



Community-based Planning for Ecologically Sustainable Land Use in the North East Goldfields of Western Australia



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This project was jointly funded by Land & Water Australia, Agriculture Western Australia and CSIRO.

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The purpose of this booklet is to communicate information obtained and developed during a project, Effective Planning Procedures for Ecologically Sustainable Land Use in Rangelands. The views and conclusions are those of the authors, based on existing literature and consultations with project participants. Agriculture WA, CSIRO and Land & Water Australia do not accept any risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using any information in this booklet.

ACKNOWLEDGMENTS

The Rangeways Project began in 1995 and was funded by the Land and Water Resources Research and Development Corporation (now Land & Water Australia) and the Commonwealth Department of Transport and Regional Development (DTARD). External support totalled \$1 million over five years and in-kind support from many sources, particularly from the lead agency Agriculture WA and from CSIRO, contributed over \$550,000. Many Western Australian and federal agencies, as well as individuals, provided data for the project, or helped us in other ways. We acknowledge:

Agriculture Western Australia
Arid Lands Coalition
Australian Heritage Commission
CSIRO Land and Water
CSIRO Wildlife and Ecology (now CSIRO Sustainable Ecosystems)
Environment Australia
Goldfields Esperance Development Commission
Heritage Council of WA
Pastoralists and Graziers Association WA
Water and Rivers Commission
WA Aboriginal Affairs Department
WA Conservation and Land Management
WA Department of Land Administration
Ms Maxine Cable
Mr David Fitzgerald
North East Goldfields community
and many others.

Dr Phil Price provided a welcome guiding hand throughout the project. We especially thank the North East Goldfields community for their involvement.

Photos: Margaret Friedel, David Fitzgerald and Felicity Gilbert

Product code: PK010096
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ISBN 0-9579582-3-4

Introduction

In the early 1990s, the decline in the pastoral wool industry nationally and increasing demand for other land uses compelled a rethink on land allocation, management and access in Australia's rangelands. As well, regional communities were demanding greater involvement in decision making about their future. Land & Water Australia responded by supporting three research projects to explore regional resource use and planning in the rangelands.

The Rangeways Project, which was based in the North East Goldfields Region of Western Australia and was begun in 1995, is one of these projects. It used an action learning model, so that the research was shaped by its outcomes as it progressed.

Mulga country near Leonora, WA



Our goal with Rangeways was to develop a series of processes to support regional, community-based land use planning rather than to produce a definitive plan. We expected that these processes, such as scoping land use issues, analysing risk or developing a strategic plan, could be adapted to suit other regions, although the details might be different.

ABOUT THIS BOOKLET

This booklet is one of a series published by Land & Water Australia about regional rangeland community planning processes. Others in the series include:

- Regional Approaches to Rangeland Planning: Seeking Sustainability in the Western Division of New South Wales by Changing Laws, Policies and Administration
- Central Highlands Regional Resource Use Planning Project: a Planning and Learning Experience.

Each booklet has a similar structure so readers can compare and contrast the projects.

After introducing the project, we explain its key elements under a series of headings, and the lessons to be learnt from our experiences. We do not try to provide details of what was done; these can be found in material listed under Further Reading.

