

SPEAKER BIOGRAPHY

With more than 25 years in biodiversity policy and data, my passion is to help design and build practice that leads to positive environmental outcomes.

This requires ecologists being involved in the early design of projects to avoid and minimise impacts on the environment. By thinking about impacts to nature early, means we can get creative and think of new ways to design and build so our environmental footprint is reduced. To address nature decline requires government, business, NGOs, universities and the community all working together, co-designing innovative ideas and importantly implementing these and evaluating them so we can further improve.

I want to debunk the myth that development is at the expense of the environment. We can have nature being a core theme in development, but only if we allow ourselves to think (design) and act (build) differently.

Please join me on this quest.

KYLIE GALWAY Section Leader, Ecology ANZ at Jacobs



The Statutory Biodiversity Metric for England

Sally will introduce the Defra Statutory Biodiversity Metric for England. This is the tool developed to support the recent introduction of mandatory biodiversity net gain (BNG) in England for planning developments. She will outline the policy this tool supports and how the tool works. We'll take a look at what's included in the Metric, what's not, and the strengths and weaknesses' of the approach. This will include a demonstration of how the tool works in practice.

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I am an experienced senior ecological consultant with over 15 years consultancy experience prior to which I completed a PhD in community ecology.

As a consultant ecologist I have worked for three large multidisciplinary consultancies; WYG in Leeds, SKM Enviros in Cardiff and Bristol and currently I work for Jacobs in Bristol. I have worked on projects across the UK which have covered a range of different developments including wind farms, energy from waste developments, MoD projects, residential and commercial developments and roads. Most recently I have worked on a number of Nationally Significant Infrastructure Projects.

In my current role at Jacobs I am following a technical career path, with a particular focus on ecological assessment including Ecological Impact Assessment (EcIA) and Habitat Regulations Assessment (HRA). Currently I'm focussing very much on the emerging requirement for mandatory Biodiversity Net Gain (BNG) in England and the relationship this has with wider Natural Capital considerations.

An important part of my role at Jacobs is knowledge sharing and mentoring to promote technical excellence.

SALLY FRASER
Senior Associate
Director at UK Jacobs



Urban Environmental-Economic Accounts

Jeremy will discuss how Urban Ecosystem Service Accounts can be developed and used to measure the extent and condition of urban ecosystem assets and the flow and economic value services they provide using a framework based on the United Nations System of Environmental Accounting –Ecosystems Accounting (SEEA

EA). The session will share insights from recent work that has developed Urban Ecosystem Pilot Accounts (UEPA) for Adelaide, Melbourne, Perth and Sydney as part of the Australian Government's Natural Capital Accounts work program.

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Jeremy is one of Australia's leading applied natural capital and environmental economists, and an experienced executive director and Board member.

20+ years experience in Australian and international natural capital and environmental economics, policy, markets and governance. PhD in environmental and resource economics and policy from the Australian National University.

Executive Director at Marsden Jacob Associates, a leading specialist Australia-based economics, public policy, markets and strategy advisory. Our team of 40+ professionals help shape the future wisely through our work across energy transition, water, natural environment, climate change, agriculture, and the circular economy: https://www.marsdenjacob.com.au/.

Also a founder and Executive Director at the Australian water market information platform WaterflowTM. WaterflowTM is the world's first natural capital market aggregator operating at scale. Designed from the ground up, WaterflowTM brings up-to-date water market information from 30+ sources together into a single app. WaterflowTM makes accessing Australian water market information quick, intuitive and simple. You can register for free access at https://www.waterflow.io/.

Fortunate to have worked on some of Australia's most significant natural capital economics, markets, governance and policy issues. Some relevant publications and recognition are listed below. Strong networks across senior levels of State and Commonwealth Government, NGOs and the private sector. Fortunate to be involved in a couple of interesting pro-bono activities with great people. Always happy to discuss other positive impact pro-bono opportunities.

JEREMY CHEESMANDirector at Marsden
Jacob Associates



A new metric for faunal community condition

Martine will discuss the BirdHealth Index: a metric that captures the condition of entire bird communities. She'll cover why we need metrics that directly describe the health of fauna communities, the way we are going about deriving them, starting with Australian terrestrial birds, and the many applications of such metrics, including leveraging the power of citizen-science databases like BirdLife Australia's Birdata to provide regional summaries of how our birds are tracking.

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Martine Maron is Professor of Environmental Management at The University of Queensland, Brisbane. Her research identifies ways to minimise impacts on biodiversity - through sound impact mitigation, and effective restoration of habitats - and seeks to embed this knowledge into policy. A particular focus is the design and consequences of policies intended to compensate for environmental impacts, such as biodiversity offsetting. She leads the IUCN's Thematic Group on Impact Mitigation and Ecological Compensation, and sits on international advisory bodies on biodiversity credit development and governance. Martine's research group also works on the conservation and restoration of Australia's woodlands and woodland birds, and wildlife management in Africa. She is a director of the Australian Wildlife Conservancy, a member of the Wentworth Group of Concerned Scientists, and a councillor with The Biodiversity Council.

MARTINE MARON Professor at The University of Queensland



A decision science approach to urban greening and nature positive

Hugh will discuss the idea of having clear and quantifiable objectives, a theory of change, and metrics to assess progress towards those objectives.

For example - what are reasonable urban cooling objectives and urban biodiversity objectives?

What are ultimate objectives and metrics for them vs tree cover and counts which are intermediate objective.

How can we cheaply and meaningfully measure progress?"

