Restoration by design: improving biodiversity outcomes from Australia's restoration investments

Project information





This project aims to improve ecosystem restoration in Australia, with a particular focus on improving biodiversity monitoring of restoration projects. It will achieve this through stakeholder workshops, examining methods used for restoration monitoring and evaluation, and evaluating biodiversity outcomes of key restoration projects.

Project details

Australia is facing significant biodiversity decline, as highlighted in the 2021 State of the Environment report, with ongoing ecosystem degradation posing a threat to ecological integrity. In response, the nation committed to the Post-2020 Global Biodiversity Framework, which targets having 30% of degraded ecosystems under effective restoration by 2030. To address this, there is a need to improve restoration efforts by evaluating how biodiversity change is measured, understanding the effectiveness of past investments, and identifying factors such as restoration practices, landholder characteristics, and social contexts that influence outcomes. The goal is to provide evidence on effective restoration strategies, independent of market-based or regulatory mechanisms.

To achieve this, the research will involve three key activities: a stakeholder workshop to align priorities and methods, an evaluation of restoration monitoring methods, and an assessment of biodiversity outcomes from selected restoration projects. Data will be compiled from existing sources and field-tested to uncover social and ecological factors that drive successful restoration.

Key research areas

To improve the outcomes for biodiversity from restoration programs, this project is:

- building capacity to improve the planning and delivery of restoration programs across diverse social and geographic contexts
- supporting knowledge transfer to maximise biodiversity outcomes
- strengthening participation in restoration programs
- providing advice on revising statutory-planning instruments/guidelines.



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 onground outcomes for environmental programs
- helps decision-makers, including those 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.



Further information

The project is being led by
Associate Professor Martin Breed and
Jake Robinson of Flinders University,
Associate Professor Rachael Gallagher of Western
Sydney University, Associate Professor Vanessa Adams
of the University of Tasmania, Professor Susan Laurance
of James Cook University and Dr Angela Dean of the
University of Queensland.

Contact:

martin.breed@flinders.edu.au, jake.robinson@flinders.edu.au, rachael.gallagher@westernsydney.edu.au, vm.adams@utas.edu.au, susan.laurance@jcu.edu.au, a.dean@uq.edu.au or nesplandscapes@uwa.edu.au

For more information scan this code:

























Search for @NESPLandscapes to follow us on social media.