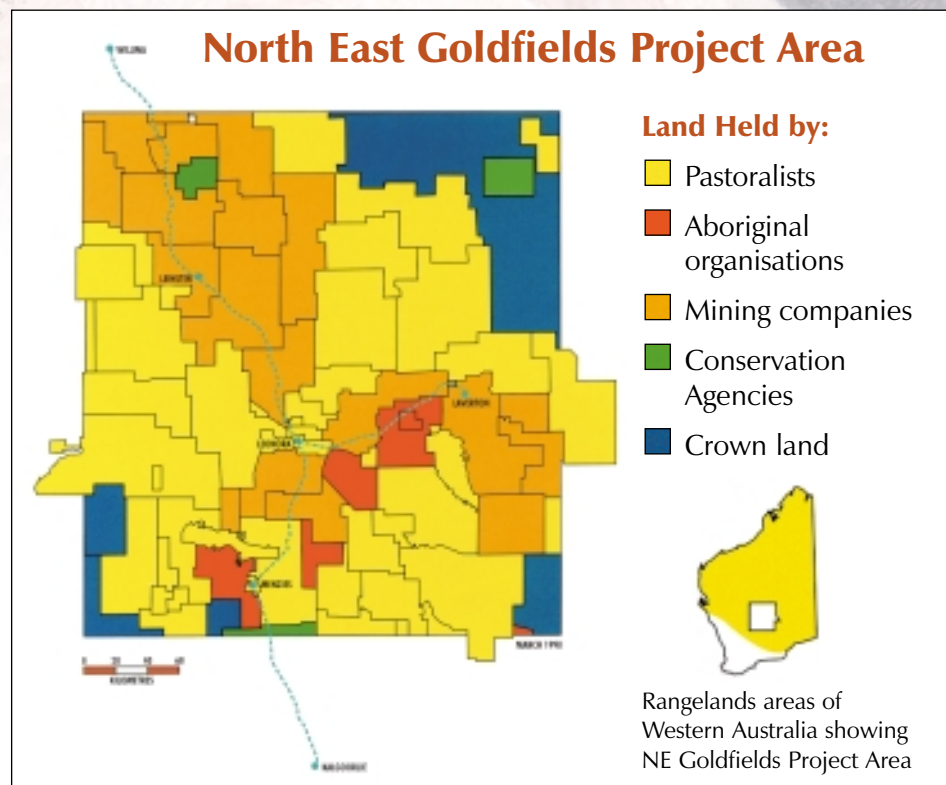
The Rangeways Project

Rangeways was based on the premise that there were better ways than the *status quo* to reconcile different land uses in the rangelands for the long term. Doing this better depended on the ability of the people who live in, work in and use these regions, or who simply care about them, to work together to find solutions for differing land uses that provided for current and future needs. Rangeways explored ways by which users could work together to develop planning solutions while ensuring the best and fairest use and management of Western Australia's North East Goldfields region.

At the end of the 5-year research phase, a representative community group was active and it had a vision and a strategic plan for its continued operation. The project had successfully initiated community-based land use planning at a regional scale and identified environmental and cultural conservation priorities.

We documented many hundreds of statements about the diversity of values that people held for the rangelands. The community determined how its various sectoral interests should be represented, and how they could express their land use priorities in a structured way.

We developed a comprehensive database to support planning activities. We did an economic assessment of land uses at a land system level, where market values could be estimated. It was not possible to assess non-market values directly although we recognised their importance. The project made some progress towards identifying improved policy options but the community's links to government decision-makers were not well enough established to influence policy-making in the immediate future. Long-term success will depend on institutional support and a closer relationship between government and the community group.



*Sons of Gwalia
open cut mine,
Leonora, W.A.*

Laying the social foundations

Let us start with a definition of community-based planning, as being the process used by the community to establish an agreed vision, set objectives, determine strategies and monitor and evaluate outcomes (see Central Highlands Regional Resource Use Planning Project: a Planning and Learning Experience).

Unless your community is self-defining, you will need to determine who your community is and what exactly they want to plan for. In some situations this may already be clear but in our case it was not. While there was general concern for the future of the rangelands, there were many points of view and many different individuals expressing them.

IDENTIFYING AND ENGAGING THE COMMUNITY

To identify the community, we started by commissioning an initial scoping study involving 120 interviewees to obtain a range of views about the major issues in the rangelands and perceptions of future activities in the region (Casella *et al.* 1996). This gave us a broad feel for the different sectors within the community that needed to be involved.

The scoping study recognised eight sectors but, as the project progressed, the community redefined itself into seven: Aboriginal, conservation and heritage, diversifiers, mining, pastoralism, prospecting, and tourism and recreation. These were flexible groupings, which in the future could continue to change and grow with individual members sometimes having interests in more than one sector. Your community will have its own ideas about defining sectors.

