Progress Report for Quarter 2 2022 (April to June 2022)



Floodplain Harvesting Action Plan

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Published August 2022

Implementing a robust floodplain harvesting framework

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. use the best available facts, data and scientific analysis to underpin the licensing framework and explain this work to you
- 2. set clear rules for floodplain harvesting and consult with you about them
- 3. ensure rules are followed
- 4. improve floodplain harvesting management over time.

Progress to date

This is the eighth 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 2022, 14 actions identified in the action plan have been completed. A further 13 actions are in progress, with 5 identified as future actions. Updated target dates for actions in progress has been provided in this progress report.

Since 2020, the NSW Government has publicly exhibited proposed water sharing rules for floodplain harvesting licences for the Border Rivers, Gwydir, and Macquarie valleys (3 out of the 5 northern Basin valleys). Once public exhibition is complete for the Barwon–Darling and Namoi valleys, a further 6 actions will have been completed. 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)
- hold workshops with stakeholders about proposed water sharing plan and water resource plan rule changes (action 2.6).

Amendments to the water management regulations

New floodplain harvesting (FPH) regulations took effect on July 1 2022, setting out the process for determining the category and share component of FPH licenses, the measurement requirements of those licenses and a statewide exemption for tailwater.

In 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 floodplain harvesting, following 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 floodplain harvesting inquiry.



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The NSW Government has welcomed the report and has 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 Committee. More than half of these are already broadly consistent with existing floodplain harvesting policy.

While past disallowance of Regulations for floodplain harvesting have 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).

More information about the NSW Legislative Council, <u>legislative amendments and the outcomes of community consultation</u> can be found on the department's website, <u>www.industry.nsw.gov.au/water.</u>

The licensing and measurement framework for floodplain harvesting has commenced

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

The reform means floodplain harvesting is now controlled within the legal limits and provides certainty for farmers, the environment and downstream water users.

Licensing and measurement of floodplain harvesting in the two 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.

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.

Ahead of the licensing framework's implementation, staff from the Department of Planning and Environment, Natural Resources Access Regulator and Water NSW met with landholders in Moree and Goondiwindi to explain the rules and approach to compliance. Guidance materials are being developed to further support implementation of the framework.

The licensing framework will be rolled out in other northern NSW valleys in coming months.

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Floodplain Harvesting Action Plan deliverables

1. 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 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 license entitlements	Q1 2020	Complete	Complete for all valleys.
1.4 Publish valley-based model build report	Q4 2022	In progress	Complete for Border Rivers, Gwydir, Macquarie and Barwon- Darling valleys. Report for Barwon Darling published May 2022. On track to complete for the Namoi valley in Q4.
1.5 Publish valley-based model scenario report	Q4 2022	In progress	Complete for Border Rivers, Gwydir, Macquarie and Barwon- Darling valleys. Report for the Barwon-Darling published May 22. On track to complete for the Namoi valley in Q4 2022.
1.6 Publish valley-based environmental benefit reports	Q4 2022	In progress	Complete for Border Rivers, Gwydir, Macquarie and Barwon- Darling valleys. Report for Barwon Darling published May 2022. On track to complete for the Namoi valley in Q4 2022.



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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	In progress	Complete for Border Rivers, Gwydir, Macquarie and Barwon- Darling valleys. On track to complete by Q4 2022.

2. 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 Independent Review of NSW Floodplain Harvesting Policy Implementation and a summary of the probity review into floodplain harvesting licensing are available on the website. The results of peer review of modelling reports for each valley are available on the website.
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 website.
2.4 Release proposed water sharing plan and water resource plan rule changes for floodplain harvesting	Q4 2022	In progress	Complete for Border Rivers, Gwydir and Macquarie. Barwon-Darling public exhibition of WSP rules commenced in June and closed in July 2022. Will complete for the Namoi valley, once modelling and assessments have been finalised. On track to complete Q4 2022.



