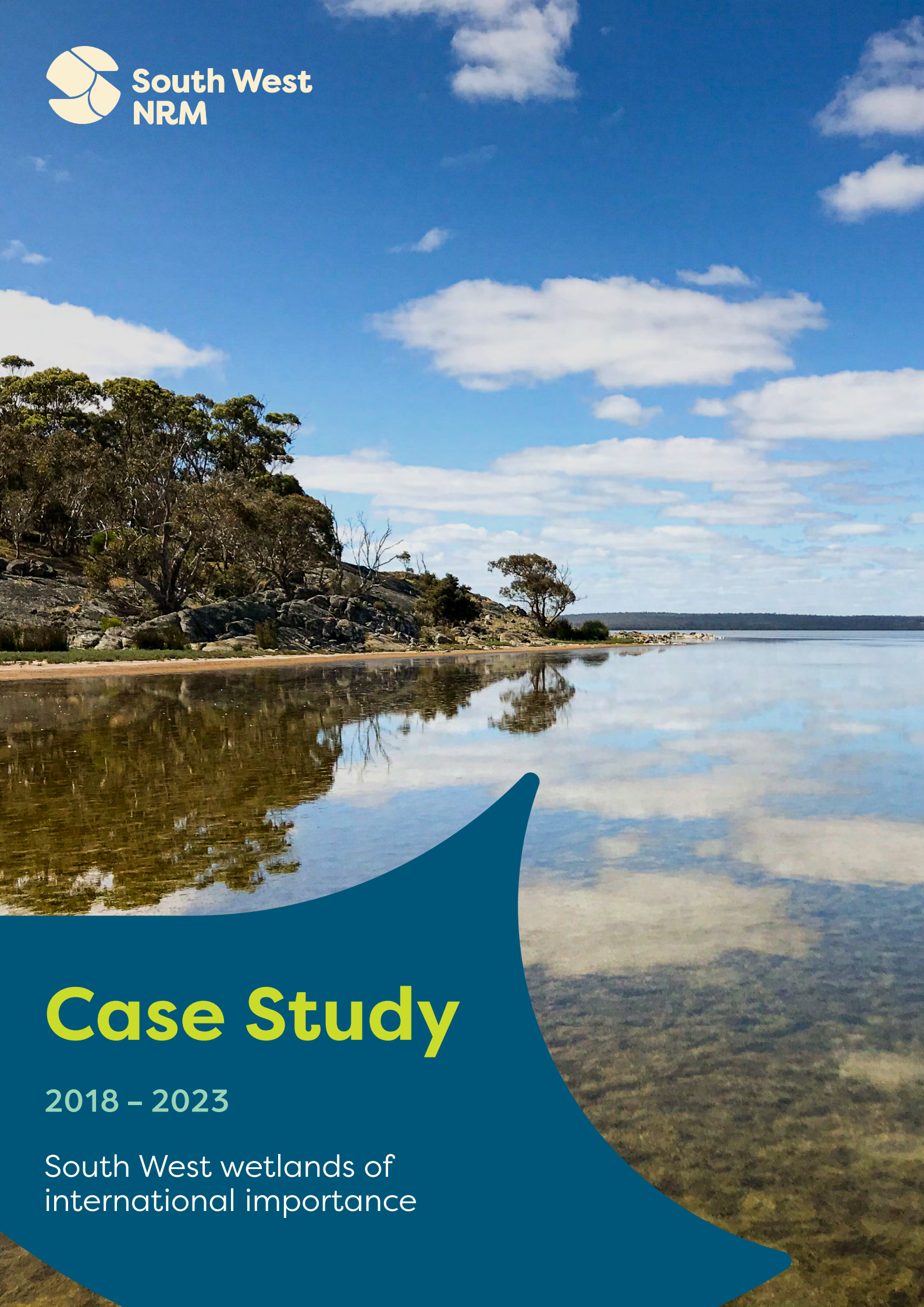
South West NRM



Case Study

2018 – 2023

South West wetlands of international importance

The South West region is home to three internationally-significant Ramsar-listed wetlands:

- Vasse-Wonnerup
- Muir-Byenup
- Toolibin Lake

These wetlands and the ecosystems they support are under threat from water quality decline due to agricultural practices, land clearing and urbanisation, as well as feral and domestic species, weed invasion and a changing climate.

