

Developing a Strategy for Regional Sustainability in the State of Western Australia

A Background Discussion Paper Prepared as a submission to the
State Sustainability Strategy

By Rachel Armstrong
Masters Student, Institute for Sustainability and Technology Policy
Murdoch University
April 2002

Contents

1.0 Executive Summary	4
Priority recommendation 1	7
Priority Recommendation 2	7
2.0 Introduction	7
3.0 Rationalisation for the development of a Regional Sustainability Strategy in the State of Western Australia.....	8
4.0 What is a Region?	9
5.0 The relationship between Social, Economic and Ecological factors at a regional level.....	10
6.0 Bioregionalism and Regional Sense of Place- A foundation for research and a basis for the development of a Regional Sustainability Strategy.....	12
7.0 Relationships between the different levels of government in Australia, and between government and non-government organisations that are important to regional sustainability.....	14
8.0 Regional Sustainability Case Studies	17
8.1 Regional development and sustainability in Western Australia- Government initiatives.....	17
8.11 The Western Australian Regional Development Council and Regional Development Commissions	17
8.12 A Regional Development Policy for Western Australia (Department of Commerce and Trade 1999)	18
8.13 Eastern Metropolitan Regional Council	19
8.14 North Eastern Wheatbelt Regional Organisation of Councils	20
8.2 Regional development and sustainability in Western Australia- Non-Government initiatives.....	21
8.21 Blackwood Basin Group	21
8.22 South Coast Regional Initiative Planning Team	22
8.23 Avon Catchment Network.....	22
8.3 Regional development in Australia- Government Initiatives	24
8.31 National Heritage Trust	24
8.4 Regional development in Australia- Non- Government Initiatives.....	24
8.41 Landcare	24
8.42 Greening Australia	25
8.43 Aboriginal Land Education Program.....	25
8.5 International Initiatives for Regional Sustainability	26
8.51 The Global 200- A representation approach to conserving the Earth's Distinct Ecoregions	26
8.6 Case studies of current best practice	26
8.61 Rangeways	26
8.62 An Ecoregional Approach to Sustainable Agricultural Landscapes in the South-west of Western Australia (World Wildlife Fund Australia, No Date)	27
8.63 Central Highlands Regional Resource Use Planning Project	28
8.64 Draft Cape Action Plan for the Environment (CAPE Project Team 2000).....	30

9.0 An Integrated Approach to Regional Sustainability	32
10.0 Core Objectives for Regional Sustainability.....	33
11.0 Priority Recommendations	35
References.....	37
Appendix 1	41

1.0 Executive Summary

Introduction

This paper provides a background discussion on regional sustainability as a submission to the State Sustainability Strategy for Western Australia. It establishes the importance of a regional scale when planning for sustainable futures, discusses some of the sustainability issues that are important in the regions of Western Australia, reviews case study examples of initiatives that are important to regional sustainability in Western Australia and recommends actions that will improve sustainability at a regional level.

Rationalisation for the development of a Regional Sustainability Strategy in the State of Western Australia

It is now recognised that actions undertaken at a regional level are often the most effective for achieving economic, social and ecological goals. A sustainability perspective asserts that social, economic and ecological spheres are intimately related. That much of Western Australia's land is classified as regional, and a vast amount of the state's resources come from regional areas is further justification for the importance of the regional scale when planning for sustainability. Regional sustainability strategies will ensure the integration of social, economic and ecological goals at the optimal scale for effective action in the state of Western Australia.

What is a Region

The State of Western Australia is divided into 10 regions, including the Perth Metropolitan Region. These regions may currently be the most effective divisions to adopt for development of Regional Sustainability Strategies. However, regional sustainability strategies will need to be based on a definition of the term region that encompasses greater depth than these boundaries. The bioregion, or ecoregion is suggested to be closer to the definition of region that this paper adopts. Reconsideration of the current regional administrative boundaries in Western Australia may be appropriate in the future.

The relationship between Social, Economic and Environmental factors at a regional level

The demonstrated interrelationship between economic factors like structural adjustment, and post-modernisation, with environmental degradation, and rural socio-economic decline in Western Australia clearly indicates a need for integrated sustainability strategies at the regional level. Research has identified the existence of regional 'winners' and 'losers' in the contemporary climate of globalisation. Regions need to be proactive in their creation of a sustainable future. This is a significant challenge for regions in decline. Demographic, Service and employment issues that many regions are experiencing are intimately related to economic and ecological change. The ability of regional communities to care for their natural environments is dependant on economic and social well-being. In turn, healthy regional social and economic systems rely on a functional natural environment that has maintained its ecological integrity. Without integrated and equal consideration

of ecological, economic and social consequences of change, sustainability in regional Australia is unlikely to be achieved.

Bioregionalism and Regional Sense of Place - A foundation for research and a basis for the development of a Regional Sustainability Strategy

The idea of bioregionalism, or developing a regional sense of place is one way to foster holistic sustainable development in regional Western Australia. Increasing awareness of the socio-cultural and ecological interactions that occur in each region will build the capacity of regional communities to create positive change. Place research, including documentation of oral histories are identified as an important foundation for the development of Regional Sustainability Strategies. However, a triangulation of research methodologies, with constant attention given to equitable community participation is suggested to inform the overall development of Regional Sustainability Strategies in Western Australia.

Relationships between the different levels of government in Australia, and between government and non-government organisations that are important to regional sustainability.

Achieving regional sustainability in Western Australia requires coordination of local, state and commonwealth government initiatives in regions as well as coordination of government and non-government initiatives. All three levels of government have some responsibility for, and input into regional issues. Devolution of more power to regions combined with a strong statewide program supporting regional sustainability may be the most effective way to promote regional sustainability. Regional natural resource management groups are active in promoting sustainability, with an environmental focus, in many regions of Western Australia. However, voluntary associations of councils such as the North Eastern Wheatbelt Regional Organisation of Councils and the Eastern Metropolitan Regional Council may provide better models for integrated sustainability planning at a regional level. A group to investigate the best way to maximise government and non-government efforts for regional sustainability and to investigate issues of boundary rationalisation is recommended.

Regional Sustainability Case Studies

A brief overview of some important Western Australian, Australian and international initiatives demonstrating different approaches to regional development, environmental protection and sustainability indicates the current direction of regional sustainability. They provide background to the area of regional development and planning and demonstrate that while there are good things happening in this area, an integrated, triple bottom line approach to regional sustainability is yet to occur in Western Australia, Australia and possibly even globally. Particular attention is given to Western Australian initiatives.

Case studies of current best practice

Four examples of current best practice in the area of regional sustainability provide useful insight into the ways that sustainability can be planned for and achieved in Western Australia's Regions. Rangeways and The Central Highlands Regional Resource Use Planning Project have a clear focus on community participation in planning for land use and resource management in their study areas. Through focussing of community participation and control over regional resource management issues, these projects demonstrate appropriate methodologies for resolving resource use conflicts. The World Wildlife Fund's Ecoregional Approach to Sustainable Agricultural Landscapes on the South-west of Australia represents an innovative approach to biodiversity conservation in the south-west of Western Australia. This area is world renowned for its exceptional biodiversity including many endemic species. The Draft Cape Action Plan, a South African initiative shows clear visions and goals, and integrates ecological, economic and social issues that impact on biodiversity conservation at a regional level. All four studies provide useful insight into the ways that sustainability can be planned for and achieved in Western Australia's Regions.

An Integrated Approach to Regional Sustainability

Seven broad conditions for an integrated approach to regional sustainability in Western Australia have been identified. These are:

1. Broad and equitable community participation in regional sustainability planning
2. A focus on innovative developments in each region
3. Research and dissemination of the best knowledge
4. Recognition and support for inter and intra regional social, economic and environmental networks and creation of new partnerships between regionally important actors
5. Development of models for proactive conflict resolution between regional stakeholders
6. Ensuring that Western Australian regions are inline with international best practice for sustainability
7. A long-term government commitment to integrated sustainability in Western Australia.

Core Objectives for Regional Sustainability

Core objectives for regional sustainability have been identified in the areas of governance, networking and partnerships, reflexivity and adaptation, economic innovation, environmental integrity and community sustainability. They identify the diverse issues that regional sustainability strategies will incorporate and indicate requirements for the achievement of these objectives

Key Recommendations

Key Recommendation 1

A Regional Sustainability Strategy for each region in Western Australia, based on the State Sustainability Strategy needs to be developed with consideration of the above objectives. This should include a strategy for the Perth Metropolitan Area, or several regions within the Perth Metropolitan Area.

Key Recommendation 2

To facilitate the development of strong regional identity, each region needs to write its story. The story would elaborate on the 'sense of place' or 'belonging' that characterises the regions. These stories need to incorporate environmental, socio-economic and cultural histories of the region and would improve understanding of potential factors that may enhance or obstruct regional sustainability. They will aim to facilitate a shared understanding of the past, and the development of a shared vision of sustainability for each region's future. These 'stories' would ideally be created as part of Regional Sustainability Strategies.

Key Recommendation 3

Investigate and implement the best model for managing sustainability at a regional level in Western Australia. The North Eastern Wheatbelt Regional Organisation of Councils may provide such a model.

2.0 Introduction

There has been significant focus on global, national, state and local issues that arise when planning for a more sustainable future. However, there is a growing awareness that many sustainability issues need to be investigated at a regional level. A regional level provides a compromise between detached and de-contextualised decision making at a state level and the potential for parochial, small picture decision making at a local scale. Regions are small enough for local communities, businesses and government agencies to direct change, and large enough for the effects of that change to be of state-wide benefit (Shearlock et al 2000). Regional organisations therefore may be the most effective vehicle for delivering sustainable change in Western Australia.

An integrated triple bottom line sustainability focus for regional development can play an important part in achieving sustainability goals for the whole of Western Australia. The development of a Regional Sustainability Strategy will therefore provide an important contribution to the State Sustainability Strategy for Western Australia.

