# Planning for catchment resilience and threatened species recovery from extreme events in Queensland's Moonaboola (Mary River)

Project information

Resilient Landscapes

National Environmental Science Program

*Queensland's Moonaboola (Mary River) is a hotspot for threatened freshwater species. Photo: Mark Kennard.*

**We're developing practical solutions for restoration in Queensland's Mary River catchment and recovering threatened species throughout this region. We are addressing threats to aquatic species and developing transferable management approaches.**

## Hard times for freshwater species

In eastern Australia, extreme weather events have caused severe droughts, heat waves, wildfires and floods. Coupled with habitat degradation and invasive species, these environmental disturbances pose increasing risks to the resilience and long-term survival of highly valued and threatened freshwater species and the integrity of critical wetland habitats.

## Restoring the Mary River

This project aims to identify practical solutions for catchment-scale restoration and threatened-species recovery. We are focused on the Mary River (Moonaboola) catchment in south-east Queensland – a hotspot of threatened species with important ecological and cultural values, including the Australian lungfish, Mary River cod, Oxleyan pygmy perch, Mary River turtle, white-throated snapping turtle, giant barred frog, wallum sedge frog, Coxen's fig parrot and water mouse.

We're working with local organisations and Traditional Owner groups to save threatened species and achieve a resilient and sustainable catchment. By taking an integrated approach, we're creating new opportunities for the management of threatened aquatic species, which will be transferable to other Australian ecosystems.


This project is focusing on catchment resilience in Queensland's Moonaboola (Mary River). Image: Resilient Landscapes Hub.

## Key research goals

To help improve the resilience of Mary River catchment ecosystems and species, this project is:

- filling critical knowledge gaps on threatened species distributions and habitat requirements, ecological and cultural values, and threats
- prioritising on-ground restoration actions to benefit multiple threatened species
- undertaking targeted implementation trials of habitat-restoration measures for key species
- designing a monitoring program to evaluate restoration success.

## What is the NESP Resilient Landscapes Hub?

The Australian Government's National Environmental Science Program (NESP) funds environment and climate research. NESP currently supports 4 multi-disciplinary research hubs, each hosted by an Australian research institution. The program:

- provides evidence for the design, delivery and on-ground outcomes for environmental programs
- helps decision-makers, including from Indigenous communities, build resilience
- supports positive environmental, social and economic outcomes.

This project is funded by the NESP Resilient Landscapes Hub, which is hosted by the University of Western Australia. The Resilient Landscapes Hub's research supports the management of Australia's terrestrial and freshwater ecosystems and makes them more resilient to extreme events and pervasive pressures.

*White-throated snapping turtle. Photo: Cait Mill.*

*Tom Espinoza and Mark Kennard with a threatened Australian lungfish. Photo: Cait Mill.*

## Further information

This project is being led by Professor Mark Kennard from Griffith University.

This document and further information are available from the project website at nesplandscapes.edu.au/projects/nesp-rlh/mary-river.

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Or scan the code:

Resilient Landscapes

National Environmental Science Program

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## Research collaborators

Burnett Mary Regional Group
Mary River Catchment Coordinating Committee
Tiaro and District Landcare Group
Butchulla Aboriginal Corporation
Butchulla Native Title Aboriginal Corporation
Kabi Kabi Peoples Aboriginal Corporation
Jinibara People Aboriginal Corporation
Qld Government
NSW Government

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