



*knowledge for managing Australian landscapes*

## Biodiversity conservation in regional NRM planning

*Research project number VRA1 of the Social and Institutional Research Program of Land & Water Australia. Completed: July 2003.*

### Background

The requirement for biodiversity conservation is recognised in planning processes for NRM regions within Australian States and Territories although is often not attributed with high priority. This project set out to identify mechanisms to enhance the adoption of biodiversity conservation within regional NRM planning processes. The project was funded through the Natural Heritage Trust and managed by Land & Water Australia through the Social and Institutional Research Program.

The major issues of salinity and water quality are often considered ahead of biodiversity issues and the opportunities for integrated management to achieve multiple outcomes are not always adopted. Recently, there has been a shift to more strategic natural resource management (NRM) regional investment. All regions in Australia share requirements for adequate expertise, techniques, data and resources to make sound decisions on the management of their natural resources.

In order to help improve the ability of regions to integrate biodiversity conservation into their planning processes, this project identified where biodiversity has been effectively included within regional NRM planning processes and established an understanding of the critical success factors required for biodiversity conservation.

### Objectives

- Provide information that will assist sharing of best-practice between jurisdictions and regions on integration of biodiversity conservation in regional/catchment NRM planning and implementation.
- Inform the development and implementation of case study projects that are identifying mechanisms to enhance the accessibility and usefulness of particular national biodiversity data-sets in assisting regional NRM planning and decision-making processes.



- identify the most appropriate mechanisms to promote integration of biodiversity conservation in regional planning processes.

## Approach to the project

The study reviewed existing projects and regional planning processes in all states and territories (with the exception of the marine environment) to provide a national overview of opportunities for biodiversity conservation.

Information for assessment of opportunities and mechanisms for biodiversity conservation in NRM planning was derived from a 'project scan' including 150 projects and semi-structured interviews with relevant people in each state or territory and a range of NRM regions.

The assessment was used to identify 16 case studies and to determine critical success factors. Recommendations were made on opportunities for Commonwealth investment and involvement to improve integration of biodiversity conservation in regional NRM processes, assuming appropriate negotiations with States and Territories.

## Key findings

### Recognising regional difference

The project recognises the significant differences between states/territories and between regions based on ecological as well as cultural and economic factors. The study identifies the importance of working with these differences rather than pursuing an homogenised approach.

### Adoption of mechanisms

Current projects are adopting or associated with non-market mechanisms substantially more than market mechanisms. Some reasons for this are:

- The application of market-based mechanisms to biodiversity conservation is relatively recent and there is considerable uncertainty about their effectiveness.

- It is difficult to identify and quantify a market basis for biodiversity conservation (especially the benefits and beneficiaries).
- Market mechanisms may not be required as some of the non-market mechanisms are considered to be quite effective.

## Capacity building

Regions have expressed a high-level requirement for ongoing planning, information and technical support. Building community capacity through use of these and other mechanisms will require targeted investment towards highest priorities for biodiversity conservation. Many mechanisms, including funding allocation and information provision, support site-based actions and are targeted to communities who are receptive to conservation. However, there is a need to achieve landscape-scale planning and actions in areas that are identified as being of highest priority for biodiversity conservation, even though community interest in conservation within some of these high priority areas may not be strong. Regions need to clearly identify the range (including international, national, state/territory, regional and local) of values and priorities for biodiversity investment.

## Critical success factors

Based on the project scan, consultations and case studies, the factors that drive or enable improved integration of biodiversity conservation in regional planning have been identified.

## Motivational success factors

- Leadership
- Iconic values
- Recognising different values (administrative)
- Providing consistent and appropriate support
- Building regional and community skills
- Recognising regional and local cultures and knowledge
- Allowing time
- Providing information that is relevant and available

- Building on success
- Developing learning processes
- Appropriate application of scientific practice and knowledge
- Effective partnership arrangements
- Legitimising management.

### Financial success factors

- Identifying biodiversity values
- Developing investment strategies for biodiversity
- Rewarding private effort for public values
- Recognising biodiversity conservation as an alternative land use
- Linking biodiversity to other NRM investment
- Assuring payments in perpetuity
- Gaining market access or price dividends
- Encouraging private investment.