This paper provides background discussion on regional sustainability as a submission to the State Sustainability Strategy for Western Australia. Through a review of literature on regional sustainability, an investigation of research methodologies that are appropriate for regional sustainability, a discussion of the relationships between government and non government initiatives of importance to regional sustainability and presentation of some case-study examples important to regional sustainability, objectives and

recommendations to inform the development of regional sustainability in Western Australia are developed.

3.0 Rationalisation for the development of a Regional Sustainability Strategy in the State of Western Australia

Regional sustainability requires an integrated focus on the economic, social and ecological factors that determine sustainability and a long term, holistic approach to creating sustainable regional futures. In the context of a globalising world, it is regions that compete, economically, with each other nationally and internationally. The divisions of nation and state are becoming less important in a globalising world. Mc Kinsey & Co (1994:19) maintain that “Regions are becoming the natural unit of making change happen. They are big enough to form natural economic units but not big enough to become unwieldy”. Ecologically, it is the regional level where social and environmental interactions occur, which can facilitate or obstruct ecologically sustainable development. Regional environmental problems occur as a result of the interactions between humans and the natural environments in which they live. It is at the regional level that research which aims to integrate social, economic and ecological factors for ecologically sustainable development will be most productive (Gray & Lawrence 2001). From a social perspective, development of strong regional identity within regional communities is a fundamental building block for sustainable development. As the long-term sustainability of a region depends on its ability to support itself, and make best use of its natural and human resources, an empowered community with a strong regional identity, or ‘sense of place’ is a necessary condition for regional sustainability. ([German Ministry for Education and Research 2000](#)).

Differentiating between developments that promote short-term economic gain and are unsustainable and those that are likely to be sustainable economically, socially and ecologically in the long term is of central importance to regional and state sustainability. Research undertaken at a regional level that provides information to communities and decision makers on how to differentiate between sustainable and unsustainable development will be fundamental to achieving this goal. This requires a long-term government commitment to research and development that facilitates social, economic and environmental wellbeing in the regions of Western Australia.

In Western Australia only 28% of the population lives outside of Perth, in areas classified as regional. Of this regional population 88% of people live in regional towns or cities (Patterson Market Research 1999). Whilst this paper has a strong focus on regions outside the Perth metropolitan area, it is envisaged that Perth will also develop a Regional Sustainability Strategy. While the population of Western Australia is highly concentrated in cities and towns, the vast majority of Western Australia’s land is regional, rural and remote from townships. Mining and agricultural commodities produced from these rural and remote areas are the primary basis for the Western Australian economy, with regional Australia producing 68% of state exports (Department of Commerce and Trade 1996). Regional Western Australia, including towns

and rural areas, suffers disproportionately from ecological problems such as salinity, social problems such as youth suicide and aging populations, and economic problems like lack of employment activities, service withdrawal and declining terms of trade. This provides further indication that regional sustainability is fundamental to a sustainable future for the whole of Western Australia.

4.0 What is a Region?

There is some variation in the way that regions are defined. This paper, defines Western Australian regions from the boundaries used by the [Western Australian Regional Development Council](#). Whilst these regional definitions may currently be the most practical definitions of regions in Western Australia, some alternative definitions give an indication of the different spatial layers that need to be considered within and between regions in Western Australia to result in an integrated Regional Sustainability Strategy.

The Natural Heritage Trust (1998:4) state that a region should be an area “that is meaningful to all the likely stakeholders and one that is practical for management purposes,” and that it should also “reflect the environment and natural resource management issues of concern to stakeholders in the region”. Gray and Lawrence (2001:2) conceptualise regions, as “that part of Australia and its population which has a distinctive relationship, sometimes incompletely described as dependency, with metropolitan Australia”. They note that much of regional Australia is socially and economically connected with the agricultural industry. Yet another conception of regions is the bioregion or the ecoregion. According to Miller (1996:11) the bioregion is “a geographic space that contains one whole or several nested ecosystems, characterised by its landforms, vegetative cover, human culture and history as is identified by local communities, government agencies and scientists”. The ecoregion, as defined by the World Wildlife Fund, is “a relatively large unit of land or water containing a characteristic set of natural communities that share a large majority of their species, dynamics, and environmental conditions (Dinerstein et al. 1995 in Olsen & Dinerstein 1998:3). These latter definitions are closer to how the term regions will be used in this paper.

Map 1 shows the ten administrative regions in Western Australia, including the Perth region.

Map 1: Western Australia’s Administrative Regions

(<http://www.regional.wa.gov.au/maps/wa.asp>)

It is recognised that within these regions there will be different scales at which it will be appropriate to look at sustainability issues- For example, different catchments areas, or bioregional boundaries set in the Interim Biogeographic Regionalisation of Australia, as represented in Map 2.

Map 2: Interim Biogeographic Regionalisation of Australia- Version 5.1
(http://www.ea.gov.au/parks/nrs/ibraimcr/ibra_95/cont-col.html)

Networks that enhance the relationships between inter and intra regional spatial differentiations like the catchment and the bioregion, or the economy of a regional town and the economy of a whole region, are a critical factor to consider for regional sustainability strategies (Arndt et al 2000), requiring a depth of understanding of the term region that encompasses more than just regional boundaries. It may be necessary to reconsider current regional boundaries in Western Australia as part of the State Regional Sustainability Strategy.

5.0 The relationship between Social, Economic and Ecological factors at a regional level

A brief discussion of the interrelated impacts of economic factors such as structural adjustment and post modernisation, ecological degradation, and rural socio-economic decline in Western Australia demonstrates clearly the need for integrated triple bottom line planning at the regional level

Contemporary globalisation forces are leading to a restructuring of the Australian economy at local, regional and national scales (Gray & Lawrence 2001:19). National and state control of commodity prices and capital flows is decreasing as markets are deregulated in line with global trends towards market freedom. The current transition from a productionist to a post-productionist economy, which includes a decreased emphasis on primary production and resource extraction (Dixon 2001), means that regional economies, based on primary resources are less secure. Structural adjustment within Australia has particularly affected farmers. Deregulation of agricultural and financial markets, removal of price supports, and the reduction of tariffs and import restrictions have combined to remove the protection of the markets under which farmers previously operated (Tonts 1999). Increasing economic efficiency through economic diversification, moving towards the supply of value added products, and increasing investment in post-productionist industries such as tourism and carbon trading, rather than relying on unprocessed agricultural commodities are new directions for regional economies to take (Lawrence et al 1993). Regions in Western Australia need be proactive to position themselves well within the new global economy.

Western Australian regions are experiencing and reacting to contemporary economic challenges differently. According to Stimson (2001:204) "it is abundantly clear that there are regional 'winners' and 'losers' with respect to their performance over the last decade...". Some regions have experienced an overall increase in investment and employment and others have experienced a loss. Whilst some regional centres, particularly coastal centres such as Mandurah, Rockingham and Broome are experiencing population growth, others, such as Port Hedland, are experiencing population decline

(Kelty 1993). Overall, regions in Western Australia that are either agriculturally rich, or have significant mining potential have experienced growth, while most inland and remote regions in Western Australia are currently experiencing decline (Stimson 2001). Creating a sustainable economic future in economically declining regions of Western Australia is a significant challenge.

The economic challenges that regions are confronting are intimately linked with their social and ecological futures. Poor farmers have difficulty investing in environmentally sound land management practices as they may involve increased economic risk or decreased economic returns. Factors including declining employment opportunities in Australia's regions and regional youth being unable to see a future in their home town have been linked to increased youth suicide in rural areas, with rural Australian males aged 25 to 25 years being more than twice as likely than their urban counterparts to commit suicide (Green 1996). Economic change cannot, therefore proceed sustainably without integrated consideration of ecological and social issues.

Many regions of Western Australia are experiencing similar social problems that severely compromise social sustainability. Loss of population, particularly of young community members, ageing of the remaining population, withdrawal of services, and limited employment opportunities all impact on sustainability in regional Western Australia. Many of these issues have been exacerbated by the structural adjustment policies of state and national governments, and there is a pressing need to increase the capacity of regional communities to cope with and take control of the economic changes discussed above. While economic and ecological sustainability have been investigated in Australia, Jones and Tonts (1995) argue that little attention has been given to social sustainability. Structural adjustment of farm related industries has created an economic crisis for many farmers, whose incomes are declining. This in turn impacts upon the town communities that service agriculture, who can enter a 'downward demographic-economic-spiral' (Gray & Lawrence 2001:95). Community capacity building that increases a shared understanding of the ecological, economic and social processes in Western Australian regions and enables communities to equitably participate in the creation of sustainable futures for their regions is a worthwhile goal for regional sustainability strategies in Western Australia.

