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## Floodplain Harvesting Action Plan – Progress report for Quarter 1 2023

This progress report details outcomes for Quarter 1: January to March 2023

May 2023



# Acknowledgement of Country

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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## Implementing a robust floodplain harvesting framework

1. The NSW Government released the Floodplain Harvesting Action Plan in September 2019. The action plan is a road map to ensure water taken from floodplains across key areas in the northern Murray–Darling Basin is managed and measured within legal limits set by the Basin Plan 2012 and by state water sharing plans. In the action plan, the NSW Government committed to:
  - 1.1 use the best available facts, data and scientific analysis to underpin the licensing framework and explain this work to you
  - 1.2 set clear rules for floodplain harvesting and consult with you about them
  - 1.3 ensure rules are followed
  - 1.4 improve floodplain harvesting management over time.

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## Progress to date

2. This is the eleventh progress report on the Floodplain Harvesting Action Plan. It demonstrates that the government has delivered on key objectives outlined in the plan and is making good progress on the remaining objectives of the reform. As of March 2023, 21 actions identified in the action plan have been completed. A further 8 actions are in progress, with 3 identified as future actions. Updated target dates for actions in progress have been provided in this progress report.
  - 2.1 Since 2020, the NSW Government has publicly exhibited proposed water sharing rules for floodplain harvesting licences for all five valleys - the Border Rivers, Gwydir, Macquarie, Barwon-Darling and Namoi, fulfilling commitments to:
    - publish valley-based model build and model scenario reports (action 1.4 and 1.5)
    - publish valley-based environmental benefit reports (action 1.6)
    - hold workshops with stakeholders to explain the model build, model scenario and environmental assessment reports on a valley-by-valley basis (action 1.8)
    - release proposed water sharing plan and water resource plan rule changes for floodplain harvesting (action 2.4)
3. Public exhibition for the final (Namoi) valley commenced on 1 December 2022. In response to feedback from stakeholders, the exhibition period was extended to 28 February 2023, and an additional public meeting was held for unregulated river water source users in Gunnedah on 7 February 2023. The What we heard report for the Namoi WSP will be published in May/June 2023. This means action 2.6 below, is now complete for all valleys.

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## Amendments to the water management regulations

4. New floodplain harvesting (FPH) regulations took effect on 3 February 2022, setting out the process for determining the category and share component of FPH licenses.

5. Measurement requirements of floodplain harvesting licenses and a state-wide exemption for tailwater regulations took effect with the regulations introduced on 1 July 2022. However, the licence determination component of those regulations was disallowed by the NSW Parliament on 21 September 2022.
6. This meant the 1 July amendments relating to the determination process for FPH access licences, no longer applied. The disallowance did not alter the validity of FPH licences already determined for eligible water users in the NSW Border Rivers and Gwydir valleys and had no effect on requirements to measure and manage FPH in these valleys.
7. On 23 June 2021 the NSW Legislative Council formed the Select Committee on Floodplain Harvesting (Select Committee) to inquire and report on the NSW Government's management of FPH, following the disallowance of earlier amendments to the Water Management (General) Regulation 2018 for FPH on 6 May 2021. On 15 December 2021 the NSW Legislative Council released its final report as part of the FPH inquiry.
8. The NSW Government welcomed the report and considered the findings and recommendations as part of its formal response, which was published on 24 May 2022. The NSW Government agrees, or partially agrees, with 20 of the 25 recommendations made by the Select Committee. More than half of these are already broadly consistent with existing floodplain harvesting policy.
9. While past disallowance of Regulations for FPH has led to delays in implementing the NSW Floodplain Harvesting Policy, the NSW Government remains committed to the task of regulating FPH to legal limits set out in the NSW water sharing plans and the Basin Plan. This is critical to ensure that legislative obligations can be met, environmental and connectivity outcomes can be improved, and to ensure clarity for all water users and the Natural Resources Access Regulator (NRAR).
10. More information about the NSW Legislative Council, legislative amendments and the outcomes of community consultation can be found on the department's website, [www.industry.nsw.gov.au/water](http://www.industry.nsw.gov.au/water) > Plans & programs > Healthy Floodplains Project > About the Healthy Floodplains Project.

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## The licensing and measurement framework for floodplain harvesting has commenced

11. The first-ever enforceable controls to reduce and regulate FPH now apply to the Border Rivers, Gwydir and Macquarie valleys, after the NSW Government's historic licensing and measurement reform came into effect in Border Rivers and Gwydir on 15 August 2022 and in Macquarie valley on 1 March 2023.
12. The reform means FPH in these valleys, is now controlled within the legal limits and provides certainty for farmers, the environment and downstream water users.

