Progress report for Quarter One 2021 (Jan–Mar 2021)



Floodplain Harvesting Action Plan

Progress report for Quarter One 2021 (January to March 2021)

Published June 2021

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 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 third progress report on the NSW Government's 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 April 2021, 10 actions identified in the action plan have been completed. A further 11 actions are in progress, with 9 identified as future actions and 2 as ongoing actions.

Since the December 2020 progress update, the NSW Government has publicly exhibited water sharing rules for floodplain harvesting licences for the Border Rivers, Gwydir, and Macquarie valleys (3 out of the 5 northern valleys). Once we complete public exhibition for the Barwon–Darling and Namoi valleys, we will have completed a further 6 actions. 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).





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, Industry 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. We propose 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 | Q1 2020 | Complete | Complete for all valleys |
| 1.4 Publish valley-based model build report | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |
| 1.5 Publish valley-based model scenario report | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain. harvesting. |



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| Our commitment | Target date | Progress | Updates |
|---|-------------|-------------|--|
| 1.6 Publish valley-based environmental benefit reports | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |
| 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 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 | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |

2. Set clear rules for floodplain harvesting and consult with you about them Table. 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. |



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| Our commitment | Target date | Progress | Updates |
|--|-------------|-------------|--|
| 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 available on the website. |
| 2.4 Release proposed water sharing plan and water resource plan rule changes for floodplain harvesting | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |
| 2.5 Hold workshops with stakeholders to explain the guideline | Q3 2019 | Complete | n/a |
| 2.6 Hold workshops with stakeholders about proposed water sharing plan and water resource plan rule changes | Q3 2020 | In progress | Complete for Border Rivers, Gwydir and Macquarie valleys. We will complete this for the Barwon–Darling and Namoi valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |
| 2.7 Release draft entitlements for comment | Q3-Q4 2020 | In progress | Draft entitlement released for comment in Border Rivers valley during Q1. We will release draft entitlements for comment in remaining valleys, subject to finalisation of water management regulations associated with floodplain harvesting. |
| 2.8 Finalise licences and amend water sharing plan and submit water resource plan for re-accreditation | Q2 2021 | In progress | Licensing will come into effect, subject to finalisation of water management regulations associated with floodplain harvesting. |



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3. Ensure rules are followed

Table 2. 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. |
| 3.3 Require licence holders to install telemetry-ready, continuous water-level loggers on all on-farm storages used for floodplain harvesting | Q2-2021 | In progress | Implementation will be through the Floodplain Harvesting Measurement Policy, supporting guidelines and Water Management Regulation (2020). See website for details. |
| 3.4 Start enforcement of the new floodplain harvesting licensing framework through the Natural Resources Access Regulator | Q3 2021 | Future action | n/a |
| 3.5 Develop a best-practice guideline for floodplain harvesting measuring in partnership with Queensland and Murray–Darling Basin Authority | Q2 2021 | In progress | Preliminary discussions with Queensland are underway for the development of best-practice guidelines. |
| 3.6 Implement best-practice guidelines | Q3 2021 onwards | Future action | n/a |
| 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 | Ongoing | Information about the Water Technology Pilot Program is available on the website. |



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| Our commitment | Target date | Progress | Updates |
|---|--------------|----------|--|
| 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 | From Q3 2019 | Ongoing | We propose to adopt an interagency approach for accelerated compliance program with the department's Water group and Crown Lands branch, NRAR, and WaterNSW. |

4. Improve floodplain harvesting management over time Table 3. 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 | From Q3 2021 | 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. |
| 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 | Future action | We are assessing options as part of the Northern Basin Toolkit and Hydrometric Networks and Remote Sensing Project. |
| 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 | Q3 2021 | Future action | We are assessing options as part of the Northern Basin Toolkit and Hydrometric Networks and Remote Sensing Project. |
| 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 | Future action | Will be guided by regional water strategies. |



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| Our commitment | Target date | Progress | Updates |
|---|--------------|---------------|---|
| 4.5 Invest in robust monitoring and evaluation programs to better understand the hydrological and ecological effects of floodplain harvesting | Q3 2021 | In progress | We are developing a monitoring, evaluation and reporting (MER) framework to better understand the hydrological and ecological effects of floodplain harvesting. We expect to publish the plan in Q3 2021. |
| 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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