

Potential flood mitigation measures to be explored as part of the scenario testing phase of NRRI

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ID	Potential flood mitigation measure
1	Water retention or diversion on land upstream of Kyogle (location to be finalised)
2	Kyogle partial ring levee
3	Casino CDB levee
4	Lowering of the Bruxner Highway
5	Water diversion on land between Casino and Coraki (location to be finalised)
6	Water retention in the Wilsons catchment upstream of Lismore (location to be finalised)
7	Water retention in the Terania Creek catchments upstream of Lismore (localisation to be finalised)
8	Water retention in the Leycester Creek catchment upstream of Lismore (location to be finalised)
9	Leycester Creek bypass
10	Lismore CBD levee upgrade
11	South Lismore levee upgrade
12	Tuckean Swamp bypass and drainage, and Baggotville barrage upgrade
13	Opening of Boundary Creek to the Pacific Ocean
14	Ballina levee (location to be finalised)
15	West Ballina culverts and levee (location to be finalised)

- The NEMA and CSIRO NRRI teams are collecting views from councils, stakeholders and community related to
- Flood mitigation measures** to be included as scenarios in the hydrodynamic model developed by CSIRO.
 - Selection of flood events** that define the climate under which the scenarios will be run. We are considering using 2017, 2022 or both flood events.

These elements will be used by CSIRO to bundle flood mitigation measures and assess their combined impact on flooding across the Richmond River catchment.



HYDRODYNAMIC MODEL DATA SOURCES

Report: Available at the National Emergency Management Agency (NEMA) website.
Citation - Vaze J, Mateo CM, Nguyen C, Marvanek S, Ticehurst C, Montazeri M, Teng J, Wang B, Austin J, Kim S, Lerat J, Yang A, Merrin L and Chilcott C (2025) Hydrodynamic model development, implementation and validation for the Richmond River catchment in the Northern Rivers region, NSW, Australia. CSIRO, Australia.
LiDAR DEM: Available publicly at the Geoscience Australia website.
Bathymetry data: Available publicly at the Geoscience Australia website.