

Floodplain Harvesting Action Plan – Progress report for Quarter 4 2022

This progress report details outcomes for Quarter 4: October to December 2022.

Implementing a robust floodplain harvesting framework

3.1 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.

Progress to date

3.2 This is the tenth 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 December 2022, 19 actions identified in the action plan have been completed. A further 10 actions are in progress, with 3 identified as future actions. Updated target dates for actions in progress have been provided in this progress report.

3.3 Since 2020, the NSW Government has publicly exhibited proposed water sharing rules for floodplain harvesting licences for the Border Rivers, Gwydir, Macquarie and Barwon-Darling valleys (4 out of the 5 northern Basin valleys). On 1 December 2022, public exhibition for the final valley (Namoi) commenced. This means a further 5 actions have now been completed for all valleys. These include fulfilling commitments to:

- publish valley-based model build reports (action 1.4)
- publish valley-based model scenario reports (action 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)

Amendments to the water management regulations

3.4 New floodplain harvesting (FPH) regulations took effect on 1 July 2022, setting out the process for determining the category and share component of FPH licenses, the measurement requirements of those licenses and a state wide exemption for tailwater. On 21 September 2022 the licence determination component of the regulations was disallowed by the NSW Parliament.

3.5 This meant the 1 July amendments relating to the determination process for FPH access licences, no longer apply. 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 has no effect on requirements to measure and manage FPH in these valleys.

3.6 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 floodplain harvesting on 6 May 2021. On 15 December 2021 the NSW Legislative Council released its final report as part of the FPH inquiry.

3.7 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.

3.8 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 floodplain harvesting 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).

3.9 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 > Plans & programs > Healthy Floodplains Project > About the Healthy Floodplains Project.

The licensing and measurement framework for floodplain harvesting has commenced

3.10 The first-ever enforceable controls to reduce and regulate FPH now apply to the Border Rivers and Gwydir valleys, after the NSW Government's historic licensing and measurement reform came into effect August 2022.

3.11 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.

3.12 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.

3.13 Other water licence holders within the two valleys have also benefitted. Allocations to supplementary licence holders have returned to normal, after being reduced in recent years, to ensure water take in these valleys complied with the legal limits.

3.14 Ahead of the licensing framework's implementation, staff from the Department of Planning and Environment, NRAR and WaterNSW met with landholders in Moree and Goondiwindi to explain the rules and approach to compliance. Guidance materials have been developed to further support the implementation of the framework.

3.15 The 21 September 2022 disallowance has delayed the rollout of the licensing framework in other northern NSW valleys. However, measurement requirements for FPH and the tailwater drain exemption are now law in NSW, providing clarity and a strong foundation for completing the reform in remaining valleys, in 2023.

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 report for additional rainfall runoff 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.

Our commitment	Target date	Progress	Updates
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.
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 user 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	<p>Reports for the Independent Review of NSW Floodplain Harvesting Policy Implementation and a summary of the probity review into floodplain harvesting licensing are available on the department's website.</p> <p>The results of peer review of modelling reports for each valley are available on the department's website.</p>
2.2 Release a response to each recommendation of the Independent Review of NSW Floodplain Harvesting Policy Implementation	Q3 2019	Complete	See the Floodplain Harvesting Action Plan .
2.3 Release a guideline about how the department is implementing the policy	Q3 2019	Complete	Guidelines 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	<p>Complete for all valleys.</p> <p>Public exhibition of proposed WSP rules for the final valley (Namoi) commenced December 2022.</p>
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	In progress	<p>Close to complete for all valleys.</p> <p>One workshop was held with stakeholders in Wee Waa on 13 December 2022. In response to stakeholder feedback at that workshop, a second workshop will be held in Gunnedah early in 2023, for Namoi unregulated river users.</p>
2.7 Release draft entitlements for comment	Q2 2023	In progress	<p>Complete for Border Rivers, Gwydir, Macquarie and Barwon–Darling.</p> <p>Draft entitlements were released in the Macquarie in June 2022 and in the Barwon–Darling in October 2022.</p> <p>On track to complete for the Namoi by Q2 2023.</p>