A healthy, functioning natural environment is important for maintaining ecological integrity, and protecting the natural resource base upon which regional economic and social systems are based (National Natural Resource Management taskforce 1999). Healthy, functioning ecosystems are crucial to agricultural industries, and produce clean air, water and a healthy living environment that human societies are reliant upon. As well as having intrinsic value, the unique natural environments and features of Western Australia form the basis of a growing tourism industry. Maintaining and restoring the ecological integrity of regional Australia is fundamental to its future sustainability (Vanclay & Lawrence 1995)

Environmental problems have been recognised in regional Western Australia for some time. Soil erosion, salinity and structural or fertility decline; groundwater pollution; chemical fertiliser and pesticide residue in soils and waterways; and loss of vegetation cover and biodiversity are urgent challenges to land management practices in Western Australia. In the Western Australian wheatbelt, between five and fifteen percent of natural vegetation is all that remains. As well as the clear impacts of this on biodiversity, farmers are experiencing severe problems from human created ecological problems like soil salinity (Harris 2000). Programs such as Landcare have begun to address the broad range of ecological problems in regional Australia, however these problems remain, threatening not only the ecology, but the economic and social viability of some areas in Western Australia. Integrated consideration of ecological, social and economic issues at a regional level, provides an opportunity to build on current environmental programs. **It is increasingly recognised that bioregions are the most appropriate level for ecosystem conservation and management (Miller 1996). Strategic planning at the bioregional level ensures that ecological problems are managed with an integrated, whole-systems approach, ensuring maximum benefit from conservation strategies.**

A combination of the growing importance of regions as economic units, increased acknowledgement of the importance of regions as functioning social, ecological and economic units, and the existence of region-specific problems and opportunities for sustainability all suggest a need for integrated sustainability planning at a regional level. Regional areas in Australia are experiencing new challenges in this rapidly changing world. Creating a sustainable future in all Western Australian Regions is fundamental to achieving sustainability for Western Australia. **Without integrated and equal consideration of ecological, economic and social consequences of change, sustainability in regional Australia is unlikely to be achieved.**

6.0 Bioregionalism and Regional Sense of Place- A foundation for research and a basis for the development of a Regional Sustainability Strategy

The above discussion has introduced the need for integrated consideration of social, economic and ecological factors at a regional level to create a sustainable future. Capacity building in regional communities, and the development of a shared understanding of sustainability issues in regional communities has been described as fundamental to enhancing the ability of regional communities to create positive change. **The idea of bioregionalism, or developing a regional sense of place is one way to foster holistic sustainable development in regional Western Australia.**

Bioregionalism is about learning to know, love and respect the place where you live. It is about understanding the ecology of your region and developing a socially and ecologically sustainable way of life within that region for present and future generations (Plant, 1990; Snyder, 1998). Whilst bioregionalism

incorporates the socio-cultural and economic aspects of human - environment interactions, it's focus is on developing human communities that exist within the ecological limits of their region (Wallas, 2001). Developing a sense of regional identity and stewardship through increased awareness the unique socio-cultural and ecological interactions that occur in the different regions of Western Australia may constitute an important move towards sustainability in Western Australia, building the capacity of regional communities to create positive change.

Place is the intersection where ecological, economic and social worlds meet. It is the site where communities and individuals construct sustainable (or unsustainable) landscapes from past experiences and future intentions. The concept of place and place research has potential to foster a deeper understanding of the meaning and practice of sustainability (Moore 1997). It has been discussed in this paper that research and practice in sustainability has often neglected social issues, focussing only on economics and ecology. Place research integrates the social realm with economy and ecology and therefore constitutes an integrated approach to sustainability research that this paper advocates.

Goodall & Lucas (1997) assert that actions towards sustainability will be based upon the different beliefs, or worldviews of diverse regional communities. The attitudes that people hold towards, for example, landscapes, lifestyle, social networks and individual identity inform their conception of sustainability. Different people value a sustainable economy, environmental integrity and sustainable social systems differently, they have different conceptions on what sustainability looks like. What sustainability is, and how it will be achieved will therefore be dependent on the worldviews of the residents in different regions.

Narrative research, or documenting oral histories gives insight into the contested nature of concepts like sustainability and people's relationship with place. Researching bioregional histories through narrative is therefore one way to assess the world-views that different communities will base their conceptions of sustainability on. It can give insight into common ground that may be shared between diverse stakeholders, and provide a tool to facilitate inter-stakeholder understanding (Goodall and Lucas 1997). It is also one way to involve community members in the creation of a Regional Sustainability Strategy that is appropriate in each region in Western Australia, whilst building regional identity and sense of place.

Narrative research has the benefit of enabling a deep understanding of participant views. It is, however time-consuming, and the results of extensive narrative research may be difficult to convey to decision makers in a concise form (Moore, 1997). It is unrealistic to base the development of regional sustainability strategies on narrative research alone. Publishing a document for each region in Western Australia that tells the personal stories and histories of a diverse range of regional stakeholders would, however, be a good start to understanding regional sustainability dynamics, and the potential conflicts that may arise when creating a sustainable strategy for the future. A possible theme for these documents would be 'past, present and future' They

would provide information for regional communities, Western Australians, industry and government on the life experiences of a diverse range of regional residents and their future aspirations. They would be of historical interest, help develop understanding within each region of the different life experiences that have led to contested worldviews and related conflicts over resource use, environmental protection, and social equity, as well as provide some input into Regional Sustainability Strategies in Western Australia's regions. Most of all, it would provide a basis for the private sector to find out how their development projects can be tailored to help with the social aspects of sustainability

Narrative research is only one form of place research that could be used in the development of regional sustainability strategies. Fundamental to place research is the participation of a diverse range of regional stakeholders- those industry, community and government individuals and groups that construct each region as a place and each develop their regional sense of place. Whilst affirming the importance of stories, this paper advocates a triangulation of research methodologies to be used in the development of regional sustainability strategies. Moore (1997) includes survey techniques, non-directive interviewing, using of photo-elicitation and maps as forms of place research, all of which may be important methodologies in the development of Regional Sustainability Strategies. It is likely that demographic research, environmental research, and economic and market research will also inform each strategy's development.

Whilst acknowledging the need for a diverse range of research methods that integrate social, economic and environmental information to succeed in creating regional sustainability strategies, real community participation that allows regional people to have significant input into, and even control the regional sustainability process and direction is imperative. This means that the results of all research, specifically including demographic, ecological and economic analysis, which may not easily incorporate community participation, should be distributed to community members. These types of research that are less amenable to community participation should not dominate the regional sustainability process and be used, rather, to inform the discussion between government, community and industry from which Regional Sustainability Strategies will develop.

Place based research works at the site of environmental, social and economic interaction that is fundamental to sustainability. It will therefore provide an important contribution to the development of regional sustainability strategies in the state of Western Australia

7.0 Relationships between the different levels of government in Australia, and between government and non-government organisations that are important to regional sustainability.

Achieving regional sustainability in Western Australia requires coordination of local, state and commonwealth government initiatives in regions as well as coordination of government and non-government initiatives.

The nature of government in Australia means that State and Commonwealth governments share responsibility for regional development, with local governments and regional organisations also being important players. The Commonwealth government has more access to revenue than state governments. Funding is redistributed to states according to Commonwealth policy and without Commonwealth money states would not be able to fulfil their responsibilities. Commonwealth investment in regional environmental programs through the Natural Heritage Trust is one example of the benefit of Commonwealth funding in regional Western Australia.

Local government in Western Australia is subordinate to state government, and to some extent reliant on state government funding (Dore & Woodhill 1999). However, local government is responsible for a variety of local functions, including maintenance and improvement of local infrastructure, local services like recreation, libraries and healthcare, town planning and land use planning. The Western Australian Local Government Association¹ has policies related to enhancing community, development, environment, governance, transport and waste management through local government ([Western Australian Local Government Online](#), accessed 19/4/02). Regional bodies like the Eastern Metropolitan Regional Council (EMRC), North Eastern Wheatbelt Regional Organisation of Councils (NEWROC), whilst voluntary associations, to some extent coordinate local government programs for the benefit of a regional area. These regional bodies are discussed in more detail as Regional Sustainability Case Studies.

Local government and state government agency reform, increased responsibility for local governments, and formation of regional governmental organisations are recent trends in governance across Australia (Dore & Woodhill 1999). Whilst States clearly have an integral role in coordinating statewide programs for regional sustainability, and ensuring that the whole state of Western Australia moves towards a more sustainable future, devolution of power for planning sustainability strategies in each region to a regional level allows for greater stakeholder participation, and attention to important local issues. This trend towards greater local and regional control of local and regional issues is a positive move for sustainability. There is further possibility for reform of institutions to create a closer focus on sustainability at all government levels.

Research agencies like the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Land Water and Rivers Research and Development Commission (LWRRDC) and advocacy groups like the Australian Conservation Federation have significant input into regional development, and some influence over the government functions of policy and legislation that are important to regional development. At a more local level, community natural resource management groups, such as the Blackwood

¹ A case study on the role of the Western Australian Local Government Association in promoting sustainability in Western Australia is available at <http://www.sustainability.dpc.wa.gov.au/CaseStudies/WALGA/walga.htm>

Basin Group, the South Coast Regional Initiative Planning Team and the Avon Catchment Network that is discussed in more detail as a case study, are important to regional sustainability for the region in which they function.

Policy and programs that facilitate greater coordination and cooperation between all government and non government initiatives that promote regional sustainability in urban and rural Western Australia will be an important objective for regional sustainability strategies in Western Australia. This is already a goal for environmental and natural resource management programs, with the Regional Development Council of Western Australia, citing “improved coordination and effort between all levels of government, industry and the community in planning and management” (Regional Development Council Online 19/4/02) as imperative to increasing effectiveness of these programs. This approach could be broadened to integrate economic and social issues. **It is recommended that a group be established, with a role that includes investigating the best way to undertake co-ordination of regional initiatives in Western Australia and guiding the overall development Regional Sustainability Strategies.**

8.0 Regional Sustainability Case Studies

The following section briefly outlines some important Western Australian, Australian and International case studies demonstrating different approaches to regional development, environmental protection and sustainability. They provide background to the area of regional development and planning and demonstrate that while there are good things happening in this area, an integrated, triple bottom line approach to regional sustainability is yet to occur in Western Australia, Australia and possibly even globally. Four projects: Rangeways, in the north eastern goldfields of Western Australia; An ecoregional approach to sustainable agricultural landscapes in the south-west of Western Australia; the Central Highlands Regional Resource Use Planning Project in Queensland and the Draft Cape Action Plan for the Environment, in South Africa are described in more detail as examples of current best practice in regional sustainability. They offer considerable insight into the direction that a regional sustainability might take in the State Sustainability Strategy of Western Australia.

8.1 Regional development and sustainability in Western Australia- Government initiatives

The following is a description of some government initiatives in regional Western Australia that are important from a sustainability perspective. It is inevitable that some important projects have not been included. Through briefly describing these projects, an indication of the current direction of regional development planning in Western Australian is gained. It is also clear that in some government areas, there has been a move towards considering social, economic and ecological factors that are integral to sustainability.