It is fundamental that community involvement in the planning processes is thorough, trustworthy, equitable amongst different groups and comprehen-

sive. Engaging the community requires many different strategies. Early on we held public meetings for different sectors, talked with government agency and industry representatives, and engaged in intensive one-on-one contact with many stakeholders. Since people living outside the region also had aspirations for the area, they were also included.

We did find it difficult to engage effectively with several sectors. Aboriginal people felt unable to speak with one voice across the region and there were confounding issues associated with overlapping Native Title claims. We talked with different Aboriginal groups individually to build trust and ensure that all Aboriginal interests were able to have input into the process (Fitzgerald and McAuliffe 2000). As a consequence Aboriginal commitment became strong, but it is likely to need continued support in the future.

Mining interests initially saw little of benefit to them in the planning processes, and they became actively involved only in the final year of the research.

Members of the pastoral group stayed involved throughout the process but held differing views of potential benefits. While not every member of a community will want to engage actively, it is necessary to work hard to maintain inclusiveness to ensure that the process is credible.

IDENTIFYING THE ISSUES

Identifying the community and its sectors tends to go hand-in-hand with identifying issues. People with common interests will, by definition, have similar views on the issues that are important to them. We entered a second phase of interviews to gain specific details of people's values for particular kinds of land, so that we could begin to fit them into spatially



Nic Dunlop and Rachel Siewert (Conservation) and Murray Thomas (Tourism), members of the community representative Strategy Group, October 1999.

detailed pictures (see 'Information and technologies that inform learning' page 7). These in-depth interviews with about 70 people from inside and outside the region were designed to ensure extensive representation of all sectors (Wilcox 1998).

After the second phase of interviews, we commissioned a third because we were not sure that we had captured all the 'left field' ideas outside the region (Burnside 1999), and some thoroughly different ideas emerged.

RISK ANALYSIS

For any similar project it could be useful to do a risk analysis so that you are ready with a response should problems arise. We developed a list of potential risks, the levels of risk, and what the responses should be (Holm *et al.* 2001).

We thought the biggest risk to the success of our project would be the failure of the community to engage in the process. This did not happen although the potential was always there.

Active community involvement took longer to achieve than we had expected because preceding tasks took longer to complete than planned. Well-timed activities and continuing support are important throughout to keep the community involved. We also made an early visit to another planning group to learn from their experience, and we recommend you do the same.

Creating a learning environment

INSTITUTIONAL SUPPORT

Community-based planning cannot work without institutional support. Policy development and implementation depend on institutions, which means working closely with personnel inside and outside agencies to develop a shared understanding of necessary change. In our case, the community group wanted minimal government participation. This meant that government support was limited.

The project managers recognised the constraints imposed by this arrangement but deliberately adopted a hands-off approach to ensure the group's autonomy. We discuss this again under 'Influencing policies, laws and organisations' (Page 9).

Fortunately, government agencies gave the project access to large amounts of data for planning exercises and went out of their way to ensure the data were compatible with our requirements. They were keen to understand how the data were being used and what the outcomes were. Almost certainly, your own planning will depend on a lot of pre-existing data sets, and it will be important to develop relationships with agencies that can help. In return you should feed back to them as much as you can about the outcomes.



John Millikan (Mining) pointing out prospective areas and mine sites in Rangeways' project area, February 2000.

PARTICIPATIVE LEARNING PROCESSES

The community, including individuals, groups and agencies, has a lot to contribute to any planning activity and learn from the experience. The more completely the community is involved and in control of processes, the more participants will own and commit to outcomes. At the same time this has its own risks – individuals with strong opinions and private agendas may dominate activities and alienate other people.

Our first steps in developing learning were the scoping exercises. Importantly, the information that was gathered was always fed back to interviewees for confirmation. The documents summarising these exercises were intentionally non-judgmental to ensure that no-one felt excluded, even if some contributions may have been based on misunderstanding or misinformation.

