

**Submission  
No 49**

## **INQUIRY INTO FLOODPLAIN HARVESTING**

**Organisation:** Murray Darling Association

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MDA Submission to the  
Select Committee on Floodplain Harvesting  
NSW Legislative Council

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Ms Cate FAEHRMANN, MLC  
Chair, and  
The Select Committee on Floodplain Harvesting  
Parliament of New South Wales  
Inquiry Into Floodplain Harvesting

Thank you for the opportunity to provide feedback to the NSW Legislative Councils Select Committee on Floodplain Harvesting's Inquiry into Floodplain Harvesting

### **About us**

The Murray Darling Association (MDA) is the peak body for local government in the Murray-Darling Basin, informing policy and contributing local knowledge and regional solutions since 1944. There are 167 councils that sit within the Basin and whose communities rely upon water from within the catchment.

The management of water is a matter that is of significant interest to local government. Local government has a direct and immediate relationship to the communities we serve; responsible for delivering core services, maintaining economic growth, resilience and community health and wellbeing.

The allocation, sustainability, availability, and affordability of water resources is recognised as a critical factor in the environmental, social, cultural, and economic health and stability of our nation as whole. This is never more applicable than across the rural and regional communities of the Murray Darling Basin.

### **Intro**

The MDA supports the reliable and equitable regulation of floodplain harvesting to progress water reform in NSW to meet the objectives of the Water Management Act 2000 and to meet our obligations under the Murray- Darling Basin Plan.

Communities across the Murray-Darling Basin are affected by the impacts of floodplain harvesting both directly and indirectly.

The MDA recognises the challenges and complexity involved in management of overland flows, rainfall run-off and floodplain harvesting, and the importance of getting the regulation right.

The following submission will focus on the following key areas of concern for our members:

- the importance of floodwaters and overland flows on lands, communities and the ag economy.
- community consultation and engagement.
- effective use of data and science.
- regard for NSW's government's own advice and recommendations.
- accuracy and accountability of proposed measuring and metering.
- the impact of FPH on system health and connectivity.

The MDA welcomes the opportunity to make submission on the following areas and has made a range of recommendations that we hope will assist government in this important regulation.

## **Importance of floodwaters**

Floodwaters serve an important function in the riverine landscape. Floodwaters spreading periodically across vast shallow floodplains of northern NSW is vitally important for river health, agricultural productivity, and for clean and reliable water supply to communities.

Floodplains naturally purify water, enrich soil health, and provide natural flood and erosion control. While there are some losses to evaporation, the importance of recharging back into groundwater or back into the rivers, contributing to water supply and security for downstream communities cannot be overstated.

The health of floodplains and the flow of floodwaters are significance to both indigenous and non-indigenous communities, all of whom value water for cultural, social, spiritual, economic, and environmental purposes.

The MDA has called for greater consideration for local and Indigenous interests in the development of water policy recognising that there is an increased financial and social impost on high Indigenous population towns during times of low flows and poor connectivity.

At its conference in 2019 the MDA resolved<sup>1</sup> to support greater recognition of concerns from Indigenous groups that they are unable to continue cultural practices due to lack of cultural flows, and in 2021 the MDA resolved to support a process for greater representation of Aboriginal people in local government and in water policy.

Any disruption or impact to floodwaters by floodplain structures which alter natural flow regimes on floodplains and reduce flow connectivity risk having adverse impacts on both Indigenous and non-indigenous communities resulting in adverse social and economic impacts.

Proposed policy settings of up to 500% carryover risk adverse impact on connectivity, and appears both absurd and perverse in sustainability or compliance context..

With concerns already evident that the legislated cap is currently not complied with and the proposed amendments seek to permit some licence holders to carryover 500% of the face value of their entitlement in the first year, up to five years.

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### **Recommendations:**

1. Floodwaters must be allowed to flow freely to meet the needs as prioritised under the Water Management Act. For this to occur, harvesting should only be permitted when priority needs have been met.
  2. Access licence conditions for floodplain harvesting should require all licenced floodplain works to allow flood waters to flow freely during restricted periods so they do not to impede or intercept water flowing across the floodplains.
  3. Any consideration of carryover, if allowed at all, should exercise the highest levels of precautionary principle, and the proposed 500% scrapped outright.
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<sup>1</sup> [MDA 2019 National Conference](#)

## Community consultation and engagement

Community consultation on floodplain harvesting has often been characterised by frustration, lack of relevant information, inundation (no pun intended) of technical information, hostility, and defensiveness, a theme highlighted in the 2020 Sefton's Report finding that the community is "over-consulted and under-listened to".<sup>2</sup>

This approach to consultation and engagement has undermined confidence in the proposed policy and created a combative sense of *them* and *us* between government, FPH licence holders and down-stream communities.