8.11 [*The Western Australian Regional Development Council and Regional Development Commissions*](#)

The Regional Development Council is the advisory body for the Western Australian Minister for Regional Development. The majority of the Regional Development Council board is made up of representatives from each of 9 Regional Development Commissions in Western Australia. The Regional Development Council promotes regional development through proposing development policies and assisting regional commissions and relevant government agencies to work together on regional issues.

Each Regional Development Commission aims to;

- improve its region's employment opportunities;
- enhance its region's economic base;
- identify regional infrastructure needs for social and economic development;
- enhance the potential for regional investment;
- promote regional business development;

- seek comparability between regional and metropolitan government services; and
- facilitate coordination between relevant statutory bodies and state government agencies.

(Regional Development Council Online, accessed 03/02)

Some innovative initiatives of the Western Australian Regional Commissions and the Western Australian Regional Council include:

- encouragement of [collocation of regional services](#) in multifunctional regional service centres; and
- the [Living in the Regions](#) Project (1999), that sought to identify why Western Australians choose to live in or move away from the regions (Regional Development Council Online accessed 03/02).

The Regional Development Council and the Regional Development Commissions have a strong economic and administrative focus. However each of them already include environmental and social projects, though they are not, in general, integrated into a sustainability framework. These are growing issues. Stronger integration of ecological and social issues in these institutions could help to promote regional sustainability in Western Australia.

8.12 A Regional Development Policy for Western Australia (Department of Commerce and Trade 1999)

A Regional Development Policy for Western Australia was completed in 1999 and is currently under review by the new government. It is likely to build on many elements of the previous policy document and is therefore well worth discussing.

The Regional Development Policy for Western Australia addresses a broad range of social, economic and ecological issues and is important to regional sustainability.

The core development principles of the policy are:

- Strong Economy;
- Vibrant Cohesive Communities;
- Sustainable Environmental Management; and
- Responsive Governments;

It incorporates the regional development goals of;

- Adaptive communities;
- Enriched lifestyles and livelihoods
- Developing wealth and employment
- Developing infrastructure
- Environment and Natural resource management; and
- Responsive governments

Due to the economic focus of some of the key players in policy development, particularly the Regional Development Council and the Department of Commerce and Trade, this document, like the Regional Development Council and Commissions, is also strongly focused on economics. Whilst the social, economic and ecological dimensions of development are all addressed in this document, stronger integration between the principles and goals of this policy would ensure a sustainability focus for regional development.

Environmental and Natural Resource Management are discussed as an important goal, and it is recognised that ecological integrity is fundamental to regional economic and social development. However, the related goal of Developing Wealth and Employment does not refer to the way that regional ecological factors may enhance, or even constrain the sustainability of wealth and employment in the regions. Integration of these two goals may lead to new and innovative partnerships between ecological and economic sustainability initiatives. Similarly, the discussion of the Goals of Enriched Lifestyles and Livelihoods and Adaptive Communities recognise the importance of skills and leadership development, facilitating understanding of regional development issues, conflict resolution and mediation processes, promotion of reconciliation, community cohesion and maintenance of community services to regional social sustainability. Investigating the tensions between these social goals and the pressures created by ecological degradation and changing regional economies that have been described above would ensure better long term planning for true regional sustainability.

As it is the Regional Development Commissions and the Regional Development Council that is responsible for the implementation of this policy, a sustainability focus within these bodies would help ensure integration of the social, ecological and economic goals of regional development policy in Western Australia. There may be advantages in renaming the Regional Development Commissions and the Regional Development Council as the Regional Sustainable Development Commissions and the Regional Sustainable Development Council.

8.13 Eastern Metropolitan Regional Council

The Eastern Metropolitan Regional Council (EMRC), which began in 1983, includes the Shires of Mundaring and Kalamunda, the town of Bassendean and the cities of Belmont, Bayswater and Swan. It covers around one third of the Perth Metropolitan Area and is a voluntary association of the above local government councils. The initial purpose of the EMRC was to coordinate waste disposal in the Eastern metropolitan regional area. Safety services and risk management were added to the council agenda in 1987, and environmental services in 1993. The EMRC has further evolved to promote regional economic and community development. Through sharing of information between participants in the EMRC, development of new methodologies for providing services and economic and community development, for the benefit of the regional as a whole is enhanced.

The EMRC strategic plan, most recently revised in 1999, aims to “facilitate the development and implementation of Regional strategies and the provision of services and facilities for the benefit of the Region”. The strategy recognises the importance of Arts and Tourism in attracting visitors to the Eastern Metropolitan region (EMRC Online, 18/4/10).

The EMRC provides consultation services for a diverse range of regional environmental issues. A regional environmental strategy is also being developed. It will address many environmental issues considered as important by the Eastern metropolitan regional community and specifies ten focus areas: air quality; biodiversity; community participation and environmental awareness; fire management; funding and resources; land management and rehabilitation; planning, development and economic activity; recreation; waste management; and water quality. An environmental education centre, promoting best waste management practice, is situated at the Red Hill Landfill Site. The EMRC is also seeking innovative ways to achieve 50% reduction in landfill, in line with ANZECC targets, possibly through biowaste composting or developing a waste to energy plant. The council is able to provide information in these areas and related guidelines for sustainable development in the region. It is developing action plans, indicators and benchmarks to measure success in progress towards sustainability in the region.

The EMRC is part of the Local Government Natural Resource Management Policy Development Project. Through its involvement in the Swan Canning Cleanup Program, it is promoting a regional focus, where the efforts of relevant local governments are co-ordinated to optimise their benefit. As local governments are responsible for development control and management of current and future land-use, coordinating local government activities that effect regional environments is fundamental to natural resource management programs like the Swan-Canning Cleanup Program.

The EMRC provides an example of the way that a regional organisation can promote and coordinate sustainability over an area of the appropriate size to benefit local and regional communities and environments. Similar bodies need to be created and given sustainability responsibilities, to cover the rest of Perth

8.14 North Eastern Wheatbelt Regional Organisation of Councils

The North Eastern Wheatbelt Regional Organisation of Councils (NEWROC) coordinates natural resource management initiatives for the seven councils of Mt Marshall, Koorda, Mukinbudin, Nungarin, Training, Westonia and Wyalkatchem in the North Eastern Wheatbelt. Following a growing trend that recognises regional partnerships as necessary for success in natural resource management issues, the councils involved in NEWROC acknowledge that environmental health is fundamental to rural futures. They recognise salinity as a particular problem in the North Eastern Wheatbelt area, and are investigating innovative solutions, like using saline water for electricity generation as well as seeking ways to desalinate land for the benefit of

community (Local Government Newspaper online, Jan. 2002). NEWROC is also piloting local government incentives for farmers to widen roadside vegetation reserves and conserve biodiversity on their properties. There is potential for the project to indicate areas for reform in local government process through exploring and expanding the role of local government in Natural Resource Management (Local Government Sustainability News 2001).

NEWROC may be a better model for how Regional Councils can be established to manage sustainability in rural WA. This model should be investigated by the group suggested to manage such boundary issues and applied to the rest of Western Australia

8.2 Regional development and sustainability in Western Australia - Non-Government initiatives

Many of the non-government initiatives that support regional sustainability in Western Australia are Natural Resource and Catchment management groups with some level of partnership with state, local and/or commonwealth government. The Blackwood Basin Group, South Coast Regional Initiative Planning Team and The Avon Catchment Group are three examples of such organisations. These organisations are supported by government and aim to support natural resource management in regional communities. To some extent, they include social and economic factors important to overall regional sustainability.

Whilst these organisations make a positive contribution to regional sustainability in Western Australia, they are not sufficient to create sustainable development in Western Australia's regions. Further, they do not guarantee broad community participation that is necessary for long-term sustainability. Models like those represented by NEWROC and EMRC, that coordinate local government initiatives and also have a role in natural resource management and regional sustainability planning, or reformed Regional Sustainable Development Commissions as described above, show greater potential to co-ordinate regional sustainability. Whilst non government natural resource management groups will continue to contribute to regional sustainability, it is envisaged that the task of creating and coordinating regional sustainability strategies in Western Australia is best undertaken by elected government, at a regional level, with input from regional natural resource management groups and a diverse range of other stakeholders.

8.21 Blackwood Basin Group

The Blackwood Basin Group (formerly the Blackwood Catchment Coordinating Group) formed in 1992 as a community initiative to ensure appropriate land and water resource management in the Blackwood river catchment. The group's interests have evolved to include confronting

important regional issues such as social decline, economic hardship and natural resource degradation, from the broader perspective of sustainable natural resource management (<http://www.bbg.asn.au/>). The Blackwood Basin Group is now incorporated within the South West Catchment Council. Map 3 shows the area covered by the Blackwood Basin Group.

Map 3: Blackwood Basin Group Regional Area

(<http://www.bbg.asn.au/>)

One example of the innovative way that the Blackwood Basin Group is responding to Natural Resource management issues is through Zone Action Planning. Zones are defined by natural, and to some extent social factors and boundaries. Each zone devises its own zone action plan with extensive community consultation that leads to on the ground action. The zones provide an efficient land management unit to facilitate integrated catchment management of the Blackwood Basin ([Ecker & Chadwick](#) 1999).

Although the Blackwood Basin Group is community based, it gives input into cross agency forums, and can in this way influence policy making. Whilst the Blackwood Basin Group fosters community development, and economic innovation, environmental issues and natural resource management are its priorities.

8.22 [South Coast Regional Initiative Planning Team](#)

The core objective of the South Coast Regional Initiative Planning Team (SCRIPT) is bringing people, organisations and information together so that it is the South Coast regional community that drives sustainable management of natural resources within the region in a way that promotes positive social and economic outcomes. It is supported by government and relies on the National Heritage Trust, natural resource management organisations, local government, community groups and individuals for funding. SCRIPT has an important role in the development of the Southern Prospects Regional Strategy, focusing on natural resource management in the region, being developed in conjunction with State Natural Resource Management Agencies. SCRIPT demonstrates a more integrated focus on sustainability issues than the other regional natural resource management groups discussed here.

