on the motion of Ms Jackson: That:

(a) the following new paragraph be inserted after paragraph 2.38:

'Mr Walker qualified the lawfulness of floodplain harvesting under the Water Act 1912 to circumstances where works can be lawfully used. In the absence of a lawful right to take water, floodplain harvesting would indirectly offend the Water Act 1912:

There is an indirect possibility of an effect on the use of so-called works which could give rise in a relatively indirect fashion to the possibility of offences having been committed with respect to what we would call floodplain harvesting—that is, offences with respect to the 1912 Act.

However, that will depend entirely upon a case-by-case factual determination of the use of works—and I stress the use of works. Where works can be lawfully used, there will be a very important question as to whether what I will call an incidental or intermittent use in terms of flood would amount to an offence. That is not a matter that I can possibly advise on in the absence of particular facts. It needs to be understood that the 1912 Act is, in my view, both obscure and indirect in any possible effect it may have upon historical floodplain harvesting.' [FOOTNOTE: Evidence, Mr Bret Walker SC AO, 24 September 2021, p2.]

(b) paragraph 2.47 be amended by omitting:

'There is an indirect possibility of an effect on the use of so-called works which could give rise in a relatively indirect fashion to the possibility of offences having been committed with respect to what we would call floodplain harvesting—that is, offences with respect to the 1912 Act. However, that will depend entirely upon a case-by-case factual determination of the use of works—and I stress the use of works. Where works can be lawfully used, there will be a very important question as to whether what I will call an incidental or intermittent use in terms of flood would amount to an offence. That is not a matter that I can possibly advise on in the absence of particular facts. It needs to be understood that the 1912 Act is, in my view, both obscure and indirect in any possible effect it may have upon historical floodplain harvesting.'

after 'address floodplain harvesting'.

Resolved, on the motion of Ms Jackson: That paragraph 2.57 be amended by omitting 'private on-farm storage structures and floodplain harvesting in the northern basin was encouraged by government during much of the 20th Century' and inserting instead 'it must be remembered that the private on-farm storage infrastructure in the northern Basin was encouraged by Governments to store floodwater (because of the lack of public water infrastructure). Since that time, there has been no change of government policy to criminalise the practice, nor has there been communication from Government to cease the practice. Simply, there has never been an intent of any government in NSW history to make FPH illegal.' [FOOTNOTE: Submission 50, NSW Irrigators Council, p 29.]

Mr Franklin moved: That Finding 2 be omitted: 'That, notwithstanding Finding 1, issues of lawfulness arise in the practice of floodplain harvesting when a work is used, and this must be examined on a case by case basis', and the following new finding be inserted instead:

'That, notwithstanding Finding 1, issues of lawfulness might arise in the practice of floodplain harvesting when a work is used, and this can only be considered on a case by case basis.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Banasiak moved: That Finding 3 be omitted: 'That, should a New South Wales floodplain harvesting licensing framework cause the state to exceed the legal limits of surface water extraction set under the Commonwealth framework, this would constitute a breach of the *Water Act 2007 (Cth)*'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Finding 3 be omitted: 'That, should a New South Wales floodplain harvesting licensing framework cause the state to exceed the legal limits of surface water extraction set under the Commonwealth framework, this would constitute a breach of the *Water Act 2007 (Cth)*', and the following new finding be inserted instead:

'That, should a New South Wales floodplain harvesting licensing framework cause the state to exceed the long term average legal limits of water extraction set under the Commonwealth framework without activating make-good or growth-in-use provisions, this would constitute a breach of the *Water Act 2007 (Cth)*'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Chapter 3

Mr Franklin moved: That Finding 4 be omitted: 'That floodplain harvesting has had a significant impact on downstream flows and river health, particularly to the Darling Baaka River, Menindee Lakes and Ramsar listed wetlands, leading to numerous economic, social, cultural and environmental impacts.', and the following new finding be inserted instead:

'That floodplain harvesting has contributed to an average reduction of 28GL per year less inflow into Menindee Lakes and up to a 1% impact on allocations in the Murray, as well as diminished localised flooding to environmentally and culturally significant sites'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Mr Banasiak, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Banasiak moved: That finding 4 be omitted: 'That floodplain harvesting has had a significant impact on downstream flows and river health, particularly to the Darling Baaka River, Menindee Lakes and Ramsar listed wetlands, leading to numerous economic, social, cultural and environmental impacts.', and the following new finding be inserted instead:

'There are concerns that floodplain harvesting has had an impact on downstream flows and river health particularly to the Darling Baaka River, Menindee Lakes and Ramsar listed wetlands, and to properly understand any and all impacts improvement in real time monitoring through increased river gauges is required'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Resolved, on the motion of Ms Jackson: That Finding 4 be amended by inserting ', and that to properly understand any and all impacts improvement in real time monitoring through increased river gauges is required' after 'cultural and environmental impacts'.

