



Adapt Land&Sea: Developing a climate adaptation knowledge platform for biodiversity

Undertaking adaptation for better biodiversity outcomes

Individual species and ecosystems adjust to changes in their environment through 'autonomous' adaptation. Climate change means that many species and ecosystems are struggling to respond to changes in their environment fast enough. We are seeing more local extinctions, increases in invasive species, and the loss of important ecosystem services, like clean water, as a result of our changing climate.

Managers of biodiversity look to counter these negative changes by increasing environmental resilience and reducing stress. This can be through active adaptation interventions, for example providing shelter or translocation of species to avoid extreme heat. Anticipating climate change and its impacts, and identifying the best management approach is a complex challenge and calls for careful adaptation planning supported by best available evidence.

To help land and sea managers plan and undertake adaptation the NESP program is building a knowledge and adaptation guidance platform – Adapt Land&Sea.

Climate change adaptation is the process of adjusting to current or expected effects of climate change. When adaptation of species or habitats are assisted by humans, this may also be called directed adaptation, or climate interventions.

This platform will assist biodiversity managers to step through development of adaptation plans, understand climate risks and access information on biodiversity adaptation options or interventions.

Who might use the platform?

The platform is being designed for people involved in aspects of biodiversity management. This includes:

- protected area managers and planners
- NRM organisations
- biodiversity policy makers
- biodiversity regulators
- private land managers focused on conservation and/or biodiversity
- people involved in carbon and biodiversity markets.





What information will be available?

Adapt Land&Sea will provide visitors to the site with a suite of curated products to assist in considering and implementing climate adaptation interventions for biodiversity. Products will include:

- step-by-step guidance to develop a biodiversity adaptation plan
- a searchable database of climate adaptation interventions
- case studies from around Australia demonstrating adaptation interventions
- information sheets that explain key biodiversity and climate adaptation concepts
- a curated set of data visualisations
- links to more information and guidance already in existence.

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What is the timeline for the project?

We will be developing a detailed understanding of end-user needs and collecting content for the site throughout 2024. A prototype version of the site is planned to be ready mid-2025 for further testing before roll-out.

How can you be involved?

The platform needs to be fit-for-purpose to meet user needs. We will be holding a series of workshops around Australia in 2024 and are looking for people that represent our target audience to attend.

We are also on the lookout for good examples of climate adaptation for biodiversity case studies. These could include projects with direct adaptation interventions, or projects that are aimed at facilitating species to autonomously adapt. We are interested in both successful and unsuccessful adaptation efforts to help share learnings.

The Australian Government's National Environmental Science Program (NESP), Phase 2, funds 4 hubs to undertake research into Australia's environment and climate. The development of Adapt Land&Sea is a collaboration across all 4 hubs and is led by the Climate Systems Hub.



National Environmental Science Program



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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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