



Department of
**Primary Industries and
Regional Development**

Western Australian Natural Resource Management Framework 2018



Introduction

Western Australia's natural environment is recognised internationally for its rich biodiversity and iconic features. Much of the State's wealth comes from its natural resources as they provide many human services through clean drinking water, the food we eat and the places where we recreate. Consequently, the state's future long-term prosperity will be intrinsically linked with the sustainable use of our natural resources and effective management of our natural landscapes. The amenity and intrinsic values of natural areas are also significant from an emotional, spiritual and cultural perspective, particularly for Aboriginal people.

The State Natural Resource Management Framework provides a focus for partnerships in protecting and managing our natural resources. It will allow for greater coordination and transparency of priority setting and the significant investment that is made by community, industry and government.

Vision

Collaborative management of Western Australia's natural resources leads to biodiversity conservation and sustainable use supporting community wellbeing and prosperous businesses for future generations.

Working together

In order to achieve our vision, community, industry and government will need to work together in partnership to ensure that we have a balanced approach to conserving and developing our natural resources for the long term. We will need to work across ecosystems and communities, including committed volunteers, and Aboriginal people, to maximise the outcomes that we can achieve together (Figure 1). Consideration of the cumulative impacts upon the environment and natural resources will require ongoing collaboration at all scales of planning and across all tiers of government. Planning and development decisions need to account for the economic, social and environmental values of natural resources and assets in the public interest.

We will work together under the following principles, acknowledging that we will:

1. Recognise the Intrinsic value of WA's natural environment and that Western Australian's benefit from the sustainability of that environment.
2. Recognise that social and ecological systems are intricately linked and we must plan to address whole systems.
3. Make risk based decisions informed by sound science.
4. Devolve decision making to the lowest capable level to ensure an adaptive and participatory approach.
5. Base investments and governance mechanisms on coherent and integrated goals.