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Our commitment	Target date	Progress	Updates
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	Q4 2022	In progress	Complete for Border Rivers, Gwydir and Macquarie.
water resource plan rule changes			Webinar and face to face workshops for the Barwon- Darling held in June 2022.
			Will complete for the Namoi valley, once modelling and assessments have been finalised. On track to complete Q4 2022.
2.7 Release draft entitlements for comment	Q4 2022	In progress	Complete for the Border Rivers and Gwydir.
			Draft entitlements released for comment in the Macquarie in June 2022
			On track to complete for the Barwon-Darling and Namoi by Q4 2022.
2.8 Finalise licenses and amend water sharing plan and submit water resource plan for re-accreditation	Q2 2023	In progress	Licenses for the Border Rivers and Gwydir were determined in Q1 2022.
			Water sharing plan amended for the Gwydir, Border Rivers and Macquarie 29 July 2022.
			On track to complete for remaining valleys by Q2 2023.

3. 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 website
3.2 Release the final Floodplain Harvesting Measurement Policy	Q4 2019	Complete	The NSW Floodplain Harvesting Measurement Policy is available on the website.



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Our commitment	Target date	Progress	Updates
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	Floodplain harvesting measurement conditions imposed in the Border Rivers and Gwydir valleys through Water Management (General) Regulation amendments 1 July 2022. Licensing and measurement framework commenced in the Border rivers and Gwydir 15 August 2022.
3.4 Start enforcement of the new floodplain harvesting licensing framework through the Natural Resources Access Regulator	Q3 2022	Future action	Delays in implementation of the licensing framework as a result of the disallowance of floodplain harvesting regulations on 24 February 2022. Workshops including the department, NRAR and Water NSW held with licence holders on requirements and approach to enforcement in the Border Rivers and Gwydir in early August 2022 Licensing framework commenced 15 August 2022 for the Border Rivers and Gwydir valleys.
3.5 Develop a best-practice guideline for floodplain harvesting measuring in partnership with Queensland and Murray–Darling Basin Authority	Q4 2022	In progress	Preliminary work has taken place to assess similarities and differences of NSW and Queensland Floodplain harvesting measurement policies. The Murray-Darling Basin Authority are preparing documentation to explain the differences and similarities between NSW and Queensland's floodplain harvesting measurement approaches.



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Our commitment	Target date	Progress	Updates
3.6 Implement best-practice guidelines	Q4 2022	In progress	The department has published technical guidelines about the standard and installation of equipment. The department has prepared legal standards, based on these guidelines.
			The department is working towards a joint NSW and Queensland best practice standard.
			Delays to the development and subsequent implementation of a guideline due to disallowance of floodplain harvesting regulations on 24 February 2022.
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 onwards	Complete	Information about the Water Technology Pilot Program is available on the website.
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	Commonwealth funding has been secured for a whole- of-NSW Government approach to accelerating compliance for high priority unapproved floodplain structures in the Northern Basin. See website for Improving Floodplains Connections Program.



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4. Improve floodplain harvesting management over time

Table 4. Progress for 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	Future action	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. 1 July 2022 amendments to the Water Management (General) Regulation 2018 aim to make this a legal requirement. Implementation delayed due to disallowance of floodplain harvesting regulations on 24 February 2022. Initial pilot study and Field demonstration program to undertake complete meter installation for water users in 2022.
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	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. Currently funding 20 new / modified surface water metering sites across the northern basin to be installed by September 2023.
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 if remote sensing to monitor water presence, volume and movement across floodplains.



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Our commitment	Target date	Progress	Updates
4.4 Undertake modelling to assess the effects of climate change on floodplain harvesting, as well as on 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	A monitoring, evaluation and reporting (MER) framework is being developed to better understand the hydrological and ecological effects of floodplain harvesting. Economic Analysis report published to website. Remote sensing research is being undertaken to look at floodplain connectivity and volumes during flood events in the Darling. Expected completion is in 2022.
4.6 Recalibrate models using floodplain harvesting measurement data	From Q3 2021	Future action	n/a
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	n/a
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

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