Resolved, on the motion of Ms Jackson: That Finding 5 be amended by inserting ', and that the only way to further improve assessments of the cumulative impacts of floodplain harvesting is through accurate metering of take during floodplain harvesting events' after 'cumulative impacts of floodplain harvesting to date'.

Mr Farraway moved: That Recommendation 1 be omitted: 'That the NSW Government conduct a thorough review of low and cease-to-flow data, as well as an assessment of downstream economic, social, cultural and environmental impacts and needs, prior to finalising the volume of floodplain harvesting entitlements in each valley identified in the NSW Floodplain Harvesting Policy', and the following new recommendation be inserted instead:

'That the NSW Government continues its review of connectivity which considers low and cease-to-flow data, as part of the Western Regional Water Strategy'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Resolved, on the motion of Mr Banasiak: That Recommendation 1 be amended by inserting ', and this includes detailed locations of any proposed new river gauges and real time monitoring infrastructure' after 'in the NSW Floodplain Harvesting Policy'.

Mr Franklin moved: That Finding 6 be omitted: 'That floodplain harvesting has reduced downstream flows which has significantly impacted on the culture and traditions of First Nations peoples' and the following new finding be inserted instead: 'That floodplain harvesting has contributed to a reduction of downstream flows which has impacted on the culture and traditions of First Nations peoples'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Mr Banasiak, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Resolved, on the motion of Mr Banasiak: That Finding 6 be omitted: 'That floodplain harvesting has reduced downstream flows which has significantly impacted on the culture and traditions of First Nations peoples', and the following new finding be inserted instead:

'Floodplain harvesting has contributed to a reduction in downstream flows which has had a profound impact on the culture and traditions of First Nations peoples'.

Mr Franklin moved: That Finding 7 be omitted: 'That engagement with First Nations peoples on the development of floodplain harvesting policy has been inadequate and, at times, culturally inappropriate', and the following new finding be inserted instead:

'While water resource plan consultation with First Nations peoples was co-designed by NBAN representatives, the consultation was lacking coverage of floodplain harvesting as part of the consultation on water resource plans'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Chapter 4

Mr Franklin moved: That Finding 8 be omitted: 'That the modelling used by the NSW Government to determine floodplain harvesting volumes lacks transparency and accountability, does not provide for validation against actual flows and does not have the public's confidence', and the following new finding be inserted instead:

'That the modelling used by the NSW Government to determine floodplain harvesting volumes has not yet been accredited through water resource plans which has diminished the public's confidence in what has been presented'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Banasiak moved: That Finding 8 be omitted: 'That the modelling used by the NSW Government to determine floodplain harvesting volumes lacks transparency and accountability, does not provide for validation against actual flows and does not have the public's confidence' and the following new finding be inserted instead:

'Due to lack of real time data at present the modelling used by the NSW Government to determine floodplain harvesting volumes does not provide for validation against actual flows and therefore does not have the public's confidence'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Recommendation 3 be omitted: 'That the NSW Government's modelling of floodplain harvesting volumes use the best available projections to evaluate the impact of climate change on entitlement reliability, downstream outcomes and environmental impacts', and the following new recommendation be inserted instead:

'That the NSW Government's continue its modelling of climate change in the regional water strategies when considering how best to adapt water management to the potential impacts of climate change, including the impact of sea level rises on the Lower Lakes.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 4 be omitted: 'That the NSW Government establish an independent expert panel coordinated by the Natural Resources Commission to:

- assess and accredit the models used in Water Sharing Plans and produce a public report on the accreditation that includes the standard and mean error of models

- assess the floodplain harvesting 'Cap Scenario' reports for compliance with the Murray-Darling Basin Cap and publish assessment reports
- annually audit the Sustainable Diversion Limit and Murray Darling Basin Plan Limit, publishing audit reports that separately identifies the annual Cap or Sustainable Diversion Limit target, and diversions for licence and extraction type.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Banasiak moved: That Recommendation 4 be amended by omitting 'That the NSW Government establish and independent expert panel coordinated by the Natural Resource commission to' and inserting instead 'That the NSW government ensures that the Natural Resource Commission is properly resourced and respected in its role to'.