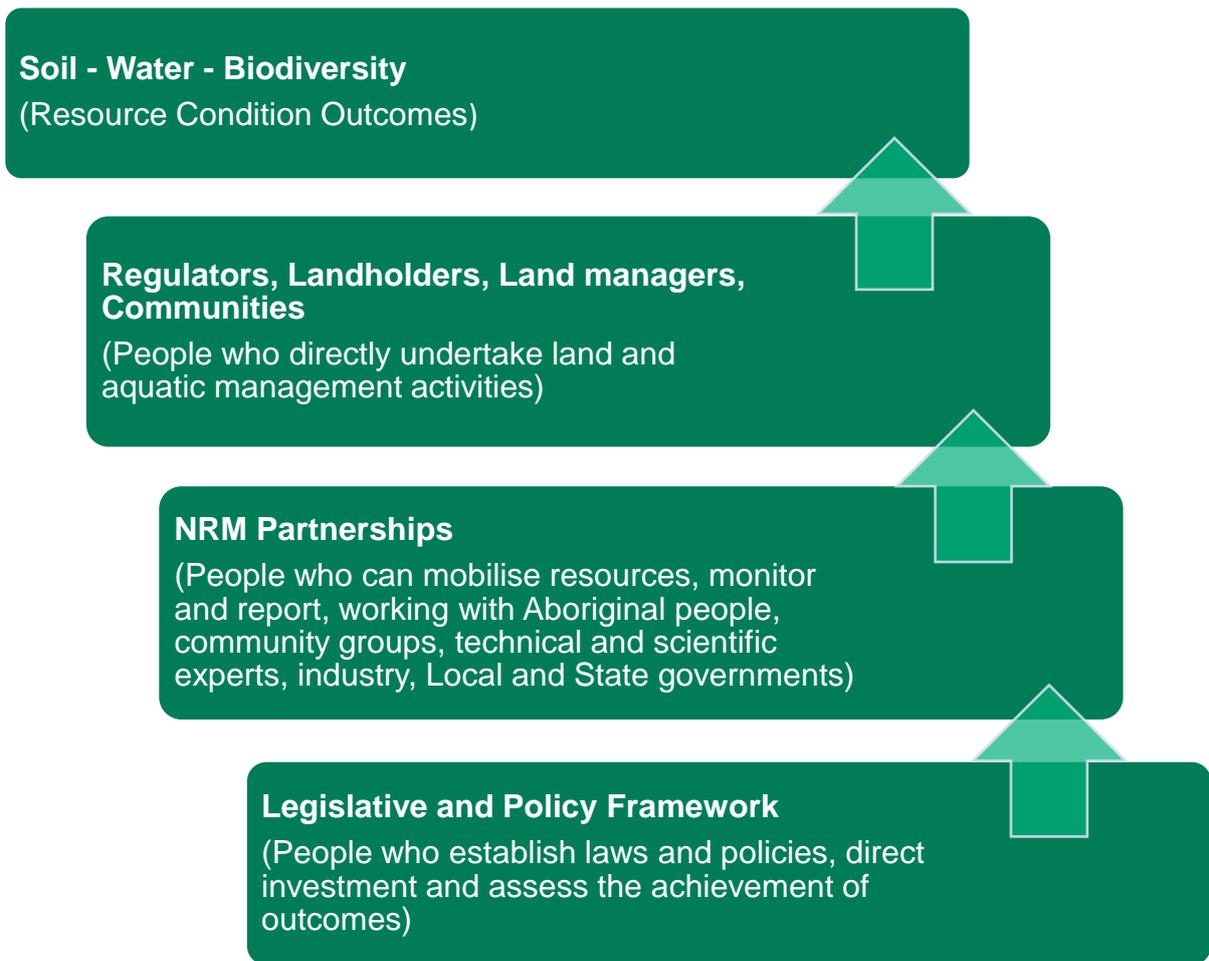


Figure 1: Community, Industry and Government will need to work in partnership to achieve our natural resource goals

Benefits of co-investment

Co-investment is critical to achieve landscape and seascape scale improvements that benefit all Western Australians. Significant investment has already taken place in the form of State policies, regional plans and individual organisational action plans. The state government, commonwealth government, community and industry all make significant investment in natural resource management in Western Australia. By mapping this investment we demonstrate the scale of effort and commitment into natural resource management in this State (Figure 2) and the progress being made towards desired outcomes. Alignment of effort and clear communication across the sector will deliver additional benefits, preventing duplicated effort and perverse outcomes.

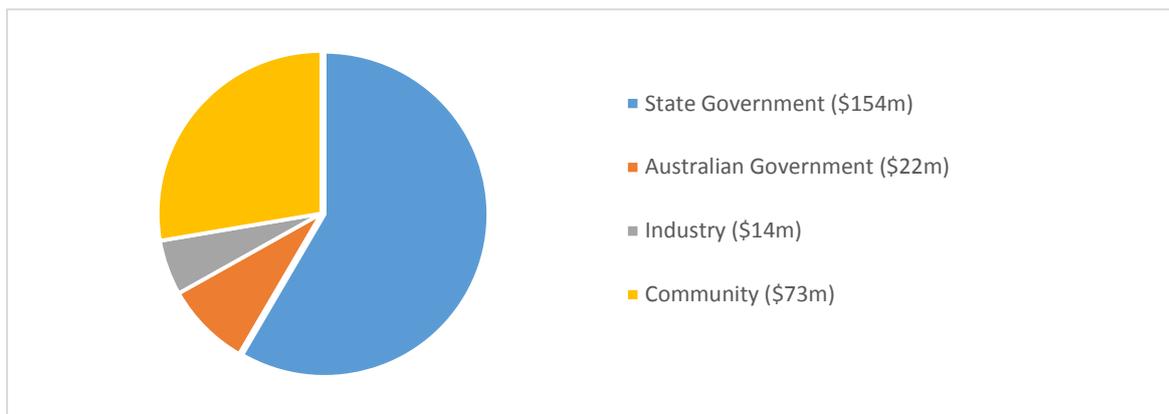


Figure 2: Co-investment in Western Australian natural resource management (2017-18)

Community investment has been estimated by multiplying Australian Government and State Government grants for natural resource management by 2.6, consistent with a method used previously by the Commonwealth (Australian Government, Department of Agriculture, Fisheries and Forestry, 2003 Review of National Landcare Program).

Shared priorities

This framework sits within a more extensive framework of international, national, State, regional and local agreements, plans, policies and legislation. The intent of all of these mechanisms is to protect our natural resources from threatening processes, including climate change. We can achieve this by focussing our attention on the following six strategies, acknowledging their co-dependency:

1. Sustainable management of land resources

The land resource is fundamental to sustaining terrestrial life and ecological processes. However, it has been highly modified since European settlement, particularly from altered fire regimes, altered hydrology, pest animals, weeds and more recently, climate change. Modification of land from its natural state inevitably results in changes to soil health and landscape functionality, which leads to negative impacts on the environment and loss of productivity. The key focus will be on driving regenerative agricultural practices, focusing on soil biology and landscape management, to produce healthier food, a healthier environment and improved bottom line.

2. Maintain and enhance water assets

Protecting waterways (including estuaries and floodplains), wetlands and groundwater systems supports ecosystem health, water availability and biodiversity. Water is fundamental to life and public health, drives and facilitates economic development and provides social opportunities. Water has a special cultural and spiritual value for Aboriginal people.