Scoping provided a big list of issues based on the following themes:

- what the actual and potential land uses were
- how compatible they might be
- what types of country could support a particular use and what could not
- how those uses should be managed
- on what terms land should be accessed.

We encouraged people to think about inclusive ways to use land, rather than to think in terms of ambit claims and exclusive uses, but we were not always successful. Community representatives developed categories of land use – 'land use groupings' – which delineated eight primary activities such as grazing, intensive industries, conservation, and Aboriginal uses. Most importantly, they described what other uses could coexist with these primary uses if some

conditions were met, as well as what uses were conflicting. Subsequently, we reconfirmed with the community on several occasions that this matrix of uses represented their views. Reconfirming is valuable because it ensures that potential dissenters have the opportunity to speak up.

We used land use planning software (see 'Information and technologies that inform learning', page 7) to structure planning activities. The land use groupings above were a vital ingredient, as was a comprehensive database. Community input via scoping had 'dictated' what data should be built into the database. The community became a powerful source for that data, which could then be integrated in new ways. This database will be an important community resource in the future.

Participative learning was a fundamental element in our sector and whole-community planning activities, as well as in developing a vision and strategy plan for the region. The learning from participation is potentially manifold: people recognise their own resources of information and appreciate the same in others, and they refine their thinking about their own interests and increase their understanding of others' perspectives in non-threatening circumstances. They begin to consider collective opportunities and devise actions to achieve them. In leading similar projects, your role may be largely to facilitate and support rather than actively instruct so the community feels it retains control.

You will need to be sensitive to your group's responses to participative planning. Not everyone may be comfortable with it. We found that some people felt threatened by a group of 'others' apparently telling them what they could do on their own land, whereas other people welcomed the opportunity to consider new options.



Lunchtime discussion among Strategy Group members: Richard Bailey (Pastoral), Greg Brennan (Agriculture WA), Sandra and Richard Evans and Ivan Forrest (Aboriginal) and Phil Stanley (Diversifiers), June 2000.

INFORMATION AND TECHNOLOGIES THAT INFORM LEARNING

We used the computer-based planning tool LUPIS (Land Use Planning Information System) to help with land use planning. LUPIS is a decision support system that allows 'What if?' questions and displays outcomes of different potential land use allocations (see Holm *et al.* 2001, for further information). In this project LUPIS enabled each sector to develop and refine their own preferred land use plan, and then allowed different combinations of plans to be displayed as a basis for negotiation amongst community members.

As already explained, the community provides the information on which LUPIS runs. People with an interest in the region are asked to, firstly, identify the key issues about land use for the region and, secondly, using these identified issues as a framework, provide statements (or guidelines) about land use needs.

These guidelines were then converted into LUPIS rules. Once it was clear from the guidelines

what information was needed to make decisions about particular land uses, many sources were canvassed for data. These data were then given ratings for each guideline. For example each piece of land or mapping unit was rated according to its pastoral potential for guidelines to do with allocating land for grazing. Once mapping units within the database were attributed with their values for different uses, LUPIS was used to produce a land use plan for all competing candidate land uses, according to the importance placed on each guideline by sector members or the community as a whole.

A major feature of LUPIS is that the process can be repeated by adjusting the importance or votes given to each guideline until a preferred plan is achieved.

Any plan that LUPIS produces can be asked, 'Why was this piece of land allocated in this way?', and the contributing guidelines be displayed. The degree to which each guideline has been achieved can also be displayed and adjusted if participants want to alter the allocation.

LUPIS is a powerful tool which we could have used more effectively. We tried to cater for both regional and local planning but did not recognise the problem this would create. Statements of planning policy and broad objectives for land use and conservation at regional scales require less detail about large areas. Conversely, decisions about particular leases or reserves, for example, require lots of detail on small areas. By not determining a single mapping-scale, and hence the scale at which Rangeways was to have major impact, we created some misconceptions about what the project could do for individuals and added greatly to the complexity of the planning process. As an example, including heritage sites of just a few hectares resulted in a huge increase in the number of planning polygons to be processed in LUPIS. This was a cause of long

delays in providing plan outputs.

