



**Australian Government**  
**Bureau of Rural Sciences**

ACLUMP

## MCAS-S A SIMPLE TOOL FOR SPATIAL MULTI-CRITERIA ANALYSIS

Government policy-makers, local authorities and land managers with responsibility for resource management decision-making often need to access and analyse large amounts of environmental, social and economic information. The transparent and logical treatment of this information and the use of value judgements incorporating public opinion and policy and management goals can be achieved using multi-criteria analysis (MCA).

### MCAS-S

The Multi-Criteria Analysis Shell for Spatial Decision Support (MCAS-S) is a software tool developed by the Bureau of Rural Sciences that brings the MCA process into the decision-makers' realm. It is an easy-to-use, flexible tool that promotes:

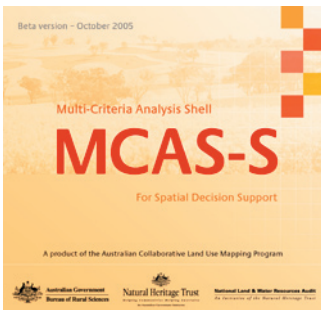
- insightful desktop combination and study of different types of mapped information
- understanding of the relationships between the decision-making process and the available spatial data
- interactive 'live-update' and mapping of alternative project scenarios.

GIS (geographic information systems) programming is not required, removing the usual technical obstacles to non-GIS users.

### WHO CAN USE MCAS-S?

Managers, policy makers and land management researchers at the national, state and local level involved in land resource evaluation and decision-making will find MCAS-S a helpful tool, particularly those working with spatial data with limited GIS support.

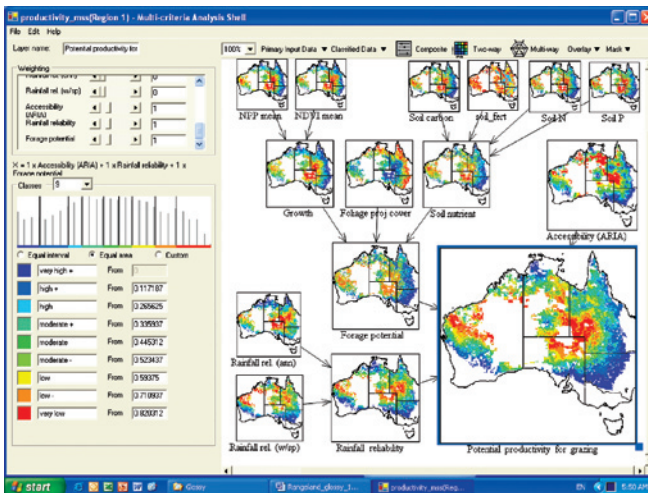
MCAS-S can assist in participatory processes and workshop situations where a clear understanding of varying approaches to spatial data management and information arrangement is necessary. Stakeholders can see the potential impacts that their decisions may make.



## WHAT HAS IT BEEN USED FOR?

MCAS-S is the latest of several MCA decision aids used in the Australian Government Department of Agriculture Fisheries and Forestry policy environment since the early 1990s. MCAS-S is currently being used at the national, regional and catchment scale for:

- assessment of Australia's rangelands: analysing natural resources, patterns of use and commodity assets
- assessment of land cover change and ecosystem services using the Vegetation Assets, States and Transitions (VAST) framework
- assessing the contribution to ecologically sustainable development of regional areas for the National Land and Water Resources Audit.



A representation of relative potential productivity for livestock grazing on conforming tenures in the rangelands. This view was created by the weighted combination of indices of forage potential (comprising measures of plant growth, foliage projected cover and soil nutrient potential), rainfall reliability (based on measures of rainfall reliability) and accessibility to services (based on the Accessibility and Remoteness Index for Australia).

### For more information contact:

The Australian Collaborative Land Use Mapping Programme  
 Bureau of Rural Sciences  
 GPO Box 858, Canberra ACT 2601  
 Phone: (02) 6272 5236 | Fax: (02) 6272 5827  
 Email: [land\\_management@brs.gov.au](mailto:land_management@brs.gov.au)