











## A pilot monitoring, evaluation and research (MER) network

Australian governments, industry, organisations and communities are investing in ecological restoration programs to improve the status of Australia's ecosystems and biodiversity.

A key challenge for these programs is measuring the achievements and improving our ability to carry out restoration outcomes that are cost-effective, sustainable and resilient within changing landscapes and climates.

## A new approach to measuring effectiveness

Monitoring, evaluation and research (MER) networks have been proposed as a new approach to learn about the effectiveness of ecological management (Prober et al. 2018, Capon et al. 2020). Through collaboration among policy-makers, practitioners and researchers, these networks will embed nationally integrated research infrastructure (small, well-designed experimental monitoring plots) within local ecological restoration programs.

Each network will be designed to address targeted ecological management questions at national scales, as well as enabling predictions and facilitating improved outcomes in future programs. By doing so, the networks will help demonstrate the ecological outcomes of management actions and inform cost-effective decisions to protect the environment using proven methods.

The 2019–20 fire season saw unprecedented bushfires in forests, woodlands, rainforests and shrublands across Australia. These fires provide an opportunity to understand how ecosystems recover from fires of this scale, and to determine where interventions such as weed management are needed to enhance recovery.







## Three-year trial project

This three-year project will trial Australia's first MER network by implementing a pilot network – to promote national-scale learning about bushfire recovery across different ecosystem types, and the ecological effectiveness of post-fire interventions.

The project involves working with Regional Land Partnerships service providers, CSIRO and university researchers, the Department of Agriculture, Water and the Environment, Australia's Terrestrial Ecosystems Research Network (TERN) and other stakeholders.

The project team is working together to co-design and co-implement the network. This includes refining the natural resource management questions the network will address, designing and establishing the on-ground plot network, developing practical, standardised on-ground monitoring protocols, and analysing outcomes.

The network also aims to draw on existing monitoring of post-bushfire interventions and to integrate on-ground monitoring with remote sensing tools.

For further information, please email the Department of Agriculture, Water and the Environment at <a href="MERIT@awe.gov.au">MERIT@awe.gov.au</a> or Suzanne Prober or Josie Carwardine at <a href="MERpilot@csiro.au">MERpilot@csiro.au</a>.

**Images:** (Top) Rapid recovery of tree ferns 2 months after an intense bushfire, East Gippsland, Vic. (Right) Dense eucalypt seedling regeneration after tree killing fire in obligate-seeder eucalypt woodlands, Dundas, WA.

## References

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