Question put.

The committee divided.

Ayes: Mr Banasiak.

Noes: Mr Amato, Ms Faehrmann, Mr Farraway, Mr Franklin, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Franklin moved: That Recommendation 5 be omitted: 'That the Department of Planning, Industry and Environment ensure that model run number and long-term average extraction limits for the Baseline Diversion Limit, the Murray-Darling Basin Cap, and the Plan Limits must be included in Water Sharing Plans for each valley', and the following new recommendation be inserted instead:

'That the NSW Government ensures the model run number and long-term average extraction limits are included in Water Sharing Plans for each valley.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Findings 9 and 10 be omitted:

'Finding 9

That it is unclear there was a legal right to floodplain harvest at the dates upon which the Murray Darling Basin Cap and the Baseline Diversion Limits are based and it is therefore unclear on what legal basis the Government intends to amend the basin plan to incorporate historic floodplain harvesting volumes.'

Finding 10

That the process the NSW Government is undertaking to amend the Sustainable Diversion Limit, as described by NSW Department of Planning, Industry and Environment, is unlawful.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Resolved, on the motion of Ms Jackson: That Finding 10 be omitted: 'That the process the NSW Government is undertaking to amend the Sustainable Diversion Limit, as described by NSW Department of Planning, Industry and Environment, is unlawful' and that the following new finding be inserted instead:

'That the process the NSW Government is undertaking to amend the Sustainable Diversion Limit as described by the NSW Department of Planning, Industry and Environment has the potential to be unlawful.'

Mr Franklin moved: That Recommendation 7 be amended by omitting 'existing' before 'Sustainable Diversion Limits'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Recommendation 8 be omitted: 'That if Sustainable Diversion Limits are to be amended, the Minister for Water, Property and Housing make representations to the Murray Darling Basin Authority to ensure that the Sustainable Diversion Limits are reflective of an environmentally sustainable level of take under the *Water Act 2007* (Cth), regardless of any adjustments to the Baseline Diversion Limits.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Finding 11 be omitted: 'That the NSW Government has failed to meet its obligations under the Murray Darling Basin Agreement by allowing the unchecked growth of unregulated floodplain harvesting extraction to volumes well in excess of the 1994 Murray Darling Basin Cap', and the following new finding be inserted instead:

'That the NSW Government has failed to limit floodplain harvesting since 2004 which was the first date a NSW Government set to licence and meter floodplain harvesting by, noting it has taken until 2020 to develop accurate estimates of the extent of floodplain harvesting in Northern NSW.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Banasiak moved: That Finding 11 be omitted: 'That successive NSW governments have failed to meet its obligations under the Murray Darling Basin Agreement by not regulating floodplain harvesting', and the following new finding be inserted instead:

'That successive NSW governments have failed to meet its obligations under the Murray Darling Basin Agreement by not regulating floodplain harvesting.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 9 be omitted: 'That the NSW Government urgently ensure all floodplain harvesting is metered and measured, including flows that enter and bypass storages, before issuing floodplain harvesting licences to ensure the accuracy of volumes and long-term extraction limits', and the following new recommendation be inserted instead:

'That the NSW Government ensures floodplain harvesting is metered and measured as part of the issuing of floodplain harvesting licences to ensure the accuracy of volumes and long-term extraction limits, excluding the exempt portion of rainfall runoff which occurs outside of floodplain harvesting events.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Franklin moved: That Recommendation 10 be omitted: 'That the NSW Water Reform Action Plan include a "no meter, no pump" rule, as recommended by the Independent Investigation into NSW Water Management and Compliance.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Finding 12 be omitted: 'The NSW Government's Floodplain Harvesting Policy will result in entitlements being granted to landholders for unapproved or illegal works which will need to be modified or decommissioned.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Ms Jackson moved: That Finding 12 be amended by omitting 'will result in' and inserting instead 'could result in'.

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Ms Faehrmann.

Question resolved in the affirmative.

Mr Franklin moved: That Recommendation 12 be omitted: 'That the NSW Government ensure floodplain structures do not alter natural flood flows at times when extraction is not permitted.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Resolved, on the motion of Mr Banasiak: That Recommendation 12 be omitted: 'That the NSW Government ensure floodplain structures do not alter natural flood flows at times when extraction is not permitted', and the following new recommendation be inserted instead:

'Excluding structures that have been assessed as protecting infrastructure that the NSW government ensure floodplain structures do not alter the natural flood flows at times when extraction is not permitted.'

