



16 April 2021

Department of Planning, Industry and Environment  
Locked bag 5022  
Parramatta NSW 2124

Via online form.

To whom it may concern,

**Floodplain harvesting licence rules in the water sharing plans for Macquarie Valley**

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 160 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC welcomes the opportunity to participate in developing the rules for floodplain harvesting in NSW and the Macquarie Valley. Water is a scarce resource in Australia. Climate modelling indicates that water resources will diminish further in the future. Effective and sustainable management of our water resources is therefore a critical responsibility of the NSW and federal governments.

The growth of on-farm storages and the practice of floodplain harvesting poses well-understood risks to the water market and the environment. NCC supports moves to improve accounting and compliance of water use in NSW.

Floods are an important function in the riverine landscape. They recharge groundwater, replenish wetlands and supply downstream flows. Floodplain harvesting is a substantial and impactful method of capturing this water, making up 30 percent of water take. Floodplain harvesting regulation is therefore important, but it is being applied to an already over allocated system. There must be rules and policies that protect environmental water and ensure sustainability.

Rather than a tool to rein in the over-extraction caused by unmeasured, unmetered floodplain harvesting, the proposed rules risk sparking even greater take of the water that is needed to



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keep rivers alive and connected from source to sea. This submission describes the international and national context for this reform and lists vital inclusions to the rules for floodplain harvesting. The rules the Macquarie Valley must align with these system-wide recommendations.

NCC and the Water Working Group welcome further discussion. Your key contact point for correspondence is Strategy and Operations Director, Jacquelyn Johnson, available at [jjohnson@nature.org.au](mailto:jjohnson@nature.org.au) and on (02) 9516 1488.

Sincerely,

**Chris Gambian**  
Chief Executive

## **1. Summary of recommendations**

- All floodplain harvesting (FPH) rules must give effect to legislated priorities for water sharing.
- All proposed reforms must address the ongoing denial of First Nations rights, and be led by meaningful consultation with, and response to, the needs of Indigenous communities.
- Conferring permanent property rights, in the form of floodplain harvesting access licences, to irrigators is a significant transfer of public wealth; public good outcomes need to be guaranteed.
- Effective and enforceable safeguards, listed in this submission, must be implemented in the regulation of FPH.
- The proposed rules for the Gwydir Floodplain must be altered to reflect these system-wide safeguards to achieve the goals of the Murray-Darling Basin Plan and keep the river system alive.

## **2. Introduction**

### **2.1 The world is facing a climate and water crisis, and Australia is experiencing significant threat**

Safe and sufficient water is one of the substantive components of the right to a healthy and sustainable environment. Water pollution, water scarcity and water-related disasters impinge on the access of communities to many human rights. Vulnerable and marginalised groups experience a disproportionate denial of these rights.

Current settings do not treat life sustaining and indispensable water with care and respect. The UN has reported that across the globe far too much water is being polluted and used, destroying wetlands, inflicting catastrophic damage on freshwater ecosystems and undermining human health, wellbeing and prosperity.<sup>1</sup>

This is most certainly the case in Australia and NSW. Chronic overallocation of water is threatening livelihoods, communities, the rivers of the Murray Darling Basin and all life that depends upon them, even as it is well acknowledged that global warming is bringing a drier, hotter climate that will fundamentally change our landscape and industries.

Global warming is accelerating, and our response must match the scale and urgency of the situation.<sup>2</sup> Protecting NSW communities and our life sustaining ecosystems, such as the Murray-Darling Basin, requires all Governments, businesses, and industry to follow and act upon the best available science. Failure to do so will be catastrophic.

## **2.2 Environmental health as a priority**

Over the last twenty years there has been a quantifiable drop in flows across the Barwon-Darling River. Recent research describes that through the Millennium and 2013-2019 droughts the Barwon-Darling River changed from a predominantly connected lotic, to a fragmented lentic, river.<sup>3</sup>

The freshwater systems of the Darling-Baaka are already listed as endangered and include multiple threatened species. Failure to act meaningfully on the fundamental cause of insufficient flows threatens the viability of the system, its wildlife and the communities that depend on it for their livelihoods and wellbeing.<sup>4</sup>

## **2.3 Adhering to the priorities set out in water legislation**

The NSW Water Management Act (2000) recognises that repairing the ecological health of NSW rivers should be of first-order importance. The Act prioritises environmental health of water sources and the principles of ecologically sustainable development.

