

# Modelling Native Vegetation Condition: Challenges and Opportunities

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In 2006 Zerger and colleagues (Zerger *et al.* 2006) developed a method for mapping vegetation condition at regional scales which integrates remote sensing and GIS in a statistical modelling framework. It was piloted over the Little River Catchment in NSW and proved feasible as a regional predictor of native vegetation condition. This research was opportunistic in that it relied on existing vegetation site assessments and pre-existing GIS and remote sensing data. This paper presents preliminary results from a subsequent project which aims to model native vegetation condition for two 1:100K map sheets in the Murray CMA of New South Wales. The current research seeks to overcome earlier limitations which limited the efficacy of the approach. It examines such issues as developing an environmental stratification for vegetation site data collection which captures the full suite of vegetation condition states in a landscape; the potential role of individual components of a vegetation condition metric rather than an aggregate score (i.e. canopy cover, weed abundance); the role of spatial properties inherent in satellite imagery in concert with their spectral characteristics; and it briefly examines the role of new technologies for rapid field data acquisition to support such modelling.

Zerger, A., P. Gibbons, S. Jones, S. Doyle, J. Seddon, S. V. Briggs and D. Freudenberg (2006). Spatially modelling native vegetation condition. *Ecological Management & Restoration* 7(s1): S37-S44.