

Summary of predicted environmental outcomes of implementing the NSW Floodplain Harvesting Policy

This report summarises the predicted environmental outcomes of implementing the NSW Floodplain Harvesting Policy across the NSW Border Rivers, Gwydir and Macquarie valleys.

The Department of Planning, Industry and Environment modelled changes to hydrology to predict ecological responses and assess the potential environmental outcomes of implementing the NSW Floodplain Harvesting Policy. The results of the analysis are summarised in Table 1.

Impact on hydrology

- Impacts vary greatly depending on the area of the floodplain.
- It is expected that the NSW Border Rivers and Gwydir valleys will receive substantial benefits of approximately 15.5 GL (+18%) and 58.5 GL (+13%) per year increase respectively in mean annual flood volumes across the floodplain in years when floods occur.
- Only limited improvements are expected in the Macquarie valley, with an approximately 4 GL/year improvement (0.2% increase) for mean annual flood volumes across the floodplain in years when floods occur.

Impact on environmental outcomes

- The largest environmental outcomes are expected in the Gwydir valley, followed by the NSW Border Rivers valley.
- Only minor changes are expected in the Macquarie valley, primarily at one location near the Wilgara Ramsar site.

Table 1. Percent change in key hydrological metrics and the achievement of environmental water requirements after implementing the policy in the NSW Border Rivers, Gwydir and Macquarie valleys. Values represent the average change across multiple floodplain breakout zones in each valley

Category	Metric or asset	NSW Border Rivers	Gwydir	Macquarie
Hydrological	Mean of annual volume	18% (15.5 GL)	13% (58.5 GL)	0.2% (4 GL)
Hydrological	Days with flow (total)	30%	13%	1%
Hydrological	Number of events	16%	20%	5%
Environmental	Waterbirds	24%	56%	9%
Environmental	Native vegetation	46%	32%	4%
Environmental	Native fish	16%	19%	0%

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