As the project developed, it became clear that Rangeways was addressing regional landuse issues and providing a broad, integrated planning framework. Clearly, it is essential to clarify the planning purpose and scale very early on.

Interest amongst some community members waned during the drawnout process of changing weightings to guidelines and obtaining plan outcomes, and the technical process was difficult for many members to understand. Although they were continually reassured otherwise, some suspected that outputs were being manipulated to meet some agenda other than their own. We tried to address this by producing 'user handouts' but with limited success. We suggest that it might be better if a technically-minded subgroup manages the process on behalf of the community, while communicating closely with it.

To help the community negotiate a balance amongst current and potential land uses, we estimated the economic values of land uses on the basis of land systems (Atkins *et al.* 1999), although we could only include land uses with a market value. While it would be highly desirable to be able to assess non-market values such as biodiversity, existence ('being there') and social amenity, the tools are either not readily useable or do not exist.

This does not mean that the highest economic value uses should prevail over others. Land is valued in many ways by members of a community and they will want to balance cultural or environmental significance against potential economic returns as they seek agreement on land use. Economic analysis simply clarifies the economic implications of different potential trade-offs so that the community can make more informed decisions.

Understanding visions

PREFERRED DIRECTIONS: CONFLICTS AND SYNERGIES

Initially, land use allocation plans were developed by individual sector groups, to represent their sector's vision. Each group refined their plan until they felt it reasonably represented their aspirations. We encouraged them to consider the potential for all land uses, not just their own. The pastoral sector group took the extreme position of allocating nearly all land to grazing in their sector plan, irrespective of grazing potential, which gave them limited flexibility later within the combined planning process.

The Aboriginal sector found it difficult to spatially distinguish land types of importance to them, both from hunting/gathering and spiritual/cultural perspectives, using the standard scientific framework that non-Aboriginal people use to describe land types. Later, the community representative group agreed that capturing Aboriginal knowledge within their own frames of reference should be a priority for its activities outside the project – a positive outcome of participative learning.

Cultural differences like these need to be recognised and catered for as much as possible. It may not be possible to reach a resolution, but if you haven't acknowledged the problem people may lose their commitment and drift away.

Once sector plans were available, we invited all sectors to participate in a representative community meeting to begin collective planning. It was agreed that each sector would send two representatives to this meeting. How these representatives were chosen was an internal matter for each sector.

The meeting was the first opportunity to develop a community vision for land use in the region and to begin the process of developing an initial joint plan of land use allocation. A skilled facilitator who was

clearly not aligned with any sector was crucial at this point. His main focus was to get the group thinking as a team and to develop their vision for the region before tackling more contentious planning issues. The group continued to work by choice with the same facilitator over some months to develop its collective identity, to determine how it would operate and to build a business plan.

We strongly recommend this approach to keep the focus on shared regional goals rather than sectoral differences. Nevertheless, participative activities do not always proceed smoothly! People will become frustrated, angry and disenchanted at times, and a good facilitator can defuse some difficult situations.

Revisiting the group's vision and reconfirming it is a useful way of refocussing on the bigger picture. Giving the group a brief summary of some group theory may also help (forming, storming, warming, etc), so that they recognise that their difficulties with working together are normal.

Participative processes can have some very positive outcomes. An Aboriginal participant with experience

in negotiation observed that this was the first time he had sat in one room with all the people he needed to talk to, rather than having piecemeal discussions, and he welcomed the opportunity. A mining industry representative was pleased to have a neutral forum for discussing industry concerns. New linkages were created amongst individuals and groups who had been unaware of one another previously.

Linkages within the representative community group need to be complemented by linkages out to the wider community. We expected sector representatives to consult with other members of their sectors and feed information back and forth. Some sectors held meetings while others did not, as a matter of choice and circumstance.

