

NSW Reconstruction Authority

Reducing flood risk in the Hawkesbury-Nepean Valley



Balmain Road, McGraths Hill, March 2022 | Photo: Adam Hollingworth courtesy of RA

The NSW Reconstruction Authority (RA) recently completed the 2024 Hawkesbury-Nepean River Flood Study.

The RA will improve how NSW plans for disasters and make sure communities across the state recover from them faster. This includes looking at ways to reduce the impact of floods in the Hawkesbury-Nepean Valley by:

- developing a new 2024 Flood Study which includes the most up to date information on the types of floods that can occur and modelling how people can evacuate safely during different types of floods
- developing the state's first Disaster Adaptation Plan, or DAP, to look at ways we can reduce the risk of floods and their impact in the Valley.

Why is the Hawkesbury-Nepean River Flood Study so important?

The Hawkesbury-Nepean Valley is one of the most dangerous floodplains in Australia and the risk of flooding is often underestimated. Floods in the Valley in 2020, 2021 and 2022

had significant impacts on homes, roads and businesses. However, we know that floods can be much larger.

In 1867, the largest recorded flood in the Hawkesbury-Nepean Valley occurred. During this flood many towns were under water and an inland sea stretched from Pitt Town to Kurrajong, and Riverstone to the Blue Mountains. This type of flood has about a 15% chance of occurring during an 80-year life. To help us better understand this risk, the RA has recently finalised the 2024 Hawkesbury-Nepean River Flood Study.

This critical piece of work will help businesses and communities be more aware and prepared. NSW Government agencies and councils are advised to use the latest Study to make decisions about flood risk in the Valley.

The 2024 Flood Study looked at 20,000 different types of floods, tested them against actual floods, and includes 12 technical reports. The Study was reviewed by local councils as well as independent experts. Results show that the most rare and dangerous types of floods (Probable Maximum Flood) would impact more people than previously thought, as it shows flood depths are higher and extend further than previously understood.

What is a Disaster Adaptation Plan?
<https://nsw.gov.au/reducingrisk/dap>



If you have questions about the Flood Study and our work in the Valley, scan the QR code. You can also call Service NSW on 13 77 88 during business hours, Monday to Friday between 7am and 7pm (Sydney time).



Flooding in Marsden Park, March 2022 | Photo: Adam Hollingworth, NSW RA

Frequently Asked Questions

We know understanding flood risk can be confusing. Some common questions are answered below with more information available online.

What is a flood study?

A flood study is a technical investigation of how floods behave within a river catchment and is a vital part of flood risk management. The 2024 Hawkesbury-Nepean River Flood Study has drawn on historic and recent floods to validate flood models. These models are used to understand higher, rarer floods that are possible.

Why prepare a flood study?

Having the most accurate flood information available, which uses the latest technology and data, is vital in understanding and managing flood risk to life and property. The NSW SES, councils and other government agencies use this information to plan for emergencies, help communities be prepared for floods and to assist with land use planning and infrastructure prioritisation. The Flood Study will also

support the Disaster Adaptation Plan being developed to reduce flood risk in the Valley.

What is the NSW Government doing about flood risk in the Valley?

The new Flood Study builds on and complements many years of work in flood risk reduction by the NSW Government. It will inform a regional Disaster Adaptation Plan (DAP) to reduce flood risk where we can and adapt to that risk where we can't. The DAP will investigate a range of options including mitigation infrastructure, like levees, evacuation routes and improved community preparedness and understanding. The Flood Study will also inform emergency management and evacuation planning, land use planning and infrastructure.

How can you be better prepared?

Knowing about flooding in the local area can help you prepare ahead of a predicted flood and know what to do during a flood.



Residents can check their flood risk via this interactive map: <https://www.ses.nsw.gov.au/hawkesbury-nepean-floods/>

Being informed and prepared will save lives – there's no simple solution to flooding in the Valley but we are making sure people are as prepared as they can be. That includes having access to up to date flood risk information.