13. Licensing and measurement of FPH in these valleys will return significant volumes of water to floodplains, rivers and creeks. These additional floodplain flows will benefit water birds, native fish and vegetation, particularly in the internationally recognised Gwydir Wetlands.
14. Other water licence holders within these valleys have also benefitted. Allocations to supplementary licence holders returned to normal in the Border Rivers and Gwydir valleys, after being reduced in recent years, to ensure water take in these valleys complied with the legal limits.
15. Ahead of the licensing framework commencing in each valley, staff from the Department of Planning and Environment, NRAR and WaterNSW held workshops with license holders to explain the rules and requirements, the approach to compliance and answer any questions. These workshops were held in:
  - Moree and Goondiwindi on 2 and 3 August 2022 for Gwydir and Border Rivers respectively
  - Warren on 23 February 2023 for Macquarie licence holders; and
  - via webinar on 28 March 2023 for Barwon Darling licence holders, ahead of the framework commencing in Barwon Darling 1 April 2023.
16. Further sessions on measurement requirements have also been held for landholders, and guidance materials developed to further support implementation of the framework.
17. The 21 September 2022 disallowance delayed rollout of the licensing framework in other northern NSW valleys. However, measurement requirements for FPH and the tailwater drain exemption have been law in NSW since 1 July 2022 and with regulations gazetted 3 February 2023, key components required to complete the reform in remaining valleys, are now in place.

# Floodplain Harvesting Action Plan deliverables

## Use the best available facts, data and scientific analysis to underpin the licensing framework and explain this work to you

Table 1. Progress for the first set of actions

Our commitment	Target date	Progress	Updates
1.1 Report on how sensitivity and uncertainty in the model has been treated by the Department of Planning and Environment and how much it affects users	Q4 2019	Complete	Documentation will now be included in the valley-based model reports.
1.2 Report on the significance of additional rainfall runoff due to irrigation and how this is being managed	Q4 2019	Complete	The <a href="#">report for additional rainfall runoff</a> is available on the website. It is proposed that runoff from irrigation areas will not be licensed as floodplain harvesting in certain circumstances.
1.3 Write to individuals to explain the parameters that we will use to work out their licence entitlements	Q4 2020	Complete	Complete for all valleys.
1.4 Publish valley-based model build report	Q4 2022	Complete	Complete for all valleys. Report for Namoi published December 2022.
1.5 Publish valley-based model scenario report	Q4 2022	Complete	Complete for all valleys. Report for Namoi published December 2022.
1.6 Publish valley-based environmental benefit reports	Q4 2022	Complete	Complete for all valleys. Report for Barwon–Darling published December 2022.
1.7 Hold a focus workshop with peak water user groups in northern NSW valleys to provide information about how the modelling approach applied to individual farms is supported by sensitivity testing	Q3-Q4 2019	Complete	Workshop and field trip held with peak water user groups in October 2019 in Moree.

Our commitment	Target date	Progress	Updates
1.8 Hold workshops with stakeholders to explain the model build, model scenario and environmental assessment reports on a valley-by-valley basis	Q4 2022	Complete	Complete for all valleys. Namoi valley workshops completed in November 2022.

## Set clear rules for floodplain harvesting and consult with you about them

Table 2. Progress for the second set of actions

Our commitment	Target date	Progress	Updates
2.1 Publish all independent reviews about policy implementation (the Independent Review of NSW Floodplain Harvesting Policy Implementation and a summary of the probity review into floodplain harvesting licensing)	Q3 2019	Complete	Reports for the <a href="#">Independent Review of NSW Floodplain Harvesting Policy Implementation</a> and a summary of the <a href="#">probity review into floodplain harvesting licensing</a> are available on the department's website.  The results of <a href="#">peer review of modelling reports</a> for each valley are available on the department's website.
2.2 Release a response to each recommendation of the Independent Review of NSW Floodplain Harvesting Policy Implementation	Q3 2019	Complete	See the <a href="#">Floodplain Harvesting Action Plan</a> .
2.3 Release a guideline about how the department is implementing the policy	Q3 2019	Complete	<a href="#">Guidelines</a> are available on the department's website.
2.4 Release proposed water sharing plan and water resource plan rule changes for floodplain harvesting	Q1 2023	Complete	Complete for all valleys. Public exhibition of proposed WSP rules for the final valley (Namoi) commenced December 2022.
2.5 Hold workshops with stakeholders to explain the guideline	Q3 2019	Complete	Complete
2.6 Hold workshops with stakeholders about proposed water sharing plan and water resource plan rule changes	Q1 2023	Complete	Complete for all valleys. Workshops for Namoi stakeholders were held in Wee Waa 13 December 2022 and in