A new approach to consultation and engagement should be considered utilising existing local government systems and networks to share knowledge and information, build trust and consensus, identify, and resolve differences of fact, perspective and opinion; and to develop robust policy in collaboration with communities.

This process must incorporate reliance on the best available science to inform the technical elements of the legislation.

There must be clear evidence that the policy will deliver sustainable environmental and downstream outcomes, reflecting local knowledge and recognised science, and will provide reliability for licence holders into the future.

FPH regulation must also rely upon established and agreed methods. DPIE has proposed that a method to assess and offset any growth in floodplain harvesting will be developed, creating a further risk that the proposed regulation will lack certainty into the future.

It is clear that the effective regulation of floodplain harvesting will likely result in impacts on existing licence holders, and that without an established process of review, FPH regulation may be unable to deliver the dual objectives of satisfying the expectations of existing licence holders, and meeting SDL targets.

To enable a fair and accountable assessment of the licencing framework in practice to ensure it meets it's community and policy objectives, we make the following recommendations.

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### Recommendations:

4. To ensure that FPH regulation provides for sustainable outcomes and certainty for licence holders, the MDA recommends
  - a) implementation of an effective model of consultation and engagement.
  - b) Include an agreed system of review within the regulation.
  - c) issue temporary access licences with specific conditions that must be met before permanent licences can be issued.

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## Effective use of data and science

Significant gaps in the availability, consistency and reliability of data and information related to floodplain harvesting and groundwater extraction, including the impacts of FPH on river flows have been identified.

Uncertainties arising from a lack of key data including measured volume of take and measurement of return flows from floodplains to river channels, limited data on rainfall runoff, and poor accuracy of river gauges has undermined confidence in the proposed regulation.

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<sup>2</sup> [Final Report: Independent assessment of social and economic conditions in the Murray–Darling Basin](#)

These concerns are heightened by the MDBA non-compliance ruling on Barwon Darling Unregulated Water Sharing Plan in the Sustainable Diversion Limit (SDL) Compliance Report for the 2019/20 water year<sup>3</sup> with the report ruling the Barwon–Darling Watercourse to be non-compliant. The MDBA also noted that the non-compliance was due to outdated modelling which hadn't been recalibrated to reflect the new meters rolled out.

While this was deemed to be a reasonable excuse by the NSW government, if not the MDBA, this latest non-compliance has served to further undermine community confidence in the NSW use of data, science and technology to meet water management obligations.

With current technology and data available, it is essential that FPH regulation relies on systems that are, and **are seen to be** capable, robust and compliant.

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### Recommendations:

5. NSW must be seen to be committed to its obligations under the Basin Plan.
  6. Floodplain harvesting infrastructure must be assessed for compliance, measurement systems installed, and monitoring periods observed.
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### Regard for NSW's government's own advice and recommendations

In November 2020, the NSW Independent Commission Against Corruption (ICAC)<sup>4</sup> made 15 recommendations to the NSW Government to improve the management of the state's water resources.

Specifically, the recommendations contained within the report concern the focus on specific interests within water agencies and deal with the:

- lengthy history of failure in giving proper and full effect to the objects, principles and duties of the Water Management Act 2000 and its priorities for water sharing
- failure to fully implement water sharing plans and ensure they are audited
- need to fund independent scientific audits to determine the ecological health of rivers
- lack of transparency, balance and fairness in consultation processes undertaken by water agencies in relation to external stakeholders
- sidelining of public officials undertaking environmental roles within the NSW Government
- lack of transparency and accountability in water account information.

These issues as identified in the ICAC report reflect the experience and feedback of MDA councils and are supported by reports and resolutions of the Murray Darling Association over successive annual general meetings (see below).

An independent review of NSW floodplain harvesting policy implementation was undertaken by Alluvium at the request of DPIE<sup>5</sup> in 2018–19. The report made several recommendations and findings on things such as improvements to accurately model floodplain harvesting in NSW, ensuring water sharing plans and water resource plans accurately represent floodplain

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<sup>3</sup> [Murray–Darling Basin sustainable diversion limit compliance outcomes 2019–20](#)

<sup>4</sup> [ICAC recommends changes to government water management in NSW after years of focus on irrigation industry interests](#)

<sup>5</sup> [INDEPENDENT REVIEW OF NSW FLOODPLAIN HARVESTING POLICY IMPLEMENTATION](#)

harvesting use, and a recommendation that a 3rd party complete analysis on the quantum and significance of rainfall run-off to identify the best methods of accounting for this form of take.

The independent review also recommended increased community engagement to enhance community input and understanding and also made a recommendation “As a matter of priority, the Model Build reports for each valley should be completed by the Department and made publicly available. Each of the reports should be explicit about how floodplain harvesting eligible properties with regulated licences prior to 03 July 2008 have been represented in the models and how all other eligible properties have been handled.”