The South West is home to 3 of the 12 Ramsar-listed wetlands in WA.

South West NRM worked with local communities, regional partners and land managers to manage and mitigate these threats and improve the overall health and function of these waterways.

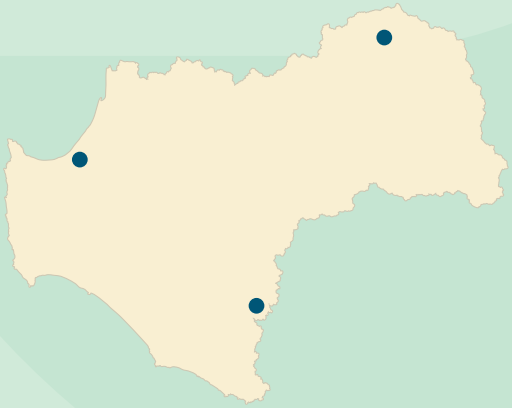
Funding program

This project was delivered by South West NRM, through funding from the Australian Government's National Landcare Program.

Funding

National Landcare Program – $2,500,000

Regional coverage



Stakeholders

Department of Biodiversity, Conservation and Attractions, Geocatch, contractors and consultants, local community, landholders.

Project manager

Derani Sullivan

Program manager

Mike Christensen and Peter Clifton

Australian Government | National Landcare Program

Key achievements

- 23 field days and workshops held to engage the community and increase participation in protecting and enhancing the wetlands.
- 76 fauna surveys undertaken to monitor birds that use the Vasse Wonnerup and Muir–Byenup wetlands have shown that populations have remained relatively stable over the five–year period.
- 247ha of new native vegetation planted to add vital food and nesting habitat for waterbirds.
- Repairs and improvements to the bund wall at Toolibin Lake have succeeded in diverting saline water away from the wetlands. No breaches of the wall have occurred since the works were implemented, which means the lake has been maintained as a natural freshwater system.
- 570 community members participated in the 'Bay Ok' behaviour change program for urban gardeners in the Vasse Wonnerup region. 80% of final survey respondents reported a change in their gardening practices to reduce nutrient run–off into the wetlands. This includes planting native species, using slow–release fertilisers, following fertiliser instructions, and not fertilising during rainy periods.
- New engineering designs for retrofitting urban water drains in Busselton were developed to improve the water quality entering the Vasse Wonnerup wetlands. When installed, the new system will protect and enhance the wetlands for use by waterbirds.
- 2km fencing installed at Buttercup Reserve to protect native vegetation and wetland quality of the Vasse Wonnerup.
- Aboriginal Rangers undertook on–ground works at Toolibin Lake including fencing, planting and weed control. 38 participants attended workshops to learn about the Aboriginal history of the lake.
- Nearly 3000 ha of pest animal control to protect waterbirds and other native animals that use the wetlands.
- Monitoring data collected for research into acid release at the Muir–Byenup wetlands suggest that major releases of acid occur after extreme drying.
- Felixer cat grooming trap trial at Muir–Byenup demonstrated up to a 60% decrease in feral cat activity.
- Nitrogen use efficiency trial at Vasse Wonnerup found that improved nitrogen management regimes can reduce runoff into the wetlands.

Potential future activities

Further funding will allow South West NRM to build on this program to:

- Conduct further hydrological studies into the acidification of peat wetlands, to conserve the Muir–Byenup wetlands.
- Continue control of feral pigs, deer, foxes and cats to protect wetland biodiversity.
- Expand revegetation works to provide bird feeding and roosting habitat
- Reduce nutrients entering wetlands from agricultural land, urban environments and stormwater.
- Increase the height of Toolibin Lake's bund wall to prevent saline water from entering the wetlands.