In accordance with the group's wishes, institutional linkages were minimal and so agency support and input were limited. This is an approach that we would not recommend, but we failed to persuade the group to adopt a more inclusive process. We discuss this further in the next section.

Saltbush/bluebush country near Leonora, WA

Influencing policies, laws and organisations

ANALYSIS OF PRESENT ARRANGEMENTS: WHAT NEEDS CHANGING, WHY, AND HOW

Understanding the institutional context of planning is a prerequisite of developing something better. We commissioned policy research, which provided a detailed analysis of the adequacy of existing instruments (Wilcox 1998). In our case, a total of 33 statutes, strategies, policies and councils at federal or State level impinged on land use in the North East Goldfields, and not all of them addressed use and management effectively (Friedel *et al.* submitted). Any planning group will need some grasp of the policy environment it is trying to work in, even if a detailed study is not feasible.

To address institutional change, the project managers developed several initiatives. A board of agency leaders was established to oversee the project and act as a conduit to political decision makers and agency staff. While the board operated throughout the project, the community group approach that evolved was considered an inadequate model for regional planning. This is because there was no opportunity for government input into decisions, and so we failed to achieve high-level political support.

Another initiative was a report on the development of a Policy Advisory Group, to be comprised of people with good links into government, to facilitate information exchange between the community group and government (Gilbert McAuliffe and Associates 1999). Once again, in the absence of community support, this group did not eventuate but the report remains a useful resource for the future.

As project managers, we supported a local initiative to establish a Government Agency

Coordinating Group for the region. It was proposed that senior officers of all State and federal government agencies, together with officers of projects like ours, would meet regularly to raise awareness of issues throughout the region. This group was not established.

It is clear that the project did not develop effective processes for influencing institutions. A significant factor was the community group's unwillingness to engage with government, but it was a genuinely held view of the majority. We accepted that the group should be able to make such decisions if it was to be effectively empowered. Governments also need to be less resistant to change and to crossing agency boundaries. Policy makers are remote from rangeland regions, leaving locals feeling their concerns are unappreciated and often overridden. Beyond the research phase we can expect that the group's increasing confidence in its own capacities will lead to a more inclusive process, which involves government.

While we were unable to provide a model for working effectively with institutions, there are some



Loading wool, Little Mill Shearing Shed 1991 Nambi Station

examples to draw on. Integrated catchment management groups have developed effective working relationships with government in agricultural areas of south western Western Australia. State agencies are represented ex-officio and can contribute fully to procedures and planning, but without formal voting rights. At the time of writing, the government was moving towards empowering regional groups like these with the authority to establish regional natural resource management strategies that then must be respected by government agencies in their allocation of resources. If such relationships are established they will provide good potential for influencing institutional change, as well as enabling planning and implementation.

MAINTAINING MOMENTUM AND KEEPING ON TRACK

Keeping on track and maintaining enthusiasm depend on a committed community and good management. Good managers are efficient, reliable and impartial, and they need to be boundlessly enthusiastic, energetic and user-friendly too! Working with regional communities, they need to establish sound relationships with locals, wider community members with an interest in the region, relevant agencies and non-government organisations and potential political supporters. Some of the components of good management include communication, timeliness, reconfirmation and equity.

Communication. Communication has to be tailored for different stakeholders, although finite resources will constrain what you can do. We developed a comprehensive marketing and communications strategy (Gilbert 1998), published 11 issues of a quality newsletter, Rangeflash (1996-2000),

distributed a Resource Atlas on CD-ROM containing our extensive spatial data set for the region (Chewings *et al.* 1999), gave frequent presentations to interest groups, and developed a web site <www.rangeways.org.au>.

At various times, misinformation about project objectives and processes, both within the region and within government, required some 'fire-fighting' to ensure that Rangeways was seen in its proper context as a research project with outputs that others may wish to advance. Change can be threatening and hence actively resisted. It's important to deal promptly with issues like this and find ways to handle them.