The overarching Commonwealth law in relation to water allocation, the Commonwealth Water Act (2007) has similar objectives. The Water Act is intended to ensure the return to environmentally sustainable levels of extraction. It aims to protect, restore and provide for the ecological values and ecosystem services of the Murray-Darling Basin and improve water security for all uses of Basin water resources.

The core ecological intention of these laws are to address the threats posed by overallocation and overuse of Basin water resources to ecosystems and biodiversity.<sup>5</sup> All rules must give effect to legislated priorities for water sharing.<sup>6</sup>

## **2.4 Respecting and enacting Indigenous water-use rights in all reform**

The UN recognises that in Australia, the cultural rights of Indigenous peoples are being devastated by water infrastructure such as dams and levees that have destroyed or are threatening to destroy sacred sites.<sup>7</sup>

In NSW in particular, water access and water rights are alarmingly inequitable, unjust, and influenced our colonial history, and the picture is worsening. The water entitlements of Aboriginal organisations in the NSW portion of the Murray Darling Basin are only 0.2 percent of all available surface water, in a region where Aboriginal people comprise almost 10 percent of the total population. Water held has decreased by 17 percent over the last decade.<sup>8</sup>

Australia's current system of water governance has excluded Indigenous people from accessing water, protecting sites of cultural significance and from participating in the water economy. This

is an unacceptable status-quo. All proposed reforms must address this ongoing denial of rights, and be led by meaningful consultation with, and response to, the needs of Indigenous communities.

### **3. Floodplain Harvesting**

Flood events form a critical part of drought recovery, especially for flood-dependent ecosystems, downstream communities and groundwater recharge.

#### **3.1 Property rights**

Reform to the practice of floodplain harvesting is much needed. All forms of water take need to be licenced, metered, and brought into a compliance framework based on agreed, sustainable diversion limits.

However, conferring permanent property rights, in the form of floodplain harvesting access licences, to irrigators is a significant financial windfall and transfer of public wealth. As such, the years of environmental impact to downstream environments should be assessed and public good outcomes need to be guaranteed. First Nations communities, who are disproportionately disadvantaged under the current policy settings, must have appropriate water rights assured.

#### **3.2 Safeguarding legislated downstream outcomes**

Systemic failures to uphold elements of the Water Management Act 2000 relating to protecting ecosystems and priority of use are established.<sup>9</sup>

There is much uncertainty and significant risks to water management outcomes in the proposed approach to FPH regulation. Climate modeling indicates a future of larger, less frequent floods. This is problematic given the models used to assess floodplains for licencing only go up to 2009 climate records, which record smaller more frequent events.

The management of FPH events is complex. This complexity is combined with limited public information about the location and legal status of floodplain structures, a lack of historically metered diversions, a lack of independent expert review or accreditation of the model, and different FPH take estimates in various reports.

NCC supports the call of the Environmental Defenders Office and the Wentworth Group of Concerned Scientists that this reform requires a guarantee that the licences issued will not impact expected outcomes under the Water Management Act (2000), the Cth Water Act (2007), and the Basin Plan for affected, downstream communities and the environment.<sup>10</sup>

Effective and enforceable safeguards are needed to ensure outcomes expected under these reforms will be achieved. We therefore recommend, and support the calls of others, that the following safeguards are in place for managing FPH access:

- Access to FPH is restricted until end of system flow targets are met to ensure the provisions of the NSW Water Management Act (2000), the Cth Water Act (2007) and Murray-Darling Basin Plan are met.
- New FPH licences are temporary until such time as all metering is in place and new modelling data and results are available.
- Accounting of volumes of take are limited to one year's entitlement with no carry over. The proposed five-year accounting with carryover of five or six hundred percent is not acceptable given a future with larger, less frequent flood events.
- Active management rules are embedded in access licence conditions to ensure that adequate water for the system will be protected for environmental purposes and human needs.
- Access licence conditions require all floodplain works to act as 'transparent structures' during restricted periods so they do not to impede or harvest flows which would have otherwise contributed to valley-wide or downstream outcomes. This should be audited for compliance.
- All water diverted above the ten percent harvestable right must be licenced.