3. Protect and enhance the marine and coastal environment

Marine and coastal environments face a number of biological and physical issues that threaten them including pressure on stocks of some species, introduction of pests and the impacts of climate change and sea level rise on a range of species and their habitats. Healthy coastal environments are critical to maintaining Western Australia's lifestyle and existing and emerging industries such as fisheries, aquaculture and bioprospecting. The flow-on impacts of unhealthy coastal environments on local communities and the State can be significant.

4. Conserve and recover biodiversity

Western Australia has an extremely rich, diverse and unique biodiversity that is internationally recognised. The spiritual and intrinsic values of biodiversity, including our sense of place, are of high cross-cultural significance. Biodiversity supports our economy in many ways as well as having important amenity, recreation, scientific and educational values.

5. Enhance skills, capacity and engagement

Capacity comprises the skills, connections and motivation of the whole community. It is essential to build and maintain skills and engage stakeholders, including volunteers and community groups. Understanding values, beliefs and behaviours is crucial as these factors can largely determine natural resource

condition. It is particularly important that Aboriginal people are provided with opportunities to engage in natural resource management activities.

6. Deliver high quality planning that leads to effective action

Good planning is essential to avoid and prevent further deterioration in the condition of natural resources and provide the opportunity for remediation when change is proposed. Impacts that may arise where urban, peri-urban and regional areas have not been adequately planned or managed include land and water degradation, increased biosecurity risks, nutrient pollution, increased pressure on water resources and degradation of biodiversity, and coastal and marine assets.

These strategies will be the basis for alignment of our priorities for action and funding. The 2017/2018 co-investment into each of these strategies is shown below (Figure 3).

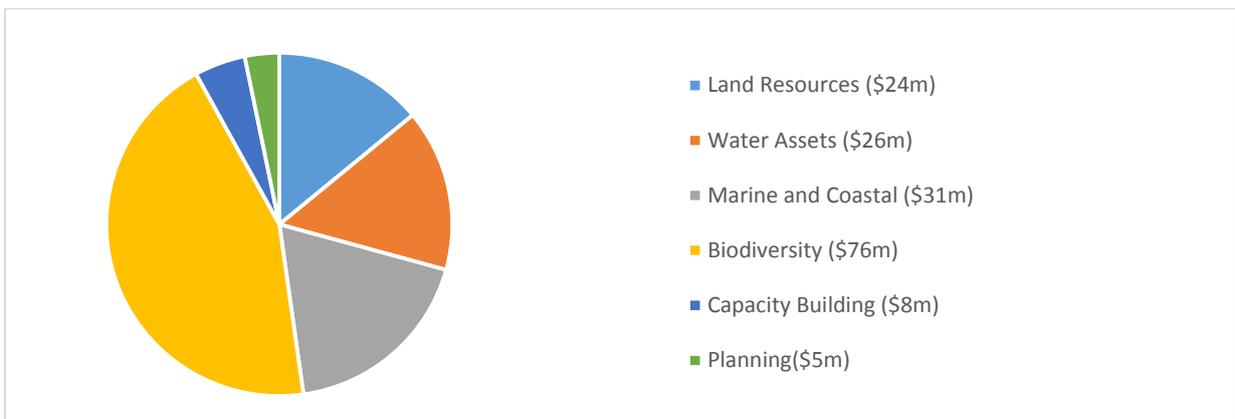


Figure 3: Investment in Natural Resource Management Strategies

Regional Natural Resource Management groups in Western Australia leverage commonwealth funding from the National Landcare Program in conjunction with state agencies to deliver natural resource management outcomes for the benefit of all Western Australians. State agencies involved in natural resource management have worked with regional Natural Resource Management groups to identify specific priorities for management outcomes that will deliver the six outcome based strategies identified in this framework. These priorities are complementary to those achieved through state investment and engagement in delivery of these priorities will maximise the benefits from commonwealth co investment into natural resource management in Western Australia.

Implementation

The Framework will be implemented through a risk based, resource level management approach which recognises social, economic, ecological and physical values at a resource level and their components. The approach includes mapping the individual elements associated with each resource and their risks and then combines these to enable integrated, resource-level risk assessments (Figure 4). This allows for all the resource-level assessments and management systems for

each resource to be presented using a consistent format that can then be used for whole of state NRM reporting and priority setting.

This approach has previously been used to successfully consolidate all of the aquatic resources of WA down to 80 regional-level resources¹ which have been the basis for the review of the status and aquatic priorities in WA on annual basis for the past decade². It is expected that using this framework, the consolidation process will identify a similar number of regional-level terrestrial resources that can be used for state-wide planning, reporting and prioritisation purposes.

