

Effective and equitable legal frameworks for biodiversity management in the Mardoowarra (Fitzroy) River- A systems approach

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Abstract:

The Mardoowarra catchment within the West Kimberly area contains exceptional biodiversity values. Traditional custodians have important relationships with the biodiversity of this area and practice important livelihood and cultural practices associated with this biodiversity. The Mardoowarra catchment is however facing significant threats and is one of two rivers in Tropical North Australia most likely to face agricultural development and increased water extraction.

This paper explores the interactions between the multiple values of biodiversity in the Mardoowarra and assesses the capacity for existing legal frameworks to achieve effective and equitable management of biodiversity in the Mardoowarra. The paper examines how governance frameworks might facilitate management of interactions across economic, cultural, social and environmental objectives that impact on biodiversity in the catchment.

The research develops and applies a participatory systems approach which maps the interactions between the multiple values of biodiversity in the Mardoowarra. The aim of the approach is to enable the interdependent issues that have an impact on biodiversity to be regulated in an integrated manner. The project employs an iterative approach where conceptual models of the social-ecological and legal systems are developed from the literature and interviews and participatory workshops with stakeholders.

BIOGRAPHIES

Dr Michelle Lim is a Lecturer at Griffith Law School, Griffith University, Gold Coast, Australia. Michelle is an interdisciplinary environmental law scholar with research interests in biodiversity, human-environment relationships, governance and ecosystem management. Michelle chairs the Early Career Group (ECG) of the IUCN's World Commission on Environmental Law (WCEL). The ECG provides a cross-cutting platform for early career environmental lawyers, policy makers and scholars to develop innovative and integrated solutions to the future challenges of our planet.

Dr Anne Poelina is the Managing Director Majala Inc, an Indigenous not-for-profit non-government community development organisation; Deputy Chair of the Nyikina Mangala Aboriginal Corporation, Deputy Chair of the Northern Australian Indigenous Land and Sea Management Alliance Indigenous Water Policy Group and is an inaugural member of the recently formed National First Peoples Water Council. Dr Poelina is also a Nyikina traditional custodian from the Mardoowarra, Lower Fitzroy River. Dr Poelina's research interests include the historical colonial context of development in the West Kimberley and how that impacts on contemporary Indigenous participation in decision making, governance, land and water reform. Dr Poelina is also a registered nurse and traditional midwife. She holds Masters degrees in Education; Public Health and Tropical Medicine; and Arts (Indigenous Social Policy).