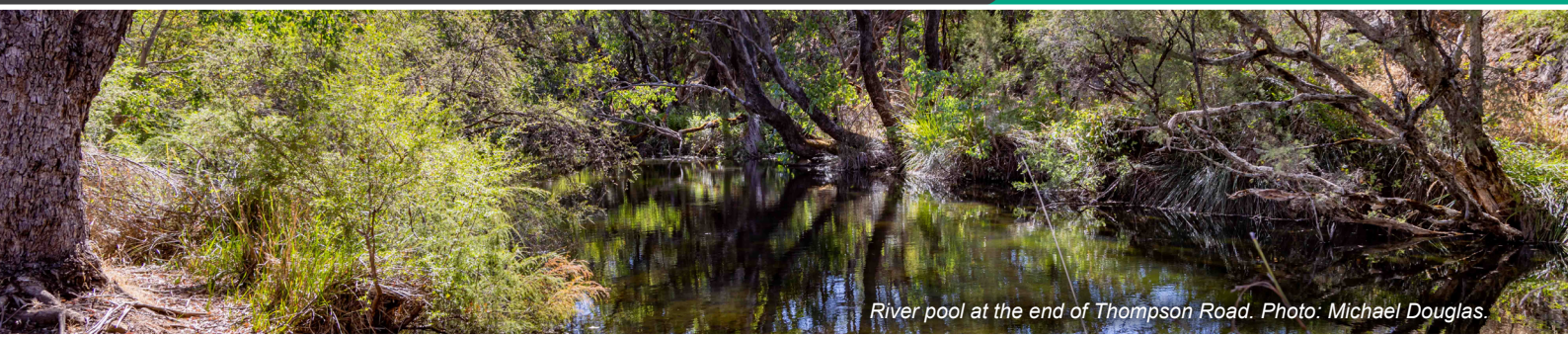
Enhancing the resilience of urban rivers:
informing the regional restoration of the Djarlgaroo Beeliar (Canning River, Perth)

Project information

Resilient Landscapes

National Environmental Science Program



River pool at the end of Thompson Road. Photo: Michael Douglas.

Creating resilient urban rivers that support biodiversity requires strategic landscape-level prioritisation, targeted on-ground actions and appropriate monitoring of future outcomes. This project seeks to inform this work using the Djarlgaroo Beeliar (Canning River, Western Australia) as a case study.

The failing health of urban rivers

For years, pollution, weeds, litter and general foot traffic have degraded the health of urban rivers. These places are in need of serious help.

Restoration efforts from local government agencies and natural-resource management and community groups largely rely on short-term grants that are directed toward revegetation. This limits their ability to implement restoration at a landscape scale.

Landscape-scale knowledge combined with an assessment of previous restoration efforts is needed to know which sites should be prioritised and which actions taken to maximise return on investment.

How to restore the Djarlgaroo Beeliar

This project will inform the implementation and evaluation of restoration work, including funding provided by the Australian Government for the ecological repair of sites along the Djarlgaroo Beeliar. We'll provide maps and decision-support tools to guide where to protect, where to restore, what best to do at each site and how to monitor to evaluate success. Our case study on the Djarlgaroo Beeliar

The Djarlgaroo Beeliar (Canning River) is an urban river that flows through Perth's south-eastern suburbs before joining the Swan River. Image: Resilient Landscapes Hub.

will provide outcomes useful to urban-restoration activities more broadly, including the Australian Government's Urban Rivers and Catchments Program.

Key research goals

To address these challenges and equip restoration groups with information to protect, manage and restore urban rivers, this project seeks to:

- assess the current condition of the Djarlgaroo Beeliar
- identify priority areas to protect, manage or restore
- evaluate past restoration actions
- recommend what to do at priority sites
- recommend what and how to monitor.

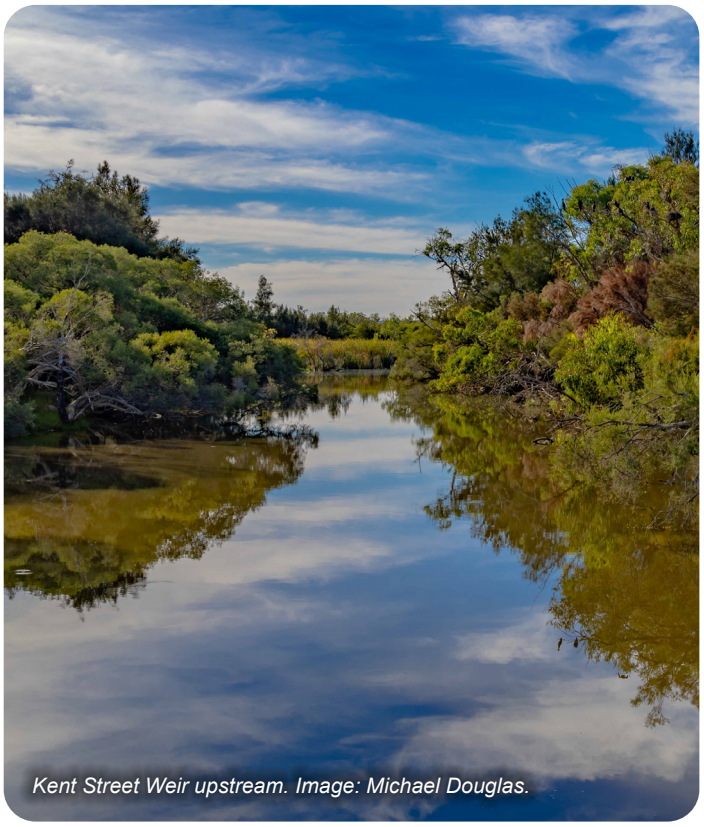
What is the NESP Resilient Landscapes Hub?

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.

Kent Street Weir pool. Image: Michael Douglas.



Kent Street Weir upstream. Image: Michael Douglas.

Further information

This project is being led by Professor Samantha Setterfield and Professor David Pannell from the University of Western Australia.

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

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Resilient Landscapes

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