Ms Jackson moved: That Recommendation 13 be amended by omitting 'as soon as possible' and inserting instead 'within 6 months'.

Question put.

The committee divided.

Ayes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Mr Amato, Mr Farraway, Mr Franklin.

Question resolved in the affirmative.

Mr Franklin moved: That Recommendation 14 be omitted: 'That the NSW Government ensure that no floodplain harvesting licences are granted on the basis of illegal works', and the following new recommendation be inserted instead:

'That the NSW Government ensure that no floodplain harvesting licences are only granted if eligible as defined by the NSW Labor Government on eligible works at 3 July 2008.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Finding 13 be omitted: 'The 500 per cent carry-over rule would allow significantly more floodplain harvesting to occur in a single year than was possible in 1994.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 15 be omitted: 'That the NSW Government ensures that floodplain harvesting entitlements:

- are not subject to any form of carry-over rule

- if subject to a carry-over rule, a Year 1 allocation of more than 100 per cent of entitlements should not be considered',

and the following new recommendation be inserted instead:

'That the NSW Government ensures that floodplain harvesting entitlements are issued without a 'hot-start' with at most a 100% Annual Water Determination (AWD).'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Banasiak moved: That Recommendation 15 be omitted:

'That the NSW Government ensures that floodplain harvesting entitlements:

- are not subject to any form of carry-over rule
- if subject to a carry-over rule, a Year 1 allocation of more than 100 per cent of entitlements should not be considered.'

Question put.

The committee divided.

Ayes: Mr Banasiak.

Noes: Mr Amato, Ms Faehrmann, Mr Farraway, Mr Franklin, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Ms Jackson moved: That Recommendation 15 be omitted:

'That the NSW Government ensures that floodplain harvesting entitlements:

- are not subject to any form of carry-over rule
- if subject to a carry-over rule, a Year 1 allocation of more than 100 per cent of entitlements should not be considered.'

and that the following new recommendation be inserted instead:

'That the NSW Government ensures that any carry-over rule included in floodplain harvesting licenses to provide flexibility in accessing floodplain harvesting entitlements does not allocate more than 100 per cent of entitlements in the first year of the accounting period.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Ms Faehrmann.

Question resolved in the affirmative.

Mr Farraway moved: That Finding 14 be omitted: 'That the NSW Government's proposed rainfall runoff exemption is a poor solution to the requirement for irrigators to capture irrigation runoff, as required under the *Protection of the Environment Operations Act 1997*, and the following new recommendation be inserted instead:

'That the NSW Government's proposed rainfall runoff exemption is the best available solution to the requirement for irrigators to capture irrigation runoff, which recognises rainfall runoff occurs during

overbank and overland flow events, as well as outside of these floodplain harvesting events on irrigated farms outside of designated floodplains.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Resolved, on the motion of Mr Banasiak: That Finding 14 be omitted: 'That the NSW Government's proposed rainfall runoff exemption is a poor solution to the requirement for irrigators to capture irrigation runoff, as required under the *Protection of the Environment Operations Act 1997*.'

Mr Farraway moved: That Recommendation 16 be omitted: 'That the NSW Government ensure that rainfall run-off is measured, metered and reported as part of extraction limits, and if exemptions are to be granted, they should be limited to landholders with less than 500 megalitres of storage capacity.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Chapter 5

Resolved, on the motion of Ms Jackson: That the following new paragraph be inserted after paragraph 5.28:

'Notwithstanding this evidence, at present section 87AA of the *Water Management Act 2000* makes compensation payable to holders of flood plain harvesting licences if 'water allocations are reduced because of a change to provisions of the relevant management plan dealing with water sharing': s87AA(1)(f1) and (f2) and s87AA(2). The licence holder 'is entitled to compensation as assessed by the Minister in accordance with subsections (5) and (6)'. These provisions, together with compensation for holders of supplementary water access licences (see s87AA(1)(f3)) were inserted into the legislation in the *Water Management Amendment Act 2014* (NSW).'