### Regulatory success factors

- Establishing effective boundaries for management
- Managing public land
- Clear responsibilities for endangered species and threatened ecological communities
- Perpetual benefit from management agreements
- Securing benefits with legislative support

### Limiting factors

The following factors were found to be barriers to integration of biodiversity conservation in regional planning. Those considered to be of greater importance are shown in bold lettering:

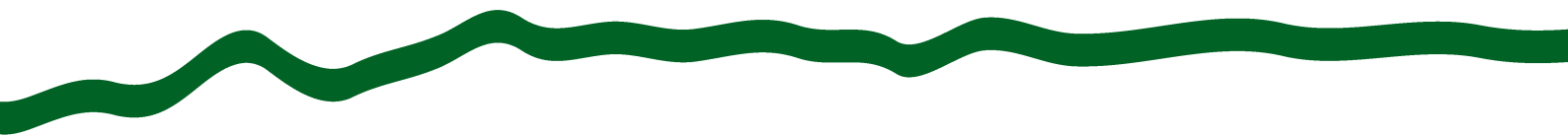
#### Limiting motivational factors

- Limited understanding of values and threats
- Limited understanding of landscape-scale management
- Local understanding or initiative is undervalued
- Emphasis on visual amenity outcomes rather than addressing the threatening processes

- Support staff that have short-term contracts and limited capacity or local knowledge
- Lower priority for biodiversity compared with other NRM issues
- Limited time available for lower-priority NRM actions, including biodiversity conservation
- Poor project design and management
- Biodiversity conservation outcomes are difficult to measure
- Uncertainty that the planned processes will eventually result in the expected outcomes for biodiversity
- Uncertainty about what to do to manage for biodiversity outcomes
- Ineffective communications particularly of scientific information
- Excess administration
- Information provided in a technical format without associated group learning or understanding
- Inadequate consideration of cultural factors (including indigenous and religious values)
- Community conflict

#### Limiting financial factors

- Statutory costs, including land tax, rates, audit costs and other charges that are imposed on private initiative for biodiversity conservation
- Areas of low productivity or socio-economic conditions have limited resources to initiate actions
- Short time period for funding of projects that are of long duration
- The effects of drought on biodiversity investments
- Achieving actual change through devolved grants or other incentives payments because they:
  - are considered to be short-term and develop a dependency upon public funding before actions are initiated;



- may not attract new interest in conservation actions by landholders with a focus on productivity; and
- are most effective if there are perceived benefits to property management rather than biodiversity values.

### Limiting regulatory factors

- Restrictive regulations, including limitations on clearing required for regrowth and control of pest native species
- Policies and protocols can restrict access to information.

## Key principles

A set of key principles to guide integration of biodiversity conservation within regional NRM planning was identified. They are:

1. Identify and sustain distinctive regional difference. Processes that homogenise NRM effort across regions will restrict motivation for biodiversity conservation.
2. Management decisions occur according to the prevailing 'world view' values. A change in 'world view' values is required to achieve a change in management.
3. Efficient and effective decision-making processes for biodiversity conservation through regional NRM planning require clear roles and responsibilities for the range of decision-makers involved.
4. Development of effective partnerships in regional NRM planning should be encouraged with consideration of the clear roles and responsibilities of partners for biodiversity conservation.
5. The use of science-based information is a key factor in successful biodiversity conservation projects. Information and the associated skills for use of this information must be accessible and applied to areas according to regional priority for biodiversity conservation.
6. Private interest and investment for biodiversity conservation will increase with better understanding and tangible evidence of biodiversity values and ecosystem services.

7. Allocate resources for projects and capacity building in relative proportion to the priority for biodiversity conservation.
8. Outcome-based program and project performance measures should prevail over time-based performance measures.
9. Investment in integrated NRM projects with biodiversity components should be contingent upon expectations of 'net biodiversity gain' for regional biodiversity conservation priorities.

## Recommendations for strategic action

The study recommended a range of actions to enhance regional capacity to advance biodiversity conservation. These strategies can be found in the executive summary to the main report.

## Contact

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