



Research solutions for natural resource management

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[Resilient Landscapes Hub](#) | National Environmental Science Program

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NRM
REGIONS
A U S T R A L I A



National Environmental Science Program

National Environmental Science Program - Hubs



Climate
Systems

National Environmental Science Program



Marine
and Coastal

National Environmental Science Program



Resilient
Landscapes

National Environmental Science Program



Sustainable
Communities
and Waste

National Environmental Science Program

• **\$149 million** from 2021-2026



Resilient
Landscapes

neslandscapes.edu.au



NESP Resilient Landscapes Hub

Research to support resilience of natural landscapes and biodiversity

1. Threatening Process & Extreme Events
2. Restoring & Recovering
3. Socioeconomic insights
4. Monitoring
5. Indigenous Knowledge & Managing the Indigenous Estate
6. Cross-cutting Initiatives
 - Lead: Threatened and migratory species
7. Solutions science



Principles for solutions science?

- Solutions focused: *Inspire action by showcasing solutions*
- User-driven
- Researchers *and* non-academic participants
- Research *and* Societal outcomes
- Enhanced knowledge-sharing

Hub Consortium Partners



National Environmental Science Program

UWA, JCU, GU, UTAS, CSIRO

Curtin, CDU, Flinders, LaTrobe, Macquarie, Newcastle, QUT, UNE, USQ, UWS

NRM Regions Australia,
Australian Land Conservation Alliance
National Landcare Network

Indigenous Australian organisations

WA, NT, QLD, NSW, VIC, TAS, SA Gov's

Governance: Hub Steering Committee



Michael Douglas
Hub Leader
The University of Western Australia



Stephen van Leeuwen
Deputy Hub Leader & Senior
Indigenous Facilitator
Curtin University



Helene Marsh
Cross-cutting Initiative Leader
James Cook University



Ian Cresswell
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Kate Andrews
Hub Steering Committee
NRM Regions Australia



Jim Adams
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Jody Gunn
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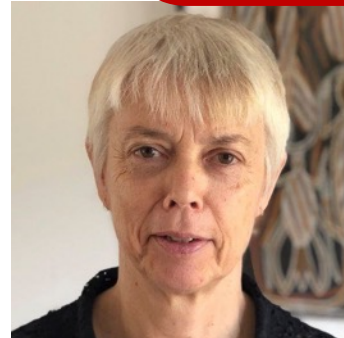
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Key stakeholders in delivering research solutions

- DCCEEW
- Researchers

- State governments
- Protected areas managers
- Indigenous land managers
- Natural resource managers
 - NRM
 - Landcare



Examples of Research Underway or Proposed

- Planning for catchment resilience and threatened-species recovery from extreme events in Queensland's Mary River
- Enhancing the resilience of urban rivers: informing the regional restoration of the Djarlgaroo Beeliar (Canning River, Perth)
- Best-practice management of feral cats and red foxes



Regional Planning research



Research co-design for Natural Resource Management

Designing research that is implementation-focussed

Collective

Research that can influence actions and planning nationally

Location-specific

Research focussed at '20 Priority places'
Opportunity for clusters/formal observers

Thematic

Research questions that are important across multiple locations. E.g. invasive spp control

Synthesis

Bringing together existing knowledge/evidence to benefit multiple regions

Photo: A Knight



Regional planning research

Stage 1

Document review –
identified research
priorities



Seek input from NRM
regions through
Community of Practice

Stage 2

Refine and prioritise knowledge
gaps/research needs through
Key stakeholder engagement

Stage 3

Workshop with NRM
regions and key
researchers to refine
priorities



Report to Resilient
Landscapes Hub



The big questions (well, some of them...)

1. What is the role of regional NRM planning in biodiversity and carbon **markets** and how we create integrity?
2. What are the most effective ways of coordinating **collaborative delivery** of regional strategies e.g. governance models, links to industry standards/legislation, how to increase buy-in and transformation?
3. How do we shift regional planning processes to align with **Traditional Owner approaches** and their priorities e.g. applying biocultural values, shared and collaborative governance, co-designing projects/plans, and applying TO knowledge and practice?
4. How do we better demonstrate the **integrated nature** of our work to justify cross sectoral roles like biosecurity?
5. What **systems** do we need nationally to support regional planning?



Climate related themes for regional planning research

1. How can our planning be used to manage compounding effects of climate change e.g. drought-fire-flood?
2. How can we better link biodiversity data to climate change modelling data to support predictions?
3. How do we better apply climate modelling to planning for adaptation?
4. What is the role of plans in managing risk? For instance in the carbon industry – is risk sufficiently modelled?

Thankyou



National Environmental Science Program

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