Mr Franklin moved: That Recommendation 19 be omitted: 'That the Department of Planning, Industry and Environment only issue floodplain harvesting licences at such time as it is satisfied that the recommendations of this report are met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, and that mandated environmental and other downstream outcomes are being achieved.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Ms Jackson moved: That Recommendation 19 be omitted: 'That the Department of Planning, Industry and Environment only issue floodplain harvesting licences at such time as it is satisfied that the recommendations of this report are met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, and that mandated environmental and other downstream outcomes are being achieved', and the following new recommendation be inserted instead:

'That the Department of Planning, Industry and Environment only issue floodplain harvesting licenses at such a time as it is satisfied that the recommendations of this report will be met so that floodplain harvesting is fully monitored and measured, there is clear evidence that water extractions are within legal limits, the independent oversight of the Natural Resources Commission has been established and that mandated environmental and other downstream outcomes are being achieved.'

Question put.

The committee divided.

Ayes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

There being an equality of votes, question resolved in the affirmative on the casting vote of the Chair.

Resolved, on the motion of Ms Jackson: That the following new paragraph be inserted after paragraph 5.68:

'As discussed above at 5.68, the legislation currently provides that a floodplain harvesting license holder, or a supplementary water access license holder, 'is entitled to compensation' if 'water allocations are reduced because of a change to provisions of the relevant management plan dealing with water sharing': s87AA(1)(f1), (f2), (f3) and (2).'

Mr Farraway moved: That Recommendation 20 be omitted: 'That, if the NSW Government grants floodplain harvesting licences or entitlements, these should be strictly non-compensable and subject to Parliamentary oversight', and the following new recommendation be inserted instead:

'That, if the NSW Government grants floodplain harvesting licences or entitlements, these should be adjustable through the Available Water Determination process without compensation, and subject to Parliamentary oversight.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Banasiak moved: That Recommendation 20 be omitted: 'That, if the NSW Government grants floodplain harvesting licences or entitlements, these should be strictly non-compensable and subject to Parliamentary oversight', and the following new recommendation be inserted instead:

'That, if the NSW Government grants floodplain harvesting licences or entitlements, that at the first five year review that these be strictly non-compensable, however after such time they be subject to the compensation provisions provided for under the *Water Management Act 2000*.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 21 be omitted: 'That the NSW Government, through the National Federation Reform Council, make representations to remove the surface water trading requirement from the Murray-Darling Basin Plan.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That Recommendation 22 be omitted: 'That, in the absence of the surface water trading requirement being removed from the Murray-Darling Basin Plan, the Minister for Water, Property and Housing ensure that water trading be restricted and subject to a robust environmental and social impact assessment process prior to each trade', and the following new recommendation be inserted instead:

'That, in the absence of the surface water trading requirement being removed from the Murray-Darling Basin Plan, the Minister for Water, Property and Housing ensure that water trading be restricted and subject to a robust environmentally distinct zones to prevent the bundling of licences.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Resolved, on the motion of Ms Jackson: That Recommendation 22 be amended by inserting at the end: ', and that trading is restricted to within catchment trading only.'

Resolved, on the motion of Ms Jackson: That paragraph 5.73 be amended by omitting: 'While the committee acknowledges the evidence of the Natural Resources Access Regulator (NRAR) in relation to its operation and independence from DPIE, the committee notes with serious concern the assertions made by stakeholders questioning this', and the following new words be inserted instead:

'While the committee acknowledges the evidence of the Natural Resource Access Regulator (NRAR) in relation to its operations and independence from DPIE, the committee notes with concern the assertions made by some stakeholders questioning this.'

Mr Franklin moved: That Finding 15 be omitted: 'That the secretive manner in which the NSW Healthy Floodplains Review Committee undertakes its work, including assessing appeals and deciding whether to grant retrospective approval to floodplain structures, is concerning and inappropriate.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Resolved, on the motion of Mr Banasiak: That Finding 15 be amended by omitting 'the secretive manner' and inserting instead 'the non-transparent manner'.

Mr Farraway moved: That Recommendation 24 be omitted: 'That the NSW Government abolish the NSW Healthy Floodplains Review Committee and future appeals be dealt with by the proposed independent expert panel, referred to in Recommendation 4.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Ms Jackson moved: That Recommendation 24 be amended by inserting at the end 'and the outcomes reported publically.'

Question put.

The committee divided.

Ayes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

There being an equality of votes, question resolved in the affirmative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 25 be omitted: 'That the Department of Planning, Industry and Environment ensure that all decisions made by the NSW Healthy Floodplains Review Committee be audited by the proposed independent expert panel, referred to in Recommendation 4.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Franklin moved: That Recommendation 26 be omitted: 'That the Minister for Water, Property and Housing make an order, under section 324 of the *Water Management Act 2000*, directing that water extraction by floodplain harvesting be prohibited until such time as floodplain harvesting is fully licenced, metered and regulated by rules in Water Sharing Plans, to an amount not exceeding the Murray-Darling Basin Cap amount as legislated.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin, Ms Jackson, Ms Sharpe, Mr Veitch.

