

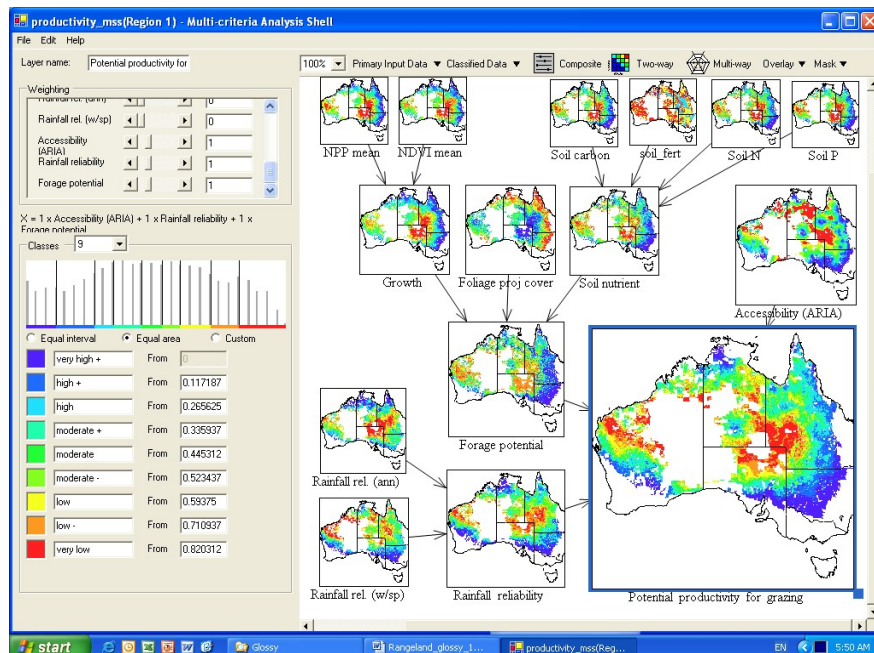
# A simple spatial multi-criteria analysis shell - MCAS-S: its application to natural resource management decision-making.

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Natural resource management decision-making generally requires the analysis of a variety of environmental, social and economic information, incorporating value judgement and policy and management goals. Justifiable decisions depend on the logical and transparent combination and analysis of information. This paper describes a newly-developed spatial multi-criteria analysis tool – the Multi-Criteria Analysis Shell for Spatial Decision Support (MCAS-S) and illustrates its use in supporting natural resource analysis and priority-setting at national and regional scales. MCAS-S is designed for use in participatory processes and workshop situations where a clear understanding of different approaches to spatial data management and information arrangement is necessary. Stakeholders can see the potential impacts that their decisions may make. The conceptual basis of the tool involves: easy-to-use access for non-specialists; database and project structure constructed by consulting experts and stakeholders; iterative ‘live-updating’ and re-working, and; development of consensus or alternative map assessments. This promotes clear visualization of the relationship between the decision, the science, other constraints and the spatial data.



A representation of potential productivity for livestock grazing in the Australian rangelands. created by the weighted combination of contributing indexes using the MCAS-S spatial multi-criteria analysis software tool.