8.23 [Avon Catchment Network](#)

The Avon Catchment network coordinates integrated catchment management, and natural resource management in the Avon basin, supports community landcare and other community initiatives and seeks to create opportunities in the region that improve community well being. The Avon Catchment network has partnerships with state government natural resource management agencies and members of these agencies form part of the Avon Working Group that aims to improve catchment and natural resource management in the region. Map 4 shows the area covered by the Avon Catchment Network

Map 4 Avon Catchment Network <http://www.avonicm.org.au/cgi-bin/avoncn/frame.cgi?2/~wcacrp/page1.html>

8.3 Regional development in Australia - Government Initiatives

8.31 National Heritage Trust

The National Heritage Trust (NHT) program aims to promote and support environmental responsibility through partnerships between individuals, communities and governments addressing environmental problems where they occur. The NHT acknowledges that a regional focus is often most effective when tackling environmental problems. Whilst it is acknowledged that economic, social and cultural factors are also important at a regional level, the NHT only funds environmental initiatives.

Support for regional strategies is given on the basis that it:

- enables public funds to be directed towards the highest priorities in a region or catchment, as defined by regional stakeholders;
- can save money by avoiding duplication of activities;
- ensures that sustainable natural resource management occurs through a regionally coordinated network, rather than through smaller, ad-hoc activities; and
- enables overall improvement of the regional environment.

Whilst the NHT is important in promoting ecologically sustainable resource management throughout Australia, it has an environmental focus, rather than a true sustainability focus.

(Natural Heritage Trust 1998)

8.4 Regional development in Australia- Non- Government Initiatives

8.41 Landcare

The National Landcare Program has been fundamental to the development of over 4000 Landcare groups and a Landcare movement that fosters a stewardship ethic in regional Australia. A broad range of community environmental conservation activities such as Landcare, Bushcare, Coastcare and Rivercare have brought major environmental improvements in regional Australia (Landcare Australia Online accessed 03/02). The Landcare program is supported by the National Heritage trust, and demonstrates a strong partnership between government and non-government natural resource management projects. Whilst Landcare has a strong ecological focus, recent evidence suggests a move towards broadening its focus to encompass rural development and change (National Natural Resource Management Taskforce 1999). Landcare networks have an important role in promoting and actioning regional ecological sustainability initiatives. However, programs such as Landcare are not sufficient to create sustainability in regional Australia. Gray & Lawrence (2001) describe a real life example of a farmer who had been strongly involved in a Landcare group and initiated sustainable land management changes on his property. After coming upon hard economic times, he withdrew from the Landcare group, partially due to time constraints.

He also recommenced what he recognised as short term, unsustainable grazing practices in his paddocks to keep his farm economically viable in the short term. This example demonstrates that while Landcare is a positive movement that can encourage sustainable change, it is unable to stand alone, without integration with social and economic policies that support ecologically sustainable land management practices.

8.42 Greening Australia

Greening Australia is a national, non-government community organisation that undertakes activities to protect biodiversity and remnant vegetation, prevent and repair land degradation, improve water quality and increase native flora and fauna habitat. Greening Australia envisages “A healthy, diverse and productive environment treasured by the whole community” and identifies its mission as engaging “the community in vegetation management to protect and restore the health, diversity and productivity of our unique Australian landscapes” (Greening Australia Online accessed 18/4/02). Working in partnership with landholders, communities and government agencies, greening Australia promotes sustainable land management practices. They support government funded bushcare and farm forestry projects. They were also in partnership with the World Wildlife Fund in an ecoregion project in the south-west of Western Australia that is discussed further on. The Aboriginal Land Education Program (ALEP), which is discussed in more detail, is one of the ways that Greening Australia promotes sustainability in regional Australia. The ALEP program currently operates in the Northern Territory and could be extended into Western Australia and included in some Regional Sustainability Strategies.

8.43 Aboriginal Land Education Program

The Aboriginal Land Education Program (ALEP) is an initiative of Greening Australia Northern Territory and the Northern Land Council. It is funded through The National Heritage Trust, Bushcare and the Landcare Program. The ALEP program works in conjunction with Aboriginal communities in the Northern Territory to develop environmental awareness and a Landcare ethic, focusing on environmental health, community development, and sustainable land management. ALEP officers provide technical information and advice, assistance in planning environmental management projects, training for community members, links to government department and they facilitate environmental education and awareness. The ALEP program achieves positive results because it works in partnership with Aboriginal communities, provides employment in Aboriginal communities and builds capacity within communities to manage their own environment (Duggan 2000). The ALEP program has achieved success in the Northern Territory and could be important in Western Australian Aboriginal communities.

8.5 International Initiatives for Regional Sustainability

8.51 The Global 200- A representation approach to conserving the Earth's Distinct Ecoregions

The Global 200 (Olsen & Dinerstein 1998) is an initiative of the World Wildlife Fund (WWF). In recognition of the number of ecosystems that are in need of conservation globally and that funds for conservation are limited, the Global 200 has identified 233 ecoregions worldwide that are outstanding examples of the world's diverse environments, and in urgent need of conservation. It is recognised that ecosystems do not conform to political boundaries. Ecoregions may cross these boundaries and initiatives to protect ecoregions can therefore require co-operation of different government jurisdictions within a country, and even between different countries. Through prioritising conservation efforts, it is hoped that the maximum conservation benefit can be achieved strategically from available funds.

The global 200 approach demonstrates that protection of biodiversity requires protection of habitats, ecosystem processes, evolutionary phenomena and the adaptation of species to their environment. Whilst it takes a whole system approach to conservation, smaller, fine-grained analysis and local strategies are also recognised as important. Two WWF initiatives, the Cape Action Plan for the Environment and an ecoregional approach to sustainable agricultural landscapes on the south-west of Australia are described in more detail further on. These initiatives are both in areas identified in the Global 200 as being of high priority for conservation. That these projects include integrated consideration of the social and economic impacts on, and relationships with conservation suggests that, in practice, the Global 200 can be a sustainable approach to conservation.

8.6 Case studies of current best practice in regional sustainability

Rangeways and The Central Highlands Regional Resource Use Planning Project are chosen as case studies of best practice because of their focus on community participation. The World Wildlife Fund's Ecoregional Approach to Sustainable Agricultural Landscapes in the South-West of Western Australia represents an innovative approach to conservation in an area that is world renowned for its exceptional biodiversity. The Draft Cape Action Plan is chosen for its clear visions and goals, and its integration of ecological, economic and social issues at a regional level. All four studies provide useful insight into the ways that sustainability can be planned for and achieved in Western Australia's Regions.

8.61 [Rangeways](#)

Rangeways was a community-based program, undertaken between 1995-2000, that sought ways to manage and plan for better use of Western

Australia's rangelands. The study area was in the North East Goldfields, and included the shire of Leonora and parts of Laverton, Menzies, Sandstone and Wiluna shires. Improving community well being and the regional environment was central to the Rangeways project (Friedel et al 1997).

The stated objectives of Rangeways were:

- "Researching an evolving, dynamic, community led and owned planning process for managing change and conflict at the regional and local scale.
- Providing mechanisms for communities to cooperate in resolving competing land uses in a just and equitable way.
- Opening direct channels from the community to decision makers, politicians and policy planners and fostering better communication and coordination between all levels of government to ensure that agreed action is implemented.
- Ensuring the integrated, best possible use of rangelands and the protection of high value landscapes at a regional scale."

(Rangeways Online accessed 21/3/01)

Around 70% of Australia is defined as Rangelands. This project sought new, community based ways to create sustainable natural resource use in Australia's rangelands through acknowledgement of social and economic opportunities and their links to sustainable natural resource use management. Rangeways was important contribution to regional sustainability in Western Australia and demonstrates an innovative approach to community involvement.

(<http://www.rangeways.org.au/factsheet.html> accessed 21/3/01)

8.62 An Ecoregional Approach to Sustainable Agricultural Landscapes in the South-west of Western Australia (World Wildlife Fund Australia, No Date)

The South-west ecoregion is one of the 233 ecoregions identified in the Global 200 as an outstanding example of the world's diverse ecosystems in urgent need for conservation. It is world renowned for its biodiversity, and includes a minimum of 4000 species of endemic plants, and 100 endemic vertebrates. It is also recognised that due to exceptional loss of habitat, the biodiversity of this region is severely threatened. An Ecoregional Approach to Sustainable Agricultural Landscapes in the South-west of Western Australia recognises that the ecological integrity of the south-west ecoregion is fundamental to its future sustainability.

Fundamental to this program is creating a shared vision with regional stakeholders for the future of the south-west ecoregion. This fits well with the idea of enhancing regional sense of place in Western Australia's regions. It is stated that the approach to conservation in the ecoregion should be

community based, bold and ambitious, adaptive and evolving and collaborative and cooperative. There is a clear community focus, and the approach therefore incorporates the social aspects of sustainability.

The south-west ecoregion is of high conservation value and in need of immediate protection from further threats to biodiversity. The ecoregional approach integrates social, ecological and economic factors and constitutes a sustainable approach to conservation in this area. **Full government support for the ecoregional approach to sustainable agricultural landscapes in the south-west of Western Australia is recommended and a proposal is included in [Appendix 1](#).**

8.63 Central Highlands Regional Resource Use Planning Project

The Central Highlands Regional Resource Use Planning Project (CHRRUPP) sought to develop effective approaches to sustainable resource management in Queensland's Central Highlands. A focus in this project was building capacity within Central Highland' communities to enable them to do their own planning, and to diminish the need for external assistance. CHRRUPP involved partnerships between a number of stakeholders. These included: the five local governments of the region; the Fitzroy Basin Association; pastoralists; grain growers; irrigators; economic development organisations; the sector of human services; the mining industry; conservationists; indigenous communities, the Central Queensland University; and state and commonwealth agencies (Dale et al 2000). It sought to improve sustainable management of the areas natural resources through:

1. "better informing *all* regional stakeholders about the nature of natural resource management problems within the region"
2. "directly supporting these regional stakeholder groups to do their own regional planning with respect to the sustainable use of natural resources"
3. "supporting regional groups to get together in a structured way to negotiate regional solutions to common natural resource problems; and"
4. researching what regional planing techniques and processes best suit communicative planning and the specific needs of regional stakeholder interests."