Noes: Ms Faehrmann.

Question resolved in the affirmative.

Mr Farraway moved: That the following new recommendation be inserted where appropriate:

'Recommendation X

That the government should license floodplain harvesting across all designated floodplains in the NSW area of the Murray-Darling Basin, in line with the 3 July 2008 eligibility criteria set for the five Northern designated floodplains.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Farraway moved: That the following new recommendation be inserted where appropriate:

'Recommendation X

That the government establish an inquiry into Toorale Station to ascertain whether claims about taking water without a licence during the 2017-2020 drought are accurate and whether this water was legally diverted out of the river by the Department of Planning, Industry and Environment - Environment,

Energy and Science, NSW National Parks and Wildlife Service and the Commonwealth Environmental Water Office.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin.

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That the following new recommendation be inserted where appropriate:

'Recommendation X

That the NSW Government support rule changes to implement a real 480GL of deliverable water when determining who controls the operation of Menindee Lakes.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Banasiak, Mr Farraway, Mr Franklin

Noes: Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch

There being an equality of votes, question resolved in the negative on the casting vote of the Chair.

Mr Farraway moved: That the following new finding be inserted where appropriate:

'Finding X

'That floodplain harvesting is occurring in the Southern Basin in NSW and Victoria, notably in the footprints of Murray Irrigation Limited, Murrumbidgee Irrigation, Goulburn-Murray Irrigation District and Colleambally Irrigation, and the government has not presented a pathway to licence and meter the floodplain harvesting occurring in these irrigation areas.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Farraway moved: That the following new finding be inserted where appropriate:

'Finding X

That the MDBA and NBAN have accredited Water Resource Plans and CAP models which have included floodplain harvesting without challenge.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin.

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch.

Question resolved in the negative.

Mr Farraway moved: That the following new finding be inserted where appropriate:

'Finding X

That environmental impacts will continue for as long as the NSW Government fails to licence and meter floodplain harvesting.'

Question put.

The committee divided.

Ayes: Mr Amato, Mr Farraway, Mr Franklin

Noes: Mr Banasiak, Ms Faehrmann, Ms Jackson, Ms Sharpe, Mr Veitch

Question resolved in the negative.

Resolved, on the motion of Ms Jackson: That:

The draft report as amended be the report of the committee and that the committee present the report to the House;

The transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;

Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;

Upon tabling, all unpublished transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;

The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;

The committee secretariat be authorised to update any committee comments where necessary to reflect changes to recommendations or new recommendations resolved by the committee;

Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;

The secretariat is tabling the report on Wednesday, 15 December 2021;

The Chair to advise the secretariat and members if they intend to hold a press conference, and if so, the date and time.

The committee adjourned 10.48 am, *sine die*

Joseph Cho
Committee Clerk

Appendix 4 Dissenting Statements

The Hon Lou Amato MLC, Liberal Party

A consistent message from almost every witness before the inquiry was the water management framework is complex and there is a lack of trust in what is being discussed. It is disappointing the report perpetuates incorrect information and outdated understandings of the water management framework. I will highlight several examples to present information on endemic flaws in the report.

Model Assumptions

A key point of discussion in the Inquiry's report revolved around estimates for floodplain harvesting.

The Inquiry quoted Professor Kingsford from UNSW and the Wentworth Group, where he attempted to cast doubt on the government's modelling of floodplain harvesting.³⁹⁶ Had Professor Kingsford looked more closely at the published model reports he would have seen that the old vs new estimates of floodplain harvesting in the Gwydir Valley are all but identical and that the apparent difference is caused by a difference in reporting, not a difference in modelling.^{397,398}

If critiques of the model and the policy were sound, it would be a productive engagement. However the Wentworth Group has failed to understand basic facts about the policy, and have presented this as a massive failure by the NSW Government.

Basic Facts

Dr Eytan Rocheta, who represented the Wentworth Group, was critical of a number of elements of the government's policy. However, these critiques made basic but fundamental errors about the policy. For instance, Dr Rocheta argued; "*lawful structures will continue to passively capture flood water even when extractions are not permitted.*"³⁹⁹ This is incorrect. The NSW Government Floodplain Harvesting policy requires the alteration of works to only actively capture of floodwater during metering periods.⁴⁰⁰ Wentworth Group representatives should work harder to make sure what they are saying is accurate, given news outlets and legislators typically assume they are truthful and accurate.