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**Recommendations:**

7. The MDA supports the findings of many sound reviews undertaken by the NSW Government and recommendation DPIE observe the findings and implement the recommendations in developing the FPH Regulation.
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**Accuracy and accountability of proposed measuring, metering, and telemetry.**

Rainfall runoff collected in floodplain diversions should be included in the licensing framework and measured in entitlements including that in tailwater drains.

The current policy setting proposes to exclude tailwater drains from any metering or monitoring and does not set out a clear guidance for metering and monitoring rainfall runoff.

It is of serious concern that provisions for contaminated rainfall runoff is insufficiently described or monitored and risks providing a loophole to facilitate unregulated take. It is also unreasonable that works for capture and storage for rainfall run off be exempt from works approval licences.

Increased measures for mitigating unregulated take of overland flows that can accurately measure the take from all forms of take are essential to FPH regulation and will protect the integrity of end of system flows for all rivers in the basin<sup>6</sup>.

Industry sectors such as cotton and rice have adopted advanced technologies and systems in monitoring, metering and telemetry of large-scale flows and extraction. These technologies are reliable, well advanced and are employed for management, compliance and audit purposes.

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**Recommendations:**

8. Metering and telemetry standards used in the measurement and monitoring of all overland flows should
    - a) align between NSW and Queensland governments
    - b) be adopted in consultation with industry to capture the benefits of market driven developments in this space, and
    - c) use best available technology to at least meet, or preferably exceed current standards in the measurement of all floodplain take, including rainfall run-off.
  9. That all forms of take are measured and accounted for consistently, then they can be managed according to requirements.
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<sup>6</sup> [MDA 2021 National Conference](#)

## Impact of floodplain harvesting on system health and connectivity

According to the Sustainable Rivers Audit, river systems across the northern NSW are in poor to very poor health due in large part to the effects of over-extraction of water from rivers and floodplains<sup>7</sup>.

This is clearly evident in the Barwon-Darling/Barka system which, while currently wet is experiencing increasing regularity and extension of low flow and no flow periods.

The proposed regulation does not provide sufficient protections to deliver outcomes for the environment and communities of the Lower-Darling/ Barka River.

The proposed policy framework does not guarantee that the higher priority water needs, including flows which contribute to first flushes and connectivity along the Barwon-Darling/Barka River, will be protected from floodplain harvesting at all times. This is inconsistent with sections 5(3) and 9(1) of the WM Act which requires water to be prioritised for the water source and its dependent ecosystem and basic landholder rights before other forms of take ('priority of use').

To achieve system connectivity and ensure sustainable 'whole of system' health there needs to be end of system and valley specific flow targets *to Wentworth*. End of system flow targets in the Darling River are essential not only for the health of the Lower Darling, but to reduce pressure on the Murray and Murrumbidgee systems.

These systems are rapidly approaching crisis point with deliverability shortfall a real and imminent risk for irrigators in the Southern Basin. Effective regulation of floodplain harvesting has a key role in restoring system connectivity.

Calls for the expansion of flow triggers in the management of water systems has been recommended by the Productivity Commission<sup>8</sup>, the NSW Natural Resources Commission<sup>9</sup> and the Commonwealth Environmental Water Office<sup>10</sup>.

Proposed policy settings such as up to 500% carryover, volumes, trade rules, long-term modelling averages, allocation and accounting framework settings pose significant risk to connectivity, and therefore to certainty for agricultural producers right across the state, from north to south.

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### Recommendations:

10. FPH regulation should incorporate independent analysis based in the best available science to determine the provisions and circumstances under which end of system and valley specific flow targets can be set and achieved.
11. NSW Water Sharing Plans and Resource Management Plans for the Barwon-Darling, Murray-Lower Darling and Northern Basin Rivers must include minimum river flow and storage levels that will protect the health of the Barwon-Darling and Lower Darling River from the Queensland border to the Murray River

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<sup>7</sup> [Murray-Darling Basin Authority \(2012\) Sustainable Rivers Audit 2](#)

<sup>8</sup> [Productivity Commission \(2021\) National Water Reform 2020, Draft Report, Canberra.](#)

<sup>9</sup> [Natural Resources Commission \(2019\) Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012: Final report, NSW Government, Sydney.](#)

<sup>10</sup> [Commonwealth Environmental Water Holder \(2019\) Submission: Barwon-Darling Watercourse Water Resource Plan](#)



## **Conclusion**

The MDA would like to thank the Select Committee on Floodplain Harvesting for accepting submissions.

We hope the findings and recommendations from this submission and others like it help contribute to implementation of a policy that is timely, based in science, meets our obligations under the Basin Plan, and provides certainty and sustainability for agriculture, industry and communities of the Murray-Darling Basin.

We would welcome the opportunity to testify to the committee or expand on any points made in this submission.