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Dedicated to conserving biodiversity - eg Great Barrier Reef marine rezoning, Marxan, Brigalow declaration, long paddock statement, decision-making tools, project prioritisation and decision science for conservation. Vice-President BirdLife Australia.

40% Professor of mathematics and conservation science at UQ with >760 refereed research papers, 95 fabulous PhD students supervised, Google Scholar h-index of 166, has led >\$80 million in successful competitive grants.

10% Chief Scientist "Accounting for Nature"

10% Lead Councillor "Biodiversity Council"

10% BirdLife Australia Board of Directors and Vice-President

Recently Queensland Chief Scientist in the Department of Environment and Science; formerly Chief Scientist of The Nature Conservancy (global, DC based) Foreign Associate of the US National Academy of Sciences FNAS since 2016 Fellow of the Australian Academy of Science FAA since 2005 Fellow of Ecological Society of America (1st Australian elected) Honorary doctorates from University of British Columbia and Adelaide University Honorary Fellow - Environment Institute of Australian and New Zealand HFEIANZ

Currently on c25 committees and boards, e.g. Chair of The Environment Institute Advisory Board (Adelaide University); Chair of the TERN Advisory Board; Native Vegetation Council of SA.

Local community roles:

President of the Friends of Oxley Creek Common; Patron of the Friends of Sherwood

Goal - save as much biodiversity as possible.

Specialties: Using decision theory/operations research tools to formulate and solve conservation problems.

Co-creator of Marxan which helps design most of the protected area systems in the planet.

HUGH POSSINGHAM

The University of Queensland and Lead Councillor at the **Biodiversity Council**



Environmental Indicators Initiative

Hamish will discuss how the ARDC will work with Australian government agencies, research institutions, non-governmental organisations, and infrastructure providers to codesign solutions to deliver findable, accessible, interoperable and reusable (FAIR) datasets and services for identifying key environmental indicators.

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Dynamic and innovative senior executive with specialist expertise within the research and information technology fields. Currently as the Director for Planet RDC at the Australian Research Data Commons with responsibilities focused on providing and managing the Planet RDC' strategic direction, team supervision and leadership and engaging with key stakeholders from the government, industry and community. Experience encompasses leading and developing information technology and research enabling infrastructure for multiple research domains and disciplines, in addition to working closely across all levels of an organisation to instil vision, and implement measures to achieve such vision. Innate ability to develop, execute and oversee strategy and key projects / programs delivering infrastructure, change and / or improvement in order to support organisational goals and objectives.

HAMISH HOLEWA
Director at Australian
Research Data
Commons (ARDC)



Nature Positive Tunnels: How the Melbourne Metro Project is creating critically endangered native grasslands

Nicholas will discuss a research partnership with MetroTrains that is in the process of creating 3 ha of Victorian Volcanic Plains native grassland to improve the connectivity of existing remnants along the Sunbury Rail Corridor. His talk will cover the mechanisms that incentivised MetroTrains to undertake nature repair, technical aspects of the grassland restoration and how we are using the EPBC definition of the vegetation community as a metric of condition and measure of success.

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I am an ecologist who works predominantly in urban areas because although they are the cause of many of the world's environmental problems cities also offer humanity great hope for a sustainable future. I seek to understand urban biodiversity patterns and ecosystem processes and then develop applied solutions to reduce the negative impacts of urbanization such as biodiversity loss, excess urban heat, stormwater runoff and CO2 emissions. I am predominantly a plant ecologist with particular expertise in how urbanisation influences plant traits, native grassland conservation and restoration and weed invasions but I have also worked on mammals, molluscs and insects. Together with social scientist colleagues I have even investigated the most complex aspect of urban environments – humans! In 2007 I established a research program to develop and evaluate the benefits of green infrastructure, in particular vegetated roofs and facades, as a climate change mitigation and adaptation strategy for Australian cities. This has since become a major research focus of the Burnley Campus, attracting substantial funding and has led to the construction of three green roofs and development of specialist subjects and courses.

NICHOLAS WILLIAMS Professor of Urban

Professor of Urban Ecology and Urban Horticulture at The University of Melbourne



A Holistic Ecosystem Metric Approach for An Urban Context

Kevin will describe the structure and principles behind Ecosystem Intelligence, a platform that enables quantification of ecosystem performance and ecosystem service production. The presentation will include discussion of the importance of a systems approach for creating resilient outcomes, use of reference sites to identify desired targets and outcomes, and the unique considerations for application in an urban context. The presentation will provide examples of application at both the site and city scale.

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I am a senior ecosystem service analyst at EcoMetrix Solutions Group (EMX) where I oversee development of the ecosystem services decision support tools developed by EMX. I am also responsible for expanding and evolving the new Ecosystem Intelligence Platform, which was launched in July 2023. My current project work is focused on helping clients achieve nature positive outcomes that move site performance towards alignment with local highly functioning reference conditions.

Prior to joining EMX I was an adjunct professor at Lewis and Clark Northwestern School of Law, where I taught a course on identifying and managing environmental risk in business transactions. I also had the opportunity to teach courses on ecosystem services and land use for the University of Oregon's Sustainability Leadership Program.

The case studies provided via the link below are a representative sample of my experience working with EcoMetrix Solutions Group over the past few years: https://www.ecosystemintelligence.com/case-studies

KEVIN HALSEY

Co-Founder Ecosystem Intelligence; and Senior Ecosystem Services Analyst at EcoMetrix Solutions Group, LLC