NSW Healthy Floodplains project

Taking a proactive approach to floodplain management in NSW

From its commencement in 2013, the aim of the NSW Healthy Floodplains project has been to drive reform in water management across the Northern Basin floodplains. This includes managing development in floodplain areas and bringing water extractions from floodplains into the water licensing framework.

With a $50 million funding commitment from the Commonwealth Government’s Sustainable Rural Water Use and Infrastructure Program as part of the implementation of the Murray–Darling Basin Plan in NSW, Department of Industry is implementing the Healthy Floodplains project across five valleys in northern NSW: the Border Rivers, Gwydir, Namoi, Barwon–Darling and Macquarie valleys.

Healthy Floodplains and the Murray–Darling Basin Plan

Once the NSW Healthy Floodplains project is completed, NSW will be consistent with the requirements detailed in the National Water Initiative and the NSW Floodplain Harvesting Policy. This project is also critical in enabling NSW to meet extraction limits defined in water sharing plans and sustainable diversion limits in the Murray–Darling Basin Plan.

The department is driving two key programs as part of the NSW Healthy Floodplains project:

- Floodplain Management Planning program
- Floodplain Harvesting program

Floodplain Management Planning program

NSW adopts a valley-scale, strategic approach to development in floodplains through the use of floodplain management plans. Using floodplain management plans, we can:

- minimise risks to life and property
- maintain the connection of flood waters to and from flood-dependent ecological and cultural assets.

The plans set clear rules and assessment criteria for new and amended flood works. They also define the works that can be built in specific parts of the floodplain, setting acceptable limits for the local and cumulative impacts of these works.

Under the floodplain management plans, existing access roads, infrastructure protection works, supply channels and stock refuges can be approved in retrospect, on the basis that they meet the assessment criteria for new and amended works.

The development of floodplain management plans involves extensive community consultation. To date, the department has facilitated more than 120 events and consulted with more than 480 participants. These participants represent a variety of stakeholder interests across the northern basin.

Floodplain management plans have commenced in the Gwydir and Barwon–Darling valleys.

Draft floodplain management plans have been prepared for the other valleys in the northern basin, including the Upper and Lower Namoi, Border Rivers and Macquarie.

Floodplain Harvesting program

The NSW Floodplain Harvesting Policy, endorsed by the NSW Government in 2013, builds on previous, extensive water management reforms. This policy is currently being implemented in five northern valleys, with a view to further implementation across NSW.

Approvals to construct earthworks associated with floodplain harvesting under both the Water Act 1912 (repealed) and the Water Management Act 2000 (WM Act) have been required for many decades. When implemented in a valley, the NSW Floodplain Harvesting Policy creates licences for floodplain harvesting take.
The policy aims to bring all legitimate floodplain harvesting diversions (those from historically approved infrastructure) within the water licensing framework under the WM Act. These diversions will fall within pre-existing water sharing plan limits. This means that no additional water take is allowed and flows for downstream systems are not reduced.

Hydrological models used to estimate water sharing plan limits accurately reflect river extractions and flows, but they do not accurately reflect what happens to flood flows that leave the river and do not return. This is because the focus of these models was on quantifying and managing within channel diversions, not floodplain harvesting and flood flows.

As part of the NSW Floodplain Harvesting Policy, there has been an unprecedented investment in data and modelling to more accurately quantify these floodplain processes, and more specifically the harvesting component of water sharing plan limits. These upgraded hydrological models with improved estimates of floodplain harvesting will be submitted to the Murray–Darling Basing Authority for review.

Floodplain Harvesting water access licences will be created through amendments to the Water Management Act Regulations. It is anticipated that licences in the five northern NSW valleys will take effect simultaneously at the end of 2019.

In some areas of the northern basin, there has been a significant growth in floodplain harvesting infrastructure, causing floodplain harvesting diversions to increase above plan limits. The NSW Floodplain Harvesting Policy, when implemented, will function to restrict current floodplain harvesting activities so that diversions return back to the plan limits.

Following public consultation in March–April 2018, refinements are proposed to the NSW Floodplain Harvesting Policy, including improvements to the monitoring framework and greater implementation flexibility to achieve balanced social, environmental and economic outcomes.

**Regulation and compliance—floodplain harvesting**

A monitoring and auditing strategy for floodplain harvesting is being developed as part of the Healthy Floodplains Project. There will be formal opportunities for stakeholder input into this strategy during its development. It will be used to ensure compliance with floodplain harvesting monitoring requirements including auditing and verification processes.

**More information**

For more information on the NSW Healthy Floodplains project, please contact floodplain.harvesting@dpi.nsw.gov.au

You can also visit industry.nsw.gov.au/water for further information on the NSW Healthy Floodplains project and its two programs, Floodplain Management Plans and Floodplain Harvesting.

**Acknowledgement**

The NSW Healthy Floodplains Project is funded by the Commonwealth Government's Sustainable Rural Water Use and Infrastructure Program as part of the implementation of the Murray–Darling Basin Plan in NSW.