Our commitment	Target date	Progress	Updates
<p>2.8 Finalise licences and amend water sharing plan and submit water resource plan for reaccreditation</p>	<p>Q2 2023</p>	<p>In progress</p>	<p>Licences for the Border Rivers and Gwydir were determined in Q1 2022.</p> <p>Water sharing plan amended for the Gwydir, Border Rivers and Macquarie 29 July 2022.</p> <p>Parliament disallowed the licence determination component of the proposed legislative amendments on 21 September 2022. This impacted the timeline for finalising licences and water sharing plan amendments in the remaining valleys.</p> <p>On track to complete for all valleys by Q2 2023.</p>

Ensure rules are followed

Table 3. Progress for the third set of actions

Our commitment	Target date	Progress	Updates
3.1 Meet Compliance Compact obligations by publishing a program for improved measurement of floodplain harvesting	Q2 2019	Complete	Improvement program available on the department's website.
3.2 Release the final Floodplain Harvesting Measurement Policy	Q4 2019	Complete	<p>The NSW Floodplain Harvesting Measurement Policy is available on the department's website.</p> <p>The policy will be revised to ensure it reflects measurement requirements in the regulations.</p>
3.3 Require licence holders to install telemetry-ready, continuous water-level loggers on all on-farm storages used for floodplain harvesting	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 framework commenced in the Border Rivers and Gwydir 15 August 2022 and measurement requirements are now law in NSW.</p> <p>Landholders have 12 months from the date their licence is credited to install primary measurement equipment (including telemetry). In the first 12 months only, they may use secondary measurement methods (such as gauge boards).</p>
3.4 Start enforcement of the new floodplain harvesting licensing framework through the Natural Resources Access Regulator (NRAR)	Q3 2022	In progress	<p>The licensing and measurement framework commenced 15 August 2022 for the Border Rivers and Gwydir valleys.</p> <p>Workshops including the department, NRAR and WaterNSW were held with licence holders on requirements and the approach to enforcement, in the Border Rivers and Gwydir in early August 2022.</p> <p>Information on the approach NRAR takes to compliance is on their website.</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 are preparing documentation of differences and similarities between NSW and Queensland’s floodplain harvesting measurement approaches.</p>
3.6 Implement best practice guidelines	Q4 2022	In progress	<p>The department has published technical guidelines about the standard and installation of measurement equipment. The department has prepared legal standards, based on these guidelines.</p> <p>The department will review and provide a response to the Murray–Darling Basin Authority, on documentation of differences and similarities between approaches to floodplain harvesting measurement in NSW and Queensland, noting that measurement requirements for floodplain harvesting in NSW, are now law.</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>Supporting the development of technology through the Market engagement policy for metering and telemetry.</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>With commonwealth funding a whole-of-NSW Government approach to accelerating compliance for high priority unapproved floodplain structures in the Northern Basin, is underway.</p> <p>Information about the Improving Floodplain Connections Program is on the department’s website.</p>

Improve floodplain harvesting management over time

Table 4. Progress on the fourth set of actions

Our commitment	Target date	Progress	Updates
4.1 Collect floodplain harvesting diversion data by implementing the Floodplain Harvesting Measurement Strategy	Q4 2022	In Progress	<p>Implementation will be 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.</p> <p>1 July 2022 amendments to the Water Management (General) Regulation 2018 made measurement of floodplain harvesting diversions a legal requirement.</p> <p>With measurement requirements now in place for Border Rivers and Gwydir, data on floodplain harvesting diversions from these valleys is now being collected via a combination of primary and secondary device measurement. However due to low installation rates, there are not many installations yet connected to WaterNSW systems.</p> <p>Collection of this data in the remaining valleys will commence when the licensing and measurement framework commences in those valleys in 2023.</p>
4.2 Consider opportunities to expand the river gauging network to improve the quantification of return flows from the floodplain to the river	Q3 2021	Complete	<p>The NSW Government has recently completed a review of the state's hydrometric network 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>

Our commitment	Target date	Progress	Updates
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	Q4 2023	In progress	We are engaged with multiple initiatives which seek to expand the use of remote sensing to monitor water presence, volume and movement across floodplains.
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>An economic analysis report has been published on the department's website.</p>
4.6 Recalibrate models using floodplain harvesting measurement data	From Q3 2021	Future action	<p>N/A</p> <p>Implementation of this action has been delayed due to disallowance of floodplain harvesting regulations on several occasions.</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>Implementation of this action has been delayed due to disallowance of floodplain harvesting regulations on several occasions.</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