Our commitment	Target date	Progress	Updates
			Gunnedah on 7 February 2023.
2.7 Release draft entitlements for comment	Q2 2023	Complete	<p>Complete for all valleys.</p> <p>Draft entitlements for the remaining valley (Namoi) were sent to landholders on 28 February 2023.</p> <p>Due to updates to supporting information and requests received during the draft entitlement submission process, additional information was sent to landholders 29 March 2023 and the closing date for submissions extended to 28 April 2023.</p>
2.8 Finalise licences and amend water sharing plan and submit water resource plan for reaccreditation	Q2 2023	In progress	<p>Licences for the Border Rivers and Gwydir were determined in Q1 2022 and for Macquarie and Barwon Darling in Q1 2023 under new regulations gazetted 3 February 2023.</p> <p>Water sharing plans were amended for the Gwydir, Border Rivers, and Macquarie 29 July 2022 and for Barwon Darling 17 February 2023.</p> <p>Disallowance of the licence determination component of regulations gazetted 1 July 2022, on 21 September 2022, impacted the timeline for finalising licences and water sharing plan amendments in the remaining valleys.</p> <p>Water Resource plans were submitted for accreditation later in Q1 2023.</p> <p>On track to complete for all valleys by Q3 2023.</p>

## Ensure rules are followed

Table 3. Progress for the third set of actions

Our commitment	Target date	Progress	Updates
<p>3.1 Meet Compliance Compact obligations by publishing a program for improved measurement of floodplain harvesting</p>	Q2 2019	Complete	<p><a href="#">Improvement program</a> available on the department's website.</p>
<p>3.2 Release the final Floodplain Harvesting Measurement Policy</p>	Q4 2019	Complete	<p>The <a href="#">NSW Floodplain Harvesting Measurement Policy</a> is available on the department's website.</p> <p>The policy will be revised to ensure it reflects measurement requirements in the regulations.</p>
<p>3.3 Require licence holders to install telemetry-ready, continuous water-level loggers on all on-farm storages used for floodplain harvesting</p>	Q4 2022	In progress	<p>Floodplain harvesting measurement conditions imposed in the Border Rivers and Gwydir valleys through Water Management (General) Regulation amendments 1 July 2022.</p> <p>The licensing and measurement framework commenced in the Border Rivers and Gwydir 15 August 2022, and in the Macquarie 1 March 2023.</p> <p>Landholders have 12 months from the date their licence is credited to install primary measurement equipment (including telemetry).</p> <p>In the first 12 months only, they may use secondary measurement methods (such as gauge boards).</p>
<p>3.4 Start enforcement of the new floodplain harvesting licensing framework through the Natural Resources Access Regulator (NRAR)</p>	Q3 2022	In progress	<p>The licensing and measurement framework commenced 15 August 2022 for the Border Rivers and Gwydir valleys, and 1 March 2023 for the Macquarie.</p> <p>Workshops including NRAR, the department and WaterNSW were held with Macquarie licence holders in Warren on 23 February 2023.</p> <p>This covered requirements and the approach to enforcement.</p> <p>Information on the approach NRAR takes to compliance is on their <a href="#">website</a>.</p>