(Dale et al 2000:38)

Three key functions of planning, support and research and development were undertaken in such a way as to empower the local communities. Each stakeholder group was encouraged to undertake planning activities and to negotiate with other stakeholders on these planning activities through a yearly regional priorities forum. Support functions including facilitation, coordination and technical and information support were designed to assist this process. Stakeholders were also encouraged to support themselves. Research and Development was undertaken with a view to disseminate important information from this study to as wide a range of stakeholder groups for regional sustainability within and outside the study region as possible.

Dale et al (2000) have developed a list of “research needs” through an evaluation of the first year of this project, and a national review of regional resource use planning. They may be useful, when considered from a Western Australian perspective, to inform the State Sustainability Strategy for Western Australia and are summarised as follows.

1. While there is significant interest Australia-wide in integrated regional development, there is contestation with regards to what this means.
2. Inter-regional linkages are poorly defined, and this leads to some confusion as to the benefits that a regional approach, and regional initiatives practically achieve.
3. Planning has evolved to include much greater stakeholder participation. Programs that facilitate equitable negotiation between stakeholders need to be encouraged, and where legal and administrative processes constrain this there is a case for reform.
4. Institutional arrangements that encourage regional approaches exist throughout Australia. However, these institutions generally have a ‘top-down’ focus, and are not integrated across sustainability themes. That is, they are economic or environmental or social in their focus. Further, there has been limited evaluation of the benefits/problems with current approaches.
5. Natural and human systems need to be integrated more effectively in planning to develop a better understanding of the complexity of these relationships and respond to them in a flexible and adaptive way. Understanding the socio-political and historical circumstances from which these relationships have evolved is central to creating positive change.
6. Integration of stakeholder perspectives in the monitoring and evaluation of regional initiatives in a way that feeds back into their planning activities and challenges institutions and resource managers to modify their behaviour is necessary. Development of context appropriate indicators with regional stakeholders will assist this process.
7. Recognition of conflicting values, interests and expectations within and between regions as well as equitable access to good knowledge and expertise is important to facilitate open communication and learning between stakeholders.
8. Understanding of the social and cultural processes that drive different regional economies is needed to plan for social economic and ecological sustainability at a regional level
9. Further research into the economic viability of regions needs to be context dependent and to take a systems approach. This includes taking into consideration regional determinants of enterprise viability, regional economic welfare issues and an analysis of regional natural resource management issues.
10. Planning frameworks that are decentralised, encourage integrated land use planning, and improve stakeholder negotiations need to be researched. Again, there is the potential for institutional reform.
11. Whilst stakeholder participation has become a common feature to both planning and sustainability discourses, it’s practice remains ill defined. Issues such as how to facilitate equitable cross-stakeholder negotiation or to ensure community representativeness need further research

8.64 Draft Cape Action Plan for the Environment (CAPE Project Team 2000)

The Cape Action Plan for the environment (CAPE) is a two-year program, to be initiated in the near future aiming to protect the unique terrestrial and aquatic biodiversity of the Cape floral kingdom in South Africa. The project is an initiative of the World Wildlife Fund (WWF) in partnership with regional stakeholders, and South African National and Provincial government organisations, universities and Non Government Organisations. This program has a clear biodiversity conservation focus, however it does integrate the social and economic factors that influence biodiversity conservation. It plans to assess the natural and biodiversity features the Cape Floral Kingdom and integrate these with institutional, legal, policy, social and economic issues in the creation of strategic regional plans.

The South-west region of Western Australia shares some similarities with the Cape floral kingdom. Like the Cape floral kingdom it has high floristic diversity including an unusually high proportion of endemic species. It is also experiencing rapid loss of that biodiversity (Corrick & Fuhrer 1996). The CAPE project may be of particular interest in planning for sustainability in the Southwest region of Western Australia.

The development of strong visions and goals are a key strength of the draft CAPE plan. The overall vision of the plan is that: "We, the people of South Africa, are proud to be the custodians of our unique Cape Floral Kingdom, and share its full ecological, social and economic benefits now and in the future" (CAPE Project Team 2000:3). The overall goal of the CAPE program is that "By the year 2020, the natural environment and biodiversity of the Cape Floral Kingdom are effectively conserved, restored wherever appropriate, and deliver significant benefits to the people of the region, in a way that is embraced by local communities, endorsed by government and recognised internationally." (Cape Project Team 2000:3)

Goals have also been developed for each of the 9 themes of the CAPE program;

- Strengthening institutions
- Cooperative governance
- Community involvement
- Strengthening conservation areas
- Conservation of biodiversity and natural resources in catchments
- Integrated land use planning
- Sustainable use of resources
- Sustainable ecologically based tourism (p4)

The first three themes of strengthening institutions, cooperative governance and community involvement, described as cross cutting themes, are designed to ensure that the necessary social and governance conditions to facilitate the success of the CAPE program occur. They offer some insight into the ways

that an integrated approach to biodiversity conservation can be created and will be discussed in more detail here.

Strengthening institutions

According to the CAPE plan, strengthening institutions will require shared understanding of the links between biodiversity conservation and social and economic well being. Community pressure to protect the environment needs to be met with a responsive government that has the capacity to act and create change. Agreed conservation priorities adopted by the whole of government will be fundamental to the CAPE program. Other factors identified as being important in creating a responsive government include:

- adequate resources;
- increased institutional capacity to support positive change;
- cross institutional understanding of biodiversity conservation issues;
- improved accountability;
- legislative and judicial support for the CAPE plan, including strong laws, policies, and a strategic environmental planning framework that facilitates coordination between different government institutions; and
- aligning jurisdiction boundaries with biophysical boundaries.

Cooperative Governance

Collaboration between institutions seeking the best possible decisions and in particular, integration of conservation and development plans will facilitate the CAPE plan.

Community Involvement

A range of strategies for community involvement in, and to ensure community benefit from the CAPE plan are described. These include:

- strategic community environmental education,
- ensuring access to recreation and economic activities created through the Cape program activities;
- creating strong link in the community between conservation and social well being,
- formalising participation in planning a strategic capacity building program; and;
- quantifying and providing incentives for sustainable use of biodiversity resources.

The remaining six themes of the CAPE program are predominantly resource/biodiversity management based. They also integrate social, economic and governance issues. Some good examples of this include: Changing land tenure to promote conservation and simultaneously encouraging value added resource use to maximise economic gain; and ensuring a broad range of nature based tourism experiences that cater for all socio-economic groups.

An integrated approach to biodiversity conservation is important in Western Australia. This project also provides insight into the types of governance

possible and to a lesser extent the types of community development programs that will facilitate sustainable resource use in regional areas.

9.0 An Integrated Approach to Regional Sustainability

The above case studies describe some current initiatives in regional development and regional sustainability. Those chosen as examples of best practice provide a partial indication of what is referred to here as integrated sustainability planning. It is likely that initiatives with a primary focus on either social, or ecological, or economic sustainability and without equal and integrated consideration of, or at least strong links to other programs that focus on complimentary sustainability processes, will not achieve optimal outcomes. The undeniable interrelationships between social, economic and ecological processes require a long term, iterative process with the vision of sustainability in Western Australia (Smailes 1995). This requires integration between government departments that are responsible for activities such as social planning, land use planning, economic development, environmental protection and so on. Stronger networks and partnerships between these bodies, and non-government agencies like Greening Australia, or Landcare groups are also necessary. It is possible that Western Australia's regional commissions could play an integrating and coordinating role, facilitating sustainability in their regions.

Seven conditions for integrated regional sustainability have been suggested:

- 1. Broad and equitable community participation in regional sustainability planning that is based on continued capacity building and the development of strong regional identity.**
- 2. A focus on innovative developments that give equal and integrated consideration to the social, economic and ecological interrelationships that are the basis for the development of a sustainable future in each region of Western Australia.**
- 3. Research and dissemination of the best knowledge possible of interrelated social, ecological and economic factors that drive sustainability in each region in Western Australia.**
- 4. Recognition and support for inter and intra regional social, economic and environmental networks and creation of new partnerships between regionally important actors, for example conservationists and pastoralists.**
- 5. Development of models for proactive conflict resolution between regional stakeholders.**
- 6. Recognition of global environmental, social justice and economic change, ensuring that Western Australian regions are inline with international best practice in all of these areas.**
- 7. A long-term government commitment to integrated sustainability in Western Australia.**

10.0 Core Objectives for Regional Sustainability

It is suggested that the following core objectives provide a basis for the inclusion of regional sustainability in the State Sustainability Strategy for Western Australia.