Timeliness. People have many demands on their time and so, unless there is a fairly steady flow of activity, they will lose interest or assume that the project has failed. In our case, the community expressed frustration with a perceived lack of activity when considerable 'off-line' data assemblage and processing took far longer than we had expected. You will inevitably encounter bottlenecks at some stage and one way of dealing with these is to put practical limits beforehand on how much you will do. Set a timetable for communication and stick with it, too.

Reconfirmation. Repeating a point made earlier, reconfirm vision and goals regularly and allow for newcomers to join the debate. It is unlikely you will have a stable constituency over your project's lifetime so you need a means of including new arrivals. Reconfirm processes too. Do people still want consensus decision-making? Do they want an independent facilitator or their own chairperson? As a group matures, it will become more confident of its directions and wish to take increasing control. Your role is to facilitate this process.

Equity. Not all community participants have equal resources. Some have better communication or



Murray Thomas (Tourism), Richard Bailey (Pastoral) and John Jordan (Mining) debating the Strategy Group's action plan, April 2000.

organisational abilities, political clout or financial resources. You will need facilitation and negotiation skills to deal with these issues, although we found that people communicated fairly readily once trust was established. On a practical note, we funded participants to attend meetings so that more poorly resourced sectors and representatives were not excluded, but cost may limit this option for you. Meeting locations were agreed by the group to ensure accessibility.

MONITORING PROGRESS

During your project, you will need some formal or informal way of monitoring how it is going. We initiated an independent longitudinal assessment of knowledge and attitudes (Walker 1998, Walker 2000) to track community engagement with the project and to reassure ourselves that the issues being addressed were consistent over time. Most respondents were generally positive about the Rangeways project in the second survey, but less so than in the first. This reflects the difference between anticipation and reality, and you may find the same. Be prepared to address the causes, if you can identify them.

You will also need some process of evaluation against criteria – What did we achieve? What did we do well? What did we do badly? What should we

change? What else do we need to do? Rangeways was independently reviewed through IWRRDC (now Land & Water Australia), its funding agency. Your own evaluation will be important feedback for your stakeholders.

AFTER THE PROJECT FINISHES

If your project is intended to persist beyond its initial funding period, you will need to have in place, well before the end of this phase:

- Strong leadership
- A business plan, including a strategic plan, in which the group has articulated its vision and goals and how it intends to achieve them. You may have the skills to do this within your group or you may be able to obtain them via a State agency. Our group planned to build on a State initiative mentioned earlier to empower regional natural resource management groups, and you may find similar agency support.
- Political support. Engagement with government at all levels is essential.
- Alliances for technical and administrative support. If you need to develop funding applications or build and use databases, or need access to experts to collaborate on new projects or secretarial help, look for mutually beneficial alliances with local organisations and companies.
- Activities to establish authority. For us, the move to become the natural resource management group for the region and receive funding to finalise our strategy was a significant step towards establishing authority. The community also had activities it wished to advance, including the development of an Aboriginal knowledge base, and it began to seek funds and 'champions' to help with their development.

Reflections



With hindsight, it would have been preferable to have our community group established sooner and involved immediately in setting regional goals, establishing land management strategies and considering policy implications. We lost momentum waiting for planning to begin, and planning then became the group's prime focus rather than one of several interdependent activities.

Being a research project brought with it its own set of constraints. While the project managers tried to be hands-off, they undoubtedly affected the direc-

tion the group took, as a result of the need to meet funding criteria and evaluate agreed processes. We also recognise that the cost of the research was high, relative to the resources usually available to regions to do their own resource use planning. In similar situations you will need to be practical about which aspects you develop.

We commend our Further Reading list to you for an appreciation of how much can be achieved. Rangeways broke new ground in developing better approaches to resource use planning in Western Australian rangelands, but it remains a step along the way.



A breakaway rising from mulga plains, north east of Leonora, WA. The duricrust 'cap' overlies deeply weathered granite.



Further reading



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