The evidence provided by other groups was also misleading. Mr Horne provided his input on the five year accounting rules by saying "*So 3.2 times 346 gigalitres is 1,107 gigalitres?*"⁴⁰¹ This claim is wrong for the fact it uses a current estimate, and is around 100GL larger than what the government is stating it will

³⁹⁶ Select Committee on Floodplain Harvesting Report, paragraph 4.23, p62

³⁹⁷ https://www.industry.nsw.gov.au/__data/assets/pdf_file/0011/354278/rainfall-runoff-gwydir.pdf, page 2

³⁹⁸ Drew Brewsher's independent estimate of total harvesting in Gwydir under Cap for MDBC (2006) = 114GL

Drew Brewsher's independent assessment of total harvesting Gwydir Cap model (2009) = 112GL

DPIE's revised estimate of total harvesting in Gwydir under Cap (2021) = 103.7GL

³⁹⁹ Evidence, Dr Eytan Rocheta, Policy Analyst, Wentworth Group of Concerned Scientists, 20 September 2021, p 4-5.

⁴⁰⁰ https://www.industry.nsw.gov.au/__data/assets/pdf_file/0006/317859/floodplain-harvesting-measurement-policy.pdf, p13-14

⁴⁰¹ Select Committee on Floodplain Harvesting Report, paragraph 4.91, p78

permit to be taken under licences. Either Mr Horne misrepresented government policy, or he has not been paying attention to the government's policy documents.

If experts are to expect a privileged position in policy discussion, the onus is on them to be accurate around the basics of an issue they are commenting on. Given this Inquiry has presumed to act as an arbiter of the truth, the onus was on us to check the accuracy of facts before including certain claims in the report. The lack of fact checking of evidence included in the report will have real world consequences, and this Inquiry will perpetuate myths about how water is managed in NSW.

The Hon Ben Franklin MLC, The Nationals

The Select Committee's inquiry into floodplain harvesting in NSW was tasked with investigating the legalities of the practice and ways in which it could be regulated and monitored.

Expert legal advice from the highly-respected Bret Walker SC stated that:

- Floodplain harvesting is legal
- There are questions surrounding Commonwealth legislation
- Floodplain harvesting is overdue for licencing and it is important the Government address this.

The Inquiry's report rightly identified that floodplain harvesting is long overdue for licencing and metering. The former Labor Government committed to this in 2003 as something to have resolved by 2008. Bret Walker SC says the NSW Government also committed to having this completed by 2011. It is now 2021 and licences still have not been issued.

The Government has spent more than \$17 million and seven years collecting the best available information to estimate current and historical floodplain harvesting, including the volume capable of being taken in 1993/94 – when the Cap was agreed to. The Department has visually inspected every floodplain harvesting structure and has used surveys, remote sensing and licensing records to build an accurate picture of past development levels.

A significant amount of work and time has been invested into these processes and it is disappointing the Inquiry has fundamentally rejected the need for urgency and has demanded changes which would delay the licencing of floodplain harvesting at least five years.

Recommendation 4 will require the Government to duplicate annual assessment processes which form the core of the Basin Plan. The subordinate recommendations (24 and 25) argue for the whole process to be started again.

Recommendation 16 demands that the Government scrap a core component of the floodplain harvesting policy and start again. This would require the Government to develop an even more complex model which would take three to five years to create, further delaying the much-needed regulation.

When the above recommendations are considered with **Recommendation 19**, the Inquiry's position will effectively result in blocking any licencing and metering that is needed to regulate the practice and cause further delays of five years minimum. Given the evidence presented to the Committee, this is an unacceptable outcome and the community expects better from the NSW Parliament.

This is a disappointing dereliction of duty. The community has consistently called for floodplain harvesting to be licenced and metered, and the aforementioned regulations, as well as the 'arguments' presented by witnesses such as the Wentworth Group, ignore the precautionary principle and stand in antithesis to protecting the environment.

The best available evidence demonstrates that without licensing and metering, floodplain harvesting will continue to have damaging environmental and social impacts and immediate regulation is crucial to manage the practice.

The Hon Sam Faraway MLC, The Nationals

The Inquiry, while ostensibly focussed on floodplain harvesting, delved more into the grievances of some stakeholders with the Murray Darling Basin Plan.