Governance

Development of Regional Sustainability Strategies is a key responsibility for state and regional government agencies. These strategies should focus on government and community process and industry involvement. A whole of government commitment to sustainability in Western Australia will help ensure that regional sustainability strategies are enacted and supported. Departments that have traditionally been concerned with isolated aspects of sustainability, such as economic development, land use planning, or environmental management will need to coordinate their efforts. This will require:

- a strong legislative and policy basis to support regional sustainability;
- formation of partnerships between government, community and industry to promote sustainability;
- formal networks and communication channels that are active within and between government departments that facilitate coordinated regional sustainability efforts, and institutional learning;
- investigation into the best way to coordinate regional governance: the Eastern Metropolitan Regional Council and the North Eastern Wheatbelt Regional Organisation of Councils may be appropriate models;
- each regional institution to have a clear sustainability focus that will enable it to integrate economic, ecological and social sustainability at a regional level. The Regional Development Council and Regional Development Commissions could be renamed the Regional Sustainable Development Council and the Regional Sustainable Development Commissions; and
- development of Regional Sustainability Strategies in each region of Western Australia. Regional Sustainability Strategy groups need to be set up as part of each Regional Development Commission

Networking and Partnerships

Formal and informal networks that facilitate collaboration between groups acting to improve sustainability in the regions, and new partnerships between regional actors like businesses, community and cultural groups, and governmental organisation are fundamental to regional sustainability. This will require:

- new partnerships and enhancement of existing partnerships between intra and inter regional groups that are important to regional sustainability in Western Australia; and
- **active networks between government organisations acting in each region, and between government organisations and community and business groups in each region.**

Reflexivity and adaptability

Any Statewide strategy for regional sustainability needs reflexivity and adaptability so that it will be responsive to the particular needs of each region, and the changing ecological social and economic conditions regionally, nationally and globally. This will require:

- a statewide framework for regional sustainability to provide useful information and direction for Western Australia's regions;
- each region's sustainability strategy to develop from within that region through a collaborative process involving partnerships between community, business and government;
- trends and innovations in regional sustainability in Western Australia, Australia and globally to be monitored so that best practice can be incorporated rapidly into each regions sustainability strategy;
- **a review of regional governance and boundaries to rationalise local and regional responsibilities and increase effectiveness and functionality of regional sustainability processes.**

Economic innovation

Economic prosperity for Western Australian regions is imperative to economic prosperity for the state of Western Australia. Economic equity within regions, ensuring the possibility of healthy and vibrant communities is also fundamental to regional sustainability. Innovative economic development that is beneficial to grass roots communities and that integrates ecological and social considerations should be a focus for all Western Australian regions. This will require:

- each Regional Sustainability Strategy to address ways that each region can ensure a prosperous future in the new, post-productionist global economy;
- innovative economic developments that integrate social and ecological considerations at a regional level to be encouraged: areas such as sustainable agriculture, carbon trading and renewable energy production all have potential in regional Western Australia and such developments need to be actively pursued; and
- compromise between the need for external investment to boost regional economies, and the need for locally owned businesses and services. Developments that increase local, sustainable, value added commodity production need to be encouraged.

Environmental Integrity

Environmental Integrity is fundamental to regional sustainability. It is no longer appropriate to place economic demands above protection of the natural environment. This will require

- each region to acknowledge the different bioregions that are within it or that it shares with other regions, and to base natural resource management plans on these regions;
- each region to identify and pursue initiatives that combine conservation or restoration of natural environments with economic development;

- a combination of legislative, policy and incentive based instruments to increase protection of the natural environment and discourage unsustainable land management practices;
- regional sustainability strategies to identify regional priorities for conservation and restoration of natural environments and to develop plans to act on these priorities.
- identification of agricultural and pastoral areas where a transition from production to rehabilitation of the natural environment is necessary; support for Aboriginal Traditional Owners to manage country and/or development of ecotourism are alternative options to production; and
- **support to be given to the process of developing an ecoregion study in the south-west as part of an international collaborative effort with the World Wildlife Fund. A proposal for such a study is included in [Appendix 1](#).**

Community Sustainability

Community capacity building and the development of strong regional identity is fundamental to each of the above recommendations. Empowered communities with a commitment to sustainability have the potential to drive sustainability in Western Australia's regions. The capacity of communities to cope with changing social, economic and ecological realities underpins the future of regions in Western Australia. Without strong regional communities, sustainability cannot be achieved. Thus capacity building, community identity and equitable participation in the development of regional sustainability strategies are possibly the most important sustainability issues discussed in this paper. This will require:

- each Regional Sustainability Strategy to be developed, from its inception, in conjunction with the diverse communities of each region;
- social research to be undertaken in each region to determine all different communities of interest in the region, and to ensure that no potential interest group is marginalised by or dominates the development of regional sustainability strategies;
- strategies that facilitate equitable resolution of conflict between stakeholders to be developed;
- a powerful vision for sustainability in each region, developed with community groups, through narrative and place based research, to support each region's sustainability strategy.

11.0 Key Recommendations

Key Recommendation 1

A Regional Sustainability Strategy for each region in Western Australia, based on the State Sustainability Strategy needs to be developed with consideration of the above objectives. This should include a strategy for the Perth Metropolitan Area, or several regions within the Perth Metropolitan Area.

Key Recommendation 2

To facilitate the development of strong regional identity, each region needs to write its story. The story would elaborate on the 'sense of place' or 'belonging'

that characterises the regions. These stories need to incorporate environmental, socio-economic and cultural histories of the region and would improve understanding of potential factors that may enhance or obstruct regional sustainability. They will aim to facilitate a shared understanding of the past, and the development of a shared vision of sustainability for each region's future. These 'stories' would ideally be created as part of Regional Sustainability Strategies.

Key Recommendation 3

Investigate and implement the best model for managing sustainability at a regional level in Western Australia. The North Eastern Wheatbelt Regional Organisation of Councils may provide such a model.

References

- Arndt, M. Gowron, T. Jahnke, P. 2000 "Regional policy through co-operation: From urban forum to urban network" in *Urban Studies* 37 (11) pp1903-1924
- Blackwood Basin Group, accessed online, 03/02 <http://www.bbg.asn.au/>
- Cape Project Team 2000 *Draft Cape Action Plan for the Environment strategy*
Cape Project Team, South Africa
- Corrick, M. & Fuhrer, B. 1996 *Wildflowers of Southern Western Australia*
Monash University, Melbourne
- Dale, A. Bellamy, J. Bischof, R. Zhu, X. Laredo, L. McLeod, N. Pollock, L. 2000 "Building a better systems of regional planning for sustainability" in Hale, P. et al *Managing for sustainable ecosystems* University of Queensland, Brisbane
- Department of Commerce and Trade 1996 *Global Incentives for Regional Industry* Regional Development Council, Perth
- Department of Commerce and Trade 1999 *A Regional Development Policy for Western Australia* Regional Development Council, Perth
- Dixon, R. 2001 "Overview" in R. Dixon (ed.) *Business as Usual? Local Conflict and Global Challenges in Northern Australia* North Australian Research Unit, Darwin
- Duggan, D 2001 *Aboriginal Land Education Program*, unpublished PowerPoint presentation, Greening Australia, Darwin
- Eastern Metropolitan Regional Council Online, accessed 18/4/10, <http://www.emrc.org.au/>
- Ecker, S. & Chadwick, D. 1999 *Zone Action Planning – delivering integrated catchment management* Blackwood River Basin, Western Australia accessed online, 23/3/01 <http://www2.harvestroad.com.au/cgi-bin/dpms/dpr.cgi/dpmsref124/bushnet/original/InternationalLandcareConferencepaper.doc>
- Friedel, M. Holm, A. Burnside, D. Chapple, R. Fitzgerald, D. Walster, R. 1997 *Rangeways: Community based land use planning for Australian rangelands* in E. Moll, M. Page, B. Alchin (eds.) *Where the city meets the bush: the importance of effective communication* Proceedings of the 10th biennial conference of the Australian rangelands society, 1st-4th December 1997, University of Queensland
- German Ministry for Education and Research (2000) *Regional Approaches to Sustainable Economy* accessed online, 25/3/02
<http://www.iclei.org/europe/economy/bmbf/strength.htm>

Green 1996 "Rural youth suicide: The issue of male homosexuality" in G. Lawrence, K. Lyons, S. Momtaz (eds.) *Social change in rural Australia* Rural Social and Economic Research Centre, Central Queensland University, Rockhampton

Gray, I. & Lawrence, G. 2001 *A future for regional Australia- Escaping global misfortune* Cambridge University Press, Cambridge

Greening Australia Online accessed 03/02
http://www.greeningaustralia.org.au/about_us/about_us.html

Harris 2000 *Natural Resource Management- is Australia Sustainable* Australian Academy of Technological Sciences and Engineering, Academy Symposium November 2000, accessed online, 19/4/02
<http://www.atse.org.au/publications/symposia/proc-2000p15.htm>

Interim Biogeographic Regionalisation for Australia accessed online, 1/3/01
<http://www.ea.gov.au/parks/nrs/ibraimcr/> last updated, 26/10/01

Jones, R. & Tonts, M. 1995 "Rural Restructuring and Social Sustainability: Some Reflections on the Western Australian Wheatbelt" in *Australian Geographer* 26(2) pp133-140

Kelty, 1993 "Developing Australia: A Regional Perspective- A report to the Federal Government by the Taskforce on Regional Development, Volume 1" National Capital Printing, Canberra

Landcare Australia Online, Accessed 03/02
<http://www.landcareaustralia.com.au/>

Lawrence, G. Share, P. Cambell, H. 1993 "The restructuring of agriculture and rural society: evidence from Australia and New Zealand" in *Journal of Australian Political Economy* no. 30 pp1-21

Leigh, C 2002 *Local Government and Sustainability: How the Western Australian Local Government Association is assisting local councils to adapt to the new agenda of sustainability*, Department of the Premier and Cabinet, available online at
<http://www.sustainability.dpc.wa.gov.au/CaseStudies/WALGA/walga.htm>

Local Government Newspaper online, Jan. 2002 <http://www.loc-gov-focus.aus.net/2002/january/partners.htm>

Local Government Sustainability News Vol 1 Issue 3 July 2001 pp9

Miller, K. 1996 *Balancing the Scales: Guidelines for increasing biodiversity's chances through bioregional management* in R. Breckwoldt (ed.) "Approaches to bioregional planning" Department of Environment, Sport and Territories, Canberra

Mc Kinsey & Co. 1994 "Lead Local Compete Global" Department of Housing and Regional Development, Canberra

