



Australian Government



Floodplain harvesting and overland flows

Floodplain harvesting is when the water that flows across the floodplains during a flood is collected and used later.

Overland flow refers to water that runs across the land after rainfall, flooding, or after it rises to the surface naturally from underground. Capturing this water on a floodplain is referred to as overland flow development or floodplain harvesting.

When the Basin Plan was established, the MDBA had a good understanding of how much water needed to remain in the river system to improve the health of our environment. The MDBA, New South Wales (NSW) and Queensland (Qld) also knew some types of water use needed to be better accounted for. In the past it has been hard to accurately estimate how much floodplain water has been used or 'harvested', and therefore this water use has not been accounted for in the rigorous way other water use is accounted for.

Licensing floodplain harvesting use means that any growth in use is restricted and, in some cases, can be wound back to ensure water use remains within the legal limits. Licensing improves compliance and accounting of water use in NSW and Qld.

Work is underway in NSW and Qld to better understand how much water is harvested from floodplains now, and how much was being harvested prior to the Basin Plan.

At its heart, the Basin Plan sets the amount of water that can be taken from the Basin each year, while leaving enough for our rivers, lakes and wetlands and the plants and animals that depend on them.

The MDBA welcomes the proposed changes from NSW and Qld governments.

It is important that any change to licenses and new improved information about water usage is reflected across the whole water management system and in the day-to-day operation of the Basin Plan. It is expected that as licensing, monitoring and compliance arrangements are improved, the total amount of water used through floodplain harvesting will be managed within the limits established under the Basin Plan.

Key facts

Measurement and compliance of floodplain harvesting must be improved—so over time, the MDBA can ensure this use does not exceed the limits.



Floodplain harvesting has been regulated under the cap system since 1995, although it **has never been fully measured and accounted for.**



As floodplain harvesting is licensed and accounted for, **it will be incorporated within the sustainable diversion limits** established under the Basin Plan. This will see the sustainable diversion limit increase.



This does not mean more water is available for use, this water is in use already—it is just ensuring that it is robustly measured and can be monitored to ensure use does not grow over time.



Any change to floodplain harvesting regulations will mean the **water limits and water resource plans will need to be updated** to incorporate these changes.



Any **changes must be based on best available or improved information** before they are incorporated into the Basin Plan.

Changes in New South Wales

The NSW Government has sought input from the community on licensing floodplain harvesting as part of the regulated system with all other water licences.

The NSW Government is proposing that water harvested from floodplains will be limited to ensure that the amount of water taken in a valley does not exceed levels used in the year 2000. This is in line with the baseline diversion limits under the Basin Plan. The NSW Government says there has been growth in floodplain harvesting across some parts of the NSW northern Basin that has caused an increase in water diversions above legal limits. As a result, licenced take will need to be reduced for users in some valleys to remain within legal limits—this is a decision for NSW.

As floodplain harvesting is regulated and measured, sustainable diversion limits in NSW will change to properly include floodplain harvesting along with other forms of take.

Over the past few years, NSW has considered data from hydraulic models, gauged streamflow, remote sensing, satellite imagery, aerial photos, flood and licensing records, as well as survey and on-ground inspection data.

This work was part of the Australian Government funded 'Healthy Floodplains Project' in NSW to improve data and planning for floodplain harvesting.

New South Wales Independent Review

An independent review was undertaken in 2018–19, finding improvements are needed to accurately model floodplain harvesting in NSW. Further work needs to be done to ensure water sharing plans and water resource plans accurately represent floodplain harvesting use.

The independent review has also recommended increased community engagement to enhance community input and understanding. The NSW Government is committed to improving modelling and engagement to provide certainty that the floodplain harvesting policy is robust. The NSW Government is conducting further public consultation, providing information to the community on licensing floodplain harvesting as part of the regulated system with all other water licences.

Water resource plans also need to include commitments to fully implement the NSW Floodplain Harvesting Policy, including installing measurement devices and licencing of storages. Once licences and measurement devices are in place the NSW government will submit updated water resource plans to the MDBA to ensure this new information and regulation changes are reflected across the whole water management system.

Changes in Queensland

Queensland is undertaking a different process to monitor and measure floodplain harvesting and overland flows. Queensland placed a moratorium on additional floodplain harvesting development in 2000, and has prevented any growth in use since that time by using a combination of authorisations and licences.

Since the moratorium was put in place and additional development ceased, Queensland has issued licences and implemented measurement programs in some places like the Lower Balonne, where floodplain harvesting is measured using storage meters and other on-farm measuring devices.

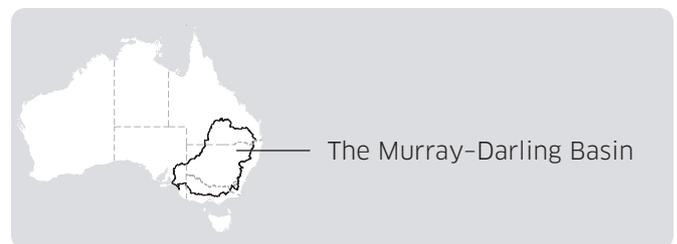
For all other areas, works-based authorisations ensure that there is no increase in the capture of floodplain harvesting water beyond 2000 levels. If an authorisation is no longer able to prevent growth (such as when an irrigator applies for a trade, or for new works on their property) then it is replaced with a volumetric licence.

Additional work is now planned through the Queensland Rural Water Management Program to enable improved measurement and monitoring of the use of overland flow.

Queensland has also recently committed to the full measurement and licencing of the Border Rivers and Moonie floodplains by 2022. Once floodplain harvesting is fully measured and licensed, water limits in Queensland will be revised to capture the best information.

New information on floodplain harvesting will need to be included in updated estimates of baseline diversion limits, which are outlined in water resource plans. This means water resource plans will change over time, as the understanding of floodplain harvesting improves.

The Queensland Government continues working with floodplain harvesters to extend measuring and licencing.



Connect with us.

The MDBA has offices in Adelaide, Albury-Wodonga, Canberra, Goondiwindi, Griffith, Mildura, Murray-Bridge, Toowoomba, and regional engagement officers around the Basin.

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