Bioregional planning pilot project
Biodiversity Values Mapping

Government of South Australia
Department for Environment and Water

The Pilot Project

The South Australian Department for Environment and Water (DEW), in partnership with the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) is piloting a bioregional planning approach in two regions of the State.

What is bioregional planning?

It is an environmental planning approach under the Environment Protection and Biodiversity Conservation (EPBC) Act that brings together biodiversity, land use and development data to support smarter land-use planning and decision-making. It helps identify areas where:

- Biodiversity values should be protected or restored.
- Development may have fewer environmental impacts.

This approach supports long-term regional environmental planning that's more consistent, transparent, and informed by better information.

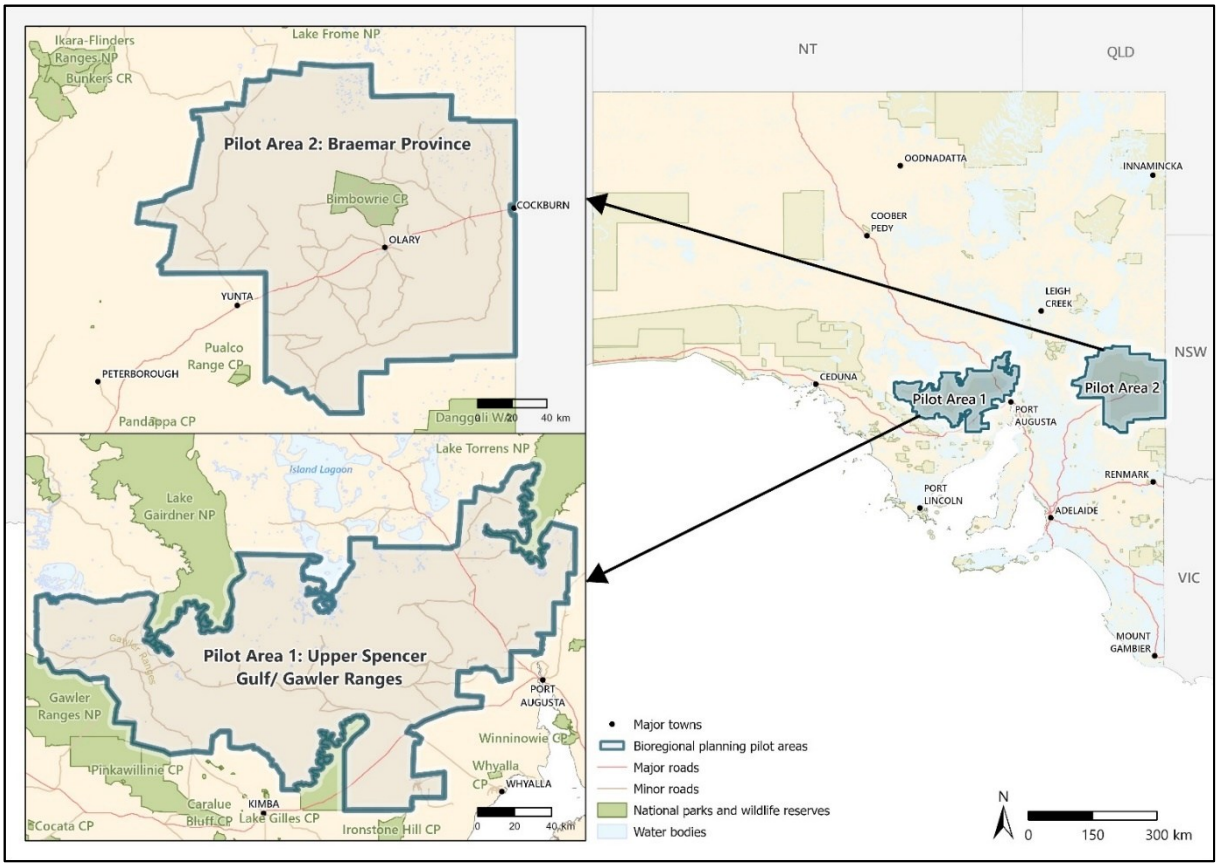
Sandhill dunnart © Brett Backhouse

Where the pilots are happening

Pilot area 1: Upper Spencer Gulf / Gawler Ranges.

Pilot area 2: Braemar Province.

Both areas contain significant biodiversity and overlap with potential development areas for renewable energy and critical minerals.



Biodiversity Values Mapping

Mapping can provide spatial information about the likely presence of species or ecosystems.

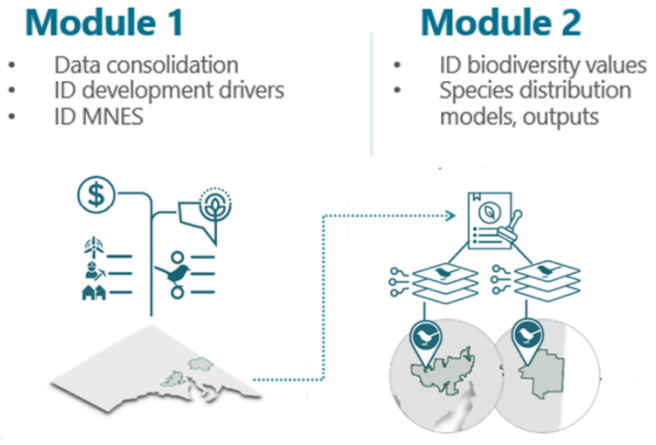
For this project, biodiversity values comprised **listed species** (under EPBC and NPW Acts), and unlisted **species of concern** (have been evaluated as threatened but not yet listed or may be at risk of becoming threatened should development occur due to a high proportion of their range found in the pilot area).

Method

- Millions of records of biodiversity have been collated, cleaned and filtered in an automated method. But we cannot rely on records alone as survey effort can be sparse, particularly in remote areas.

- Threatened species relevant to the pilot areas have been modelled for their likely presence. This considered predicting factors like habitat, terrain and climate. This resulted in a spatial distribution model for each species. This mapping is fine scale (90m grid resolution) and can be re-run when new data is available.

The method and preliminary outputs have been reviewed by experts including independent peer review, as is best practice.



Next steps

Additional data will be collected where there are data gaps via targeted field surveys and stakeholder engagement in both Pilot areas. This data will then be incorporated.

Benefits of the Project

- Provides improved biodiversity information products that can inform, and guide decision making based on the best available scientific knowledge and evidence.
- Improves mapping to support regional planning and environmental assessments. Can guide developments into the lowest risk areas and provide certainty on the regulatory constraints.
- Improves understanding of a region's biodiversity and establishes a shared evidence base for future planning and engagement.

Key messages:

- This pilot project will not change landholder rights or lease conditions.
- It will improve evidence for planning - it won't make development decisions.
- Ethical guidelines and data protocols will be followed. Sensitive information will be handled securely.

To register your interest, learn more, or share local knowledge

Contact us

Melissa Riessen

Project Manager- Bioregional Planning,
Biodiversity Science, Coasts and Information Branch
Department for Environment and Water

(P) 08 7421 0243
(E) melissa.riessen@sa.gov.au

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