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The Australian Rangeland Society

A PRELIMINARY SUSTAINABILITY FRAMEWORK FOR THE GASCOYNE-MURCHISON REGION OF WESTERN AUSTRALIA

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WHY DO WE NEED A SUSTAINABILITY FRAMEWORK?

At all levels of management, investment of limited resources needs to be based on rigorous assessments of objectives and strategic choices of available options. Furthermore, there needs to be memory in the management system to review the outcomes of previous decisions and so inform the decisions to be made presently, i.e. adaptive management. This has not happened in the rangelands of Western Australia and it is questionable whether the National Land and Water Audit Rangelands Theme process has addressed this deficiency adequately.

Rather, our management frameworks have tended to be disintegrated monitoring procedures that, by lacking the *prerequisite* management framework, have neither guided investment of limited resources, nor demonstrably achieved better management/policy and outcomes. The Salinity Investment Framework in agriculture was developed in order to address similar inadequacies in the intensive land-use zone. Here we present our preliminary attempt to build a rangelands counterpart, one that focuses on addressing identified problems and opportunities with strategic investment within an adaptive management framework.

THE FRAMEWORK'S DIMENSIONS

The first cut is along the triple bottom-line: economic, environmental and socio-cultural themes. Our immediate focus is on the environmental theme. However, we identify a need for increased capacity in the other themes in order to provide regular and convincing narratives of rangeland sustainability.

The second cut is according to scale: from enterprise to group to district to NRM subregion and region to State. It is critical that the framework is coherent across scales and that there is a smooth transition involving considerable overlap of involvement between scales. The framework needs to provide information that is locally relevant, whilst also informing administration and policy development.

Within the environment theme, the next cut is according to aims; relatively uncontroversial outcomes we would all like to see. They are:

1. Maintain sufficient examples (i.e. no further loss) of all native species, habitats, landscapes and so forth (biodiversity sub-theme)
2. Maintain and enhance soil stability, nutrient cycling and the infiltration and use of water by ecosystems (ecological integrity sub-theme)
3. Maintain the quantity and quality of renewable natural resources (natural capital sub-theme)
4. Improve productive capacity of specific resources/values (resource value context)

This means that we have themes, with scales and then sub-themes. We also have multiple ways of characterising sub-themes, in order to answer what are perceived as critical questions. It is important that information provided in feedback to land managers or statutory/policy bodies is simple and profound. That requires some level of distillation, a process that must be accountable and open in order to avoid undue influence residing in the hands of information managers.

STRUCTURED INFORMATION

Within the sub-themes' aims, we need to assign quite specific objectives and targets to reflect the values, threats and feasibility of recovery, maintenance or enhancement. That is, we do not have the

same objectives (or levels of investment) for every parcel of land within an enterprise or region. We need to choose carefully the indicators that will reflect progress towards or away from targets, which themselves need to be feasible (or made so by revision and/or added investment). The data we might collect and manage could include:

1. Specific objectives for that area, with key performance indicators
2. Benchmarks (current status of key performance indicators)
3. Targets (SMART levels of the key performance indicators)
4. Action Plan/Current Recommended Practices/Responses
5. Monitoring results (did we get closer to, or further from our targets?).

We would then need to have formal assessment/review as the linking between adaptive cycles.

For example, within an environmental theme at a regional scale, to address biodiversity aims, one aspect that might be chosen to monitor would be the representativeness of the nature reserve system. Representativeness would be expressed with targets, benchmarks and so forth as listed above. Alternatively, within a socio-cultural theme at a Land Conservation District scale, to address community participation aims, one might monitor levels of attendance at meetings.

IMMEDIATE OBJECTIVES

Management and administration of pastoral leases without such frameworks does not instil confidence in the wider community that their aims are being met in the rangelands. The current absence of specific targets leaves pastoralists confused as to community expectations, no systematic way of using local progress to meet regional goals, and the community uninformed as to what is happening in the rangelands; all of which is unhealthy. We hope to develop information systems within an overarching sustainability framework that will assist pastoralists to demonstrate lease compliance, and their contribution to public good, as well as guide and justify public and private investment in the rangelands.

In a complementary context, we suggest that pastoralists who choose to participate in this systematic approach deserve better treatment from statutory administrators and will be rewarded in terms of demonstrably enhanced asset values.

FUTURE GOALS

In the longer-term, we would like to see the participatory evolution of this framework. Ideally administrators, bureaucrats, wider community groups, local groups and land managers would all understand and use the framework. It can help build shared visions and guide both public and private investment processes that optimise desired outcomes at a range of scales. At least across Government, the framework offers greater accountability and efficiency of investment and a basis to manage co-operatively towards stated policy goals. Once the thematic parts of the framework are working, emphasis can shift to between-theme, and between-scale (i.e. holistic) assessments of patterns and trends in rangelands as complex adaptive systems.