



Environment Institute  
of Australia and  
New Zealand



# ANET 2026

## BREAKING THE BARRIERS

INNOVATING TO IMPROVE ECOLOGICAL OUTCOMES  
ON TRANSPORT AND OTHER LINEAR INFRASTRUCTURE

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IMAGE CREDIT: ROB APPLEBY, WILDSPY/GRIFFITH UNIVERSITY



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## ABSTRACT

### From Local Hotspot to Regional Link: Reconnecting Koalas Across Sydney's Transport Barriers

Heathcote Road and the Princes Highway in south-west Sydney have long acted as major barriers to safe fauna movement between habitat reserves. A spike in koala vehicle strikes around Deadmans Creek on Heathcote Road in 2020–2021 triggered a targeted response under the NSW Koala Strategy. At the same time, the Princes Highway remained a substantial long-term barrier between Heathcote National Park and Royal National Park. Transport for NSW partnered with NSW Department of Climate Change, Energy, the Environment and Water (DCCEE) to plan and deliver two projects addressing these connectivity challenges across the broader landscape. At Deadmans Creek, specialist ecological and engineering assessments identified strategic koala-proof fencing as the most effective mitigation measure. More than one kilometre of exclusion fencing is being installed and tied into existing barriers to reduce collision risk, while guiding animals to safe passage points under the bridge. Additional habitat features are being incorporated to improve usability of the creek banks as a functioning underpass. Further south, an existing maintenance bridge spanning the Princes Highway is being creatively repurposed as a fauna overpass to reconnect Heathcote and Royal national parks for the first time in decades. The project retrofits approximately half of the existing bridge with a vegetated surface, refuge structures, and a timber post-and-rail system linked by rope to support arboreal and ground-dwelling species alike. Together, these projects demonstrate an integrated approach to reducing vehicle strike risk while restoring ecological connectivity across a highly constrained transport corridor. Both projects are scheduled for completion in early 2026 and are expected to deliver substantial long-term biodiversity gains. PLEASE NOTE: my attendance is still subject to internal approval. I am open to suggestions on the appropriate mode of presentation.

## KEY TAKEAWAYS

1. How to retrofit transport infrastructure to restore ecological connectivity.
2. Evidence-based design of koala strike mitigation measures.
3. Delivering biodiversity outcomes through interagency collaboration.

## SPEAKER BIOGRAPHY

**Brenton Hays** is a Senior Environmental Officer in Transport for NSW's biodiversity specialist team, where he leads work on fauna connectivity and habitat mitigation across the road network. With a Bachelor of Environmental Science and Management from the University of Newcastle, Brenton began his career as an ecological consultant supporting environmental assessments for transport infrastructure projects. Since joining Transport for NSW in 2021, he has specialised in road ecology issues concerning koala habitat connectivity and microbat management.