It is impossible to have created an instantaneously immaculate water management framework, which the Inquiry's Report pretends is possible. This is the attitude that led to floodplain harvesting taking almost 20 years to get to a point where it could be licenced and metered, which Bret Walker SC reinforced was a failure of successive governments.

Bret Walker SC flagged the NSW Government has lagged in bringing floodplain harvesting into the water management framework.¹ This requires licences to be issued, rules to be made around metering. How these rules affect take and the sustainable diversion limits will be assessed initially and then annually by the Murray Darling Basin Authority for compliance with the Water Act 2007, through Water Resource Plans.

The Inquiry's report is forwarding a theory that using best available science to inform the Baseline Diversion Limit is unlawful, on the basis that the numbers identified in Schedule 3 of the Basin Plan are immutable.

This presentation of Schedule 3 in the report is misleading, as it overlooks the adaptive management framework that is used to control overuse. If you accept the theory underpinning Finding 9, then the NSW Government's adaptive management framework would reduce AWDs for floodplain harvesting licences to zero.

Issuing floodplain harvesting licences does not breach Section 73 of the Water Act 2007, a breach would only occur if the sustainable diversion limit was exceeded and NSW failed to take the necessary corrective actions.

The report should have accurately reflected the water management framework, instead of relying on incorrect statements. It is difficult to see how this is anything other than delaying bringing floodplain harvesting into a licenced and metered framework, when the overwhelming message from the community has been to get on with fixing floodplain harvesting.

There are issues which needing improvement in water management in NSW; however, we will only arrive at a better framework by progressively fixing issues, instead of attempting to solve all of them before allowing people to take water. It is disappointing the Inquiry pretends this is a viable approach, as it only perpetuates stalemate, delay and frustration amongst the community. It is time to get on with licencing and metering floodplain harvesting, instead of delaying and arguing about tangential issues.

¹ Evidence, Bret Walker SC, 24 September 2021, p8.

The Hon Mark Banasiak, Shooters, Fishers and Farmers Party

Finding 3: should have been omitted as it ignores that post November 2012 intergovernmental agreement, all decisions made by the state prevail over the commonwealth, therefore finding 3 was factually incorrect, as was proposed government amendment.

Recommendation 4: ignores that the NRC already completes this work, setting up an independent panel within NRC is unnecessary duplication, ensuring that they properly resourced to complete the work as per SFF proposed amendment was more appropriate.

Recommendation 10: should have been omitted as it is superfluous as the water reform action plan was implemented within legislation 2 years ago and is not solely related to floodplain harvesting.

Finding 11: ignores the fact that successive governments of differing political persuasions have failed in this task, SFF amendment to portray that fact was an honest representation of the historical timeline in regulating floodplain harvesting.

Finding 12: factually incorrect, as the disallowed regulations did not even allow for this

Finding 13: as per recommendation 15, this finding should have been omitted. Carry-over in relation to FPH was not measured or metered in 1994 therefore it is not possible to validate this statement as true and accurate.

Recommendation 15: should have been omitted as it was factually incorrect in that it is an accounting rule, not a carry over rule, additionally the recommendation as it is worded contradicts itself. The evidence provided to the inquiry in communicating this accounting rule was poor which has led to a misunderstanding of its purpose and impact.

Recommendation 19: should have been omitted or reworded, as it stands if accepted by the government it places regulation of FPH and the need for it to be measured and metered in a catch 22 situation. They should occur together.

Recommendation 20: ignores the fact that whether a water licence is compensable is based on legislation, SFF amendment to this recommendation would have seen it non-compensable at first five year review as licences issued would be largely based on modelling not accurate metering, than at the next 5 year review any reduction based on accurate metering would be compensable, therefore being consistent with the water management act with regards to all water licences.

Recommendation 21: should have been omitted, as it not only relates to floodplain harvesting but by its nature proposes to ban all water trading. While there should be stricter rules around trading such as limits within valleys or catchments as per amended recommendation 22, there should not be an outright ban which recommendation 21 proposes.

Recommendation 24 and 25 should have been omitted as they ignore the fact that the NSW Healthy Floodplains Review Committee is an anomalies committee that will cease to exist if and when licences

are issued, therefore referencing future appeals being referred to proposed independent expert panel is non-sensical.

Additional proposed recommendations by government that committed to an inquiry into long standing concerns over Toorale station and implementation of rule changes to implement real 480GL of deliverable water into Menindee Lakes should have been included as positive steps in water management in NSW.

