

# Nature-based solutions: Building flood resilience in the Lismore Catchment

The Nature-based Solutions: Building Flood Resilience in the Lismore catchment project (RLI NBS project) is a pilot project that is aiming to gather evidence that the nature-based solution of reforesting the riparian and upper sub-catchment floodplains can be used as a flood mitigation strategy for the Wilsons River catchment.

The project will establish an on-ground works program and create tools to support future uptake of Nature-based solutions (NBS) at the scale required to mitigate flooding impacts within the Lismore Local Government Area.

It is important to note that NBS will not mitigate extreme floods from occurring in Lismore, however they will be able to slow the flow of upper catchment contributions as well as hold and store water which can reduce the magnitude of the damage on the downstream floodplains.

### Impacts of revegetation on flow rates

Through incorporating experience and expertise of the local community through a Community Advisory Group and subject matter experts the RLI NBS project aims to determine:

- the extent to which upper-catchment reforestation can slow flow under a range of scenarios
- reduction in flow downstream of the pilot on-ground sites through monitoring outcomes into hydraulic catchment and flood risk models (both project and Lismore City Council models
- which locations across the Wilsons River upper sub-catchment floodplains will maximise reduction in flood risk.

### Avenues for incentivisation for landholders

An essential part of the project is investigating how to provide an economic incentive so that landholders wanting to incorporate nature-based solutions into their land management will generate an economic benefit. The project intends to:

- deliver multiple benefits framework, with benefits including carbon sequestration, enhanced biodiversity, and improved water quality.
- develop a cost-benefit analysis tool that will demonstrate the public benefit of private landholders' uptake of NBS, through working with landholders and industry groups.

### Collaboration with other catchment-focused projects

The RLI NBS project acknowledges the significant work already undertaken by Landcare groups, government and non-government organisations, community members and more. The project will foster ongoing collaboration with other catchment-focused project teams to maximise potential outcomes. This is necessary to avoid duplication, share knowledge and enhance efficiency.

# **Project Details**

Budget:	\$2.8 million funded through Disaster Ready Fund (funded by National Emergency Management Agency, administered by NSW Reconstruction Authority)  \$2.8 million in project co-contributions is also a requirement of the project
Project Timeline:	Jan 10, 2024 to Dec 30, 2026

# Still have questions?

Email nbs.officer@richmondlandcare.org or visit our website:

https://richmondlandcare.org/nature-based-solutions/