

The research-policy nexus: A new model for collaboration

Lesley Hughes & Tori Graham

Macquarie University

The current dearth of climate change action at the federal government level in Australia provides a stark illustration of the yawning gulf between research and policy. While the lack of an effective emissions reduction strategy garners the headlines, the federal government's attention to climate change adaptation is also wanting, particularly now that funding for the National Climate Change Adaptation Research Facility has ceased. However, we are seeing state and local governments stepping up not only to the emissions reduction challenge, but also to adaptation policy.

Here we report on a five-year experiment aimed at bridging the policy-research nexus in NSW that we believe has had a substantial impact on approaches to biodiversity conservation in the face of rapid environmental change.

The [NSW Adaptation Research Hub](#) was established by the NSW Office of Environment and Heritage (OEH) in 2013. The Hub originally consisted of three nodes: Biodiversity, Coastal Processes & Responses, and Adaptive Communities. A fourth node, Human Health & Social Impacts, was added in 2017.

Macquarie University hosts the [Biodiversity Node](#).

All research funded by the Biodiversity Node has had the broad aim of underpinning policy to maximise the resilience of species and ecosystems to climate variability and change. A total of 19 projects have been supported over the life of the Node. These projects have addressed a diverse range of questions and issues, including translocation policy; horizon scanning for new pests and diseases; identification of climate refugia in the landscape; and strategies to promote sustainable landscape restoration in a changing climate. More than 60 researchers and 16 institutions have been involved in Node projects over the past five years, including CSIRO, Taronga Conservation Society Australia, Macquarie University and Western Sydney University.

Every project undertaken under the auspices of the Node has been co-designed and co-led by an academic/institution researcher and one or several OEH staff members, after being approved by a steering committee of researchers and OEH staff. The Node has thus served as a hub for interactions between researchers, governmental decision-makers, scientists and operational staff, as well as businesses, and other stakeholders.

The Node has delivered a range of outputs, both traditional (journal papers) and non-traditional (interactive web-based tools and policy guidelines). Workshops, seminars and masterclasses have been delivered to a range of end-users. These have culminated in a series of seven roadshows conducted across NSW aimed at showcasing the [tools](#) developed by Node researchers. These tools include:

- Niche Finder: Baseline maps of ecological ranges and climatic niches for NSW flora.
- Weed Futures: Database and distribution projections under climate change scenarios.
- Climate Refugia: Climate suitability maps for key species and climate refugia for threatened species.
- The Climate Ready Revegetation Guide: A step-by-step manual to support restoration decisions.

The Node's collaborative focus was recognised in 2017 by the Business/Higher Education Roundtable Award for Outstanding Collaboration for National (non-economic) Benefit. The research is also supporting the current revision of the OEH translocation guidelines and the NSW Saving Our Species program.

The Node has been a learning experience, and not all projects have gone smoothly. Overall, we feel this model of research project design has gone a long way toward bridging the research-policy gap, ultimately with better outcomes for our biodiversity. □