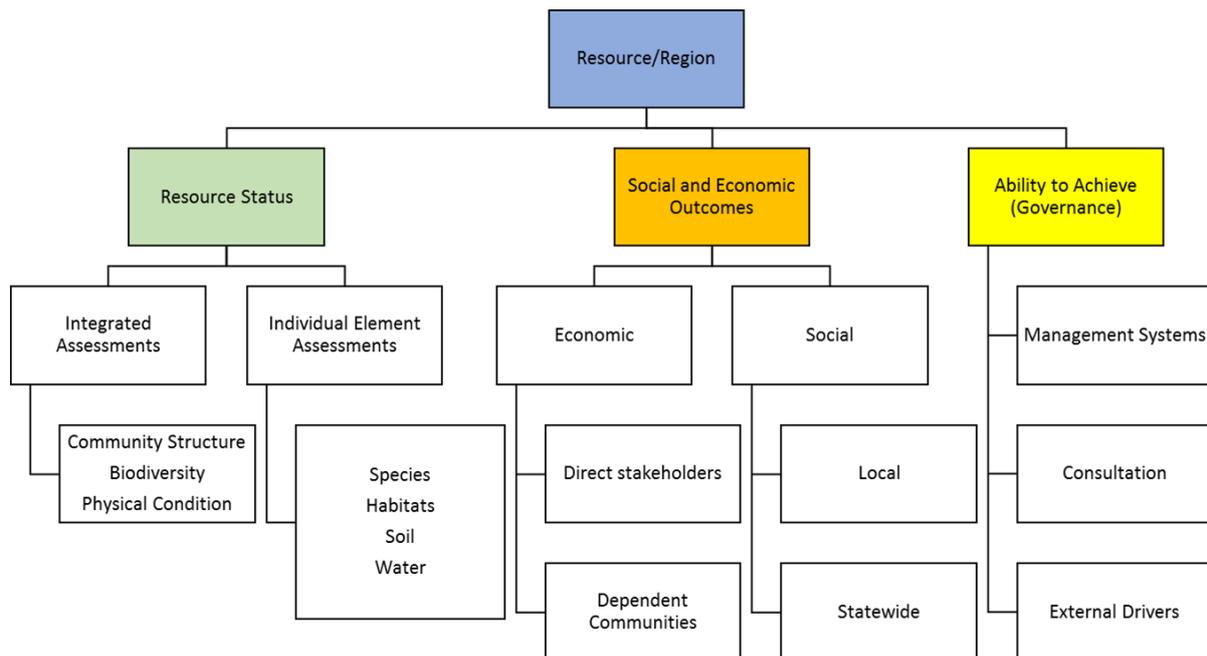


Figure 4: Risk Based, Resource level Management Framework for NRM

The process to generate consistent and integrated statewide NRM priorities includes the recognition that we manage each of our natural resources in order to generate social amenity and economic activities for the overall benefit of the community. The relative priority ratings for each regional-level resource will, therefore, be determined by combining the current risks to its ecological status along with the risks and relative levels of social (including cultural) and economic benefits the resource generates plus the governance risks. This approach not only generates clear priority levels but as it identifies which are the key risks (ecological, social, economic or governance) that generated the priority, it helps focus where management actions (or other activities) should most appropriately be directed. Indicative examples of how this approach would operate are provided in Table 1.

¹ See Fletcher et al 2010 - An Ecosystem Based Fisheries Management framework: the efficient, regional-level planning tool for management agencies. *Marine Policy* 34: 1226–1238.

² *Status Reports of the Fisheries and Aquatic Resources of WA.*

http://www.fish.wa.gov.au/Documents/sofar/status_reports_of_the_fisheries_and_aquatic_resources_2015-16.pdf

Table 1: Illustrative version of how the relative statewide priority for each regional-level resource will be assessed

Resource	Ecological Risk	Economic Activity (GVP)	Economic Risk	Social Amenity	Social Risk	Governance Risks	Indicative State-wide NRM Priority Score
Resource 1	Low	Low	Low	Moderate	Low	Low	Very Low
Resource 2	High	Moderate	Low	Moderate	Low	Low	Moderate
Resource 3	High	High	High	High	Moderate	Moderate	High
Etc..							



Monitoring, evaluation and reporting

While there are many ways to monitor the effectiveness of strategies, it will be important to focus NRM reporting on the degree to which agreed resource level outcomes are being achieved. The system will also recognise there may be different temporal and spatial considerations among resources that may affect progress. Reports will, therefore, include both the progress in the implementation of each funded activity and the level of benefits that are being derived (e.g. improvements in risk status) from those activities.

There are already a number of existing monitoring, evaluation and reporting processes in place for State NRM-related activities, including statutory reporting requirements. These provide a solid basis from which a coordinated, state-wide view of progress across the full spectrum of NRM resources and systems can be developed. This state-wide reporting system will be facilitated by applying the NRM framework consistently across all NRM areas which will provide relevant stakeholders with a consolidated report on the status and progress associated with the management of the State's natural resources on an annual basis.