



The Fitzroy River, photo Michael Douglas.



Northern Australia
Environmental
Resources
Hub

National Environmental Science Programme

Environmental water needs for the Fitzroy River

Start-up factsheet

The Fitzroy River sustains many significant environmental values and processes

Western Australia's mighty Fitzroy River has high environmental, economic and cultural significance and there is increasing interest in developing its substantial water resources for irrigated agriculture.



The Fitzroy River catchment in Western Australia.

Important environmental values, such as the iconic barramundi, are likely to be impacted if the river's natural flows or groundwater levels are altered. **To minimise risks to these natural values, we need to understand how they may respond to potential water resources development.**

Understanding water needs will support water planning in the Fitzroy

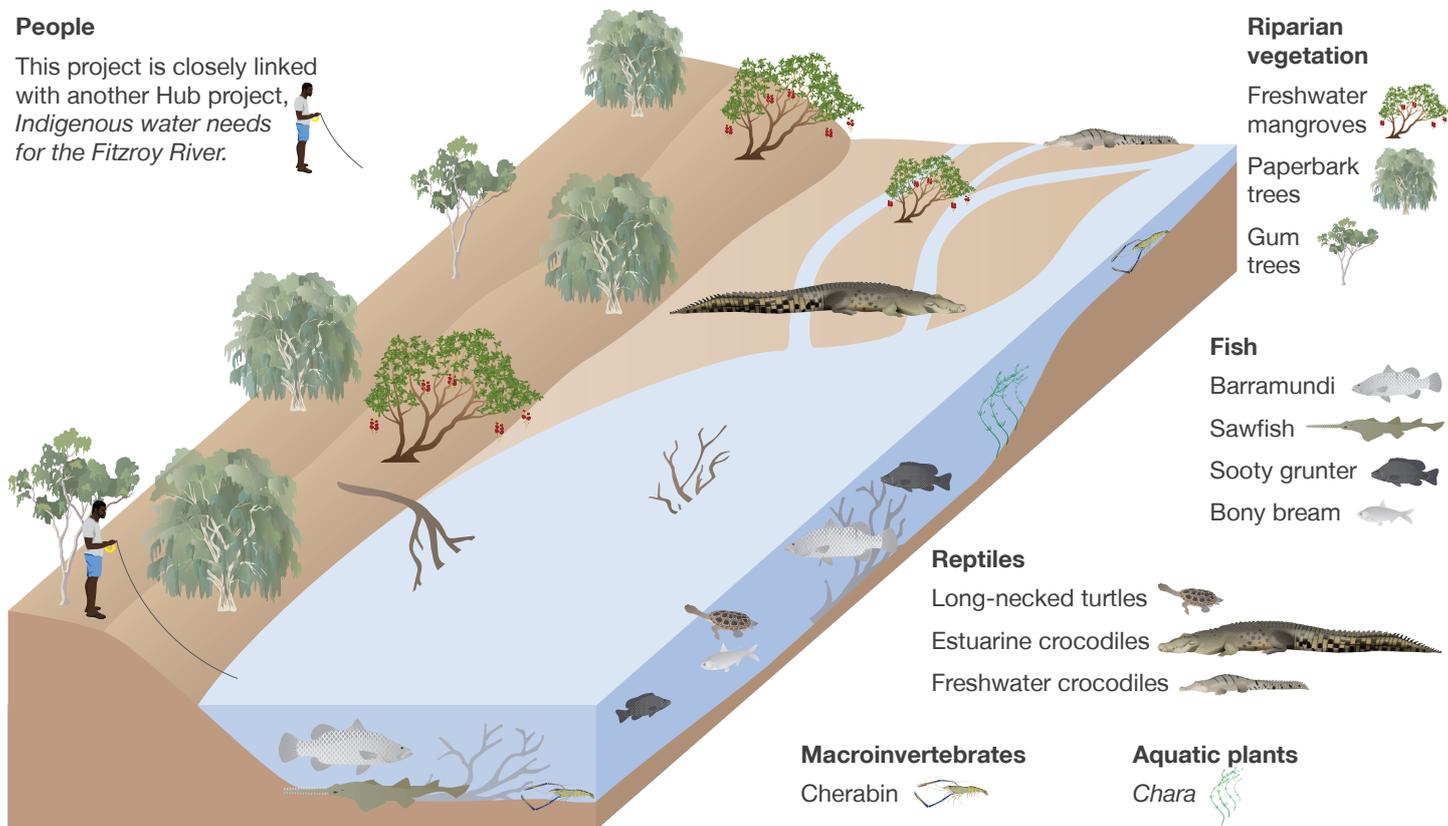
This project will work in collaboration with the Australian and Western Australian Governments, Traditional Owners and pastoralists to improve the available information on the water needs of key natural values in the Fitzroy River. This knowledge will underpin future water allocation and planning decisions.

Overview

The primary aim of this project is to improve our understanding of the environmental water needs of key plant and animal species in the Fitzroy River to inform sustainable water planning and management decisions.

People

This project is closely linked with another Hub project, *Indigenous water needs for the Fitzroy River*.



Project activities

The project includes three major components:

1. Reviewing the current information on environmental water needs and developing initial conceptual models to predict the impact of various water use scenarios on key environmental values
2. Undertaking targeted research to determine water needs of environmental values, including significant plant and fish species
3. Using the new research to revise conceptual models and recommendations to reduce the risk to environmental values from water resource development.

Anticipated outputs

- Conceptual models of ecohydrological relationships and potential risks from water resource development
- Recommendations of environmental water needs for important riverbank plants and aquatic animals in dry season pools and the implications of wet season water use for fish
- Peer-reviewed scientific publications.

People, animals and plants may be potentially impacted by water resource development in the Fitzroy River.

Who is involved?

This project is being led by [Professor Michael Douglas](#) from [The University of Western Australia \(UWA\)](#).

Professor Douglas will be assisted by researchers from UWA, [Charles Darwin University](#), [Griffith University](#) and the [Western Australia Department of Water and Environmental Regulation](#).

Gooniyandi Aboriginal Corporation PBC, Walalakoo Aboriginal Corporation PBC, Wilinggin Aboriginal Corporation and Yi-Martuwarra/Yanunijarra Aboriginal Corporation PBC are collaborators in this research.

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For further information and project updates, visit the project webpage at www.nespnorthern.edu.au/projects/nesp/environmental-water-needs-fitzroy-river



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