National Heritage Trust 1998 *Natural Heritage Trust support for regional activities* National Heritage trust, Canberra

National Heritage Trust, Online, accessed 03/02 <http://www.nht.gov.au/>

National Natural Resource Management Taskforce 1999 "Managing Natural in Rural Australia for a Sustainable Future- A discussion paper for developing a National Policy" Natural Resource Management Division, Department of Agriculture Fisheries and Forestry Australia, Canberra

Olsen & Dinerstein 1998 *The Global 200- A representation approach to conserving the Earth's Distinct Ecoregions* International World Wildlife Fund

Patterson Market Research 1999 "Living in the Regions: The State Report" Regional Development Commission, Perth

Plant, J. 1990 "Searching for common ground: ecofeminism and bioregionalism" in I. Diamond & G. Ornstein (eds.) *Reweaving the world: the emergence of ecofeminism* Sierra Club Books, San Francisco

Rangeways Online accessed 3/3/02
<http://www.rangeways.org.au/relatedprojects.html>

Regional Development Council Online, accessed 03/02
<http://www.regional.wa.gov.au/>

Regional Development Council Online 19/4/02 *A regional development policy for Western Australia- environment and Natural Resource Management*
<http://www.regional.wa.gov.au/policy/environment.asp>

Shearlock, C. James, P. & Phillips, J. 2000 "Regional Sustainable Development: are the new regional development agencies armed with the information they require? In *Sustainable Development* 8:79-88

Smailes, P. 1995 "The enigma of social sustainability in rural Australia" in *Australian Geographer* 25 (2) pp 140-150

Snyder, G. 1998 "The place, the region and the commons" in Zimmerman, M. Baird Callicott, J. Sessions, G. Warren, K. Clark, J. (eds.) *Environmental Philosophy* Prentice Hall Inc, New Jersey

Stimson, R. 2001 "Dividing Societies: The socio-political spatial implications of restructuring in Australia" in *Australian Geographical Studies* 39 (2) 198-216

Tonts 1999 "Some Recent Trends in Australian Regional Economic Development Policy" in *Regional Studies* 33 (6) pp581-587

Vanclay, F. & Lawrence, G. *The environmental imperative- ecosocial concerns for Australian Agriculture* Central Queensland University Press, Rockhampton

Wallas, A. 2001 "Making regions viable by making them imageable" in *National Civic Review* 90 (1) 75-85

Western Australian Government Online accessed 19/4/01
<http://www.wama.wa.gov.au/locGovInfo/history.htm>

World Wildlife Fund Australia No Date *An ecoregional approach to sustainable agricultural landscapes in the south-west of Western Australia* Unpublished Project Proposal

Appendix 1

An ecoregional approach to sustainable agricultural landscapes in the south-west of Western Australia

Background

The South-West ecoregion of WA is one of the top 25 “biodiversity hotspots” of the world. It encompasses 7 IBRA regions ranging from the northern sandplain heaths to the Swan coastal plains and wetlands, the tall forests to the woodlands and granites of the wheatbelt and the mallee and heaths of the south coast. The south-west ecoregion is characterised by “an exceptional concentration of endemic species undergoing an exceptional loss of habitat”. More than 4000 species of endemic plants and 100 endemic vertebrates have been recorded in the region, with other plant species believed to be yet discovered. Many of these endemics are rare and endangered, giving SW Australia the highest concentration of rare and endangered species on the continent.

The protection of these natural assets and the ecological integrity of this region is vital as a basis for sustainable development. The indirect impacts of vegetation clearing on private and public assets through dryland salinity, is a stark example. Poor management and neglect of native vegetation, encroachment of urban and peri-urban development and degradation of precious soil and water resources also lead to the depletion of this critical natural capital.

An ecoregion is a relatively large unit of land or water that contains a distinct assemblage of natural communities sharing a large majority of species, dynamics and environmental conditions. They are suitable units for conservation planning. Examples in WA include the South-West, the Kimberley and the Central Arid ecoregions.

Ecoregion conservation uses a broader view of biodiversity and addresses overarching threats i.e. those operating over multiple areas within and outside an ecoregion. The basic approach is for a biodiversity vision and targets to be clearly defined as a first step, through a process of identifying and assessing biological attributes and key processes, the direct and over-arching threats and conservation status. This vision forms a basis for establishing priority areas and issues for action. It also helps to identify any synergies or contradictions with visions, objectives and attitudes of other stakeholder groups. Through further assessments, the legal, policy, institutional, financial, social and economic aspects of the region and their links to biodiversity can be outlined and refined. This leads to an improved understanding of what interventions, tools and approaches to biodiversity conservation might be the most feasible and desirable. The final action plan would identify key strategic actions (e.g. institutional) and priority projects (e.g. landscape, site-scale). It would clarify *who* should take action, *which* tools and approaches are needed and a suitable timeline for implementation.

Need for a shared vision and coordinated approach to action

The protection of these unique values will require better coordinated strategies between government agencies and non-government organisations that address conservation of both the private and public estate. There will also need to be better integration of policies and economic instruments that influence the behaviour of the public and private sector in natural resource management.

Some institutional steps have recently been taken to promote ecologically sustainable development as the preferred model in WA - for example in the formation of the new integrated environmental protection and natural resource management agency for Western Australia (DEWCP) and the NRM regional groups.

If there is to be a coordinated approach and an integrated framework for natural resource management, it will be necessary to develop, among the parties involved, a shared vision of what future landscapes may look like and an agreed approach to implementing that vision.

The Salinity Taskforce recognised these needs in their report this year, calling for *"a tangible long-term vision for the landscape of south-west Western Australia ...to guide coordinated action"* (Recommendation 3.1) and *"better integration of government actions for NRM and sustainable development"* (Recommendations 5.5). They further recommended that a government-NGO Working Group is established *"to develop a Nature Conservation, Vegetation and Biodiversity strategy for public and private lands across the south-west of Western Australia"* (Recommendation 5.6.2).

A possible way to take the vision and strategic action forward

A small group of people with an interest in this issue has convened to explore our collective views of what a truly sustainable landscape might look like. We have developed a first draft of such a vision and have, at a preliminary level, canvassed possible pathways for turning this vision into reality.

The shared purpose for this group is:

"To develop a partnership approach to ecoregional Natural Resource Management that considers both the public and the private estate and which aligns with and complements new and existing initiatives."

Based on the experience from elsewhere in Australia and overseas, a number of key principles underpin the ecoregional approach that is suggested for the south-west of WA.

It should be:

- Community based
- Bold and ambitious
- Adaptive and evolving
- Collaborative and cooperative

It should provide integrated outcomes that are relevant at the whole landscape scale and at the property scale.

It should address the triple bottom line i.e. to enable social and economic decisions to be made within the constraints imposed by the environment.

To be successful, this approach must be based on a new NRM culture based on Government and NGOs working in partnership to support community-owned initiatives.

Anticipated outcomes:

A landscape-scale, community-based "ecoregional approach" has the potential to produce the following outcomes:

1. A clearer understanding of the root causes of biodiversity loss in the region, how they interact and the best “entry points” for actions to address policy and market failure.
2. Development and articulation of desired future scenarios for the SW ecoregion, together with a vision, goals and objectives that inspire all organisations that can influence the region.
3. Biodiversity targets that reflect priorities for conservation drawn up at the ecoregion level – to inform state and regional group Natural Resource Management plans, all levels of government and NGO strategic plans.
4. Coordinated strategies and initiatives for protected areas and effective conservation on all land tenures, that influence business and implementation plans.
5. A greater regional, national and international awareness of the conservation challenge in the south-west of WA and an increased ability to attract funds to the partnership, linked to the joint action plan.

Preliminary scoping of a biodiversity vision

A preliminary attempt to develop a biodiversity vision for the south-west identified the following elements:

- Representation of all of the dominant vegetation associations. This will require representation of valley floor, mid-slope and upper catchment communities;
- Stable populations of all plant species that naturally occur in the area of interest;
- Sufficient habitat to support species that have the greatest requirement for habitat area and to provide a range of microhabitats for species that require less area;
- Connecting vegetation that ensures continuous populations of all species. This vegetation should be viewed as linear habitat for dispersal-limited species rather than simply “corridors” for mobile species;
- Native vegetation along all drainage lines of sufficient width to act as habitat for lowland species and to absorb edge effects from adjoining land uses;
- Sufficient patches of connected habitat to ensure viable populations of all resident native species;
- Management regimes designed to manage threats such as weeds, inappropriate fire regimes, and feral predators.

The resulting landscape-scale conservation framework should be integrated with:

- Areas of “benign production”- low impact land-uses designed to manage land-degradation and protect and enhance conservation areas while generating income for land-holders;
- Areas of intensive production carefully located in the most appropriate parts of the landscape. These intensive land uses should not generate environmental impacts that cannot be absorbed by other more benign land uses and by the conservation estate

- | |
|--|
| - Areas for infrastructure located in appropriate parts of the landscape |
|--|

The biodiversity vision being presented is but one component of a broader landscape vision that encompasses social and economic outcomes.

Next Steps

This emerging vision was the outcome of an attempt to ascertain the level of shared purpose among the current group. It is acknowledged that the process of developing a shared vision is one that should encompass a wider range of stakeholders and should be a part of a more formal participatory initiative. The next step is therefore to seek to establish political support and the commitment of key government agencies and non-governmental organisations to take it forward.

It is anticipated that a workshop would be needed to bring together key stakeholders to explore the options for further developing the ecoregional approach. It is anticipated that support would be forthcoming to assist these next steps from WWF's international Conservation Strategies Unit, and possibly The Nature Conservancy, a major private land conservation organisation based in the US, which has already invested in fostering private land conservation and environmental philanthropy in WA. WWF and TNC have been engaged in developing successful ecoregional strategies and plans elsewhere, as partners with other NGOs and governments.