Our commitment	Target date	Progress	Updates
3.5 Develop a best-practice guideline for floodplain harvesting measuring in partnership with Queensland and Murray–Darling Basin Authority	Q4 2022	In progress	<p>Preliminary work has taken place to assess similarities and differences of NSW and Queensland’s floodplain harvesting measurement policies.</p> <p>The Murray–Darling Basin Authority is preparing documentation on the differences and similarities between NSW and Queensland’s floodplain harvesting measurement approaches.</p>
3.6 Implement best practice guidelines	Q4 2022	In progress	<p>Measurement requirements for floodplain harvesting in NSW, are now law.</p> <p>The department has published <a href="#">technical guidelines</a> about the standard and installation of measurement equipment. The department has also prepared legal standards, based on these guidelines.</p> <p>The department will review and provide a response to the Murray–Darling Basin Authority, on its assessment of the differences and similarities between approaches to floodplain harvesting measurement in NSW and Queensland.</p>
3.7 Support the development of technologies that enable better auditing and compliance of floodplain harvesting, including through the department’s Water Technology Pilot Program	Q3 2019	Complete	<p>The development of technologies is being supported through the <a href="#">Market engagement policy for metering and telemetry</a>.</p> <p>Development is underway for a Floodplain Harvesting Analytics Tool, funded through the Hydrometric Networks and Remote Sensing program.</p>
3.8 Encourage the Natural Resources Access Regulator to address unapproved flood works on a risk basis to improve outcomes for the environment and downstream water users	Q1 2022	Complete	<p>A whole-of-NSW Government approach to accelerating compliance for high priority unapproved floodplain structures in the Northern Basin, is underway under the Improving Floodplain Connections program.</p> <p>This program is jointly funded by the Commonwealth and NSW governments, and more information on the <a href="#">Improving Floodplain Connections Program</a> is available on the department’s website.</p>

Our commitment	Target date	Progress	Updates

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## Improve floodplain harvesting management over time

Table 4. Progress on the fourth set of actions

Our commitment	Target date	Progress	Updates
<p>4.1 Collect floodplain harvesting diversion data by implementing the Floodplain Harvesting Measurement Strategy</p>	<p>Q4 2022</p>	<p>In Progress</p>	<p>Measurement requirements for floodplain harvesting are now in place for Border Rivers, Gwydir and Macquarie valleys and diversion data is now being collected via a combination of primary and secondary device measurement.</p> <p>Collection of data in the remaining valleys will commence when the licensing and measurement framework commences in those valleys in 2023.</p> <p>Data is being collected through the installation of local intelligence devices (telemetry systems) with floodplain harvesting meters, as outlined in the NSW Floodplain Harvesting Measurement Policy.</p> <p>Implementation of this action was delayed due to disallowance of floodplain harvesting regulations on several occasions. The 1 July 2022 amendments to the Water Management (General) Regulation 2018 made measurement of floodplain harvesting diversions a legal requirement.</p>
<p>4.2 Consider opportunities to expand the river gauging network to improve the quantification of return flows from the floodplain to the river</p>	<p>Q3 2021</p>	<p>Complete</p>	<p>The NSW Government has recently completed a <a href="#">review of the state's hydrometric network</a> and published a hydrometric plan, which includes a map of top ranked sites in the northern Basin for installation or upgrade.</p> <p>Currently funding 20 new and modified surface water metering sites across the northern Basin to be installed by September 2023.</p>
<p>4.3 Continue to invest in remote sensing to improve our understanding of flood flow breakouts and return flows from the floodplain to the river</p>	<p>Q4 2023</p>	<p>In progress</p>	<p>We are engaged with multiple initiatives which seek to expand the use of remote sensing to monitor water presence, volume and movement across floodplains.</p>

Our commitment	Target date	Progress	Updates
4.4 Undertake modelling to assess the effects of climate change on floodplain harvesting, as well as on the downstream water users and the environment	Q3 2021	Complete	Completed as part of the development of the draft regional water strategies.
4.5 Invest in robust monitoring and evaluation programs to better understand the hydrological and ecological effects of floodplain harvesting	Q2 2023	In progress	<p>A monitoring, evaluation and reporting (MER) framework is being developed to better understand the hydrological and ecological effects of floodplain harvesting.</p> <p>Measurement data from licensing and measurement of floodplain harvesting will provide important new data for monitoring and evaluating the hydrological and ecological effects of floodplain harvesting.</p>
4.6 Recalibrate models using floodplain harvesting measurement data	From Q3 2021	Future action	<p>N/A</p> <p>Implementation of this action was delayed due to disallowance of floodplain harvesting regulations on several occasions. Work could not commence on this action, until licensing and measurement of floodplain harvesting was implemented.</p> <p>Importantly, collection of floodplain harvesting measurement data has now commenced in three valleys.</p>
4.7 Improve model capability by explicitly representing flows from the floodplain to the river using all new data and information collected	From 2025	Future action	<p>N/A</p> <p>This action is about a year behind the intended schedule. The department has received a draft report for the first of 3 stages and is committed to completion of this important work.</p>
4.8 Review water sharing rules and amend them as necessary to improve the management of floodplain harvesting over time, based on improved data and information	From 2025	Future action	N/A