#### **4. Priorities for floodplain Harvesting licences in the Macquarie**

The Macquarie Valley floodplain is of ecological and cultural significance. The Macquarie River supports important First Nations cultural values, and the internationally significant Ramsar listed Macquarie Marshes. Once one of the biggest bird-breeding sites in Australia, the Macquarie Marshes have shrunk significantly because of river regulation and consumptive water use upstream, including FPH.<sup>11</sup>

The growth in FPH diversions on downstream First Nations communities, the environment and basic landholder rights has had a significant, unmeasured impact that has increased exponentially in recent decades. An initial AWD of more than 1 would inexcusably amplify that impact and be in direct contradiction to the priority of use of water management legislation and the Murray Darling Basin Plan.

The intention of FPH rules is to allow for an increase to the amount of water returning from the floodplain into the river to benefit the environment.

We are witnessing the degradation of this system. Yet, the volume of FPH proposed to be licenced in the Macquarie Valley is based on how much water can be taken, rather than how much water is needed for critical, known, environmental needs. The rules suggest no reduction



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to current extraction levels, and access to tailwater beyond the 10 percent harvestable right. There has been a change to the allowable limit, and it is unclear how the new limit was determined. More information is required to achieve transparency and confidence among stakeholders.

The proposed rules do not meet the objects or priorities under the NSW Water Management Act 2000. The proposed rules for the Macquarie Floodplain must be altered to reflect the system-wide safeguards identified in this submission to achieve the goals of the Murray-Darling Basin Plan and keep the river system alive.

## References

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- <sup>1</sup> United Nations, 2021, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, March 2021, <https://undocs.org/A/HRC/46/28>
- <sup>2</sup> Steffen, W, Hughes, L, Bradshaw, S, Arndt, D & Rice, M. 2021, 'Áim high go fast: why emissions must plummet this decade', Climate Council of Australia, <https://www.climatecouncil.org.au/wp-content/uploads/2021/04/aim-high-go-fast-why-emissions-must-plummet-climate-council-report.pdf>
- <sup>3</sup> Mallen-Cooper, M & Zampatti, B, 2020 "Restoring the ecological integrity of a dryland river: Why low flows in the Barwon-Darling River must *flow*"
- <sup>4</sup> Mallen-Cooper, M & Zampatti, B, Ibid
- <sup>5</sup> Walker, B SC, 1999, "Murray-Darling Basin Royal Commission Report", Ch3 ESLT Interpretation, p131
- <sup>6</sup> Investigation into complaints of corruption in the management of water in NSW and systemic non-compliance with the Water Management Act 2000, NSW Independent Commission Against Corruption, November 2020
- <sup>7</sup> United Nations, Ibid
- <sup>8</sup> Hartwig L D, Jackson S & Osborne N, 2020, 'Trends in Aboriginal Water Ownership in NSW, Australia: The continuities between colonial and neoliberal forms of dispossession', Land Use Policy, Vol 99, <https://www.sciencedirect.com/science/article/pii/S0264837719319799?via%3Dihub>
- <sup>9</sup> Independent Commission Against Corruption NSW, 2020, Investigation into complaints of corruption in the management of water in NSW and systemic non-compliance with the Water Management Act 2000, <https://www.icac.nsw.gov.au/investigations/past-investigations/2020/nsw-government-operations-avon-and-mezzo/nsw-government-allegations-concerning-management-of-water-in-nsw-and-systemic-non-compliance-with-the-water-management-act-2000-operations-avon-and-mezzo>
- <sup>10</sup> Wentworth Group of Concerned Scientists & Environmental Defenders Office, 2020, Submission to the NSW Government on the draft rules for floodplain harvesting licences to be included in water sharing plans within the Border Rivers Valley, <https://www.edo.org.au/wp-content/uploads/2020/12/Submission-to-the-NSW-Government-on-the-draft-rules-for-floodplain-harvesting-licences-to-be-included-in-water-sharing-plans-within-the-Border-Rivers-Valley.pdf>
- <sup>11</sup> Power, J, 2016 "Macquarie marshes: A great sight of nature only being kept alive by life support" Sydney Morning Herald 19 November 2016, <https://www.smh.com.au/environment/conservation/macquarie-marshes-a-great-sight-of-nature-only-being-kept-alive-by-life-support-20161119-gssyv3.html>